TOWN OF BROOKFIELD, CONNECTICUT WATER POLLUTION CONTROL AUTHORITY

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LOUISE TROJANOWSKI-MARCONI Vice Chairperson

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* * * * *

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JEFFREY B. SIENKIEWICZ, ESQ TIM STRID

Commission Attorney Maintenance Crew

MARY RAJCULA ONGARO KRISTI MCPADDEN
Accounts Receivable Manager Executive Administrator

CONTRACT 2020-01

Route 133 Pump Station Improvements

Langan Job No. 190011048

W. Charles Utschig, P.E. License No. P.E.N. 19262 Langan, CT, Inc. White Plains, NY

Date: June 24, 2020



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See detailed Table of Contents at beginning of General Conditions.

Attachment 1: A Guide to Prevailing Wage Laws in the State of Connecticut and Prevailing Wage Rates



ADVERTISEMENT FOR BIDS

TOWN OF BROOKFIELD, CT WATER POLLUTION CONTROL AUTHORITY

CONTRACT 2020-01

Route 133 Pump Station Improvements

Notice is hereby given that sealed bids will be received, publicly opened and announced by the Brookfield Water Pollution Control Authority (Authority), on Monday, August 10, 2020 at 2:00 PM local time.

The work covered under this contract includes the installation of a 12-foot diameter wet well, generator, propane tank and associated appurtenances; and site restoration as required in the Contract Documents. This is a prevailing wage project.

Contract documents may be examined and downloaded at the Brookfield Water Pollution Control Authority Portal https://brookfieldwpca.org/bids starting Thursday, July 2, 2020.

A pre-bid meeting will be held on Monday, July 13, at 2:00 PM at the Authority office. The meeting is not mandatory, but prospective bidders are urged to attend.

Bids must be submitted on standard proposal forms in the manner designated therein and be enclosed in a sealed envelope bearing the name and address of the bidder on the outside, addressed to the Brookfield Water Pollution Control Authority. The words "Route 133 Pump Station Improvements, Contract 2020-01" must be printed on the face of the envelope.

Sealed bids will be received by the Authority at the Brookfield Water Pollution Control Authority, Brookfield Municipal Center, 53A Commerce Road, Unit 1, Brookfield, CT. prior to the date and time established for opening of bids. **No bids will be received by mail.**

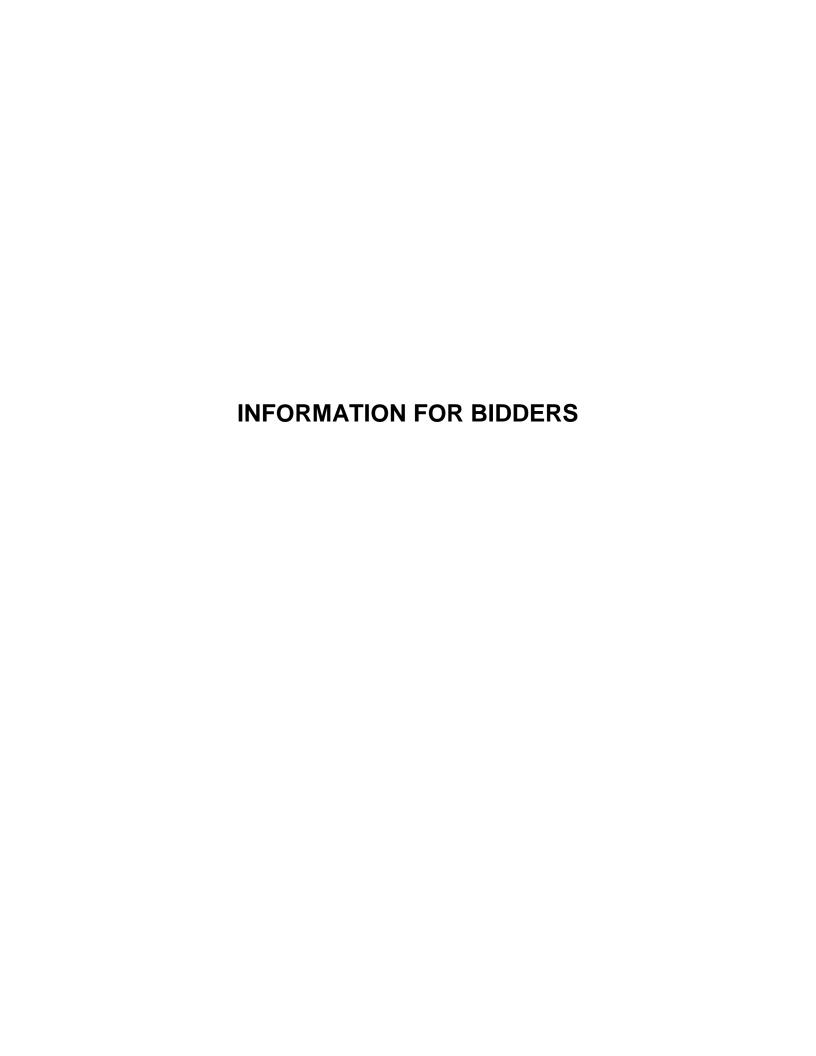
Each individual Bid Proposal must be accompanied by a bid security in the amount of five percent (5%) of the bid, a certificate guaranteeing the furnishing of Performance and Payment Bonds (Consent of Surety), and all other documents identified in the Form of Proposal. Bid security may be in the form of a bid bond, cashier's check, or certified check. The successful bidder must furnish a Performance Bond and a Payment Bond, each in the full amount of the contract price, issued by a surety company licensed to issue such bonds in the State of Connecticut, and having an A.M. Best & Co. rating of at least A-minus.

No bidder may withdraw his bid within 120 days after the date of the opening thereof. The Authority reserves the right to waive any informality in the bids, to reject any or all bids, and to make its awards in the best interests of the Town of Brookfield, CT.

Attention is called to the State requirements regarding employment, nondiscrimination, safety and wage scales.

Attention is called to provisions in the Contract Documents providing for preference to local laborers and subcontractors.

Brookfield Water Pollution Control Authority By: Nelson Malwitz, Chairman



INFORMATION FOR BIDDERS

1. **RECEIPT AND OPENING OF BIDS** - The Brookfield Water Pollution Control Authority (hereafter called the "Authority" or the "Owner") will receive sealed bids for "Route 133 Pump Station Improvements, Contract 2020-01" at the office of the Brookfield Water Pollution Control Authority, Brookfield Municipal Center, 53A Commerce Road, Unit1, Brookfield, CT. until 2:00 PM local time on Monday, August 3, 2020 at which time they will be opened and announced.

Proposals shall be enclosed in opaque sealed envelopes plainly marked "Route 133 Pump Station Improvements, Contract 2020-01", with the name and address of the bidder.

No bids will be received by mail.

- 2. **CONTRACT DOCUMENTS** Contract Documents will be obtained from the Brookfield Water Pollution Control Portal. Refer to the Advertisement to Bid for the information to access the Portal. If you the contractor has any questions to access the Portal, please call (203)-775-7319 \times 1000.
- 3. **DESCRIPTION OF WORK -** The work covered under this contract includes the installation of a 12-foot diameter wet well, generator, propane tank and associated appurtenances; and site restoration as required in the Contract Documents.
- 4. **ADDENDA AND INTERPRETATIONS -** No interpretations of the meaning of the Contract Documents will be made to any prospective bidder orally. Every request for such interpretation should be in writing addressed to Langan Ct, Inc., 1 North Broadway Suite 910, White Plains, New York 10601, or via email to ekingsbury@langan.com, and to be given consideration must be received on or before the end of the business day on Monday, July 27, 2020 Date via email or regular mail. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the Contract Documents which will be emailed with return receipt to all prospective bidders (at the respective email address furnished for such purposes) not later than the end of the business day on Friday, July 31, 2020. Failure of any bidder to receive any such addenda or interpretations shall not relieve said bidder from any obligations under his bid as submitted. All addenda so issued shall become part of the Contract Documents.
- 5. **OBLIGATION OF BIDDER** Each bidder must inform himself fully of the conditions relating to the construction and the labor provisions under which the work will 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 of the Contract Documents and to complete the contemplated work for the consideration set forth in his bid.

At the time of the opening of bids each bidder will be presumed to have inspected the sites and to have read and to be thoroughly familiar with the Contract Documents (including all addenda). The failure or omission of any bidder to receive or examine any form, instrument, or document shall in no way relieve any bidder from any obligation in respect to his bid.

Bidders are notified that it is obligatory upon them to obtain by their own means information which they may require as to the existing physical condition, and in particular as to subsurface and ground water conditions. The Owner will make available to the bidder all information obtained by investigations prior to the bid openings, but makes no guarantee with respect to the accuracy of such information, and each bidder in bidding represents that he relies exclusively upon his own investigations, and he makes his bid with a full knowledge of all conditions, and the kinds, quality, and quantity of work required.

- 6. **SUBSURFACE UTILITIES** The approximate locations of certain existing subsurface pipes and structures are indicated on the drawings. The Owner does not guarantee that the locations and/or depths of such utilities are even approximately correct. Contractor must contact "Call Before You Dig" 1-800-922-4455, or 203-281-5435. In addition, the contractor is obligated to retain the services of a qualified utility locator company to have all existing utilities located on the project site. Refer to item 16 of "Information for Bidders."
- 7. **INFORMATION NOT GUARANTEED -** All information given on the drawings, or in the Contract Documents, relative to materials encountered, subsurface conditions, and existing pipes and structures is from the best sources at present available to the Owner. All such information and the drawings of existing construction are furnished only for the convenience of bidders.

It is understood and agreed that the Owner does not warrant or guarantee that the materials, conditions, and pipes or other structures encountered during construction will be the same as those indicated by the information given on the drawings. The bidder must satisfy himself regarding the character, quantities, and conditions of the various materials and the work to be done.

It is understood and agreed that the bidder or the Contractor will not use any of the information made available to him, or obtained in any examination made by him, in any manner as a basis or ground for claim or demand of any nature against the Owner or the Engineer, arising from or by reason of any variance which may exist between the information offered and the actual materials or structures encountered during the construction work.

- 8. **PREPARATION OF PROPOSAL -** Proposals must be submitted on the prescribed form. All blank spaces for unit prices, extended totals, and summations must be filled in, in ink or typewritten, in both words and figures. The bidder must sign the bid, and give his title and business address. All forms attached to the Proposal shall be completed by the bidder and submitted with the bid as well as any other documentation requested by these bid documents and required by law.
- 9. **ERRORS IN BID -** In the event there is a discrepancy between the unit prices (if any) and the extended totals, the unit price shall govern. In the event there is a discrepancy between prices written in words and written in figures, the prices written in words shall govern. In case of error in the bidder's extended summation, the computed total of the Engineer shall govern. If an error in any bid item is obvious, and is corroborated by extensions or additions, the Owner may make the appropriate correction and accept the bid.

- 10. **APPROXIMATE QUANTITIES -** The quantities given in the Proposal are approximate only, being given as a basis for the uniform comparison of bids, and the Owner does not expressly or by implication agree that the actual amount of work will correspond therewith.
- 11. **BIDDERS TO CHECK APPROXIMATE QUANTITIES -** Bidders must satisfy themselves by personal examination of the location of the proposed work, and by such other means as they may choose, as to the actual conditions and requirements of the work, and the accuracy of the estimate of the Engineer, and shall not, at any time after the submission of a bid, dispute or complain of such statement or estimate of the Engineer, nor assert that there has been any misunderstanding in regard to the nature or amount of the work to be done.
- 12. **PRICES NOT CHANGED BY CHANGE OF QUANTITIES** An increase or decrease in the quantities listed in the Proposal for any item shall not be regarded as sufficient grounds for an increase or decrease in the unit price of that item, nor in the time allowed for the completion of the work, except as provided in the Contract. The Owner reserves the right to delete portions of the work, or to add to the work, as it deems necessary, and such changes shall be based upon the unit prices bid or upon reasonable prices established by the Engineer.
- 13. **INFORMAL BIDS** The Owner may reject as informal, bids which are incomplete, conditional, or obscure, or which contain additions not called for, erasures not properly initialed, alterations or irregularities of any kind, or the Owner may waive such informalities.
- 14. **INTENT OF CONTRACT DOCUMENTS -** The intent of the Contract Documents is to obtain a complete job, satisfactory to the Owner and the Engineer. It shall be understood that the bidder is cognizant of the full requirements of the Contract, and has based his Proposal upon such understanding. Compensation for all work and materials required to complete the Contract shall be considered included in the price bid in the Proposal.
- 15. **RIGHT TO ACCEPT OR REJECT BIDS -** The Owner reserves the right to select the lowest responsive and responsible bid, to waive any informalities in the bids, to reject any or all bids, and to make its awards in the best interests of the Town of Brookfield. Conditional bids may be rejected.
- 16. **LOCATING UTILITIES -** The Contractor shall obtain advance information on the vertical and horizontal location of all utilities, structures, or other facilities located within the project area. Such information shall be obtained from utility mark-outs, test pits, or pipe locating devices, and the obtaining of such information is exclusively the Contractor's responsibility. Any conflicts must be reported to the Engineer sufficiently in advance of the work schedule to avoid delays or extra work. The cost of obtaining such advance information shall be included in the prices bid for the various items of work.
- 17. **BID SECURITY** Each bid must be accompanied by a cashier's check, a certified check of the bidder or a bid bond issued by a surety company licensed to issue such bonds in the State of Connecticut in the amount of <u>five percent</u> (5%) of the amount of the bid, drawn to the benefit of the Brookfield Water Pollution Control Authority. Such checks will be returned to all except the three lowest responsive bidders within three days after the opening of bids. The remaining checks 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 120 days after the date of the opening of bids, upon demand of the bidder at any time thereafter, so long as he has not been notified of the acceptance of his bid. Bid bonds will not be returned, except on written request.

- 18. **CONSENT OF SURETY/SURETY GUARANTEE** In addition to the checks or bid bonds for bid security, each bid must be accompanied by a guaranty from a surety company, qualified and authorized to do business in this State, and having an A.M. Best & Co. rating of at least Aminus, agreeing to furnish Performance and Payment Bonds, each in the full amount of the contract price in the event of award of Contract.
- 19. **QUALIFICATION OF BIDDER -** The Owner may make such investigations as are deemed 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 bid if the evidence submitted by, or investigation of such bidder, fails to satisfy the Owner that such bidder is properly qualified and/or financially capable to carry out the obligations of the contract and to complete the work contemplated therein within the time limit stipulated.
- 20. **WITHDRAWAL OF BIDS** Upon proper request and identification, a bidder may withdraw his bid prior to the scheduled time for the opening thereof. However, no bid may be withdrawn after the first bid has been opened and thereafter not for a period of 120 days after the date of the opening thereof.
- 21. **LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT -** The successful bidder, upon his failure or refusal to execute and deliver the Contract and the required Performance and Payment Bonds within ten (10) days after he has received notice of the acceptance of his bid, shall forfeit to the Owner as liquidated damages for such failure or refusal, the security deposited with his bid.
- 22. **CONTRACT BONDS AND INSURANCE -** Simultaneously with his delivery of the executed Contract, the successful bidder must deliver to the Owner Performance and Payment (labor and materials) bonds, each in the amount of one hundred percent (100%) of the accepted bid, as security for the faithful performance of his Contract, and for the payment of all persons performing labor or furnishing materials in connection therewith; prepared in a form acceptable to the Owner (see forms attached) and having as security thereon such surety company or companies as are acceptable to the Owner and as are authorized to transact business in this State, and having an A.M. Best & Co. rating of at least A-minus. The bonds shall comply with Section 49-41 et seq. of the Connecticut General Statutes.

Simultaneously with the delivery of the executed contract, the successful bidder must deliver approvable insurance certifications, as specified in Article 8 of the General Conditions.

The Contractor shall obtain and pay for, and shall provide proof of insurance for the types and limits of insurance as more particularly specified in Article 8 for the General Conditions.

- 23. **EXECUTION OF CONTRACT -** The bidder to whom the contract is awarded will be required to furnish the Contract Bonds duly executed by a satisfactory surety (as defined above), and to execute the contract within the time limit stated in the Proposal after notification that the contract is ready for signature.
- 24. **POWER OF ATTORNEY -** Attorneys-in-fact who sign Contract Bonds must file with each bond a certified and effectively dated copy of their power of attorney.
- 25. **TIME FOR COMPLETION AND LIQUIDATED DAMAGES** The bidder to whom the contract is awarded must agree to commence work within 10 days from the date of receipt of written notice to proceed from the Owner, and shall complete the work in all respects except for maintenance and placement of permanent pavement within 120 consecutive calendar days following the service of said notice. Liquidated damages for late completion shall be as stipulated in the Contract.
- 26. **LAWS AND REGULATIONS -** This contract will be governed by the laws of the State of Connecticut. The attention of the bidder is specifically directed to the provisions of the General Conditions relative to laws and ordinances, State Labor Standards, Non-discrimination Provisions and Safety Provisions.
- 27. **NON-DISCRIMINATION IN EMPLOYMENT -** Contracts for work under this proposal will obligate the contractors and subcontractors not to discriminate in employment practices. The Contractor must comply with all applicable State, Federal and Local statutes dealing with non-discriminatory practices.

The Contractor shall take affirmative action to insure that applicants for employment are employed, and that employees are treated during employment, except in the case of a bona fide occupational qualification or need, without regard to their race, color, religious creed, age, sex, sexual orientation, marital status, national origin, mental retardation, learning disability, or physical disability. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

The Contractor shall post in conspicuous places and make available to employees and applicants for employment, notices to be provided by the State setting forth the provisions of this nondiscrimination clause. The Contractor shall state that all qualified applicants will receive consideration for employment without regard to their race, color, religious creed, age, sex, sexual orientation, marital status, national origin, mental retardation, or physical disability.

The Contractor shall incorporate the requirements of this paragraph in all subcontracts for Work performed under this Agreement.

28. **WAGE RATES -** Where the project is for new public works construction greater than \$1,000,000 or repair or rehabilitation work is greater than \$100,000, the Contractor must abide by State Wage Rates as published by Department of Labor in accordance with Connecticut General Statute Sec. 31-53(g).

The wages paid on an hourly basis to any mechanic, laborer or workman employed upon the Work herein contracted to be done and the amount of payment or contribution paid or payable on behalf of each such employee to any employee welfare fund, as defined in Section 31-53 (h) 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 where the work is being performed. Any contractor who is not obligated by agreement to make payment or contribution on behalf of such employees to any such employee welfare fund shall pay to each employee as part of his wages, the amount of payment or contribution for his classification on each pay day.

Prevailing Wage Rates. Please note: The regulations require that the Authority contact the Labor Commissioner at least 10 days, but not more than 20 days, before the contract is to be advertised to ascertain the proper prevailing wage. Normally, the applicable prevailing wage rate is either included with the bid documents or is added to the bid documents as an Addendum prior to the opening of bids. In this way all bidders are operating off of the same wage rates and the wage rates become a part of the contract documents.

- 29. **OVERTIME AND HOLIDAY WORK** Bidders are advised that all bids are to be premised on the assumption that work will be performed during regular working hours, from 7:30 AM to 5:00 PM, Monday to Friday. Where overtime (after 5:00 PM), work on holidays, or work on weekends, is required, written permission must be obtained from the Owner or its delegated officials. The Contractor is required to pay for all costs of engineering field work and inspections which is made necessary by the Contractor's operations on such days/times. The Contractor shall not be entitled to additional compensation for work outside regular working hours. Also note that required working hours, when construction is along state roads, shall meet the State Department of Transportation requirements.
- 30. **TRAFFIC CONTROL** A Traffic Control Plan with advance notification, signage, temporary barricades, warning lights, cones, barriers, etc. must be submitted to the Town of Brookfield Police Department for approval, as required. The cost of traffic controllers must be included in the prices bid. Also as per DOT requirements the work performed on state roads will be between the hours of 9:00 AM and 4:30 PM.
- 31. **NON-COLLUSION; NO KICKBACKS -** The Contractor warrants that no person has been employed or retained to solicit or secure the Agreement upon an agreement or understanding for a commission, percentage, brokerage or contingent fee; and that no Commissioner or any employee of the Owner has any interest, financially or otherwise, in the Contractor's organization.

For breach or violation of this warranty, and without limiting any other remedies provided by law, the Owner shall have the right to terminate the Agreement without liability or at its discretion to deduct from the Contract Price or consideration, the full amount of such commission, percentage, brokerage or contingent fee.

32. **PAYMENTS TO SUBCONTRACTORS -** The Contractor must comply with Section 49-41a (as more fully provided in Article 39 of the General Conditions) of the Connecticut General Statutes, as to payment to subcontractors.

- 33. **USE OF LOCAL LABOR -** In the employment of mechanics, laborers, and workers, in the performance of the Contract, the Contractor shall give preference to citizens who are, and continuously for six months prior to the contract date, have been residents of the Town of Brookfield; and if no such persons are available; then to residents of the State of Connecticut, if no such persons are available, then to residents of other States, in accordance with Section 31-52, and 31-53 of the Connecticut General Statutes.
- 34. **SAFETY** Bidders are notified that the Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs necessary to the safe and proper performance of the work and that the Contractor shall be solely responsible for taking all necessary precautions to insure the safety of all employees, subcontractors and other persons, including the public, exposed to the contract work. The Contractor shall comply with all current safety requirements mandated by the Occupational Health and Safety Act (OSHA), the Connecticut Department of Transportation (DOT), and any other applicable State statutes.

In addition to any other indemnification provisions contained in the Contract Documents, the Contractor shall at all times indemnify and save harmless the Owner, the Town of Brookfield, The Water Pollution Control Authority, the Engineer, and their officers, agents and employees on account of and from any and all claims, damages, losses, judgments, worker's compensation payments, litigation expenses, and counsel fees arising out of injuries to any person (including death) or damage to property alleged to have been sustained by any person as a result of the acts, omissions, or neglect of the Contractor, its employees or subcontractors. The existence of insurance shall in no way limit the scope of this indemnification. The Contractor shall further be liable to the Owner, the Town of Brookfield, the Engineer, and their officers, agents and employees for all attorneys' fees, costs and other expenses incurred by it or them in enforcing this indemnity provision, provided however, that the Contractor is found to be liable for injury as a result of any act, omission or neglect by it or its employees or subcontractors.

Neither action nor inaction on the part of the Engineer or Owner, or their representatives, shall make them responsible for safe conditions, or make them liable for bodily injury or property damage on this project.

- 35. **STATE REQUIREMENTS** If needed, the Contractor must obtain a General Permit for the Discharge of Stormwater and Dewatering Waste waters from construction activities, as issued by the State Department of Energy and Environmental Protection.
- 36. NOT USED
- 37. **NOT USED**
- 38. **PAYMENT OF TAXES, CHARGES AND ASSESSMENTS** Each person who submits a bid shall be deemed to have agreed that the Owner may apply payments otherwise properly due to such person to the reduction of all real estate or personal property taxes and/or sewer charges and assessments (including interest, fees and penalties thereon) owed to the town or Owner by such person, which taxes are delinquent and have been so delinquent for a period of not

less than one (1) year. Prior to making any payment to any person awarded the contract, the Owner shall ascertain from the Tax or Sewer Collector whether such person owes past due taxes on real or personal property or sewer charges or assessments and shall deduct from such payment the amount of taxes or charges (plus penalties, interest and fees thereon) which are delinquent and have been delinquent for a period of at least one (1) year as of the time of withholding.

- 39. **EXEMPTION FROM TAXES** State and Local sales taxes on construction materials required for construction shall not be included in the bid. The Brookfield Water Pollution Control Authority is exempt from payment of State and Compensating Use Taxes of the State of Connecticut on all materials sold to it, or for the project pursuant to the provisions of the Contract Documents. The purchase by subcontractors of materials to be furnished pursuant to the provisions of the contract shall be a purchase for resale to the Contractor (either direct or through other subcontractors) and hence exempt from sales tax, regardless of the terms of the contract between the prime contractor and the subcontractor.
- 40. **WIDTH OF OPERATIONS -** The bidder's attention is directed to the width limitations for operations in various portions of the project.

During construction, the Contractor will be required to perform operations as follows:

- a) Where so indicated, no activities will be permitted outside the limits of work. Work must be confined to in-line operation, unless otherwise authorized in writing.
- b) Staging areas are to be established in field consultation between the Contractor, the Engineer, and the WPCA representative. Such areas will not exceed 2,000 sq. feet, and are to be delineated by snow fencing.

PROPOSAL, BIDDER'S AFFIDAVIT, BID BOND, SURETY GUARANTEE AND OTHER FORMS,

TOWN OF BROOKFIELD, CONNECTICUT

Route 133 Pump Station Improvements

Langan Job No. 190011048 WPCA CONTRACT NO. 2020-01 PROPOSAL

Brookfield Water Pollution Control Authority 53A Commerce Road, Unit 1 Brookfield, Connecticut 06804

Made by			
P.O./ Address			

Gentlemen:

Pursuant to and in compliance with your request for bids, the undersigned states that he has examined the Contract Documents and the site of the work, made all investigations which he has deemed necessary or desirable, and that he understands the purport and magnitude of the work intended, and the undersigned hereby offers to furnish all plant, labor, material, supplies, equipment, and other facilities and things necessary or proper for or incidental to the proper construction of the work advertised, and to construct the said work in strict accordance with the Contract Documents of which this Proposal is a part and such detailed directions, plans, and drawings as may be furnished from time to time during the progress of construction by the Engineer at the following prices, which prices include all incidental work including traffic control:

SCHEDULE OF PRICES

ITEM	EST.	LINUT	ITEM WITH	UNIT PRICES (IN NUMBERS))	AMOUNT BID	
NO.	QUANTITY	UNIT	UNIT PRICES (IN WORDS)	Dollars	Cents	Dollars	Cents
1	1	L.S.	Mobilization and Demobilization (see max. bid price allowed)				
2	1	Ea.	12-foot Diameter Wet Well (including internal concrete slab and sand infill) Ea.				

ITEM	EST.	UNIT	ITEM WITH	UNIT PRICES (IN NUMBERS)		AMOUNT BID	
NO.	QUANTITY	UNIT	UNIT PRICES (IN WORDS)	Dollars	Cents	Dollars	Cents
3	1	Ea.	Generator Ea.				
4	2	Ea.	Propane Tank Ea.				
5	1	Ea.	Concrete Pad Ea.				
6	16	L.F.	12" DIP CL 52 Sewer Pipe L.F.				
7	1	Ea.	Pipe Connection to Existing Wet Well Ea.				
8	20	L.F.	4" DIP CL 52 Vent Pipe L.F.				
9	1	L.S.	Temporary Relocate Existing Wet Well Electrical Lines & Vent Pipe L.S.				
10	30	S.F.	Repair Existing Wet Well Concrete Slab S.F.				

ITEM	EST.	UNIT	ITEM WITH	UNIT PRICES (IN NUMBERS		AMOUNT BID	
NO.	QUANTITY		UNIT PRICES	Dollars	Cents	Dollars	Cents
11	1	L.S.	Remove Existing Generator, Fuel Tank and associated components L.S.				
12	1	L.S.	Repair Pump Station Building Wall with concrete blocks				
13	2,000	S.F.	Lawn Restoration S.F.				
14	200	S.F.	Repair Driveway S.F.				
15	120	L.F.	Silt Fence L.F.				
16	1	EA.	Stabilized Construction Entrance				
17	1	L.S.	Electrical Connection L.S.				
18	40	L.F.	Gas Line L.F.				

ITEM	EST.	UNIT	ITEM WITH	UNIT PRICES (IN NUMBERS)		AMOUNT BID	
NO.	QUANTITY	UNIT	UNIT PRICES (IN WORDS)	Dollars	Cents	Dollars	Cents
			Bollards				
19	3	EA.					
			Ea. Wet Well and Sewer				
20	1	L.S.	Line Sheeting and Shoring				
			L.S.				
			As-Built				
21	1	L.S.					
			LS.				
22	1	F.L.S.	Allowance for Dewatering				
			FLS.	\$7,500	00	\$7,500	00
23	1	F.L.S.	Miscellaneous Additional Work				
			FLS.	\$25,000	00	\$25,000	00
SUMMATION OF BASE BID ITEMS			DOLLA	ARS			
					CEN	rs	
				(\$)	

The summation of the bid for this contract is based on the prices for the various items. This summation is made with the understanding that it is not a part of the bid and is solely a matter of information for convenience in comparing the bids at the time of opening.

The undersigned proposes to commence work within ten (10) calendar days of receipt of written notice from the Owner so to do, and shall complete the work in all respects except for maintenance and

WPCA Contract No. 2020-01

Addendum No. _____ Dated _____

final pavement	within 45	calendar	days f	ollowing	service	of said	d notice	. The	und	dersigned	is a	lso av	vare of
the provision o	f payment	to the O	wner f	or liquida	ated dar	nages	should	he fai	l to	complete	the	work	within
the time stipula	ated above.												

for		this proposal, under s dollars (\$	•		, certified check or bid bon	d
the sai Owner	ct with, and delivided cashier's checker and shall be the	ver Contract Bonds to ck, certified check, or	the Owner in the amount on of the Contra	accordance with the in of the Bid Bond shall b actor or his Surety for	ed shall fail to execute the information for Bidders, the become the property of the the aforesaid failure of the	en ie
withdra deliver Contra	ninety (90) day awn, the unders ing of such not ct Bonds as he	s after the date of o signed shall, within te ice, execute and deli	pening of the en (10) days ver a contrac he undersign	e bids, or any time the after the date of suc t in the Form of Cor ed hereby designates	delivered to the undersigne hereafter before this bid in the mailing, telegraphing, contract attached hereto, and the above address as his ed.	is or d
by the	The bidder her Engineer:	eby acknowledges the	e receipt of th	e following issues of	addenda, if any, distribute	d
		Dated		um No um No	Date Date	

The Brookfield Water Pollution Control Authority reserves the right to reject any and all bids for any reason, to waive any informality in the bidding and to award the Contract to the lowest responsible and qualified bidder or the responsible and qualified bidder with the lowest combination of **Base Bid and Alternates, where applicable,** selected by the Authority.

Addendum No. _____

Date _____

INFORMATION SHOWING QUALIFICATIONS FOR WORK:

THE BIDDER SHALL SUBMIT WITH HIS BID HIS MOST RECENT CERTIFIED FINANCIAL STATEMENT

The bidder shall here furnish the following summary information relative to his ability and financial resources available for the fulfillment of the Contract, if such be awarded to him:

How many consecutive years has he or they been engaged in the construction business present firm name?	under the
When organized?	
Where incorporated?	
Credit available for this Contract \$	
Contracts in hand- Number	
Gross Amount	
List Permanent Field Personnel	
List Construction Equipment Owned	
Has the firm ever refused to sign a Contract at the original bid?	
Has the firm ever defaulted on a Contract?	
Has the firm ever been adjudged a bankrupt or been subject to a receivership or an order of	
reorganization? If so, give details and particulars	
Is the business at this time subject to any court order relating to bankruptcy, receivership, liqu reorganization?	idation or
Does the bidder hold a current "DAS Contractor Prequalification Certificate" from the Connecticut	
Department of Administrative Services?	
If so, what is the single project limit for which the bidder is so qualified?	
If so, what is the contractor category or categories in which the bidder is so prequalified?	

to the Brookfield Water Pollution Control account of Sewer charges or assessment		of unpaid real or personal property taxe	s or on
Financial Resources- Information from the following: (Give name, business		financial resources can and may be ob	otained
Listing of current contracts of comparable	e size:		
Name or Location	Value	Contact & Tel. No.	

Is the bidder, or any affiliated entity, or principal stockholder or officer, indebted to the Town of Brookfield or

Upon request, the bidder will be expected to amplify the foregoing statements as necessary to satisfy the Owner concerning the ability to successfully perform the work in a satisfactory manner.

The undersigned hereby certifies that no person interested in this proposal is directly or indirectly interested in or connected with any other bid or proposal for said work, and no member of the Owner or other officer or employee of the Owner is directly or indirectly interested therein, or in any portion thereof.

The undersigned hereby certifies that this bid is genuine and not collusive or sham; that said bidder has not colluded, conspired, connived, or agreed, directly or indirectly, with any bidder or person, to put in a sham bid, or that such other person shall refrain from bidding, and has not in any manner, directly or indirectly sought by agreement or collusion, or communication or conference, with any person, to fix the bid price of any other bidder, or to fix any overhead profit or cost element of said bid price, or of that of any other bidder, or to secure any advantage against the Owner or any person interested in the proposed Contract; and that all statements contained in said proposal or bid are true; and further, that such bidder has not, directly or indirectly submitted this bid, or the contents thereof, or divulged information or data relative thereto to any association or to any member or agent thereof.

WPCA Contract No. 2020-01

The undersigned hereby certifies that neither he nor his agent nor any other party for him has paid or agreed to pay, directly or indirectly, a person, firm or corporation any money or valuable consideration for assistance in procuring or attempting to procure the contract herein referred to, and further agrees that no such money or reward shall be hereafter paid.

Date	Firm Name:**	*	
	Address		
		 Seal	
**Insert Bidder's name			
If corporation, give the State of Incorpor		ase "A corporation organized under t	the laws of
If a partnership, give names of the partne under the firm name and style of			ng business
If an individual using a trade name, give i under the firm name and style of			ng business

BIDDER'S AFFIDAVIT (This Affidavit is part of the Proposal)

State of				
County of	SS:			
		Ву:		-
being duly sworn, deposes and says t	hat he resides at			- -
that he is the(Title)	of the			_
who signed the above Proposal, that Bidder; that the seal attached is the se in the Proposal are true to the best of	eal of the Bidder a	and that all that belief.		s contained
Subscribed and Sworn to before me tl	his	day of	, 20	
			(05.41)	
			(SEAL) Notary Public	
			My Commission Expires	6

FORM OF CONSENT OF SURETY/SURETY GUARANTY

(To accompany Proposal)

				ion, the					ompany)						
а со	rporation o	rgani	zed a	nd existing	und	er the	laws of	the	State of ₋					_	
and	licensed	to		business								s and Contrac	_	, that	if
is av	varded to _														
	_	d co	rpora	(Na tion will ex	ime ecut	of Bid e the	der) Perforn	nance	e and Pa	yment	bond o		-	-	
Cont perf	tract Docu	d co ment f the	rpora s an Cor	(Na	ecut	of Bid e the sure	der) Perforn ty in th	nance e fu	e and Pa	yment nt of t	bond o	tract pr	ice for t	he fait	hful
Cont perf	tract Docu ormance o	d co ment f the	rpora s an Cor	(Na tion will ex d will beco	ecut	of Bid e the sure	der) Perforn ty in th	nance e fu	e and Pa	yment nt of t	bond o	tract pr	ice for t	he fait	hful

(To be accompanied by the usual proof of authority of officers of surety company to execute the same).

BID BOND

as principa	L MEN BY THESE PRESENTS, That we, the al; andasin the penal sum of \$hereby jointly and severally bind ourselves	s Surety, are hereby held a for the payment of w	which, well and truly to be
	e condition of the above obligation is such , a certain Bid, attached hereto, and hereby		as submitted to the owner
now, the	EREFORE,		
(A)	If said Bid shall be rejected, or, in the alte	rnate	
(B)	If said Bid shall be accepted and the Prin Contract attached hereto (properly compound for his faithful performance of sa laborers and material men, shall in all o acceptance of said Bid.	pleted in accordance with sa aid Contract, and for the pa	id Bid) and shall furnish a syment of subcontractors,
expressly (en, this obligation shall be void, otherwise understood and agreed that the liability of eed the penal amount of this obligation as h	the Surety for any and all cla	
its bond sh	e Surety, for value received, hereby stipula nall be in no way impaired or affected by an h Bid; and said Surety does hereby waive r	ny extension of the time with	in which the Principal may
them as ar	WITNESS WHEREOF, the Principal and the corporations having caused their corporations their proper officers, the day and year first s	ate seals to be hereto affixed	
		Principal:	(L.S.)
Suraty		Rv:	

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:	
THATa	, as Principal, hereinafter called Contractor, and as Surety, are held and firmly bound unto the
Brookfield Water Pollution Control Authority as Obligee, h	
Contractor and Surety bind themselves, their heirs, execujointly and severally, firmly by these presents.	itors, administrators, successors, and assigns,
WHEREAS, Contractor has by written agreement dated with the Owner for the construction sanitary sewers entitle Improvements , which contract with all its terms, covenant herein to form a part hereof as fully as if said contract was re-	d Contract 2020-01 Route 133 Pump Station nts, conditions and stipulations is incorporated
NOW, THEREFORE, the condition of this obligation is sufaithfully perform said Contract, then this obligation shall be force and effect.	
PROVIDED, that any alterations which may be made in the tunder it, or the giving by the Owner of any extension of tin other forbearance on the part of either the Owner or the Corthe Contractor and the Surety, or their successors or assig Surety of any such alterations, extension or forbearance is he	me for the performance of the contract, of any ntractor to the other shall not in any way release ns from their liability hereunder. Notice to the
WHENEVER Contractor shall be, and declared by the Owner having performed the Owners obligations thereunder, the S promptly remedy the default or shall promptly:	
1. Complete the Contract in accordance with its term acceptable to the Owner, said other contractor to the Owner, said other contractor to acceptable to the Owner, said other contractor to acceptable to the Owner, said other contractor to acceptable to the Owner, said other contractor to acceptable to the Owner, said other contractor to the	· · · · · · · · · · · · · · · · · · ·
2. Obtain a bid or bids for submission to the Caccordance with its terms and conditions, and upon of the lowest acceptable and responsible bidder, arrand the Owner, and make available as work progrecompletion less the balance of the contract price (evsuccession of defaults under the contract or contraparagraph), but not exceeding, including other costs be liable hereunder, the amount set forth in the first of the contract price" as used in this paragraph shall Owner to the Contractor under the Contract and any properly paid by the Owner to Contractor.	determination by the Owner and Surety ange for a contract between such bidder ess sufficient funds to pay the cost of en though there should be a default or a acts of completion arranged under this and demands for which the surety may t paragraph hereof. The term, "balance I mean the total amount payable by the
IN WITNESS WHEREOF, the above-bounded parties have exthis day of, 20, party being hereto affixed and these presents signed by authority of its governing body.	the name and corporate seal of each corporate
IN THE PRESENCE OF:	

WPCA Contract No. 2020-01						
				(Principal)		S. ffix Seal)
			Ву			
				(Title)		
				(Surety)	l (Affix S	
			_	,		seal)
			Ву	(Attorney-in-fact)		
ACKNOWLEDGMENT OF PRINCIPAL				,		
STATE OF)	,			00	00111117/05
)) ss.:			, 20	_ COUNTY OF
Personally appeared of						
Corporation; that the seal affixed to see resolution of the Board of Directors or being authorized to do so, executed the	said instr f said Co ne forego	ument is rporation ing instru	s such (n, and t ument f	Corporate Seal, that hat he, as such	it was so	o affixed to the
the name of the corporation by himself						
In witness whereof I hereunto	set my h	nand and	seal.			
		Notary	Public			
ACKNOWLEDGMENT OF SURETY CO	MPANY					
STATE OF)					
COUNTY OF)) ss.:			, 20_	
Personally appeared of			wh	no acknowledged (Surety) that h	himself e knows	to be the
Corporation; that the seal affixed to s resolution of the Board of Directors of authorized to do so, executed the forename of the corporation by himself as	said instr f said Cor egoing in	ument is rporation istrumen	s such (, and th t for th	Corporate Seal, that nat he, as such	it was s	o affixed to the being
In witness whereof I hereunto	set my h	nand and	seal.			
			Notary			

(The Surety company must append statement of its financial condition and a copy of the resolution authorizing the execution of Bonds by Officers of the company, and the power of attorney of the Surety company's attorney in fact, authorized to act within the State of Connecticut).

Affix Corporate Seal

KNOW ALL MEN BY THESE PRESENTS:

LABOR AND MATERIAL PAYMENT BOND

THAT,	of									as	Principal,	anc
			,	of					as Su	urety ar	e held and	firmly
bound ur	nto the	Brookf	ield Water F	Polluti	on Control Au	uthority as	s Ob	ligee	(hereina	fter calle	ed Owner)	for the
use and	d ben	efit of	claimants	as	hereinbelow	defined,	in	the	amoun'	t of _		
				_ (\$ _), fo	or the	e pay	ment of	which	the Princip	oal and
Surety bi firmly by				, exec	cutor, adminis	trators, su	icces	ssors,	and ass	igns, joi	ntly and se	verally
		•	•	_	reement date wers entitled							
				•	art hereof, and				-		-	

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 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 alterations, extension, modification or forbearance of said Contract 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 therefore, may assert a claim for payment or bring a suit on this Bond, and in the name of the person or party suing, prosecute the same to a final judgment, and

NOW, THEREFORE, the condition of this obligation is such that, if Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

- 1. A claimant is defined as a person or party having a direct contract with the Principal or with a subcontractor of the Principal for labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the Contract.
- 2. The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished or provided by such claimant, may assert a claim for payment and prosecute a suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any costs or expenses of any such suit.
- 3. No suit or action shall be commenced hereunder by any claimant.
 - a) Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two (2) of the Principal, the Owner, or the Surety, within ninety (90) days after claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was performed. Such notice shall be served by mailing the same by certified mail, postage prepaid, return receipt

requested in an envelope addressed to the Principal, Owner or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the State in which the aforesaid project is located.

b) After the said Contract.	e expiration of one	(1) year follow	wing the	date on which Pr	incipal ceased	Work	on
	an in a state court Project or Principal	•	t jurisdict	ion within and fo	r the Judicial	District	in
4. The amount good faith thereund against said improve this bond.		e payment by	Surety	of mechanics lie	ns which may be	e filed of red	cord
IN WITNESS WHEF thisparty being hereto authority of its gove	_ day of affixed and thes	<u> </u>	_, 20	the name and c	orporate seal of	each corpo	rate
IN THE PRESENCE	OF:						
				(Principal)	L.S. (Affix Se	al)	
			Ву				
				(Title)			
				(Surety)	L.S.	ix Seal)	
				,		ix Seai)	
			By <u>.</u>	(Attorney-in	—fact)		
ACKNOWLEDGEMI	ENT OF PRINCIPA	L					
STATE OF)					
) s	ss.:		, 20_		
COUNTY OF)					
Personally				who acknowle (Principal), t			the said
Corporation; that the resolution of the Bo authorized to do so name of the corporation.	ne seal affixed to a pard of Directors of , executed the for	said instrume f said Corpora egoing instru	ent is suc ation, and ument for	ch Corporate Sea I that he, as such	al, that it was so	o affixed to be	the eing
In witness v	whereof I hereunto	set my hand	d and sea	I.			
			No.	tary Public			
			INO	tary i ublic			

ACKNOWLEDGEMENT OF SURETY COMPANY

STATE OF)			00	
COUNTY OF) SS.:)			, 20	
Personally				acknowledged (Surety), that he		
resolution of the Bo authorized to do so	ne seal affixed to pard of Directors , executed the f	to said instrument is su s of said Corporation, ar foregoing instrument fo as	ich Corp nd that h or the pu	porate Seal, that he, as such urposes therein c		being
In witness v	whereof I hereur	nto set my hand and sea	al.			
		 No	otary Pu	blic		

(The Surety company must append statement of its financial condition and a copy of the resolution authorizing the execution of Bonds by Officers of the company, and the power of attorney of the Surety company's attorney in fact, authorized to act within the State of Connecticut).

Affix Corporate Seal



CONTRACT

Town of E the Brook	IIS AGREEMENT, made this day of, 2020 by and between the Brookfield WPCA, a municipal corporation located in State of Connecticut, acting by field Water Pollution Control Authority, a duly authorized agency of said Town, party t part, hereinafter called the "Owner"; and
of	County of State of, hereinafter called the "Contractor".
performed complete Improven Contract I the Adver this Contr	ETH; That for and in consideration of the payments and agreements to be made and by the Owner, the Contractor hereby agrees with the Owner to commence and the work described as "Contract 2020-01, "Route 133 Pump Station nents" as shown in the Contract Documents prepared by Langan CT, Inc. The Documents include the Contract Drawings, General Specifications, Contract Items, tisement, Information for Bidders, Proposal, Bidder's Affidavit, General Conditions, ract, and all addenda thereto and modifications thereof, incorporated in the said its before execution of this Contract.
(10) days work exce The Contr	e Contractor hereby agrees to commence the work under this Contract within ten of receipt of a written notice to proceed from the Owner and to fully complete all ept maintenance and final pavement within 120 consecutive calendar days thereafter. Factor shall pay the Owner liquidated damages in the amount of \$500.00 for each day that the Contractor shall exceed the foregoing contract period in completing the
Th	e Owner will pay and the Contractor shall receive the Contract Price of dollars and cents (in words) (\$
(a)	based upon the bid prices in the Bid Proposal, as full compensation for: Furnishing the security required for the faithful performance, and for the payment of all labor and material required under the Contract; Performing and completing all work which is necessary or proper to be furnished and/or performed in order to complete the entire work as shown and described in the Contract Documents;
(c)	 All losses or damages sustained by the Contractor: (1) Arising out of the nature of the work aforesaid, or (2) From the action of the elements, or (3) From any unforeseen obstructions or difficulties encountered in the prosecution of the work, or (4) From any encumbrances on the line of the work; and

(d) All expenses incurred by or in consequence of the suspension or discontinuance of

the work as specified.

The Owner shall pay the Contractor for performance of work in accordance with the unit prices or lump sums bid, and only for the work quantities actually required and performed. The Contractor will accept, as payment in full with no allowance for anticipated profit, the sum of:

- (a) The lump sum bid, less any approved credits for reduction in work;
- (b) The products of the quantities, as determined by the Engineer, multiplied by the unit prices bid or stipulated; and
- (c) Compensation for extra work, if any, as provided for in the General Conditions.

Such sum shall be subject to additions and deductions as provided in the Contract Documents, and shall be paid by the Owner to the Contractor in current funds, and only upon certificates of the Engineer, as provided in the General Conditions.

The Contractor represents and warrants:

- a) That the Contractor is financially solvent and experienced and competent to perform the contract work, and to furnish the labor, materials, supplies and equipment, to be so performed or furnished by the Contractor;
- b) That the Contractor is familiar with all federal, state, and municipal laws, ordinances, and regulations, which may in any way affect the work or those employed therein;
- c) That such temporary and permanent work required by the Contract Documents can be satisfactorily constructed and used for the purpose for which it is intended, and that such construction will not injure any person or damage any property; and
- d) That the Contractor will make no claims against the Owner if, in carrying out the project, the Contractor finds that the actual conditions encountered do not conform to the information shown in the Contract Documents, or to conditions to be expected from surface and/or subsurface indications and or investigations.

Liquidated Damages:

A. The Owner and the Contractor recognize that "time is of the essence" on this project and that Owner will suffer financial loss apart from the costs described as Special Damages, if the Work is not complete within the time specified herein, plus any extensions allowed in accordance with the General Conditions. Owner and Contractor also recognize the delays, expense and difficulties involved in proving in a legal proceeding the actual loss or damages suffered to the Owner and/or its third part contract beneficiaries if the work is not complete on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty) Contractor shall pay Owner \$500.00 for each day that expires after the time specified herein for completion including any extensions thereof made in accordance with the General Conditions, until the work is complete.

Special Damages:

- A. In addition to the amount provided for liquidated damages, Contractor shall pay Owner the actual costs reasonably incurred by Owner for engineering and inspection forces employed on the Work for each day that expires after the time specified herein for completion, including any extensions thereof made in accordance with the General Conditions, until the work is complete.
- B. After completion if Contractor shall neglect, refuse or fail to complete the remaining Work within the Contract Time, Contractor shall pay Owner the actual costs reasonably incurred by Owner for engineering and inspection forces employed on the work for each day that expires after the time specified herein for the Work to be completed and ready for final payment (adjusted for any extensions thereof made in accordance with the General Conditions) until the Work is completed and ready for final payment.

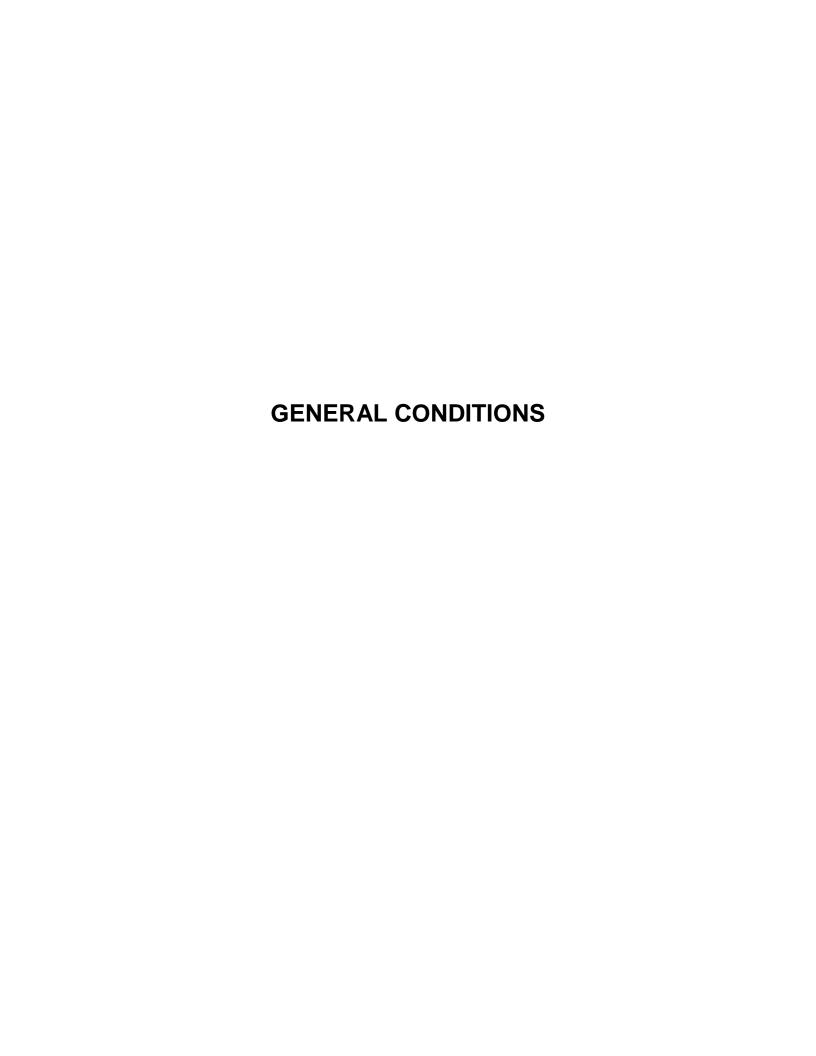
The Owner may deduct the amount of Liquidated Damages and Special Damages from monies due the Contractor under this Contract.

This Contract shall bind the heirs, executors, administrators, successors and assigns of the respective parties hereto.

IN WITNESS WHEREOF, the parties to these presents have executed this Contract in four (4) counterparts, each of which shall be deemed an original, in the year and day first above mentioned.

(Seal) Authority	Brookfield Water Pollution Control		
ATTEST:	By: Nelson Malwitz, Chairman		
(Seal) ATTEST:	(Contractor)		
	By: (Title): (Address):		

NOTE: If Contractor is a Corporation, Secretary should attest.



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GENERAL CONDITIONS

ART. 1 - DEFINITIONS

The term "Contract Documents" shall mean and consist of the Advertisement for Bids, Information for Bidders, Proposal, Bidder's Affidavit, executed Contract, General Conditions, General Specifications, Detailed Specifications, Contract Drawings entitled and all addenda thereto and modifications thereof incorporated in the Documents before execution of the Contract.

The term "Owner" shall mean the Brookfield Water Pollution Control Authority, Town of Brookfield, Connecticut, or its duly authorized representative.

The term "Engineer" shall mean Langan CT, Inc., 1 North Broadway – Suite 910, White Plains, New York 10601.

The Term "Contractor" shall mean the party or parties contracting with the Owner to perform a branch of the work herein specified or to the legal representative of such party or parties.

The term "Subcontractor" shall mean the party or parties having a contract or agreement with the Contractor to supply labor or materials, or both, for work at the site of the Project.

The term "Contract Bonds" shall mean the bonds furnished by the Contractor, as security for the faithful performance of his Contract and security for the payment of all persons performing labor or furnishing materials in connection therewith.

The term "Surety" shall mean the person, persons, or corporate body which is bound with and for the Contractor, and which binds itself or himself for the payment of all debts pertaining to, and for the acceptable performance of, the work for which he has contracted.

The term "Project" shall mean the entire work to be performed under the Contract.

The term "work" shall mean all plant, labor, materials and supplies (including their transportation to or from the site of the Project by employees of the Contractor or his subcontractors), structures or parts thereof on which work is underway or completed, equipment, rentals, insurance, Contract Bonds, and other facilities and things agreed to be furnished and done by the Contractor, and necessary and proper for or incidental to the carrying out and completion of the terms of this Contract, including all shop and field tests of equipment and structures, operating tests and maintenance for one year.

The term "extra work" shall mean work authorized by the Owner which, by his written direction, involves changes in, or additions to, the work required under the Contract at the time of its execution.

The term "drawings" shall mean the Contract Drawings, all details or working drawings furnished by the Engineer pertinent or supplemental thereto, and such supplemental detail drawings as the Contract Documents may require the Contractor to furnish, when such drawings have been duly approved.

The term "specifications" shall mean the General Specifications, Detailed Specifications, specifications contained in the Contract Items or shown on the drawings, and standard specifications referred to herein.

The term "provide" and/or "furnish" shall mean to supply, deliver, place, install, connect, and make ready for use or for the purpose intended.

The term "completion" shall mean the full and exact compliance and conformance with the provisions and requirements expressed and implied by the drawings, specifications, and Contract Documents.

The term "material" (or "materials") shall mean all the things of any kind, nature, and class as may be specified which become a part of or are used in the construction of the work, together with all manufactured or prepared materials, articles, equipment, accessories, appliances, appurtenances, supplies and parts used therein or placed thereon.

The term "structures" shall mean manholes, conduits, pipe, electrical and other facilities, and other works which are to be built under this Contract or which may be encountered in the work and which are not otherwise classified herein.

The term "site" shall mean the area or areas which is the location for the performance of the work.

When referring to the work or its performance, the words "directed", "required", "permitted", "ordered", "designated", "prescribed", and others of like import, shall imply the direction, requirement, permission, order, designation or prescription of the Engineer; and "approved", "acceptable", "satisfactory", "in the judgment of", and words of like import shall mean approved by or acceptable to or satisfactory to the Engineer. Wherever in the specifications the words "detailed", "noted", "shown", or words of like import are used, it shall be understood that these words mean as detailed, noted, or shown on the drawings; and where the word "specified" is used, it shall be understood to mean as specified herein.

Whenever any article of equipment or material is specified by reference to the name of a manufacturer or dealer without the use of the terms "equal to", or "approved equal", the intent is to specify that equipment or material shall be the basis for the bid submitted in the proposal.

ART. 2 - HEADINGS

The headings of the articles herein are intended for convenience of reference only and shall not be considered as having any bearing on their interpretation.

ART. 3 - EXECUTION, CORRELATION AND INTENT OF DOCUMENTS

The Contract Documents shall be signed in quadruplicate by the Owner and the Contractor.

The Contract Documents are complementary, and what is called for by one shall be binding as if called for by all, The work herein described and/or shown on the drawings shall be complete in every detail notwithstanding that every item necessarily involved is or is not particularly mentioned or shown, and the Contractor will be held to provide all labor, materials, equipment and incidental accessories necessary for the entire completion of the work intended to be described or shown in finished form, tested and ready for operation, and shall not avail himself of any manifestly unintentional error or omission, should such exist.

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 this Contract shall be read and enforced as though it were included herein, and if through mere mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party hereto, the Contract shall forthwith be physically amended to make such insertion.

If this Contract contains any unlawful provisions not an essential part of the general structure of the Contract and which shall not appear to have been a controlling or material inducement in the making

thereof, the same shall be deemed of no effect and shall be deemed stricken from the Contract without affecting the binding force of the remainder.

ART. 4 -CONTRACT SECURITY

Simultaneously with delivery of the executed Contract, the Contractor shall furnish and deliver to the Owner in quadruplicate an executed Performance Bond and Labor and Material Payment Bond, each in the amount of one hundred percent (100%) of the accepted bid as security for the faithful performance of his Contract, and in the amount of one hundred percent (100%) of the accepted bid as security for the payment of all persons performing labor or furnishing materials in connection therewith, prepared in a form and having as security thereon such Surety or Sureties as are acceptable to the Owner, are authorized to transact business within this State, and have at least an A Minus rating from A.M. Best & Company. The bonds shall be purchased through a surety company having a local agent upon whom service of process can be made. The bonds shall assure the Owner coverage for a one year maintenance period subsequent to completion of work.

If, at any time after execution and approval of this Contract and the Bonds required by the Contract Documents, the Owner shall deem any of the Sureties upon such bonds to be unsatisfactory, or if, for any reason, such bonds shall cease to be adequate security for the Owner, the Contractor shall, within five (5) days after notice so to do, furnish new or additional bonds, in forms, sums and signed by such Sureties as shall be satisfactory to the Owner. No further payment shall be deemed due nor shall any further payment be made to the Contractor unless and until such new or additional bonds shall be furnished and approved. The premium on such bonds shall be paid by the Contractor.

ART. 5- BREAKDOWN STATEMENT OF LUMP SUM BIDS

Simultaneously with his delivery of the executed Contract, the Contractor shall furnish and deliver to the Owner triplicate copies of a breakdown statement of his lump sums bid in the Proposal, in such detail and form as will be acceptable to the Engineer, for use in preparing the monthly estimates. The breakdown shall show the delivered price of material and the allowance for installation, which may be enumerated in any monthly estimate for payment as provided here-in-under; and shall be so made as to facilitate the preparation of monthly estimates.

ART. 6- OBLIGATION OF CONTRACTOR

The Contractor shall, under the bid prices, furnish all labor, materials, plant, power, light, heat, fuel, water, tools, appliances, equipment, supplies, and any and all other means of construction necessary or proper for performing and completing the work; restore to their original condition all surfaces disturbed; do all work and pay all costs of cutting, fitting, patching, protecting, supporting, maintaining, repairing if damaged, relocating and restoring all surface, subsurface and overhead structures, and all other property, including the work of other contractors, and pipe, conduits, ducts, tubes, chambers, and appurtenances, public or private in the vicinity of the work; bear all costs of insurance; bear all losses due to the nature of the work and costs incidental to suspension or discontinuance of the work, except as herein provided; take all risks of whatever nature; indemnify the Owner for all claims, as herein provided; conform to all federal, state, county, or municipal legislation and requirements; undertake all cutting, fitting, or patching of his work required to bring it into conformity with the Contract Documents; leave intact the work of adjoining contractors, unless otherwise ordered; perform and complete the work, including all operating tests, to the satisfaction of the Engineer, and in the manner best calculated to promote rapid construction and consistent with safety of life and property, and in strict accordance with the Contract Documents; protect the work during construction; clean up the work during and after construction; and maintain it until final acceptance and as provided hereinafter under "Maintenance."

The Contractor will supervise and direct the work efficiently and with his best skill and attention. He will be solely responsible for the means, methods, techniques, sequences, safety measures, and

procedures of construction. It is understood that neither the Owner nor the Engineer are responsible for the adequacy of construction methods or for the safety of Contractor's personnel.

Neither the action nor inaction of the Owner or the Engineer shall make them liable for injury or damage resulting from inadequate or improper construction methods. The Contractor shall indemnify the Owner and the Engineer from any action by his personnel or by others, as a result of injury or damage caused by improper construction methods, and shall provide the Owner and Engineer with suitable defense for any such action at his own expense.

It is intended that the unit prices and lump sum bids include all the work to be done which will result in a complete installation of first class workmanship and material ready for operation, and that any appurtenance, accessory, or work allied to any particular item of work and necessary for its proper operation or completion will be furnished and installed under the unit prices and lump sums or lump sum bid under this Contract.

ART. 7- START AND COMPLETION OF WORK

The Contractor shall commence work within ten (10) days from the date of receipt of a written notice from the Owner to commence work, and shall continue without interruption until work is completed, except as provided herein. The sequence of work shall conform to the construction program submitted by the Contractor and approved by the Engineer, provided however, that said schedule may be modified from time to time as directed or approved by the Engineer.

Modification of the schedule or sequence of construction by the Engineer shall not entitle the Contractor to extra compensation other than mobilization and demobilization costs, and only if such costs are in excess of normally anticipated costs as determined by the Engineer.

The Contractor shall complete the work in all respect, except for maintenance, within the number of consecutive calendar days stipulated in the Contract following the service of notice from the Owner to commence work.

ART. 8- CONTRACTOR'S AND SUBCONTRACTOR'S INSURANCE

The forms or amounts of insurance to be furnished by the Contractor and each subcontractor shall not in anyway operate to relieve or limit the liability of the Contractor or subcontractors as otherwise set forth in the Contract or any other sections of the Contract Documents.

The Contractor shall not commence work under this Contract until he has obtained all insurance required and such insurance has been approved by the Owner, nor shall the Contractor allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been obtained and approved. Approval of the insurance by the Owner shall not relieve or decrease the liability of the Contractor hereunder.

The Contractor shall purchase and maintain insurance with companies having a minimum A Minus rating from A.M. Best & Company, which are also satisfactory to the Owner.

Certificates from the insurance carrier shall be filed in quadruplicate with the Owner and shall state the limits of liability and the expiration date for each policy and type of coverage. Each certificate issued shall include a clause that the Owner will receive 30 days written notice if the insurance is terminated or canceled prior to the expiration date of the policy. Renewal certificates covering the renewal of all policies expiring during the life of the Contract shall be filed with the Owner not less than 10 days before the expiration of such policies.

The Contractor and each subcontractor shall take out and maintain during the life of this Contract such insurance as will protect him, the Owner, and the Engineer from claims for damages for bodily injury, including accidental or wrongful death, as well as claims for property damage, which may arise from operations under this Contract whether such operations be by himself or by any subcontractor or by anyone directly or indirectly employed by either party. A subcontractor may be excused from coverage only if he is a named insured on the prime contractor's policy or policies. The Owner, the municipality in which work is to be done, and the Engineer, shall be <u>Additional Insured's</u> on all policies. Such insurance shall be considered to provide coverage as required by the contract, or any other section of the Contract Documents.

All of the insurance to be provided shall be considered to be primary and non-contributory insurance as respects the Owner, the municipality in which the work is to be done, and the Engineer.

The Contractor and Subcontractor will save harmless, indemnify and defend the Owner, Engineer, the municipality in which the work is to be done, their agents and employees from any and all claims arising out of the Contractor's performance.

The amounts of such insurance shall be not less than the following limits of liability. Such limits of liability may be provided under a combination of primary and excess policies.

- A) Bodily Injury or Property Damage: Liability for bodily injury or property damage: \$3,000,000 on account of a single occurrence.
- B) Personal Injury: Liability for personal injury torts: \$3,000,000 each person.
- C) The limits of liability in (A) and (B) above shall be subject to the following annual aggregate limits:
 - (1) \$3,000,000 for products and completed operations. This aggregate limit must apply solely to this work and Project.
 - (2) \$3,000,000 for all other occurrences or offenses other than products and completed operations. This aggregate limit must apply solely to this project and Endorsement CG 25 03 03 97 Designated Construction Project(s) General Aggregate Limit or equivalent must be attached to the policies except the motor vehicle insurance policy.
 - (3) No aggregate shall apply to the motor vehicle insurance policy.

The following types of insurance shall be provided.

- (a) <u>Workers Compensation Insurance</u> The Contractor shall take out and maintain during the life of this Contract, Workers Compensation Insurance for all of his employees. On any work that is sublet, the Contractor shall require the subcontractor similarly to provide Workers Compensation Insurance for all of the subcontractor's employees.
- (b) <u>Contractor's Commercial General Liability Insurance</u> Liability for Bodily Injury, Property Damage and Personal Injury shall be not less than the amount required in (A), (B) and (C) specified hereinbefore. The "x" (blasting) "c" (collapse) and "u" (underground) exclusions or equivalents shall be removed from the policy.
- (c1) <u>WPCA Protective Liability Insurance</u> Liability for WPCA's Protective Bodily Injury and Property Damage Insurance shall be not less than the amount required in (A) and (B) specified hereinbefore. A separate policy shall be furnished to the WPCA for this coverage

- (c2) <u>Owners Protective Liability Insurance</u> Liability for Owner's Protective Bodily Injury and Property Damage Insurance shall be not less than the amount required in (A) and (B) specified hereinbefore. A separate policy shall be furnished to the Owner for this coverage.
- (d) <u>Motor Vehicle Insurance</u> Bodily Injury and Property Damage Insurance covering the operation of all motor vehicles owned or used by the Contractor and/or subcontractor in the prosecution of the work under the Contract, shall be in the amount required in (A) specified hereinbefore.
- (e) <u>Property Insurance</u> The Contractor shall procure and maintain during the life of the Contract, Builder's Risk Completed Value coverage. The interest of the Owner, the Contractor and subcontractors shall be included and the insurance shall be written in an amount equal to 100% of the completed value. Coverage under the insurance will be written on a broad all risks of loss policy form including without limitation collapse, flood, earth movement, etc. A waiver of this coverage may be sought for less vulnerable sections of the work, such as buried pipelines but it shall be the Contractor's responsibility to request such waiver and to provide a breakdown of covered values.
- (f) <u>Contingent Liability</u> The above policies for Public Liability and Property Damage Insurance must be so written as to include Contingent Bodily Injury Liability and Contingent Property Damage Insurance to protect the Contractor against claims arising from the operation of Subcontractors. This coverage may be waived only if there will be no subcontractors on the project, or if the subcontractor will be separately covered with fully equivalent insurance.
- (g) <u>Insurance Covering Special Hazards</u> The following special hazards shall be covered by rider or riders to the Public Liability Insurance policy or policies herein elsewhere required to be furnished by separate policies of insurance, in amounts as set forth in (A), (B) and (C) specified hereinbefore.

Loading and Unloading Hoisting and Rigging Blasting, Collapse and Underground

(h) <u>Completed Operations and Products Liability</u> - The Contractor must furnish evidence of coverage under the Commercial General Liability Policy for not less than the amount required in (A), (B), and (C)(1) specified hereinbefore for a period of not less than 3 years after completion of the work under this contract. This coverage limit must apply solely to this work and Project, If such coverage is not furnished initially, it must be made available before Acceptance of the Work and final release, by the furnishing of a separate site specific policy.

ART. 9- CONSTRUCTION PROGRAM

Following award of his Contract, the Contractor shall attend a Project conference arranged by the Owner which will include representatives of the Owner, the Engineer, and all other contractors doing work on or about the site.

Within 10 days after notice to proceed with the work, the Contractor shall prepare and submit for approval six copies of a detailed chronological construction program or work progress schedule, setting forth clearly each stage including approximate delivery dates of materials, and the time allowed for the installation of materials, in order to complete all the work fully within the time fixed herein, and, if required, he shall revise and resubmit the program until it is approved. Confirmed delivery dates for materials shall be furnished as soon as practicable after the submission of the construction program.

The Critical Path Method will be permissible in preparation of the construction program, which must be adjusted and updated through a monthly narrative submission.

The Contractor, within 7 days after being notified of an unsatisfactory program, shall resubmit a revised program for approval. If, subsequent to the initial approval, unforeseen circumstances necessitate a modification of the approved construction program, as determined by the Engineer, the Contractor, within 7 days after such notification, shall submit a revised program for approval.

The Contractor shall adhere to such program, and, if necessary to do so, he shall supply, without increased cost to the Owner, additional labor and/or additional shifts of labor and overtime, and procure materials and equipment more promptly.

The Engineer shall have the right to order the Contractor to prosecute the work simultaneously at and from as many different points or parts as the Engineer may deem necessary to assure completion within the Contract time, or to assure minimum interference with the public. Failure to comply with any such work order shall constitute a breach hereof.

The Contractor shall also submit, with such construction program, his plans for plant and his specifications covering methods of construction and of handling materials which he proposes to use in the performance of work. Approval, however, of any proposed plans of plant and such specifications shall not be deemed to relieve the Contractor of any liability or responsibility placed upon him by this Contract or by law.

ART. 10- NOT USED

ART. 11- ACCEPTANCE OF DRAWINGS AND SPECIFICATIONS

The Contractor admits and agrees that he is satisfied with the drawings and specifications and agrees that he will at no time dispute or complain that there was any misunderstanding or any error in regard to the amount, quantities, materials to be furnished, and of the work to be done under this Contract, or in regard to the amount of compensation to be paid therefore; and he further covenants and agrees to completely execute and perform his Contract and to fully complete the said work or improvements to the satisfaction of the Owner and to strictly comply with these drawings and specifications and not to ask or demand, sue for or recover any further or extra compensation beyond the Contract price. He also further covenants and agrees that the Owner may accept any alternate listed at the time of submitting his proposal for the price set therein during the life of the Contract. It is intended that all said prices shall be the sole and only compensation to the contractor for the full and complete performance of this contract, and the full completion of said Contact or improvement. It is also understood and agreed that the price to be paid includes payment for all labor, materials, tools, equipment and permits therefor.

The Contractor accepts the drawings and specifications as complete and accurate and agrees that there is no conflict therein with permissible trade practices or methods. Any objections to the drawings and specifications that the Contractor may have must be called to the Engineer's attention and the matter resolved before submitting his Proposal.

The Contractor agrees that should there be conflicts or objections not called to the Engineer's attention and written decision rendered by the Engineer before signing the Contract the Engineer's decision with regard to such conflict or objection shall be final and binding on the Contractor.

ART. 12 - OMISSION OF DETAILS IN DRAWINGS AND SPECIFICATIONS

All work called for in the specifications applicable to each separate Contract, but not shown on the drawings in their present form, or vice versa, and work not specified in either the drawings or in the specifications, but involved in carrying out their intent, or in the complete and proper execution of the work, shall be performed by the Contractor as though it were specifically delineated or described.

The apparent silence of the specifications as to any detail, or the apparent omission from them of a detailed description concerning any work to be done and materials to be furnished, shall be regarded as meaning that only the best general practice is to prevail and that only the best material and workmanship is to be used; and interpretation of these specifications shall be made upon that basis.

ART. 13 - CONFLICTS ON DRAWINGS AND SPECIFICATIONS

In case of any conflict or inconsistency between the drawings and specifications, the matter shall be submitted by the Contractor to the Engineer, whose decision thereon shall be conclusive and binding on the Contractor as if same were specifically set forth in the Contract, and unless he shall have asked for and obtained a decision in writing from the Engineer before submitting his Proposal as to what shall govern, the Contractor shall be deemed to have estimated on the more expensive way of doing the work.

Any discrepancy between the figures on drawings shall be submitted by the Contractor to the Engineer, whose decisions thereon shall be conclusive and final.

When any detail of construction is not fully understood by the Contractor, he shall make application to the Engineer for such additional instructions as may be necessary and the Engineer's decision shall be final. In no case shall he proceed without such instructions.

Should anything be omitted from the drawings or specifications which is necessary to a clear understanding of the work, or should any errors appear either in any of the drawings furnished or in the work done by other contractors affecting the work included under this Contract, the Contractor shall promptly notify the Engineer of such omission or errors and in event of the Contractor's failure to do so, he shall make good any damages to or defect in his work caused thereby. He will not be allowed to take advantage of any error or omission on the drawings, as full instructions will be furnished by the Engineer, should such error or omission be discovered, and the Contractor shall carry out such instructions as if originally specified.

Errors in the specifications and/or drawings which are purely typographical shall be interpreted as would be the logical conclusion or brought to the attention of the Engineer for interpretation.

The Contractor is required to check all dimensions and quantities on the drawings or schedules given to him by the Engineer, and shall notify the Engineer of all errors therein which he may discover by such examination and checking. The Contractor will not be allowed any extra payment for work he alleges to be due to any error or omission in these specifications, nor in the drawings or schedules, as full directions will be furnished by the Engineer should such error or omission be discovered, and the Contractor shall carry out such instructions as if originally specified.

Figured dimensions on drawings shall take precedence over measurement by scale and detailed working drawings shall take precedence over general drawings and shall be considered as explanatory of them and not as indicating extra work.

ART. 14- DRAWINGS, DIAGRAMMATIC REPRESENTATION

Where drawings are shown in diagrammatic form they are intended to convey scope of work and to indicate general arrangement of equipment, ducts, conduits, piping and fixtures.

Locations of all items, shown on drawings or called for in specifications that are not definitely fixed by dimensions are approximate only. Exact locations necessary to secure the best conditions and results shall be submitted to the Engineer for approval before installation.

When directed by the Engineer, reasonable modifications in layout shall be made as required to prevent conflict with work of other trades or for proper execution of work, without additional cost to the Owner.

ART. 15- STANDARD SPECIFICATIONS AND ABBREVIATION

Where reference is made in the Contract Documents to the standard specifications of any technical society, Federal Specification Board, or other recognized organization, these shall be construed to mean the latest standard adopted and published at the date of advertisement for bids and such specifications are made part hereof to the extent which is indicated.

The following abbreviations are used throughout the specifications to refer to organizations publishing specifications that are widely accepted as standards:

AASHTO American Association of State Highway and Transportation Officials

ACI - American Concrete Institute
AGA - American Gas Association

AGMA - American Gear Manufacturers Association
AHDGA- American Hot Dip Galvanizing Association
AIEE - American Institute of Electrical Engineers
AISC - American Institute of Steel Construction

AISI - American Iron and Steel Institute

AMCA - Air Moving and Conditioning Association

ANSI - American National Standards Institute
ASCE - American Society of Civil Engineers

ASHRAE- American Society of Heating, Refrigerating and Air Conditioning Engineers

ASME - American Society of Mechanical Engineers
ASTM - American Society for Testing and Materials
AWPA - American Wood Preservers' Association

AWS - American Welding Society

AWWA - American Water Works Association

F.S. - Federal Specifications

IBR - Institute of Boiler and Radiator Manufacturers
 IEEE - Institute of Electrical and Electronic Engineers
 IPCEA- Insulated Power Cable Engineers Association

NBFU - National Board of Fire Underwriters (American Insurance Association)

NEC - National Electrical Code

NEMA - National Electrical Manufacturer's Association

SBI - Steel Boiler Institute

SSPC - Steel Structures Painting Council UL - Underwriters Laboratories, Inc.

ART. 16 - DATUM

The figures given in the Contract and specifications or upon the Contract Drawings after the word "elevation" or an abbreviation of it, shall mean distance in feet above United States Coast and Geodetic Survey Datum, for mean sea level.

ART. 17- DRAWINGS AND SPECIFICATIONS TO BE FURNISHED TO CONTRACTOR

The Contractor will be furnished with four white prints on paper, of each of the numbered drawings and a title sheet, and four sets of specifications. Additional prints and specifications will be furnished the Contractor upon application, at cost of reproduction.

Where a revision of a drawing becomes necessary, four copies of only the revised drawing will be furnished to the Contractor for inclusion with the previously issued drawings.

Supplementary drawings will be issued by the Engineer to the Contractor from time to time, where the Contract Drawings require supplementing, to explain the work more fully or to show changes which have been ordered by the Owner. Four white prints on paper, of each supplementary drawing will be furnished to the Contractor. These supplementary drawings shall have the same force and effect as any other Contract Documents.

The Contractor shall keep one (1) copy of all drawings and specifications including the latest revised drawings and supplementary drawings, at the job site, in good legible condition, available to the Engineer and to his representatives.

ART 18 – RE-USE OF DRAWINGS AND SPECIFICATIONS

All drawings, specifications and copies thereof furnished by the Engineer are not to be used on any other work.

ART 19 - ENGINEERING REPRESENTATION

During the life of the Contract, there will be representation by the Engineer and his authorized agents who will define the meaning and intent of the drawings and specifications, pass upon materials and workmanship, and determine that the work is proceeding in accordance with the Contract Documents. He may reject such work as in his opinion is not in accordance with the drawings and specifications.

The Engineer's representation is for the purpose of assuring that the work described by the drawings and specifications is being properly executed. If an Engineer's field representative is employed he shall act as the Engineer's agent, serve as liaison between the Engineer and the Contractor generally through the Contractor's field superintendent, conduct on-site observations and keep records of the work in progress, give assistance in interpreting the drawings and specifications, transmit orders by the Engineer to the Contractor, review applications by the Contractor for payment, conduct final inspection of the work in the company of the Engineer and the Owner and perform other field representative duties as required.

Neither the Engineer, his field representative, or other authorized agents shall authorize any deviation from the Contract Documents without the knowledge and consent of the Owner, nor undertake any of the responsibilities of the Contractor, his subcontractors, or his field superintendent, nor expedite or superintend the Contractor's work, nor advise on or issue directions relative to any aspect of construction technique or method unless such technique or method is called for in the drawings and specifications.

The Engineer and his authorized agents shall have authority to stop the work of the Contractor whenever such stoppage is necessary to insure compliance with the Contract Documents.

The Engineer shall judge as to what constitutes a reasonable notice, and whether or not workmanship or materials incorporated in the work meet the standards and intent of the drawings and specifications, or of the kind of quality of materials that must be submitted to the Engineer for approval. His decision as to these questions must be accepted as final.

ART. 20 - INSPECTION

The Engineer, his authorized agents, or the Owner will inspect materials furnished and the work done under this Contract, and he is also hereby authorized and empowered to reject and refuse all work; materials and equipment, and the method of application of any part thereof, under or in fulfillment of this

Contract, that does not comply in kind, quality, quantity, time, place or performance, with the specifications and the drawings. The inspection, approval or acceptance of any part of the work herein contracted for, or the materials used therein, or any payment on account thereof, shall not prevent the rejection of said work or materials at any time thereafter during the existence of this Contract and prior to the final payment should said work or materials be found to be defective or not in accordance with the requirements of the drawings and specifications.

Inspection, test, or acceptance of any materials prior to shipment shall not be deemed as a final acceptance of the materials. The Engineer may inspect or require tests or analyses of any portion of the materials at any time, after delivery at the site of work, either before or after installation, and any material which is found to be defective or which does not otherwise conform to the requirements of the specifications shall be rejected and removed forthwith from the site of the work, as provided in the Contract.

The Contractor will be required to pay for all costs of engineering field work and inspection which is:

- (a) Performed on Saturdays, Sundays, or legal holidays, and which is made necessary by the Contractor's operations on such days and
- (b) Performed between the completion date specified and the actual completion of the Contract, regardless of whether or not an extension of time may be approved.

ART. 21 - ACCESS TO WORK

Agents, authorized representatives, and employees of participating Federal Agencies, the State, the Owner, and the Engineer, shall for any purpose have access to the work and the premises used by the Contractor, and the Contractor shall provide safe and proper facilities therefor, including ladders and scaffolds. Other parties who may enter into contracts with the Owner for doing work within the territory covered by this Contract, shall, for all purposes which may be required by their contracts, be accorded the rights of access to the site of those parts of the work for which they are under contract.

Furthermore, the said agencies, the Owner, the Engineer, and their inspectors and agents shall, at all times, have immediate access to all places of manufacture where materials are being made for use under this Contract and the Contractor shall provide full facilities for determining that all such materials are being made strictly in accordance with the specifications and drawings. Records of payrolls, personnel, invoices, bills of lading and other relevant data shall also be made available by the Contractor for inspection upon request.

ART. 22 - PERSONAL LIABILITY

In carrying out the provisions of this Contract or in exercising any power or authority granted them by their position there shall be no liability upon the appointed officials, the Engineer or their authorized representatives or assistants, either personally or as officials of the Owner, it being understood that in such matters they act as agents and representatives of the Owner.

ART 23 - TESTING OF MATERIALS

If the Engineer so requires, either prior to, beginning, or during the progress of the work, the Contractor shall submit samples of materials for such special tests and analyses as may be necessary to demonstrate that they conform to the specifications. The Owner will select and pay for testing laboratories to perform tests and analyses on concrete aggregates, mixed and placed concrete and similar materials. Such samples shall be furnished, taken, stored, packed, and shipped as directed at the expense of the Contractor.

The Contractor shall submit data and samples, or place his orders, sufficiently early to permit consideration, inspection, testing, and approval before the materials and equipment are necessary for incorporation in the work. Any delays resulting from his failure so to do shall not be used as a basis of a claim against the Owner or the Engineer.

If the Engineer orders sampling and analyses or tests of materials which are usually accepted on certification of the manufacturer but which appear defective or not conforming to the requirements of the specifications, the Owner will bear the costs of tests and analyses if material is found to be sound and conforming to the specifications; if found defective or not conforming to the specifications, the Contractor shall bear all of the costs.

ART. 24 - CERTIFICATES OF MANUFACTURERS

For pipe, cement, steel reinforcement, paint and similar materials which are normally tested in the shop by the manufacturer, the Contractor shall furnish the Engineer certified records of physical, chemical, and other pertinent tests, and/or certified statements from the manufacturer that the materials have been manufactured and tested in conformity with the specifications. Where such a small quantity of material is required as to make physical tests or chemical analyses impractical, a certificate from the manufacturer stating the results of such tests or analyses of similar materials which were concurrently produced, may at the discretion of the Engineer, be considered as the basis for the acceptance of such materials.

ART. 25 - DEFECTIVE WORK OR MATERIALS

The inspection of the work by the Engineer or Owner shall not relieve the Contractor of any of his obligations to fulfill his Contract as herein prescribed and defective work shall be made good, and unsuitable materials may be rejected, notwithstanding that such work and materials may have been previously inspected by the Engineer or Owner and accepted or estimated for payment.

If at any time before the final acceptance of the work, materials or workmanship should be discovered which do not comply with the specifications and drawings, they shall be immediately removed by the Contractor when notified to do so by written notice from the Engineer or Owner and shall be replaced at the Contractor's expense. Any work rejected by the Engineer or Owner as unsuitable or improperly done shall be removed and repaired, or otherwise remedied, as the Engineer or Owner may direct.

Any material rejected by the Engineer or Owner shall be removed from the site of the work within two days if and after notice to that effect is given.

Should defective work be suspected and the Engineer or Owner so require, the Contractor shall uncover, take down or make openings in the finished work for the purpose of examining at such points as said Engineer or Owner designates.

Should the work thus exposed or examined prove satisfactory, the uncovering, taking down or making openings in and replacing of the covering or the making good of the parts removed shall be paid for in accordance with the contract unit prices and/or as provided hereinafter under "Extra Work and Changes in the Work", for the items involved; but should the work exposed or examined prove unsatisfactory, the uncovering, taking down, replacing and making good shall be at the expense of the Contractor. However in no event shall the Owner pay for any costs of uncovering and covering work where the Contractor has covered the work without its being inspected by the Owner or the Engineer.

If the Contractor shall fail or neglect to replace any defective work or to discard rejected materials within 10 days after the service by the Engineer of an order to replace such defective work or discard such materials, or to prove to the satisfaction of the Owner that he is initiating effective efforts to

replace defective materials, the Owner may cause such defective work or materials to be replaced or removed, and acceptable materials provided, and the expense thereof shall be deducted from the moneys as are or may become due under this Contract, or if such moneys are not sufficient to meet said expense the additional moneys shall be furnished by the Contractor or his Surety. If during the maintenance period provided for hereinafter, any work done in accordance with that article shall be found defective before the end of the maintenance period; such defective work shall be made good in the same manner as provided herein. The Owner will have the option at all times to allow the defective or improper work to stand and to accept an equitable deduction from the Contract Price therefor.

ART. 26 - WEIGHING AND MEASURING

Whenever requested by the Engineer, the Contractor shall provide personnel and all required weighing and measuring devices for determining the quantity of materials. For estimating quantities in which the computation of areas by geometric methods would, in the opinion of the Engineer, be comparatively laborious, it is stipulated and agreed that the planimeter shall be considered an instrument of precision adaptable to the measurements of such areas.

ART. 27 - DRAWING AND PRINTED MATTER FURNISHED BY THE CONTRACTOR

After approval of the list of manufacturers, the Contractor shall submit for approval, working drawings and shop drawings and descriptions of all materials and equipment which he is to furnish such as steel reinforcement, structural details, layout and support of sheeting and bracing, wiring, and details of supporting and relocating utilities or other adjacent structures, if he intends to deviate from the details shown or if the details are not shown. The Contractor, on approval of the Engineer, may submit manufacturers' literature as a substitute for, or supplement to, the shop drawings. The minimum size for any submission shall be 8 1/2 inches by 11 inches. All drawings and printed matter submitted shall clearly indicate the section of the Contract Items to which they correspond (e.g. G 2.08). Erection drawings may also be required.

Drawings or printed matter shall give all dimensions and sizes to enable the Engineer to consider the suitability of the material or layout for the purpose intended. The working drawings shall, where needed for clarity, include outline and sectional views, and detailed working dimensions and designations of the kind of materials and the kind of machine work and finish required. Drawings for submission shall be coordinated by the Contractor with the drawings heretofore approved, and with the design and function of any equipment or structure. All measurements shall be field checked by the Contractor, who shall not rely on the contract drawings for any dimension that can be measured in the field.

Material shall not be purchased or fabricated for equipment or structures until the Engineer has reviewed the working drawings, which shall represent all materials and work involved in the construction. No materials or equipment shall be delivered to the site until working drawings have been reviewed.

Work shall not be done upon any part of a structure, the design or construction of which is dependent upon the design of equipment or other features, until a review has been made by the Engineer.

Six copies of drawings and printed matter shall be submitted to the Engineer for review. Upon review by the Engineer, the Contractor shall furnish the Engineer with four prints on paper of each approved drawing, and four copies of approved manufacturer's printed literature. Only drawings which have been checked and corrected by the material fabricator shall be submitted. The Contractor shall be responsible for the prompt submission of all working drawings, so that there shall be no delay in the work due to the absence of such drawings.

All shop drawings submitted must bear the approval stamp of the Contractor as evidence that the drawings have been first checked by the Contractor. Any drawings submitted without this stamp of

approval will not be considered and will be returned to the Contractor for resubmission. If the shop drawings show variations from the requirements of the Contract Documents because of standard shop practice or other reasons, the Contractor shall make specific mention of such variation in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment; otherwise the Contractor will not be relieved of the responsibility for executing the work in accordance with the Contract Documents even though such shop drawings have been reviewed.

Where a shop drawing as submitted by the Contractor indicates a departure from the Contract, which the Engineer deems to be a minor adjustment, in the interest of the Owner not involving a change in Contract price or extension of time, the Engineer will review the drawing but such review implies the following:

"The modification shown on the attached drawing has been reviewed in the interest of the Owner to effect an improvement for the Project and is accepted with the understanding that it is subject generally to all Contract stipulations and covenants; and that it is without prejudice to any and all rights of the Owner under the Contract and bond or bonds."

Where additional working drawings are required, the Contractor shall submit same upon the request by the Engineer.

Any review or lack of same by the Engineer of such working drawings, manufacturer's literature or other data related to the work or material to be furnished for the Contract shall not be construed as in any way relieving the Contractor from his full responsibilities under the terms of the contract.

ART. 28 - NOT USED

ART. 29 - PATENTS AND ROYALTIES

The Contractor shall indemnify and save harmless the Owner and his officers and agents, from all damages, judgment, claims and expenses arising from the infringement of any letters of patent, or patent right or because of any royalty, fee or license for the use, arrangement or operation of any tools, machinery, appliances, devices, materials, process or processes which may be used by the Contractor or furnished by him in fulfillment of the requirements of this Contract. In the event of any claim or action at law on account of such patents or fees, it is agreed that the Owner may retain out of moneys which are or which may become due the Contractor under this Contract, a sum of money sufficient to protect himself against loss, and to retain the same until said claims are paid or satisfactorily adjusted.

ART. 30 - DESIGN OF EQUIPMENT

All parts of the equipment furnished under the Contract shall be amply proportioned for all stresses that may occur during fabrication, shipment, erection, and intermittent or continuous operation. Identical parts shall be interchangeable.

The equipment to be furnished under the Contract shall be of an approved type, and the product of manufacturers who have successfully built equipment of the same size, capacity, and type for at least 5 years unless otherwise specified. The Contractor shall submit any information that the Engineer may consider necessary in order to determine the ability of the manufacturer to produce the equipment as called for by the specifications.

Unless other specific requirements are noted under the Contract Items, the Contractor shall provide the services of an accredited representative of the manufacturer to supervise the installation, testing and placing of equipment in satisfactory operation. This representative shall also make final adjustments and shall instruct designated employees of the Owner in the proper operation and maintenance of the equipment.

The Contractor shall obtain from each manufacturer a warranty for equipment replacement and repair in the event of malfunction, which shall extend for one year from the date of "acceptance of the work".

The minimum manufacturing experience requirement is for five years, as specified herein. In other sections of the Contract Documents, manufacturers are required to "have regularly engaged in the manufacture and installation of comparable systems". In all such cases, consideration will be given to alternative equipment which does not meet the specified experience period if the equipment supplier or manufacturer provides a bond from acceptable surety, or a cash deposit, for the value of the equipment being supplied, plus installation costs, removal costs, overhead and profit. The bond or deposit shall be maintained for a period of time equal to the experience period specified and must be available as a guarantee for replacement within thirty days after declaration by the Engineer that the alternative equipment has failed to meet with specified requirements. All such alternative equipment must be submitted to the Engineer for review so as to assure that all technical requirements are met.

The manufacturer's nameplate, name or trademark shall be permanently affixed to all equipment and material furnished. Nameplate of subcontractor or distributor will not be acceptable.

The Contractor shall furnish and install identifying tags and nameplates on all equipment, valves, ducts, dampers, motors, heating and ventilating and electrical work, bearing name and number indicated on the drawings and the function. Unless otherwise specified, tags shall be Seton Name Plate Co. aluminum type with black enamel background and etched or engraved aluminum lettering, or laminated Bakelite or Lamicold.

Nameplates shall be secured with screws, or nuts and bolts where possible, or wired securely elsewhere. The Contractor shall furnish four copies of a list of all nameplates and their location.

ART. 31 - GREASE FITTINGS AND LUBRICATION

The Contractor shall ensure that all grease fittings on each piece of equipment furnished under the Contract are standardized so that only the "Alemite" button-head type of fitting is utilized, except as otherwise specified or required. Fittings shall be standard or giant size according to the type of service performed.

The Contractor shall furnish and use, for each piece of equipment, the type of lubricant recommended by the manufacturer of the equipment. He shall furnish a schedule, in triplicate, listing the type, frequency of application, and manufacturer of the lubricant recommended for each piece of equipment. At the time of turning the installation over to the Owner, the Contractor shall furnish one year's supply of each type of lubricant in unopened containers.

ART. 32 - SPARE PARTS, SERVICING TOOLS, MANUALS AND PARTS LISTS

Each piece of equipment shall be furnished with a dozen lot assortment of keys, bolts, nuts, lock washers and pins, in tagged sacks. Each piece of equipment having shear pins shall be furnished with two dozen shear pins of each size used, in tagged sacks. Each piece of equipment having leather or rubber washers shall be furnished with two extra washers of each size and material required.

The Contractor shall furnish, with each piece of equipment, the complete set of tools including three sets of spare bulbs and fuses normally furnished by the manufacturer for the servicing of the equipment.

Each major piece of equipment shall be furnished with the spare parts listed in the specifications for the equipment or, if no such list is provided, with the standard set of spare parts recommended by

the manufacturer of the equipment. The recommended list of spare parts shall be submitted to the Engineer prior to the delivery of the equipment.

All spare parts shall be plainly tagged and marked for identification and ordering. They shall be treated with suitable preservatives, wrapped and packaged to provide adequate protection during storage.

The Contractor shall furnish and deliver to the Engineer, prior to the installation of any piece of equipment, three complete neatly bound sets of instruction books or trade literature for such equipment to enable the operator to understand the mechanism and its maintenance. Automatic control diagrams and complete numbered parts lists shall be supplied with the instruction books. The books shall contain clear and concise instruction for operation, adjustment, lubrication (including a lubrication chart) and maintenance of the equipment.

The Contractor shall furnish three sets of parts drawings of all equipment, including minor parts and sub-assemblies, in such detail as will permit disassembly and assembly of the equipment.

The list of all parts for the equipment, shall have the part or catalog number, name of actual manufacturer as well as supplier and other data necessary for ordering replacement parts. Part or catalog number shall be listed according to both supplier and actual manufacturer.

Such instructions and parts lists have been prepared for the specific equipment furnished and shall not refer to other sizes and types or models of similar equipment.

ART. 33 - NOTICES TO CONTRACTOR

The residence or place of business given in the bid or proposal upon which this Contract is founded, is hereby designated as the place where all notices, letters and other communications shall be served, mailed to, or delivered. Any notice, letter or other communication addressed to the Contractor and delivered at the above named place or deposited in a prepaid wrapper in any post office box regularly maintained by the United States Post Office Department shall be deemed sufficient service thereof upon the Contractor, and the date of mailing shall be the date of service. The place name may be changed at any time by an instrument in writing, executed and acknowledged by the Contractor and delivered to the Engineer. Nothing herein contained shall be deemed to preclude or render inoperative the service of any notice, letter or other communication upon the Contractor personally.

ART. 34 - RESPONSIBILITY OF CONTRACTOR

The Contractor shall take all responsibility of the work, shall bear all losses resulting to him on account of the amount or character of work, or from any unforeseen obstructions, encumbrances, or difficulties which may be encountered, or from the breaking of or leakage from any pipe, water mains or sewers, or because the nature of the land in or on which the work is done is different from what is assumed, or on account of the weather, floods or other causes, or from delayed deliveries of equipment required for any related or adjoining contract, or from damage or injury from any cause to property or persons used or employed on or in connection with the work; and he shall assume the defense of and indemnify and save harmless the Owner and its officers, and agents, from all claims of any kind arising from the performance of this Contract, except claims for injuries to or death of employees of the Owner, which injury or death is not due to negligence of, or breach of contract by, the Contractor or of any subcontractor performing any portion of the work included in this Contract.

ART. 35 - SUPERINTENDENCE BY CONTRACTOR

The Contractor shall employ at the site of the work during the performance of any part thereof, a competent foreman or superintendent who shall be satisfactory to the Engineer and who shall have full

authority to act for the Contractor, and all directions given such foreman or superintendent shall be as binding as if given to the Contractor.

ART. 36 - COMPETENT MEN TO BE EMPLOYED

The Contractor shall employ only competent, skillful men to do the work, and whenever the Engineer shall notify the Contractor, in writing, that any man on the work is, in his opinion, incompetent, unfaithful, disorderly, or otherwise unsatisfactory, the Contractor shall take such measures as are deemed necessary by the Engineer.

ART. 37 - CONCURRENT CONTRACTS AND OTHER CONTRACTORS

The right is reserved by the Owner to do work using other contractors and to permit public utility companies and others to do work during the progress and within the limits of or adjacent to the Project, and the Contractor shall conduct his work and cooperate with such other parties so as to cause as little interference as possible with such other work, as the Engineer may direct.

It is agreed that the Contractor shall not be entitled to any damages or extra compensation from the Owner on account of any work performed by other contractors, that in any way affects the work under this Contract. The Engineer shall decide all questions between the Contractor hereunder, and the other contractors, and the order of carrying on the work shall always be subject to his direction and approval.

When the territory of one contract is the necessary or convenient means of access for the transportation of men, materials, equipment or appliances for the execution of work by others, the privilege of access thereon or trespass thereon or any other reasonable privilege may be granted by the Engineer. Employees of the Contractor shall not enter upon adjoining property to underpin or protect adjoining structures or for any other purpose whatsoever except with the written permission of the owners or lessees as provided by law.

If, in the judgment of the Engineer, the joint occupation of the site of the work by the Owner or by two or more contractors working on different contracts at the same time, actually impedes progress in the work herein described, then upon the recommendation of the Engineer, the Owner may extend the time for the completion of the work in the amount which accords with and compensates for the delays so caused.

In case the Contractor, by his own acts or the acts of any person or persons in his employ, shall unnecessarily delay, in the opinion of the Engineer, the work of the Owner or other contractors, by not properly cooperating with them or by not affording them sufficient opportunity or facility to perform work as may be specified, the Contractor shall, in that case, pay all cost and expenses incurred by such parties due to any such delays and he hereby authorizes the Owner to deduct the amount of such cost and expenses from any moneys due or to become due the Contractor under this Contract. The Engineer, subject to the approval of the Owner, shall decide the extent of such delay or delays, and the amount of such costs and expenses, and his decisions shall be binding upon all parties concerned. Nothing contained in this paragraph shall, however, relieve said Contractor from any liability or damage resulting to the Owner on account of such delay or delays.

Where the work of the Contractor adjoins other adjacent concurrent contracts, the Contractor doing the latest work is responsible for making all final connections to the work of other adjacent concurrent contracts, as directed by the Engineer.

ART. 38 - MUTUAL RESPONSIBILITY OF CONTRACTORS

Should the Contractor cause damage to any other contractor on the work, Contractor agrees, upon due notice, to settle with such Contractor by agreement or arbitration, if he will so settle. If such other contractor sues the Owner on account of any damage alleged to have been so sustained, the

Owner shall notify the Contractor, who shall defend such proceedings and, if any judgment against the Owner arises there from, the Contractor shall pay or satisfy it and pay all costs incurred by the Owner.

ART. 39 - SUBCONTRACTS

The Contractor shall, within thirty days after signing of the Contract, notify the Engineer in writing of the names of subcontractors he proposes for principal parts of the work.

The Contractor shall not enter into contract with any subcontractor until he receives the Owner's or Engineer's approval as to the firm's competence, experience, financial capability and municipal tax clearance. Subcontractors will be required to carry insurance equal to that of the prime contractor, or must be a named insured on all of the Contractor's policies.

The Engineer shall, on request, furnish to any subcontractor, wherever practicable, evidence of the amounts certified for payment on his account.

Each payment requisition submitted by a subcontractor to Contractor shall include a statement showing the status of all pending construction change orders, other pending change directives and approved changes to the original subcontract. Such statement shall identify the pending construction change orders and other pending change directives, and shall include the date such change orders and directives were initiated, the costs associated with their performance and a description of any work completed. As used herein, "pending construction change order" or "other pending change directive" means an authorized directive for extra work that has been issued to a subcontractor.

The Contractor agrees that he is 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 acts and omissions of persons directly employed by him. He further agrees that he will bind his subcontractors to each and every part of the Contract Documents.

The Contractor shall comply with Connecticut General Statutes: Sec. 49-41a as to payment to subcontractors and material men, which provides as follows:

"The general contractor, within thirty (30) days after payment to the Contractor, shall pay any amounts due any subcontractor, whether for labor performed or materials furnished, when the labor or materials have been included in a requisition submitted by the Contractor and paid by the Owner.

The general contractor shall include in each of its subcontracts a provision requiring each subcontractor to pay any amounts due any of its subcontractors, whether for labor performed or materials furnished, within thirty (30) days after such subcontractor received a payment from the general contractor which encompasses labor or materials furnished by such subcontractor."

Nothing contained in the Contract Documents shall create any contractual relation between any subcontractor and the Owner.

ART. 40 - RELATIONSHIP OF CONTRACTOR AND SUBCONTRACTORS

The Contractor agrees to bind every subcontractor and every subcontractor agrees to be bound by the terms of the Contract, the General Conditions, the drawings and specifications, and other Contract Documents as far as applicable to his work, including the following provisions of this article, unless specifically noted to the contrary in a subcontract approved in writing as adequate by the Engineer.

The Contractor and the subcontractor agree that:

- (1) Nothing in this article shall create any obligation on the part of the Owner to pay to or to see to the payment of any sums to any subcontractor.
- (2) All Contractors and subcontractors shall cooperate with each other and must conform to the directions of the Engineer, in order that all parts of the work may progress harmoniously and expeditiously.
- (3) Each subcontractor must aid the others in as far as his services may be reasonably required. All Contractors will be required to make themselves familiar with the requirements of the drawings and specifications for the entire work.
- (4) The Contractor on one branch of the work shall allow the subcontractor for other branches of the work free access to the project and grounds in order that they may execute their work properly and promptly.

All subcontractors shall read the entire General Conditions and specifications and shall be held responsible for all items called for in them whether specifically mentioned under their particular headings or not.

IT IS UNDERSTOOD THAT THE ENGINEER WILL SUPPLY ALL INFORMATION TO CONTRACTORS ONLY AND NOT TO SUBCONTRACTORS. THE CONTRACTOR SHALL NOT ACCEPT THE STATEMENT OF ANY SUBCONTRACTOR THAT THE ENGINEER HAS APPROVED ANY SUBCONTRACTORS, HIS WORK OR ANY OF HIS DRAWINGS, AS THE ENGINEER WILL MAKE ALL SUCH APPROVALS TO THE CONTRACTOR IN WRITING.

ART. 41 - ASSIGNMENTS

The Contractor or his thoroughly qualified and designated representatives shall give his personal attention constantly to the faithful prosecution of the work.

He shall not sell, transfer, assign or otherwise dispose of this Contract or any part thereof to any third party. The Contractor shall perform with his own organization and with the assistance of workmen under his immediate superintendence work amounting to not less than forty percent (40%) of the total price bid for the Project. Subject to the above provision and to the consent of the Owner, work may be sublet. It is understood, however, that any consent of the Owner for the subletting of any of the work under the Contract in no way relieves the Contractor of his full obligations under the Contract. The consent to sublet any part of the work and the acceptance by the Owner of the surety bond shall not be construed to be an approval of the said subcontract or of any of its terms, but shall operate only as an approval of the making of a subcontract between the Contractor and subcontractor. The subcontractor shall look only to the Contractor for the payment of any claims of any nature whatsoever arising out of the said Contract, and said subcontractor agrees, as a condition of the granting by the Owner of the consent to the making of said subcontract, that neither the subcontractor, his agents or employees shall make any claim whatsoever against the Owner for any work performed or thing done by reason of said subcontract. The Owner will not consent to the making of any subcontract unless the proposed subcontractor furnishes a statement to the effect that said subcontractor is acquainted with all the provisions of the Contract Documents and agrees thereto.

The Contractor shall not assign, by power of attorney or otherwise, any of the moneys to become due and payable under this Contract, unless by and with the written consent of the Owner, and such consent of approval, if given, will in no way relieve the Contractor from any of the obligations of said Contract.

Assignment of this Contract or any part thereof or of any funds to be received thereunder by the Contractor shall contain a clause to the effect that it is agreed that the funds to be paid the assignee under the assignment are subject to a prior lien for services rendered or materials supplied for the performance of the work called for in said Contract in favor of all persons, firms, or corporations rendering such services or supplying such materials.

If the Contractor shall, without previous written consent, assign, transfer, convey, sublet, or otherwise dispose of the Contract in whole or in part of his right, title or interest therein, or any of the monies to become due under the Contract from any person, firm, or corporation, the Contract may at the option of the Owner, be revoked and annulled and the Owner thereupon is relieved and discharged from any and all liability and obligations growing out of same to the Contractor and to his assignee or transferee; and no right under this Contract or to any money to become due hereunder, shall be asserted against the Owner in law or in equity by reason of any so-called assignment of this Contract or any part thereof, or any monies to grow due hereunder unless authorized as aforesaid by the written consent of the Owner.

ART. 42 - SAVE OWNER HARMLESS

The Contractor shall, from time to time, as required by the Owner, furnish satisfactory evidence that all persons who have done work or furnished materials under this Contract, or have suffered damage on account of the Contractor's operations, have been fully paid or secured.

The Contractor shall indemnify and save harmless the Owner, its Engineer, officers, agents and servants and each and everyone of them against and from all suits, and costs of every kind and description, including court costs and attorney's fees, and from all damages to which the Owner or any of its officers agents or servants may be subjected by reason of injury to the person or property of others resulting from the performance of the Project, or through the negligence of the Contractor, or through any improper or defective machinery, implements or appliances used by the Contractor in the project, or through any act of omission on the part of the Contractor or his agents, employees or servants, whether or not caused by or contributed to by the Owner, Engineer, their agents, employees, or others; and he shall further indemnify and save harmless the Owner; its officers, agents, and servants from all suits and actions of any kind or character whatsoever which may be brought or instituted by any subcontractor, material-man or laborer who has performed work or finished materials in or about the Project or by, or on account of, any claims or amount recovered from infringement of patent, trade-mark or copyright. The cost thereof shall be included in the prices bid for the various parts of the work. So much money due to the Contractor under and by virtue of the Contract as shall be considered necessary by the Owner may be retained by the Owner and held until such bids, actions, claims or amounts shall have been settled and suitable evidence to that effect furnished to the Owner. It is understood and agreed, however, that the Owner hereby assumes no obligations toward such claimants, nor in any way undertakes to pay such claims out of any funds due or that may become due the Contractor, or out of its own funds.

ART. 43 - LIABILITY OF CONTRACTOR IS ABSOLUTE

The liability of the Contractor hereunder for all injuries to persons or damages to property is absolute and is not dependent upon any question of negligence on his part or on the part of his agents, servants, or employees, and neither the approval of the Engineer of the methods of doing work nor the failure of the Engineer to call attention to improper or inadequate methods or to require a change in methods, nor the neglect of the Engineer to direct the Contractor to take any particular precautions or to refrain from doing any particular thing shall excuse the Contractor in case of any injury to persons or damages to property.

<u>ART 44 - PE</u>RMITS

The Contractor shall obtain and pay for all other permits required for the prosecution of the work under the Contract. He shall pay all charges and expenses and shall furnish all bonds and insurance stipulated in the permits, and shall indemnify and save harmless the Owner from all claims for damages and any actions that may arise thereunder. Before the final acceptance of the work, and as a prerequisite to the release of the semi-final payment, the Contractor shall secure a written release from the authorities having jurisdiction over the lands occupied by him certifying to the satisfactory restoration of all pavements and other surfaces and the utility structures removed or safeguarded for the work.

ART. 45 - LAWS AND ORDINANCES

The Contractor will be required to comply with all federal, state, and municipal laws, ordinances and regulations in any manner affecting those persons engaged or employed in the work, or the materials used in the work, or in any way affecting the conduct of the work, either with respect to hours or labor or otherwise, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. If any discrepancy or inconsistency is discovered in the drawings, specifications, or Contract for this work in relation to any such law, ordinance, regulation, order, or decree, he shall forthwith report the same to the Engineer in writing. He shall at all times himself observe and comply with, all such laws, ordinances, regulations, orders and decrees, and shall protect and indemnify the Owner and his agents against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by himself or his employees.

The Contractor shall comply in particular to the following:

• Rules and Regulations of the Town of Brookfield, W.P.C.A.

The Contractor hereby agrees to comply with all said legal requirements and agrees that upon his failure to comply with the provisions thereof, this contract may be voidable at the option of the Owner.

ART. 46 - STATE LABOR STANDARDS/ WAGE RATES

The Contractor shall comply with all requirements of the labor laws of this State applicable to contracts for construction, alteration or repair of any public work.

Where the project is for new public works construction greater than \$1,000,000 or repair or rehabilitation work greater than \$100,000, the Contractor must abide by State Wage Rates as published by the Department of Labor in accordance with Connecticut General Statute Sec. 31-53(g).

In the event that any of the provisions contained herein or any other labor standards subsequently made applicable by passage of State Law during the life of this Contract differ from standards in effect now or modified during the life of this Contract, then the more rigorous standards shall take precedence and prevail.

The wages paid on an hourly basis to any mechanic, laborer or workman employed upon the Work herein contracted to be done and the amount of payment or contribution paid or payable on behalf of each such employee to any employee welfare fund, as defined in Section 31-53 (h) 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 where the work is being performed. Any Contractor who is not obligated by agreement to make payment or contribution on behalf of such employees to any such employee welfare fund shall pay to each employee as part of his wages, the amount of payment or contribution for his classification on each pay day.

The Contractor and all his subcontractors shall keep accurate records showing the name, craft or trade, and actual hourly rate of work under the Contract and shall preserve said records for two years from date of payment. The records shall be open at all reasonable hours to the inspection of the Owner

and the Commissioner of Labor or their duly authorized representatives. One copy of weekly payroll records shall be filed with the Owner as required by law.

In the event it is found that any workman employed by the Contractor or his subcontractors has been paid less than the prevailing wage listed therein for the class of work performed, the Owner may terminate the Contractor's or Subcontractors right to proceed within the work, or such part of the work as to which there has been a failure to pay required wages and to prosecute the work to completion or otherwise. The Contractor and his surety shall be liable to the Owner for any excess costs occasioned thereby.

Before final payment is made by the Owner of any sum or sums due on account of work performed under the Contract, the Contractor and his subcontractors shall file written statements with the Owner certifying to the amounts then due and owing to any and all workmen for wages earned. The statements shall set forth the names of the persons whose wages are unpaid and the amount due each. The statements shall be verified by the oaths of the Contractor or subcontractor, as the case may be.

The Contract will not be awarded to any contractor who has failed to pay prevailing wages, and no subcontractor will be approved who has failed to pay prevailing wages.

ART. 47 -NONDISCRIMINATION PROVISIONS

The Contractor and all subcontractors shall not discriminate in employment practices. The Contractor must comply with all applicable State and Federal laws and regulations dealing with non-discriminatory practices.

The Contractor shall take affirmative action to insure that applicants for employment are employed, and that employees are treated during employment, except in the case of a bona fide occupational qualification or need, without regard to their race, color, religious creed, age, sex, sexual orientation, marital status, national origin, mental retardation, learning disability, or physical disability. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

The Contractor shall post in conspicuous places and make available to employees and applicants for employment, notices to be provided by the State setting forth the provisions of this non-discrimination clause. The Contractor shall state that all qualified applicants will receive consideration for employment without regard to their race, color, religious creed, age, sex, sexual orientation, marital status, national origin, mental retardation, learning disability or physical disability.

ART. 48 - SOCIAL SECURITY ACT

The Contractor shall be and remain an independent contractor with respect to all services performed hereunder and agrees to and does hereby accept full and exclusive liability for the payment of any and all contributions or taxes for social security, unemployment insurance, or old age retirement benefits, pensions or annuities now or hereafter imposed under any state or federal law which are measured by the wages, salaries, or other remuneration paid to persons employed by the Contractor on work performed under the terms of this Contract, and further agrees to obey all lawful rules and regulations and to meet all lawful requirements which are now or hereafter may be issued or promulgated under said respective laws by any duly authorized state or federal officials; and said Contractor also agrees to indemnify and save harmless the Owner from any such contributions or taxes or liability therefor.

ART. 49 - SAFETY PROVISIONS

It is understood that the Contractor will be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work. He will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the work and other persons who may be affected thereby.

The Contractor will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction for the safety of persons or property, or to protect them from damage, injury or loss. He will erect and maintain, as required by the conditions and the progress of the work, all necessary safeguards for safety and protection and in addition he will comply with all applicable recommendations of the Manual of Accident Prevention in Construction of the Associated General Contractors of America. Inc.

If at any time, in the opinion of the Engineer, the work is not properly safe in respect to public travel, persons on or about the work, or public or private property, the Engineer shall have the right to order such safeguards to be erected and such precautions to be taken as he deems advisable and the Contractor shall comply with such orders. If, under such circumstances, the Contractor does not or cannot immediately put the same into proper and approved condition or if the Contractor or his representative is not upon the site so that he can be immediately notified of the insufficiency of safety precautions, then the Engineer may cause the work to be put into such a condition that it shall be, in his opinion, in all respects safe, and the Contractor shall pay all expenses of such labor and materials as may have been used for this purpose by him or by the Engineer. Such actions of the Engineer, or his failure to take such action, shall in no way relieve the Contractor of the entire responsibility for any cost, loss or damage by any party sustained on account of the insufficiency of the safety precautions taken by him or by the Engineer acting under authority of this section.

The Contractor shall comply with the Department of Labor Safety and Health regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (PL9I-596) and under Section 107 of the Contract Work Hours and Safety Standards Act (PL 91-54), or subsequent amendments to such regulations.

This project is subject to all of the Safety and Health Regulations (See 29 CFR 1518) as promulgated by the U.S. Department of Labor on April 17, 1971. Contractors are urged to make themselves familiar with the requirements of these regulations.

The Contractor shall comply with the Owner's Confined Space Entry Program, and no personnel will be permitted to participate in any work or interact with the Contractor if the Contractor does not have the appropriate equipment in compliance with said program.

The Contractor is responsible for establishing and maintaining a health and safety program throughout the course of the project so as to meet all Local, State, Federal and OSHA requirements.

The Contractor shall keep in his office, ready for immediate use, all articles necessary for giving first aid to the injured. He shall also have standing arrangements for the immediate removal and hospital treatment of any employees or persons who may be injured on or about the work.

ART. 50- LAND FOR CONTRACTOR'S USE

Land and easements for the purpose of this Contract will be provided by the Owner. If the Contractor desires the temporary use, during construction, of land or lands to which the Owner has no rights, he shall secure written permission from the owners and shall file a duplicate copy of such permission with the Engineer and Owner. Land shall not be used or occupied by the Contractor prior to

the securing of permission. The Contractor shall at all times save harmless the Owner, from actions by third parties by reason of any acts or omissions by the Contractor.

Delays in easement acquisition shall act only to extend the contract period, as reviewed in other sections of the contract documents. No guarantees are given herein that all needed lands will be available at the time of contract award. Should it be required as a part of this Contract to perform work within the limits of private property, or in rights-of-way, such work shall be done in conformity with all permits and agreements between the Owner and the owners of such property, and whether or not such a condition be part of the agreement, care shall be taken to avoid injury to the premises entered, which premises shall be left in a neat and orderly condition by the removal of rubbish and the grading of surplus materials and the restoration of said private property to the same general conditions as at the time of entry for work to be performed under this Contract.

ART. 51- USE OF PREMISES

The Contractor shall confine his materials and their storage and the operation of his workmen to limits indicated by law, ordinances, permits, or directions of the Engineer, and shall not unreasonably encumber the premises with such materials, but shall store them in orderly fashion, so that they will not interfere with the work under this or other contracts. The Contractor shall not load or permit any part of the work to be loaded with a weight that will endanger its safety or unduly affect the structure or any part thereof. The Contractor shall enforce the instructions of the Engineer regarding signs advertisements, fires, and smoking.

ART. 52- PROTECTION OF PREMISES

The Contractor shall properly protect the Owner's and adjoining property from injury or damage. Any damage to same must be made good without delay. The Contractor shall make good, at his own expense, any such injury or damage done and shall leave all in as good condition as found when operations were started.

ART. 53- SANITARY FACILITIES

The Contractor shall provide and maintain in a strictly sanitary manner toilet facilities for his workmen, which shall be screened from public view. The location and the method of waste disposal shall be approved. The Contractor shall observe and enforce all sanitary regulations and maintain satisfactory sanitary conditions around and on all parts of the work.

ART. 54- TEMPORARY WATER

The Contractor shall provide and maintain temporary potable water service connections and fixtures as specified for his own use and the use of other contractors doing work at the site. The cost of temporary water meters, if required, and service charges for all water will be paid by the Contractor.

When work is completed, the Contractor shall remove all temporary water connections and fixtures as required.

The Contractor shall furnish at his own expense all water required during the performance of work under the Contract, including testing, paying for the expense and charges of same, and installing and paying for a meter if it is required.

ART. 55- TEMPORARY LIGHT, POWER, AND TELEPHONE

The Contractor shall be responsible for the furnishing of temporary light and power.

The Contractor, at his own expense, shall arrange with the local telephone company for all telephone service required by him in the performance of the work.

ART. 56-TEMPORARY HEATING

Each Contractor, at his own expense, shall provide, install, and maintain approved heating devices as required for supplying temporary heat of sufficient volume to protect the work under his Contract and to assure suitable working conditions for his workmen. Such devices shall be installed and operated in such manner that no hazards will result and that no damage will be done to any part of his work or the work of other Contractors.

ART. 57- CARE AND PROTECTION OF WORK AND MATERIALS

From the commencement of the work until its completion, the Contractor shall be solely responsible for damages caused to the property of the Owner, for the care and protection of the work covered by the Contract, and for the materials and equipment delivered at the site or incorporated in the work.

All excavated materials, construction equipment, and materials and equipment to be incorporated in the work, shall be so placed as not to injure the work and so that free access may be had at any time to all parts of the work and to all public utility installations in the vicinity of the work. Materials and equipment shall be kept neatly piled and compactly and conveniently stored so as to inconvenience as little as possible public travel and adjoining tenants.

All loss, injury, or damage to the work or materials, from whatever cause, shall be made good at the expense of the Contractor.

The Contractor shall provide suitable and adequate storage room for materials and equipment during the progress of the work, including approved weathertight storage for all materials and equipment which might deteriorate if left uncovered. He shall provide protection against damage or deterioration for all equipment during storage, and after installation, until the equipment is put to use by the Owner.

During adverse weather, the Contractor shall take all necessary precautions so that the work may be properly done and be satisfactory in all respects. When required, protection shall be provided by use of tarpaulins, wood building shelters, or other approved means.

During cold weather, materials shall be preheated, if required, and the materials and adjacent structure into which they are to be incorporated shall be made and kept sufficiently warm so that a proper bond will take place and proper curing, aging and drying will result. Protected spaces shall be artificially heated by approved means which will result in a moist or a dry atmosphere according to the particular requirements of the work being protected.

The Engineer may suspend construction operations at any time, when in his judgment, the conditions are unsuitable or the proper precautions are not being taken.

The Contractor shall at all times have, as directed or approved, a sufficient number of watchmen to protect the property of the Owner, to exclude unauthorized persons from the work and to protect traffic on the public highways.

ART. 58-OWNERSHIP OF MATERIALS

Nothing in the Contract shall be considered as vesting in the Contractor any right of property in materials used, after they shall have been attached or affixed to the work or the soil, nor in materials which have been accepted for partial payment at the site of the work, as provided hereinafter, but all such materials shall upon being so attached or affixed, or so accepted, become the property of the Owner.

ART. 59- CHATTEL MORTGAGES

No materials or supplies for the work shall be purchased by the Contractor or by any subcontractor subject to any chattel mortgage or under a conditional sale or other agreement by which an interest is retained by the seller. The Contractor warrants that he has clear title to all materials and supplies used by him in the work.

ART. 60- LINES AND GRADES

All work shall be constructed according to the lines and grades shown and approved. At the site, the Engineer will lay out and mark upon the ground a base line and bench mark, from which the Contractor shall be responsible for staking out the construction lines. For sewers, the Engineer will lay out and mark suitable number of control points and bench marks. The Contractor shall employ the services of a land surveyor, licensed to practice in this state, for laying out the work, including setting of key or principal stakes, markers and levels, and preparation of cut sheets, if required, on a form approved by the Engineer.

The Contractor shall furnish all stakes, markers, and other materials, and shall furnish any assistance that the Engineer may require in laying out the base lines and establishing the bench marks, and in checking and measuring the work. Whenever the Engineer finds it necessary to carry on his operations on Sundays, legal holidays, or other times when the work of the Contractor is not in progress, the Contractor shall furnish all necessary service and assistance. He shall not proceed until he has received from the Engineer such points and instructions as may be necessary for the progress of the work. Any work improperly done without lines or levels or instructions shall be removed and replaced by the Contractor at his own expense.

No direct payment will be made for the cost to the Contractor of any of the work or delay occasioned by giving lines and grades, or making other necessary measurements, or by inspection, compensation therefor being considered as having been included in the bid or stipulated prices.

ART. 61- PRE-CONSTRUCTION AND CONSTRUCTION PHOTOGRAPHS

The Contractor shall furnish a series of photographs, taken by a commercial photographer, to show the site of the work before construction. Photographs shall be taken at such locations as may be determined by the Engineer, or at a spacing of approximately 50 feet apart in streets and 100 feet in easements and wetland areas. Two glossy prints of each picture shall be submitted to the Engineer before construction.

The Contractor shall also furnish a series of construction photographs, to show the progress of the work. At least 6 photographs shall be taken monthly at such locations as may be determined by the Engineer. Two glossy prints of each picture taken during the month shall be submitted to the Engineer at the time of the monthly estimate for progress payment. Email of photos will also be accepted.

Prints for submission shall not be less than 8 in. by 10 in. in size, and inserted in a clear plastic sleeve for binding, properly identified by text and dates on the reverse side. Negatives of all photographs, including identifications shall be furnished to the Engineer.

ART. 62- RECORD DRAWINGS

Concurrent with progress of installation, the Contractor shall maintain a set of as-built record drawings, consisting of a reproducible marked set of Engineer's drawings with additional sketches as required, denoting and dimensioning accurately all changes in elevation, location and size, of all items deviating from Engineer's drawings. The set shall be kept in the Contractor's field office and be made available for inspection by the Engineer upon request.

Upon completion of work, the Contractor shall deliver to the Engineer one up-to-date set of these as-built record drawings, prepared by a Connecticut State licensed land surveyor.

ART. 63- TIME OF THE ESSENCE

Inasmuch as the provisions of this Contract relating to the time for performance and completion of the work are for the purpose of enabling the Owner to proceed with the construction of a public improvement in accordance with a predetermined program, and inasmuch as failure to complete the work within the period specified may result in a loss to the Owner, such provisions are of the essence of this Contract.

ART. 64- NIGHT, SUNDAY AND HOLIDAY WORK

Unless otherwise especially permitted by the Engineer, no work shall be done between the hours of 5:00PM and 7:30AM, nor on Sunday or Legal Holidays, except as necessary for the proper care and protection of the work already performed. The Engineer and Owner shall be informed a reasonable time in advance of the beginning of performance of such work. Only such work will be permitted at night as can be done satisfactorily and in a first class manner and without disturbance to adjoining property owners. Good lighting and all other facilities for carrying out and inspecting the work shall be provided and maintained at all points where such work is being done. Work performed after regular working hours, on Sundays, or Legal Holidays, shall cause no additional expense to the Owner.

ART. 65- WORK IN FREEZING WEATHER

Unless written permission is given, work liable to be affected by frost shall be suspended during freezing weather. When work proceeds in such weather, the Contractor shall provide sufficient and approved facilities for creating workable conditions and protecting the work after its completion, as approved by the Engineer.

ART. 66- UNNECESSARY NOISE

The Contractor shall use every effort and means possible to minimize or eliminate noise caused by his operations, which the Engineer may consider objectionable. The Contractor shall provide working machinery, equipped with silencers or mufflers where required, designed to operate with the least possible noise.

ART. 67- WORK IN STREETS AND HIGHWAYS

The Contractor shall obtain from the proper authorities, permission to open any State, County or Municipal highway. The Contractor shall file with the Engineer, and with the agencies having jurisdiction, triplicate copies of sketches and descriptions showing the exact location and size of the opening or excavation, the time during which it is proposed to make such opening or excavation, and the proposed method of maintaining traffic during construction. The Contractor shall not make any such opening or excavation until written permission has been granted by the agencies having jurisdiction and the Engineer. If such agencies require inspection, traffic control, signaling or other work to be done by its own forces, the Contractor shall arrange for and pay for the same.

The Contractor shall not close or obstruct any portion of a street, road, or private way without obtaining permits therefor from the proper agencies. If any street or private way shall be rendered unsafe by the Contractor's operations, he shall make such repairs or provide such temporary ways or guards as shall be acceptable to the Engineer.

After the completion of backfilling in public highways, the Contractor shall remove all surplus material, regrade, and leave in good order and dust-free condition all roadways disturbed by his operations.

He shall maintain the surface of the street over the trenches in good condition, promptly filling in all depressions caused by settlement of the backfill.

ART. 68- MAINTAINING AND SAFEGUARDING TRAFFIC

The Contractor as directed, shall build and maintain such temporary roads, passageways, trestles, and bridges as shall be deemed necessary for the accommodation of traffic on streets and roadways interfered with by the Contractor's operations, for convenient access to the various parts of the work, for access to adjacent buildings and properties, and for other necessary purposes incidental to the work. He shall erect such temporary guards, fences, warning signs, lights, and signals as may be necessary or required to protect all traffic on the streets and roadways. He shall not obstruct vehicular traffic unless he has permission from the agencies having jurisdiction to bar temporarily all traffic from the site of the work. He shall not deprive any building or property of safe and proper access except with the consent of the occupant and after due notice to the Engineer. Free access must be given to every fire alarm box, fire hydrant, valve box, or valve chamber. The temporary roads and the Contractor's access roads shall be located where directed or approved and shall be maintained in good condition. Calcium chloride or other approved means, shall be used to maintain the roads in a dust-free condition. The Contractor shall indemnify and save harmless the Owner from any expense whatsoever due to his operations in streets and highways.

ART. 69 - HAULING MATERIALS

Before starting any work, the Contractor shall arrange with the municipal, County, or State officials having jurisdiction for the use of routes of travel for hauling materials that will result in minimum inconvenience to the traveling public. Routes of travel so scheduled shall be adhered to throughout the course of the work.

The Contractor shall, at his own expense, handle, haul and distribute all materials and all surplus materials on the different portions of the work as required. Delays in handling involving storage charges and demurrage charges by the railroad and other companies shall be at the expense of the Contractor.

ART. 70- OBSTRUCTIONS ENCOUNTERED

In addition to showing structures to be built under this Contract, the drawings show certain information regarding the pipe lines and other structures which exist at the site of the work, both at and below the surface of the ground. The Owner expressly disclaims any responsibility for the accuracy or completeness of the information given on the drawings with regard to existing structures and pipe lines, and the Contractor will not be entitled to any extra compensation on account of inaccuracy or incompleteness of such information, said structures and pipe lines being shown only for the convenience of the Contractor, who must verify the information to his own satisfaction. The giving of this information upon the Contract Drawings will not relieve the Contractor of his obligation to support and protect all pipe lines and other structures which may be encountered during the construction of the work, and to make good all damages done to such pipe lines and structures, as provided in these specifications.

ART. 71- EXISTING UTILITIES

The Contractor will be required, at his own expense to do everything necessary to protect, support and sustain all sewers, water or gas pipes, railroad tracks, or telegraph poles, conduits and other fixtures laid across or along the site of the work. The Engineer, as well as the company or corporation owning said pipes, poles, or conduits must be notified of same by the Contractor before any such fixtures are removed or molested. In case any of the said sewer, gas or water pipes, service pipes, electric lights, power, telephone or telegraph poles, conduits or other fixtures are damaged, they shall be repaired by the authorities having control of the same, and the expense of said repairs shall be deducted from the moneys which are due or become due said Contractor under this Contract.

Should it become necessary to change the position, or temporarily remove any electric conduits, water pipes, gas pipes, or other pipes, or wire, in order to permit the Contractor to use a particular method of construction or in order to clear the structure being built, the Contractor shall notify the Engineer of the location and circumstances, and shall cease work if necessary, until satisfactory arrangements have been made by the owners of the said pipes or wires to properly care for the same. No claims for damages will be allowed on account of any delay occasioned thereby. The entire cost of the changes or temporary removal must be included in the unit or lump sum prices stipulated for the various items of work to be done under this Contract.

ART. 72- CONTINUITY OF UTILITY SERVICES

In all cases where temporary pipes must be installed or where sewage, water, or drainage must be pumped or otherwise carried over or around excavations or any other portions of the work, the Contractor shall furnish such pipes, pumps, and all other materials, equipment, and labor as are required to maintain continuity of service in the utilities affected.

ART. 73- PROTECTING EXISTING STRUCTURES

The Contractor shall, at his own expense, shore up and protect any buildings or structures which may be encountered or endangered in the prosecution of the work, and he shall repair and make good any damages caused to any such property by reason of his operations.

ART. 74- PROTECTING EXISTING TREES AND SHRUBBERY

The Contractor shall protect trees, shrubs, and grassed areas on the lands of the Owner, and on adjacent lands, from being cut, trimmed, or injured, unless specifically ordered otherwise, for clearing the site of the work. Any damage to trees, shrubs, or grassed areas shall be made good by the Contractor, at his own expense, to the satisfaction of the owners thereof.

Tree roots shall not be mutilated nor shall they be cut except by permission of the Engineer. When the Contractor is permitted to cut tree roots, he shall cut the ends off smoothly, without splitting or shattering them. The trunks of the trees shall be carefully protected from damage, and if unavoidable damage occurs, the injured portions shall be neatly trimmed and covered with an application of grafting wax. Excavating machinery, cranes, etc., shall be handled with care to prevent damage to shade trees, particularly to overhanging branches, and branches shall not be cut off except by special permission of the Engineer. No special compensation will be made for the protecting of existing trees and shrubbery, but such cost shall be considered as having been included in the lump sum prices or unit prices as stipulated for the work to be done under the Contract.

ART. 75- MONUMENTS AND LANDMARKS

When any bench mark or monument, whether of stone, concrete, pipe, or a mark on the pavement, designating the lines of the streets or highways or of private property, is in the line of any trench or other construction work and may have to be removed, the Contractor shall notify the Engineer in writing at least 24 hours in advance. Under no circumstance shall such monument be removed or disturbed by the Contractor or by any of his men without a written order from the Engineer. The Contractor shall furnish the necessary labor which may be required in resetting any monument, under the direct supervision of the Engineer. Should any monument be destroyed through accident or neglect, the Contractor shall be required, at his own expense to employ a licensed surveyor acceptable to the Engineer, to re-establish the monument.

ART. 76- SEWAGE, SURFACE AND FLOOD FLOWS

The Contractor shall furnish all the necessary equipment, shall take all necessary precautions, and shall assume the entire cost of handling any sewage, seepage, storm, surface and flood flows which may be encountered at any time during construction of the work. The manner of providing for these

flows shall meet with the approval of the Engineer, and the entire cost of said work shall be considered as included in the prices bid for work to be done under this Contract.

ART. 77- SUSPENSION OF WORK

If the Engineer deems it advisable, or upon a determination by the Owner that all or any portion of the Work should be suspended, delayed or interrupted, then the Engineer may order the Contractor in writing to stop work on all or any part of the Contract, and the Contractor shall do no work when so ordered until he has received written notice from the Engineer to resume work. When work is suspended as above provided, payments for the completed parts of suspended work will be made as provided hereinafter and a suitable extension of time for completing the work will be granted. No payment will be made for work done by the Contractor when done in violation of said order by the Engineer.

ART. 78- ABANDONMENT OF WORK

Should the Contractor abandon or in any manner fail to complete the work under this Contract, the Owner is hereby authorized and empowered to pay any laborers or mechanics for work done who may have been employed by said Contractor upon the work herein, and to pay any claims against the Contractor for materials furnished, out of any funds that would otherwise be due or become due said Contractor under this Contract, and in every such case the Owner is hereby authorized and empowered to ascertain through the Engineer, the amount or amounts due or owing to such labor or laborers, or for materials, from said Contractor, in such manner and upon such proof as said Owner may deem sufficient. And the amount or amounts so found by the Engineer to be due and payable to such labor or laborers, or for materials furnished, shall be final and conclusive against the Contractor, and may thereafter be paid by the Owner to said labor or laborers, or to liquidate claims for material furnished; and any payment may be withheld from said Contractor until all such claims for labor or material on the Contract have been satisfied.

ART. 79- DEFAULT OF CONTRACTOR

The Owner may terminate this Contract upon the occurrence of any one of the following events of Contractor default:

- (1) If the Contractor shall fail, within the time required, to begin the work to be done under this Contract, or
- (2) If the work to be done under this Contract shall be abandoned, or
- (3) If the Contractor shall be adjudged bankrupt or make an assignment for the benefit of creditors, or
- (4) If a receiver or liquidator shall be appointed for the Contractor or for any of his property and shall not be dismissed within 20 days after such appointment, or the proceedings in connection therewith shall not be dismissed within 20 days after such appointment, or the proceeding in connection therewith shall not be stayed on appeal within the said 20 days, or,
- (5) If the Contractor shall fail to or refuse to regard laws and ordinances, and such orders as may from time to time be given by the Owner or the Engineer with respect to the work, or
- (6) If the Contractor shall refuse or fail, after notice from the Engineer, to supply enough properly skilled workmen or proper materials, or
- (7) If the Contractor shall violate any of the provisions or covenants of this Contract or shall not perform the same in good faith in accordance with the terms hereof, or

- (8) If the Contractor shall refuse or fail to prosecute the work or any part thereof with such diligence as will insure its completion within the period specified (or any duly authorized extension thereof) or shall fail to complete the work within said period, or
- (9) If the Contractor shall fail to make prompt payment to persons supplying labor, material or equipment for the work, or
- (10) If the Contractor shall assign or sublet the work otherwise than as specified, or
- (11) If the Engineer should be of the opinion and shall certify in writing to the Owner that the work or any part thereof is unnecessarily or unreasonably delayed, or that the Contractor is not complying with his orders, or is not executing the Contract in good faith, or that suitable and sufficient workmen, material, plant, power tools, supplies, or other means of carrying on the work are not provided to carry out all requirements of the Contract.
- (12) If the Contractor disregards laws, ordinances, rules, regulations, or orders of any public jurisdiction.
- (13) If the Contractor disregards the authority of the Engineer.

ART. 80- UNFINISHED WORK COMPLETED BY THE OWNER

Upon a declaration of default of the Contractor and termination as hereinbefore provided, the Owner shall, by written notice, order the Contractor not to begin, or not to resume, or to discontinue all work under this Contract or any part of such work, and thereupon the Contractor shall not begin, or shall not resume, or shall discontinue all work or such part thereof, and the Owner shall thereupon have the power, in the manner prescribed by law, to contract for the completion of the work or such part thereof, or to place such and so many persons as they may deem advisable by contract, or call on Surety to complete the work or otherwise to work at and to complete the work or part thereof, or so much of the work or part thereof, as the Owner may direct or may place under contract, and take possession of and use any or all plant, tools, appliances, equipment, supplies, property, and materials as they may find upon the site of the work, and procure or cause to be procured, by contract or otherwise, all plant, tools, appliances, equipment, supplies, property, and materials for the completion of the same, and charge the whole expense of the completion of the work, or part thereof, to the Contractor or his Surety.

The expense so charged, together with the administrative, legal, engineering, and other costs associated with terminating the Contract and re-contracting the Work, and also liquidated damages for delay in the completion of the work, if any, as provided, shall be deducted and paid by the Owner out of such moneys as may be then due or may at any time thereafter become due under and by virtue of this Contract or any part thereof. In case such expense and liquidated damages, if any, shall exceed the sum which would have been payable under this Contract, if the same had been completed by the Contractor, he shall and will pay the amount of such excess to the Owner; and in case such expense and liquidated damages, if any, shall be less than the sum which would be payable to the Contractor, if the Contractor had completed the Contract, he shall be entitled to the difference, subject to all the other terms, convenants and conditions of this Contract.

ART. 81- CERTIFICATE OF COST OF WORK COMPLETED BY OWNER

In the event of the Owner's undertaking, by contract or otherwise, to perform the work or any part thereof as hereinbefore described, the certificate of the Engineer, as to the amount of work done, the cost and amount of excess cost, if any, of performing or completing the work called for by this Contract, and as to the amount of liquidated damages hereunder, shall be binding and conclusive upon

the Contractor, his Sureties, successors, assigns, lienors and to all claimants of any part of the moneys payable hereunder.

ART. 82- CONTINUATION OF WORK BY CONTRACTOR

When any particular part of this work is being carried on by the Owner, by contract or otherwise, under the provisions of this Contract, the Contractor agrees to continue the remainder of the work in conformity with the terms of this Contract and in such manner as not to hinder or interfere with the persons or workmen employed by the Owner.

ART. 83- THE OWNER'S RIGHT TO DO WORK AND THREE DAY CLAUSE

If the Contractor or his subcontractors should neglect to prosecute the work properly or fail to perform any provisions of the Contract, the Owner, after three (3) days written notice to the Contractor, may without prejudice to any other remedy he may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor; provided, however, that the Engineer shall approve both such action and the amount charged to the Contractor.

ART. 84- CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE

If, through no act or fault of the Contractor, the Work is suspended for a period of more than ninety days by the Owner or under an order of court or other public authority, or the Engineer fails to act on any Application for Payment within thirty days after it is submitted, or the Owner fails for 45 days to pay the Contractor any sum finally determined to be due, then the Contractor may, upon seven days' written notice to the Owner and the Engineer, and provided the Owner does not remedy such suspension or failure within that time, terminate the Contract and recover from the Owner payment as provided herein. In lieu of terminating the Contract and without prejudice to any other right or remedy, if the Engineer has failed to act on an Application for Payment within thirty days after it is submitted, or the Owner has failed for 45 days to pay the Contractor any sum finally determined to be due, the Contractor may upon seven days' written notice to the Owner and the Engineer stop the Work until payment of all such amounts due the Contractor, including interest thereon.

In the event the Contractor properly terminates the Contract pursuant to this article, then in such case, the Contractor shall be paid (without duplication of any items):

- 1. For completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
- For expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;
- 3. For amounts paid in settlement of terminated contracts with Subcontractors, manufacturers, fabricators, suppliers or distributors and others (including but not limited to fees and charges of engineers, architects, attorneys and other professionals and court and arbitration or other dispute resolution costs incurred in connection with termination of contracts with Subcontractors and manufacturers, fabricators, suppliers or distributors); and
- 4. For reasonable expenses directly attributable to termination.

The Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss or any consequential damages arising out of such termination.

ART. 85- ESTIMATE OF QUANTITIES

Wherever the estimated quantities of work to be done and materials to be furnished under this Contract are shown in any of the Contract Documents including the Proposal, they are given for use in comparing bids and the right is especially reserved, except as herein otherwise provided, to increase them or diminish them as may be deemed reasonably necessary or desirable by the Owner to complete the work contemplated under this Contract, and such increase or diminution shall in no way vitiate this Contract, nor shall any such increase or diminution give cause to the Contractor for claims or liability for damages.

ART. 86- EXTRA WORK AND CHANGES IN THE WORK

Without invalidating the Contract, the Owner may order deletions or deductions in the contract Work or may order extra work or changes involving alterations or additions to the work, the Contract price being adjusted accordingly. Such ordered deletions or increases in the work shall be executed under the conditions of the Contract except that any claim for extension of time caused thereby shall be adjusted at the time of ordering such change.

No extra work or changes in the work covered by the Contract Documents shall be done or made by the Contractor without the written approval by the Owner or the Engineer, acting officially for the Owner, and unless subject to an established unit price, not until the price for doing or making such change is agreed upon in writing.

Changes or credits for the work so ordered and approved shall be determined by one or more, or a combination of three methods, as approved by the Owner as follows:

- (a) By such applicable unit prices, if any, as are set forth in the Contract; or
- (b) If no such unit prices are set forth, then by unit prices or by a lump sum mutually agreed upon by the Owner and the Contractor; or
- (c) If no such unit prices are set forth and if the parties cannot agree upon prices or a lump sum, then, for work performed the Contractor shall receive as compensation the actual cost to him, which cost shall include:
 - 1. Labor, including foreman;
 - 2. Materials entering permanently into the work;
 - 3. The ownership or rental cost of construction plant and equipment during the time of use on the extra or changed work;
 - 4. Power and consumable supplies for the operation of power equipment during the above time;
 - 5. Insurance;
 - 6. Social Security and old age and unemployment contributions:
 - 7. Plus a fixed fee to be agreed upon but not to exceed 15 percent of the summation of Items 1 through 6 above, which fee shall be compensation to cover the cost of supervision, overhead, bond, profit, and any other general expenses.

If all or part of the extra work is done by a subcontractor, subcontractor's overhead in the amount of 5 percent may be added to cost of labor and materials, if methods (b) or (c) above are used.

The Contractor shall give the Engineer access to all accounts, bills, payrolls, and vouchers relating to such extra work and he agrees that he shall have no claim for compensation for such work unless a statement in writing of the actual cost of the same, fully itemized as to labor, materials, and

other allowable costs is presented to the Engineer before the fifteenth day of the month following that during which each specific order was complied with by him.

It is understood and agreed by the Contractor that the Owner reserves the right to have such extra work done by any persons, person, or corporation other than the Contractor, unless an agreement upon the prices to be paid for such extra work can be promptly reached between the Owner and the Contractor. Should said extra work be done by any person, persons, or corporation other than the Contractor, all of the provisions as hereinbefore provided shall apply and the Contractor agrees to make no claim for damages or for any privileges or rights, other than that provided in the Contract, by reason of such work by others, except for an extension of time to perform this Contract as may be certified to the Owner by the Engineer, and approved by the Owner.

Should the Contractor consider himself entitled to extra compensation on account of the before mentioned alterations or changes, he shall notify the Owner by making his claim in writing to the Engineer before proceeding with the work in question. Should the Contractor proceed with the said work in compliance with the written order of the Engineer, it is to be construed as his acceptance of the order and the stipulated compensation for the said work.

ART. 87- CLAIMS FOR EXTRA WORK

If the Contractor claims that any instructions issued by drawings or otherwise involve extra cost under this Contract, he shall give the Engineer written notice thereof within 48 hours after the receipt of such instruction, and in any event before proceeding to execute the work; except in emergency endangering life or property, the procedure shall then be as provided for in the preceding section. No such claim shall be valid unless so made.

ART 88 -SUPPLEMENTARY CONTRACT

Where conditions require an unforeseen and major change in, and addition to the work after the Contract has been signed, the Contractor will undertake to enter into a Supplementary Contract at agreed prices, to cover the cost of said changed work, and shall, if requested, waive any right to do such work as extra work.

ART. 89-CONTRACTOR'S CLAIM FOR DAMAGES

If the Contractor shall claim compensation for any damage sustained by reason of the acts of the Owner or its agents, he shall, within seven days after sustaining of such damage, make a written claim and statement to the Engineer of the nature of damage sustained. On or before the fifteenth day of the month sustained, the Contractor shall file with the Engineer an itemized statement of the details and the amount of such damage alleged to have been sustained and unless such statement is made as thus required, his claim for compensation will not be considered by the Owner.

In addition to the foregoing statements, the Contractor shall, upon notice from the Owner, produce for examination by the representatives of the Owner, all his books of accounts, bills, invoices, payrolls, subcontracts, time books, daily reports, bank deposit books, bank statements, check books, and canceled checks, showing all of his acts and transactions in connection with or relating to or arising by reason of this Contract, and submit himself and persons in his employ for examination under oath by any person designated by the Owner to investigate claims made against the Owner. Unless the aforesaid statements shall be made and filed within the time aforesaid and the aforesaid records submitted for examination, and the Contractor and his employees submit themselves for examination as aforesaid, the Owner shall be released from all claims arising under, relating to or by reason of this Contract, except for the sums certified by the Owner to be due under the provisions of this Contract.

ART. 90- RESOLUTION OF DISPUTES

This Contract shall be interpreted in accordance with the laws of the State of Connecticut.

All unresolved claims, disputes and other matters in question between OWNER and CONTRACTOR arising out of, or relating to the Contract Documents, or the breach thereof, shall be resolved as follows: a) the parties may agree to submit any such claim, dispute or matter in question to mediation before a mediator acceptable to the parties; b) if the parties do not agree to submit such dispute to mediation, or if such mediation fails to result in resolution of such claim, dispute or matter in question, then by a State court of the jurisdiction in which the Project is located.

ART. 91- EXTENSION OF TIME FOR COMPLETING THE WORK

If the Contractor be delayed in completion of the work under the Contract by any act or neglect of the Owner or of any other Contractor employed by the Owner, or by changes in the work, or by any priority or allocation order duly issued by the Federal government, or by any unforeseeable cause beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God or of public enemy, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes and severe weather, or by delays of subcontractors or suppliers occasioned by and of the causes described above, or by delay authorized by the Engineer for any cause which the Engineer shall deem justifiable, then:

For each day of delay in the completion of the work so caused, the Contractor shall be allowed one day additional to the time limitation specified in the Contract, it being understood and agreed that the allowance of same shall be solely at the discretion and approval of the Engineer.

No such extension of time shall be made for any delay unless the Contractor, within 5 days after the beginning of the delay, shall have informed the Owner or Engineer in writing of the nature of the delay, its cause, and its estimated duration. The Engineer will ascertain the facts regarding the delay and notify the Contractor within a reasonable time of its decision in the matter.

The Contractor shall use all honorable and reasonable means to prevent strikes, to avoid violations of labor agreements or other actions calculated to create dissatisfaction with working conditions. Should strikes occur, he shall make all proper and reasonable efforts to effect early settlement and resumption of the work. Should collusion by the Contractor be proven in the case of strikes or lockouts, then no extension of time for completion of the Contract will be given. Burden of proof in this case shall rest entirely with the Contractor.

No claim for damages or any claim other than for extensions of time as herein provided shall be made or asserted against the Owner by reason of any delays caused by the reasons hereinabove mentioned.

ART. 92- 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 thereunder 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 or before a date to be specified in the Owner's written notice to commence the work.

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 all work described in the Contract Documents is a reasonable time for the completion of 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 specified in the Contract, or within such further time as may be properly granted by the Owner in accordance with the provisions of this Contract, 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 exceed the time stipulated in the Proposal 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 ascertaining the true value of the damages which the Owner and third parties who are eligible to receive sewer service, will sustain by failure of the Contractor to complete the work on time, such as loss of revenue from service charges, additional costs of interest charges, delays caused to other work by failure to perform this Contract, and other damages, some of which are indefinite and not susceptible of easy proof, and said amount is agreed to be the amount of damage which the Owner will sustain and said amount shall be recovered by the Owner by deducting the same out of any monies due or that may become due the Contractor, and if said monies are insufficient to cover said damages, then the Contractor or his Surety shall pay the amount of the difference.

As specified under "Inspection", the costs of engineering and inspection performed during overtime hours, or after the specified date of completion (regardless of the granting of extensions of time), shall be deducted from funds owed to the Contractor, as damages sustained by the Owner caused solely by actions of the Contractor.

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 extension of 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.

It is also understood and agreed that the Contractor will not be charged with liquidated damages when the Owner determines that the Contractor is without fault and that the Contractor's reasons for requesting a time extension are acceptable to the Owner. If an extension of time is approved, said liquidated damages will be charged the Contractor from the end of such extension to the completion of the work. However, whether or not an extension of time is granted by the Owner, the Contractor shall pay to the Owner all costs of engineering field work and inspection from the completion date, as determined from the number of days specified for completing the work, to the date of actual completion.

ART. 93- PREPARATION OF ESTIMATES FOR MONTHLY PAYMENTS

Preliminary drafts of estimates for partial or monthly payment for work done and materials delivered shall be delivered to the office of the Engineer no later than the fifth day of the month following the period covered by such estimate.

Each preliminary or final draft payment requisition submitted by the Contractor to Owner shall include a statement showing the status of all pending construction change orders, other pending change directives and approved changes to the original contract. Such statement shall identify the pending construction change orders and other pending change directives, and shall include the date such change orders and directives were initiated, the costs associated with their performance and a description of any work completed. As used herein, "pending construction change order" or "other pending change directive" means an authorized directive for extra work that has been issued to the Contractor.

After the preliminary drafts have been approved, final drafts of such estimates shall be prepared by the Contractor, and delivered to the office of the Engineer no later than the tenth day of the month

following the period covered by such estimate. Classes of work listed on a partial estimate shall be only those approved, and in the quantities so approved. Equipment, materials and work shall conform to the approved breakdown statement, and shall be considered only the extent, approved by the Engineer, as indicated on daily work report sheets, as of the date on which the work was done.

On each estimate where pipe and conduits in paved streets are included for payment and the proposal does not contain a separate line item for pavement restoration, the Contractor shall deduct \$15.00 per square yard of permanent pavement area until such time as the permanent pavement is placed and approved. In unpaved areas, the deduction shall be \$10.00 per foot of trench until permanent restoration is completed and releases are obtained from the affected property owners. Deductions for incomplete testing shall be in accordance with the article entitled 'Materials Included in Monthly Estimates. All such deductions shall be made from the Value of Work Completed, before calculation of retention's.

No estimate or payment shall be required to be made when, in the judgment of the Engineer, the total value of the work done since the last estimate amount to less than One Thousand Dollars (\$1000.00).

Deviation from the above procedure by the Contractor will result in disapproval of the estimate. The work and materials included on such disapproved estimate shall not be submitted for consideration until the next monthly estimate is submitted.

ART. 94- DAILY WORK REPORTS AND DELIVERY SLIPS

Daily work reports shall be prepared by the Contractor on forms acceptable to the Engineer, and shall be submitted to the Engineer on or before noon of the day following the day's work reported, properly prepared and signed.

The Contractor shall furnish the Engineer with copies of delivery slips covering all material delivered to the site of the work, which is to be included in any monthly estimate. All materials delivered to the site of the work, whether from a supplier's warehouse or from the Contractor's stock, shall be covered by such delivery slips. Delivery slips shall be submitted daily with the daily work report sheets.

Deviation from the above procedure by the Contractor, as to daily work reports and delivery slips, will result in disapproval of items of work. Such disapproved items shall not be included in any monthly estimate until properly reported on daily work reports and/or on approved delivery slips.

ART. 95- MATERIALS INCLUDED IN MONTHLY ESTIMATES

(a)

Allowances for payment to the extent listed herein, for equipment and materials specifically listed on the approved breakdown statement of the lump sum bid, may be included in the next monthly estimate after the stages herein have been reached:

Upon completion of delivery 75% of the equipment or

		material price shown in the breakdown statement.
(b)	Upon completion of erection or installation (including subsurface pipe installation)	Not more than 90% of the installed price shown in the breakdown statement, or in the unit price bid.
(c)	Upon successful completion of acceptance tests	100% of the price shown in the breakdown statement, or in the unit prices bid.

All such equipment and materials included for payment in the monthly estimate shall be and become the property of the Owner and, on demand, the Contractor at his own expense shall promptly execute, acknowledge, and deliver or cause to be executed, acknowledged, and delivered to the Owner for any and all such equipment and materials included in any monthly estimate, proper bills of sale or other instruments in writing in a form and as required by the Owner from the Contractor and from any person, firm, or corporation manufacturing for, or selling or shipping or delivering to the Contractor any such equipment and materials, conveying and assuring to the Owner title to such materials included in such estimate free from all liens and encumbrances; and the Contractor at his own expense shall mark such materials as the property of the Owner and shall take such other steps, if any, as the Owner may require or regard as necessary to vest title in the Owner to such equipment and materials free from all liens and encumbrances. The Contractor shall, however, notwithstanding such transfer of title to the Owner be absolutely responsible to the Owner for any loss or damage to such equipment and materials until the same shall have been completely installed and tested, all work under the Contract completed and accepted, and shall at his own cost replace any equipment and materials lost or damaged.

ART. 96- PAYMENTS

Not later than 45 days after receipt of the monthly estimate, the Owner will make partial payment to the Contractor on the basis of the estimate of the work performed during the preceding calendar month by the Contractor, and duly approved and certified by the Engineer, which estimate includes the allowances set forth hereinbefore. All such payments shall be considered tentative only, subject to correction in the final estimate, and need not be based on accurate measurement. These payments are to be made purely to aid the Contractor to meet his current bills and for no other purpose.

The Owner will retain the following amounts from each estimate, in addition to payments withheld for payment of claims, defective work, etc., as specified elsewhere:

- a) During construction a retention of 5% payments claimed will be held until completion at "semi-final" payment, after which 2.5% will be retained until completion of the maintenance period, provided that the Contractor is making satisfactory progress and there is no specific cause for greater withholding.
- b) Retentions for payment of claims, defective work, potential losses, etc., as specified elsewhere, may also be withheld.

Failure by the Contractor to pay subcontractors and material men within the time provided by Article 39 and Section 49-41a of the Connecticut General Statutes, shall constitute an event of default and grounds for disapproval by the Engineer of the current periodical estimate for partial payment.

ART. 97-OWNERS RIGHT TO WITHHOLD PAYMENTS AND MAKE APPLICATION THEREOF.

The Owner may withhold from the Contractor as much as any approved payments due him as may in the opinion of the Owner be necessary:

- a) To assure the payment of just claims of any persons supplying labor or materials for the work then due and unpaid;
- b) To protect the Owner from loss due to defective work not remedied; or
- c) To protect the Owner from loss due to injury to persons or damage to the work or property of other contractors, subcontractors, owners of utilities, or others caused by the act or neglect of the Contractor or any of his subcontractors.

The Contractor shall, at the request of the Owner, furnish satisfactory proof that all obligations of the nature hereinabove described have been paid, remedied, discharged, or waived. If the Contractor fails to do so, then the Owner may, after having served written notice, withhold from Contractor's unpaid compensation a sum of money deemed reasonably sufficient to cover 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 article be construed to impose any obligations upon the Owner to either the Contractor or his Surety.

In paying any unpaid bills or obligations of the Contractor, the Owner shall be deemed the agent of the Contractor and any payments so made by the Owner shall be considered a payment made under this 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.

If the moneys retained under this Contract are insufficient to pay the sums found by the Owner to be due under the claims for labor and materials, the Owner may, at his discretion, pay such sums, and the Contractor or his Surety shall repay to the Owner all sums so paid out.

ART. 98- OPERATING TESTS

Prior to and as a requirement for receiving semi-final payment, the Contractor shall conduct all operating tests called for in the specifications, including but not limited to, watertightness tests of piping systems, tests of motorized and pneumatic equipment and their controls, tests of meters, gages and other instruments, tests of all control systems, pump tests and other tests as specified or directed. Testing shall be performed in the presence of the Engineer or his authorized representatives.

In the event that any tests fail to meet the requirements of the specifications, the Contractor shall make alterations, repairs or replacements as required in order that all systems equipment and appurtenances meet the operating tests as specified. The intent of the Contract is to provide a complete installation in accordance with the drawings and specifications, in working order, and ready for operation.

ART. 99- CLEANING UP

The Contractor shall expressly undertake at his own expense:

- a) Frequently to clean up 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,
 workmanlike appearance;
- b) Before semi-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; and
- c) Before semi-final payment, he shall restore all areas which have been used for storage of materials and equipment, and all areas which have been disturbed by his operations to their original conditions, or to a condition satisfactory to and approved by the Owner. He shall seed or sod any grassed area damaged by his operations (except for delayed seeding as provided in the Contract), and shall maintain such areas until the expiration of the maintenance period. Any such areas which fail to show a uniform stand of grass shall be reseeded or resodded until an acceptable stand of grass exists.

ART. 100- CERTIFICATE OF COMPLETION

Upon completion of all work required, or assigned during the contract period, except maintenance, as explained under "Maintenance", and final pavement, when applicable, the Engineer shall prepare a Certificate of Completion certifying that all work has been performed and materials supplied in

full accordance with the terms of the Contract. Acceptance of the Certificate of Completion by the Owner shall constitute "acceptance of the work".

After completion and acceptance of the Certificate of Completion by the Owner, the retention previously held, will be reduced as indicated in Article 96.

ART 101- FINAL ESTIMATE AND SEMI-FINAL PAYMENT

Upon completion of all work required, except maintenance, the Engineer shall file with the Owner a "Final Estimate" stating, from actual measurements or observation, the entire amount of work performed and compensation earned by the Contractor, including Extra Work and compensation therefor, under and according to the terms of the Contract. The Owner reserves the right to disregard claims for compensation submitted by the Contractor after the date of final estimate.

Within 45 days after the filing of the final estimate, the Owner will pay to the Contractor the amount therein stated, less retainage, and less all prior payments and advances whatsoever to or for the account of the Contractor. All prior estimates and payments shall be subject to correction by this payment, which is throughout this Contract called the semi-final payment. In any event, the semi-final payment will not be released to the Contractor until all outstanding claims against the Contractor shall have been satisfied.

ART. 102- ACCEPTANCE OF SEMI-FINAL PAYMENT CONSTITUTES RELEASE

The acceptance by the Contractor of the semi-final payment shall be and shall operate as a release for all things done or furnished in connection with this work and for every act of the Owner and others relating to or arising out of this work. No payment, however, semi-final or otherwise, shall operate to release the Contractor or his Sureties from any obligations under this Contract or the Contract Bonds.

ART. 103- MAINTENANCE

During a period of one year subsequent to the date of the acceptance of the work by the Owner, or as provided below, the Contractor agrees to replace the material which does not conform to the Contract requirements, and to repair any defects in materials or the work, or to make any changes required without cost to the Owner, to the satisfaction of the Engineer, and in conformity with the Contract Documents, provided that orders for such replacements, repairs or changes are received by him in writing within the one year period. The Contractor is not obligated thereby to do any work of replacement or repair that he may prove, to the satisfaction of the Engineer, to have resulted from abuse of the work, or materials by parties other than the Contractor, after the date when the Owner puts to use that part of the work requiring replacements or repairs, or has approved the Certificate of Completion, and has accepted the work.

If the Owner shall deem it necessary and shall so order, such replacement, changes or repairs shall be undertaken within 24 hours after service of notice. If the Contractor unnecessarily delays or fails to make the ordered replacements, changes or repairs within the time specified, or if any replacements, changes or repairs are of such nature as not to permit the Contractor to undertake them within 24 hours, then the Owner shall have the right to make such replacements, changes, or repairs and the expense thereof shall be paid by the Contractor or deducted from any moneys due the Contractor, or from any moneys of the Contractor retained by the Owner.

If the Owner puts to use for which it is built or installed, any structure or equipment prior to the acceptance of all work under the Contract, the maintenance period for such structure or equipment shall be calculated from the time when such use begins.

ART. 104- SURETY DURING MAINTENANCE PERIOD

The Performance Bond and Labor and Material Payment Bond submitted with the executed contract shall remain in full force and effect for the duration of the maintenance period.

ART. 105- FINAL CERTIFICATE AND FINAL PAYMENT

Twelve months after the acceptance of the work by the Owner, the Engineer shall file with the Owner a "final certificate" certifying that all work has been performed and materials supplied in full accordance with the terms of the Contract and stating therein the amount retained. Upon approval of the final certificate by the Owner, the Owner will pay to the Contractor the amount therein stated.

Final payment, however, will not be released to the Contractor until:

- a) He presents proof that all claims against the Contractor have been satisfied;
- b) He executes and delivers a release substantially in the following form: "In consideration of the above payment we hereby release the Owner and his agents from all claims and liability of whatsoever nature for anything done or furnished or in any manner growing out of the doing of the work."
- c) He secures and files with the Owner statements from Officials that the highway surfaces, if any, under their jurisdiction have been restored satisfactorily.

ART. 106- NO WAIVER OF CONTRACT

Neither an extension of time for any reason beyond the date fixed herein for the completion of the Contract, nor the delivery and acceptance of any articles or materials, nor any payment for, nor acceptance of the whole or any part of the work by the Engineer, or any possession taken by the Owner or its employees or agents, shall be deemed to be a waiver by the Owner of the right to abrogate this Contract for abandonment or delay or non-performance in the manner therein provided, nor shall it operate to void or annul any of the terms of this Contract.

ART. 107- NO ESTOPPEL

Neither the Owner nor any of his officers, shall be precluded or estopped by any certificate made or given by the Owner, the Engineer, or other officer, agent or appointee of the Owner under any provision of this Contract, from at any time (before the completion and acceptance of the work and payment therefor, or before the end of the maintenance period) showing the true and correct amount and character of the work done and materials furnished by the Contractor or any other person under this Contract, or that any such certificate is incorrect or improperly made in any particular, or that the work and materials, or any part thereof, do not in fact conform to the specifications and drawings, and the Owner shall not be precluded or estopped, notwithstanding any such certificate and payment in accordance therewith, from demanding and recovering from the Contractor such damages as it may sustain by reason of his failure to comply with the Contract Documents.

ART. 108- OTHER PROHIBITED INTERESTS

No official of the Owner who is authorized in such capacity and on behalf 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, 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 legislative, executive, supervisory, or other similar functions in connection with the construction 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.

ART. 109 - NOT USED

ART. 110- CONFORMANCE WITH MUNICIPAL AND STATE REQUIREMENTS

Prior to commencement of any work, the Contractor shall obtain all permits and approvals required to be acquired by the Contractor by the Township agencies having jurisdiction. These requirements may include, but are not limited to the following:

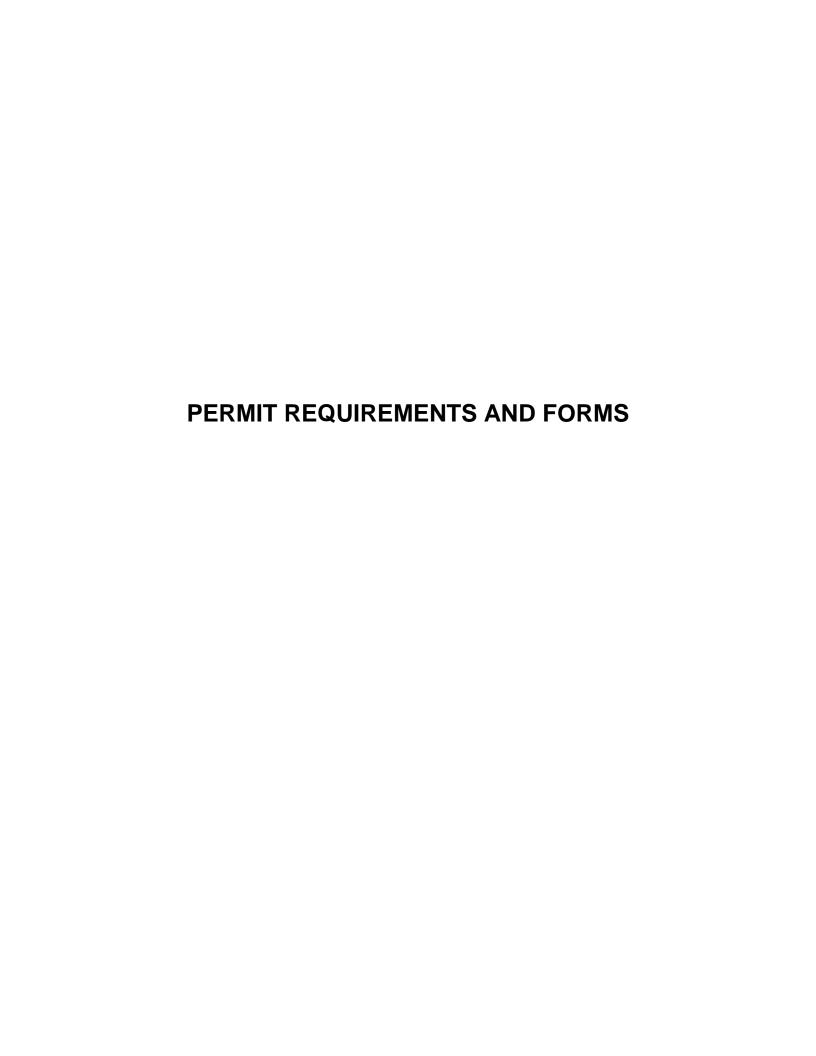
- Road opening permit

Contractor shall pay all fees, establish escrows and provide insurance and bonds required by these permits and approvals.

All State and local requirement shall be satisfied prior to commencement of work.

ART. 111- EXEMPTION FROM SALES AND COMPENSATING USE TAXES

In computing their bids, bidders are not to include the sales and compensating use taxes of the State or of any city and county in the State on any supplies or materials to be sold to the Owner, which is exempt from such taxes.



ACKNOWLEDGEMENT

The Applicant acknowledges and agrees to save the Town free and harmless from any injury or claim arising out of the work to be done, and further that he/she has knowledge of the existence of this Article II, EXCAVATIONS [Adopted 8-6-79], and 192-12 through 192-21, Code of the Town of Brookfield, Connecticut, and intends to comply fully with its provisions as well as all other ordinances and laws relating to the work to be done including Director of Public Works specifications.

Applicant Signature:	
Data	
Date:	

ACCEPTABLE FORMS OF SECURITY WHEN POSTING A BOND WITH THE TOWN OF BROOKFIELD

- 1. Check
- 2. Letter of Credit
- 3. Passbook

A Letter of Assignment signed by applicant and lending institution official, plus two (2) signed withdrawal slips must accompany each passbook.

(The Town of Brookfield does not accept Certificates of Insurance as security for bonds)

ASSIGNMENT OF SAVINGS BANK DEPOSIT

	Assignment made this _	day of		, 20,
by _		of	, Assignor,	to the Town of
Broo	kfield, a municipality withi	n the County of Fairfi	eld, State of Conr	necticut, Assignee.
	For valuable consider	ation, receipt of w	hich is hereby a	acknowledged, the
Assi	gnor hereby assigns to the	e Assignee all the As	signor's interest in	the following bank
acco	ounts:			
	Bank Name	Account No.	<u>Amount</u>	
	The Assignor hereby of	delivers to the Assig	nee all passbool	ks, if any, for said
acco	ounts listed above, which	passbooks are to b	e retained by the	e Assignee for the
dura	tion of this assignment.			
	The Assignor hereby d	irects said bank or	banks to pay the	Assignee, its legal
repre	esentatives, or assigns, up	to the full amount of	f such deposit upo	on demand.
	The undersigned appoin	nts the Treasurer of t	he Town of Brook	field as its attorney
in fa	ct for the purposes of ca	rrying out the terms	of this assignme	nt and to take any
actio	n or execute any instrume	ents necessary hereto	o and the undersi	ned hereby ratifies
and	confirms all that may be la	wfully done by virtue	hereof.	
	IN WITNESS WHEREC	F, the Assignor has	signed this instrur	nent.
	Dated this	day of	, 2	20
		Aggingan		
		Assignor		
	Accepted and acknowle	dged this day	of	, 20
		Ву		
		Rank [.]		



SECTION S-1 EARTHWORK AND BACKFILL

S 1.01 LIMITS OF DISTURBANCE

The Contractor shall limit all work to the limits designated on the drawing. The limits outside the roadway shall be staked with clearly flagged stakes prior to the start of construction, where appropriate. The WPCA shall be contacted for inspection of the staked limits.

Silt fencing shall be installed as shown on the contract documents. The silt fence shall be installed to protect all areas that will be disturbed during that workday which includes areas that vehicles and equipment will travel. It is the contractor's responsibility to install and maintain the silt fence during the entire duration of construction.

S 1.02 EXCAVATION

Excavation shall mean the removal from place of all materials including rock, pavement, curb, topsoil, in-situ soil and organic material such as peaty or humus material.

S 1.03 UNAUTHORIZED EXCAVATION

All excavation carried beyond the lines and grades shown, specified or established by the Engineer, together with its disposal, shall be at the Contractor's expense. All such spaces shall be filled by the Contractor, at his own expense, with concrete, foundation material, or compacted suitable material as directed.

S 1.04 STORAGE AND DISPOSAL

Excavated material, which is suitable and approved for backfill and fill shall be placed in storage piles unless or until it can be placed in the work. It shall not be placed close to the sides of excavations, where the weight of the material could create a surcharge on such sides, whether sheeted or not. Places for storage as directed by the Brookfield WPCA Inspector.

Unsuitable material or material in excess of that required for fill, backfill or other purposes, including any stored surplus, shall be disposed of off the site, by the Contractor at his own expense, unless needed for municipal fill purposes.

S 1.05 SHEETING AND BRACING

Where excavations are made with sides which require supporting, sheeting and bracing shall be used, of sufficient strength to sustain the sides of the excavations and to prevent movement which could in any way injure the work, or diminish the working space sufficiently to delay the work. Sheeting shall be of a material that will not split while being driven. Special precautions shall be taken where there is additional pressure due to the presence of other structures, and in such case, the Contractor shall submit, for the Engineer's approval, an outline plan showing the lines on which he proposes to drive sheeting and the method proposed for

bracing against the loads imposed by the structure. Such plan shall be prepared by a Registered Professional Engineer of this State and said plan shall bear the signature and seal of said Engineer. Sheeting and bracing shall be removed before the completion of the work, unless otherwise specified.

The Contractor will be permitted to remove sheeting or bracing except as follows:

a) Where the Engineer determines that removal of sheeting or bracing constitutes a potential danger to the work, adjacent utilities or structures; or may cause settlement of pavement.

Omission of any sheeting or bracing called for above will only be permitted at the Contractor's risk after approval by the Engineer, and with suitable credit.

After backfilling the trench, no sheeting shall extend to within 18 inches of the original ground surface. Compensation for temporary sheeting and bracing and for sheeting and bracing left in place, shall be deemed to be included in the bid price for Bid Item No. 14.

S 1.06 DEWATERING

The Contractor shall provide, operate and maintain satisfactory facilities and equipment, which to contain, collect and pump all water entering excavations or other parts of the work to suitable places for disposal. All excavations shall be kept free of water until the work or structure to be built therein is completed. Approved sediment bags and pumps shall be provided for catching and temporarily holding water containing mud, clay, sand, or other material in suspension, pumped from excavations. Such sediment bags shall be large enough to allow reasonable storage time for the settlement of such suspended matter. The settled material shall be cleaned out frequently and disposed of as directed.

Lowering of ground water to the injury or detriment of other structures shall be a part of the Contractor's risk and responsibility. Any structure injured or damaged as a result of the lowering of ground water shall be repaired or replaced to the satisfaction of the Owners thereof, at the expense of the Contractor.

Dewatering shall be accomplished by methods which shall insure that the groundwater will be drawn down to an elevation two feet (2') below the bottom of the bedding. Upon removal of dewatering equipment, the Contractor shall backfill, compact, and pave (in road) all holes.

Dewatering for the pipelines shall commence when groundwater is first encountered and shall be continued until such time as the backfill operation has been completed. The Engineer may direct the Contractor to continue dewatering operations for additional two (2) days after backfilling has been completed. Groundwater shall not be allowed to rise around the pipe until the trench is backfilled.

Discharge of groundwater resulting from the dewatering of trench excavations shall in no case be pumped directly into any body of water or drainage system. Unless a naturally vegetated drainage course is available for said discharge, suitable silt/sand traps shall be provided to remove and set suspended materials at the point of discharge.

The dewatering pump shall be screened and soundproofed in order to avoid subjecting the adjoining residents to objectionable noise levels. If in the opinion of the Engineer the noise level from the dewatering pump is excessive, the Contractor shall immediately take additional steps to further reduce the noise level of the pump. If required, the pump shall be provided with a critical silencer and should be enclosed with a sound deadening enclosure.

Dewatering shall be conducted in accordance with the requirements on the project plans. The contractor shall provide a plan to the Brookfield WPCA Engineer for approval for all dewatering activity prior to implementing said activity.

The contractor shall provide, at minimum, one additional sediment bag and sump pump on site during all dewatering operations. There is to be no disruption in the day's work that would prohibit the excavation from being backfilled.

S 1.07 BACKFILL AND FILL

All backfill, and fill under pipes and structures, shall consist of suitable approved foundation material. All other backfill and fill, in unpaved areas unless otherwise specified or required, shall consist of a suitable selected and approved earth or sand generally from storage of approved suitable excavated material, free from rejected organic matter, boggy, peaty humus or other unsuitable material such as unconsolidated silt, rubbish, waste, ashes, or cinders and with less than 15% of size 200 sieve material. If sufficient suitable material for backfill is not available from the excavated material in unpaved areas, as determined by the Engineer, the Contractor shall procure elsewhere a sufficient quantity of suitable bank run sand and gravel and shall furnish and place such material. No frozen earth shall be used for backfill, and all stones more than 6 inches in the largest dimension shall be removed from acceptable earth for fill.

S. 1.08 PLACING AND COMPACTING BACKFILL

Backfill shall be made to the slopes, grades, and elevations shown, specified, or required. Backfills shall be compacted, as hereunder specified, to a density at least equal to that of the adjacent undisturbed soil, so as to avoid future unequal settlement.

No backfill shall be placed until the structure has been inspected in place and approved. Backfilling shall be carried out as soon as possible after such approval, and the amount of trench left open shall be kept to a maximum length of 50 feet except that not more than 25 feet shall be left open at the end of the work day. Any trenches not completely backfilled by the end of the working day, shall be covered with steel plates sufficiently strong to carry roadway traffic.

Trenches shall be backfilled with bank run sand and gravel to a depth of 12 inches over the pipe, and compacted with mechanical tampers. After a compacted coverage of 12 inches has been made, the remainder of the trench shall be completely filled in an approved manner. Puddling from compaction will not be permitted except with coarse to medium granular materials and as approved by the Engineer. Bulldozing of backfill material into trenches will be prohibited unless it is done in uniformly spread layers, not over 12 inches thick and immediately machine tamped.

The Contractor shall provide material as required to compensate for settlement of backfill and fill.

When sheeting is being withdrawn, all cavities left thereby shall be filled with suitable granular earth, hosed or tamped in place so as to fill all voids thoroughly.

Backfill or fill shall be carried to a subgrade that permits topsoil of the required depth to be placed to bring it to the finished grade. As far as practicable, the underlying backfill or fill shall be given time to settle through several heavy rains or by artificial wetting before the new topsoil is placed.

Backfilling shall be completed using the method of construction for sewer pipes and manholes in accordance with ASTM D2321. Compaction of backfill material shall be in accordance with ASTM D1557.

Backfill in the area between the bedding and the pavement subbase course shall be compacted to ninety-five percent (95%) maximum dry density as determined by the ASTM D-1557 test procedure. Backfilling shall progress to the springline of the pipe, then between the springline and the crown of the pipe, and then backfill from the crown of the pipe to a point twelve inches (12") above the top of the pipe. After that, individual lifts of initial backfill shall be no greater than twelve inches (12") in thickness.

Trench backfill material shall be best excavated dry material or suitable imported material where determined necessary by the engineer.

All unsuitable or excess excavated material is to be directly loaded on trucks and removed from the site of work and disposed of legally at no additional cost to the OWNER.

S 1.09 SAND, STONE AND GRAVEL

Bank run sand and gravel shall consist of hard, sharp, clean granular material, free of organic matter. The material shall be free of any considerable amount of flat, laminated or elongated particles and shells, silt, clay, limestone, shale or other deleterious matter. The material must be capable of compaction to the density specified or required by the Engineer. The material shall contain no stones larger than 3 inches in their largest dimension, and no more than 15% of the material by weight shall pass a No. 200 sieve.

Gravel and crushed stone shall consist of hard, sharp, clean material. The material shall be free from fines, shells, clay, limestone, shale or other deleterious matter. Material shall be supplied as a mixture of sizes with 5% to 10% of the material passing a No. 40 sieve and the remainder ranging in size from 3/8-inch to 1-inch.

Foundation material shall be placed and firmly compacted by mechanical tamping equipment. Care shall be taken to place and compact material under pipe haunches.

Foundation material shall consist of clean gravel or crushed stone, as specified above and as approved; it shall not include bank run or excavated material.

S 1.10 TOPSOIL

Where topsoil on the areas to be excavated is of acceptable quality for use in the work, it shall be stripped therefrom to a depth directed, cleared of stumps and roots, and stored at approved locations separate from other storage until required to be placed on top of the backfill, fill or other areas, as shown, specified or directed.

In easements and all other areas where seeding or sodding is required, the Contractor shall furnish and spread a minimum of 4 inches of topsoil.

New topsoil shall consist of natural loam obtained from an area that has never been stripped, and shall be free from hard clods, stiff clay, partially disintegrated stone, cement, ashes, roots, or other undesirable material.

During the period of settlement, the Contractor shall maintain all trenches and provide for additional backfill to keep the finished grade of such trenches as near as possible to the original ground elevation. When ordered by the Engineer, but not before trench settlement has substantially ceased, the Contractor shall proceed with and complete all property restoration.

S 1.11 ROCK EXCAVATION

Rock excavation shall mean removal of boulders exceeding one cubic yard in volume, and solid ledge rock and masonry, which in the opinion of the Engineer requires for its removal, wedging, sledging, barring, or breaking up with a power operated tool. No blasting shall be performed by the Contractor. Soft or disintegrated rock which can be removed with a pick or power operated excavator or shovel, loose, shaken, broken stone in rock fill or elsewhere, and rock exterior to the maximum limits allowed, or which may fall into the excavation, shall not be included as rock excavation. Pavements, curbs, and driveways shall not be included as rock excavation.

When rock is encountered, the Contractor shall completely expose the rock surface, within the trenching payment limits shown on the contract documents, and notify the Engineer. Rock excavation if any, shall be paid at the prices bid for this item in the proposal. The limits of rock to be exposed shall not exceed the pay limits described in the contract documents unless approved by the engineer.

The Contractor shall notify the Engineer before starting any excavation, so that elevations and the measurements of the excavation area may first be obtained. When ledge rock is encountered, the Contractor shall notify the Engineer and shall strip or expose the rock to such an extent that in the Engineer's opinion the necessary measurements can be taken. If the Contractor fails to give such notice or notices, or removes any material prior to the taking of measurements, the Engineer may presume that measurements taken at the time he first saw the material in question indicates the true quantity of excavation.

S 1.12 LIMITS OF EXCAVATION

Excavations shall be made to the approved lines which shall be of sufficient width outside the structure to give room for placing and removing forms for concrete and for forming the pipe joints. Excavations for all structures shall not be plowed, scraped, or machine-dug closer than 3 inches to the finished subgrade. The last 3 inches of depth for all structures including pipe shall be removed with pick and shovel to the exact lines and grades just before placing foundation material, or pipe supports. The pipe elevations noted refer to the center lines and inverts and due allowance shall be made for excavating to a lower depth to accommodate foundation material or pipe supports. Bell holes shall be hand excavated for any pipe with a bell dimension larger than the pipe barrel.

Excavations made adjacent to or in the proximity of existing structures shall be made with special care and in such a manner as not to damage the structures or disturb the supporting backfill and foundations of such structures.

Trench Excavation

- (1) Excavation shall be accomplished using suitable equipment for the conditions anticipated for the work. Excavation shall not progress more than fifty feet (50') ahead of pipe laying operations. Not more than twenty five feet (25') of open trench shall be left uncovered following the sewer main installation, unless specifically required.
- (2) Extreme care shall be exercised in excavating in the vicinity of existing sanitary, gas or drain pipes, and service connections. These facilities shall be properly protected or support as necessary. Where such pipes or conduits form an obstruction to the line and grade of the sewer main, any removal, alternation or rearrangement of utilities shall be completed by the CONTRACTOR in a manner acceptable to the ENGINEER.
- (3) Trenches shall first be excavated to the top of the Pipe Embedment Zone (12 inches above the crown of the pipe). Excavation for other appurtenances shall have twelve inches (12") minimum and twenty-four inches (24") maximum clearance on all sides. The ground surface adjacent to all open trenches shall be graded to prevent surface water from entering the excavation, as required.
- (4) Excavation of the Pipe Embedment Zone shall be carefully progressed to the depth of bedding and shall not exceed the maximum trench width of the outside diameter of the pipe plus 24 inches.
- (5) Should the excavated width of the Pipe Embedment Zone exceed the maximum values listed above, the pipe shall be constructed in higher class bedding, or the class of pipe shall be increased, or both in accordance with the loading conditions at that specific location.
- (6) Where the bottom of the trench will not support the pipe in the opinion of the Engineer, the Contractor shall furnish and install additional foundation material under

the bedding. The Contractor shall make such additional excavation and construct foundation of the thickness directed by the Engineer.

Final pavement disturbance areas will be measured based on the actual field measurements; however, pavement disturbances beyond the maximum width indicated above plus 0.5 foot cut back on either side of the trench will not be considered by the Authority for payment unless these limits of disturbance have been approved by the Engineer or the Authorities Representative (in writing) prior to disturbance activity. For pavement areas that have been disturbed beyond the maximum limits of 5 feet that were not approved as noted above will be paid based on the 5 foot maximum trench width plus the 0.5 foot cut back on either side of the trench for the liner feet measured in the field.

S 1.13 SEEDING

All areas to receive new topsoil shall be seeded. After the area to be seeded has been graded to the required elevation, the surface shall be raked to true lines. All objectionable material, which would interfere with a finely pulverized seed bed, shall be removed.

The surface shall be seeded at a rate of pound per acre per 1,000 square feet of fresh, clean grass seed of the latest crop, mixed in the following proportions by weight:

<u>Species</u>	LBS. Per Acre	Per 1,000 S.F.
Spreading Fescue	15	0.3
Chewings Red Fescue	15	0.3
Kentucky Bluegrass	25	0.6
Perenial Ryegrass	10	0.2

An approved fertilizer shall be applied with the grass seed at the rate of 500 lbs. per acre.

Grass seed shall be sown in the Fall from August to October, or in the Spring between March and May. Seeding shall be done in dry or moderately dry soil at times when the wind velocity does not exceed 5 mph. After seeding, the surface shall be evenly raked with a fine toothed rake, than rolled with an approved roller, and finally watered with a fine spray. During dry weather, grassed areas shall be watered daily with sprinklers until grass is firmly rooted.

The Contractor shall maintain all seeded areas without additional payment until the expiration of the maintenance period. Any areas that fail to show a uniform stand of grass will be reseeded and refertilized at the Contractor's expense, until an acceptable stand of grass is established.

S 1.14 SUBMITTALS

<u>Certifications.</u> Tests and Inspections required under this Section shall be certified in accordance with the Contract Documents and shall be submitted for review by Engineer.

Shop Drawings. Shop Drawings (1 copy) are required for the following:

(1) Dewatering Plan (as necessary)

- (2) Sediment Bags (as necessary)
- (3) Sheeting and Bracing design by a CT Licensed Engineer, where applicable
- (4) Silt Fencing
- (5) Filter Fabric

END OF SECTION S-1

SECTION S-2 CONCRETE

S 2.01 MATERIALS

Ingredients of the concrete mixtures used shall meet the following requirements:

Cement - ASTM Designation C150, Type II

Air Content - 3% to 6%

Aggregates - ASTM Designation C33

Max. size of coarse aggregate-3/4inch

Water - From approved source Ready Mixes - ASTM Designation C94

28 Day Strength 4,000 psi

Water-Cement

Ratio, Gal./bag 5 1/4 to 6 1/4

Slump, inches 2 to 4

Mm. Cement

Quantity, Bags/c.y. 6 ½

S 2.02 GENERAL REQUIREMENTS

Unless otherwise ordered, the following procedures shall be followed:

- a) The proposed concrete mix and source shall be submitted to the Engineer for approval 10 days before use.
- b) Concrete shall be 4,000 psi.
- c) Concrete not discharged within 60 minutes after adding water shall be wasted.
- d) When required by the Engineer, test cylinders shall be prepared and tested in accordance with ASTM Designations C31 and C39. Contractor shall provide certified test results from a competent laboratory.
- e) Forming, if required, shall be as approved by the Engineer, and shall not be removed for 2 days after pouring.
- f) Concrete shall not be placed on mud, in water, or at temperatures below 40F. Concrete shall be placed in layers, with mechanical vibration, and without interruption unless approved construction joints are used.
- g) For at least 7 days, concrete shall be cured by being kept continuously moist and suitably covered. Surfaces shall be finished as required.
- h) No backfill shall be placed against fresh concrete for at least 7 days after pouring, unless otherwise approved.

FND OF SECTION S-2

SECTION S-3 PIPES

S 3.01 PIPE MATERIALS

Sanitary sewer pipe material utilized in the Contract shall be Polyvinyl Chloride (PVC) SDR-35 as designated on the Contract Drawings. Pipe materials, fittings, appurtenances, and installation shall conform to the applicable provisions of the following paragraphs of Section S3 and the WPCA Rules and Regulations. It should be noted that the more restrictive requirement will apply.

S 3.02 DUCTILE IRON

Ductile iron pipe and fittings shall be flexible joint or flanged. In general, flexible joints shall be used for outside piping and flanged joints shall be used for inside piping except as otherwise shown. Ductile Iron Pipe and Fitting shall conform in all respects to ANSI Standard A21.51 for thickness Class 52. Flanged ductile iron pipe shall be minimum class 53. All ductile iron pipes shall be flexible joint with mechanical joints or Tyton Joints equal to United States Pipe and Foundry Co. Mechanical Joints shall conform to the requirements of ANSI Standard A21.11. Gaskets shall be full faced, furnished with plain tips. Gasket dimensions shall be in accordance with the manufacturer's standard design of dimensions and tolerances. Flanges and flange ends shall conform to the requirements of ASA Standard B 16.11.

Plain ends of pipe for coupling joints shall be prepared in strict accordance with the requirements and instructions of the manufacturer of the coupling to be used.

All ductile iron pipe and fittings shall have a double cement mortar lining and interior seal coat.

Joints subjected to unbalanced thrust conditions shall be restrained as required, see Section S3.04.

S 3.03 FLEXIBLE COUPLINGS AND FLANGED COUPLING ADAPTERS

Flexible pipe couplings and flanged coupling adapters for making field joints between plain end pipes shall be of the elastic gasket type, meeting the requirements of the Code for Pressure Piping, ANSI Standard B31.l.

The couplings shall be designed and constructed to facilitate easy assembly in the field and to provide tight flexible joints when subject to expansion, contraction, irregularities and distortion due to normal settlement, and shall be as manufactured by the Dresser Manufacturing Division of Dresser Industries, Smith-Blair, Inc. or equal.

Flexible pipe couplings shall be Style 38 Dresser couplings. Flanged coupling adapters shall be style 127 for 8 inch pipe and smaller and style 128 for all others.

Unless otherwise noted, all flange coupling adapters and all flexible couplings shall be

harnessed.

On ductile iron pipe the harnessing shall be done by tying adjacent flanges with tie bolts. Lock pin type harnessing may also be used.

On steel pipe, cast steel lugs shall be welded to the plain end section of pipe and the joint tied with steel bolts and nuts between the lugs and adjacent flange. Dimensions, sizes, spacing and material for tie bolts, washers and nuts shall conform to the standards of Dresser Industries, Smith-Blair, Inc. or approved equal for pipe size and test pressure indicated.

S 3.04 JOINT RESTRAINT

Pipe joints subjected to an unbalanced thrust shall be suitably harnessed to the satisfaction of the Engineer. All tees and bends deflecting 11 1/4 degrees or more and other locations where there will be an unbalanced thrust shall be harnessed in accordance with this item. The type of joint restraint the Contractor proposes to use at points of unbalanced thrust shall be submitted to the Engineer for approval.

Socket pipe clamps and tie rods may be used for joint restraint on mechanical joints. Socket pipe clamp shall be Grinnell Figures 600 with socket clamp washers, Figure 599, or approved equal for all straight pipe harnessing and for fittings of 12 inch diameter and smaller. Clamps for fittings larger than 12 inch diameter shall be specially designed and fabricated to suit the fittings proposed for use. Tie rods shall extend from the back of the bell of one joint beyond next joint to provide positive restraint. The use of socket pipe clamps as restraint devices relying on friction between the clamp and pipe barrel will not be permitted.

Dimensions, sizes, spacing, and material for lugs, tie bolts, washers, and nuts shall conform to the standards of Dresser Industries, or approved equal, for pipe size, wall thickness, and test pressure indicated.

S 3.05 PIPE LAYING AND INSTALLATION

All pipe and fittings shall be installed to the lines, elevations and grades shown or ordered, and in accordance with the manufacturer's recommendations.

Suitable tools and equipment shall be used for proper handling, storing, and laying of pipe and fittings. In order to avoid damage to interior coatings, lifting hooks or bars shall not be inserted therein.

Each pipe and fitting shall be checked for defects and injuries as installation proceeds. Imperfect pipe materials shall be rejected and removed from the work. Pipe found to be defective after installation shall be removed and replaced by undamaged material.

The interior of all pipe shall be cleaned of dirt, and other deleterious materials, and kept clean, as the next section of pipe is laid. During the progress of the work, the exposed ends of the pipe shall be provided with approved temporary covers fitted to the pipe, in order to prevent material from entering the pipe. All pipes shall be left clean.

Where pipe must be cut to fit as closing pieces, such cuts shall be evenly and squarely made in a workmanlike manner with approved equipment. Injury to linings or coatings shall be satisfactorily repaired. Ductile iron joints must be thoroughly brushed with a wire brush to remove all loose rust or foreign material, and soapy water brushed over the joint surfaces and over the gasket. Bolts for mechanical or flanged joints shall be tightened uniformly, using only torque-limiting wrenches to avoid overstressing the bolts. Bolt heads, nuts and all unpainted surfaces of the flanges shall be coated with two heavy applications of black asphaltum varnish.

Where pipe joints are to be welded, all welding shall be done by duly qualified welders in conformity with the Code for Pressure Piping, ANSI B31. Certificates of qualification of current issue for the work involved executed by an approved inspection agency or corporation, shall be given to the Engineer.

I.P.S. threads for screwed joints shall be cut clean and true in conformance with ANSI Standard B2-I for taper threads. Care shall be taken not to damage or mar pipe and fitting surfaces. Fittings shall be screwed up close to the shoulders of the male threads. No lampwick, cord, wool, or shall be used in making up screwed joints. Pipe joint compounds shall be applied to male threads only; all joints shall be made with Permatex compound.

Unless otherwise specified, handling and laying of ductile iron pipe shall comply with the methods described in Section 3 of the "Handbook of Cast Iron Pipe" of the Cast Iron Pipe Research Association. Pipe shall be laid in conformance with Laying Condition Type 4.

In general, all buried non-ferrous pipes shall be laid in accordance with the requirements of ASTM Designation on C-12.I except where otherwise shown, specified, or approved. Joints shall be made in accordance with the recommendations of the manufacturer.

The Contractor shall excavate and dewater the trench below the pipe invert, to limits shown or ordered, and place the pipe on foundation material, as shown, specified or ordered.

Inside piping, fittings and valves shall be supported as shown, specified, or required. Where temporary supports are used, they shall be sufficiently rigid to prevent shifting or distortion of the pipe. Where expansion couplings are used, they shall be properly adjusted so that the pipe lines are liquid or gas tight during expansion or contraction.

S 3.06 MATERIAL TESTING

Ductile iron pipe shall be hydrostatically tested at the point of manufacture to 500 psi for duration of one minute. Testing may be performed prior to machining bell and spigot. Failure of ductile iron pipe shall be defined as any rupture of pipe wall. Certified test certificates shall be furnished in duplicate prior to time of shipment. All ductile iron pipe and ductile iron fittings shall be inspected and tested at the foundry as required by the standard specifications to which the material is manufactured. Furnish in duplicate sworn certificates that all tests and inspections required by the Specifications under which the pipe is manufactured have been satisfied.

S 3.07 GRAVITY PIPE LINE TESTING

The Authority reserves the right to retest and re-inspect any construction at any time prior to final acceptance at the end of the maintenance period. The Contractor shall be required to correct any defects found in such latter inspections even if said defects had existed, but was not reported, during a previous inspection. The Developer shall bear the cost of all pipe testing.

After installation and inspection has completed, all new sewers shall be flushed to remove all foreign material. Pipe shall be inspected and tested for alignment, freedom from obstruction, and lack of structural damage a minimum of 90 days after installation using closed circuit television and mandrels. A mandrel rated at 5% deflection shall be passed through all new PVC sewers after 90 days has elapsed since backfilling has completed. Not withstanding satisfactory testing, any flexible pipe deflected more than 5.0% within 90 days of installation or the date of testing, whichever is later, shall be replaced at the Contractor's expense.

Testing of the gravity sewer lines between manholes shall be made to determine watertightness of the system. Either infiltration testing where the ground water level is sufficiently above the line or exfiltration testing shall be conducted.

Low pressure air tests shall comply with UNI-B-6-98 (or latest) "Recommended Practice for Low-Pressure Air Testing of Installed Sewer Pipe", by Uni-Bell PVS Pipe Association.

The minimum time duration permitted for a prescribed low-pressure exfiltration pressure drop between two consecutive manholes should not be less than that shown below. The prescribed drop should not exceed 0.5 psi from 3.5 to 3.0 psi in excess of the ground water pressure above the top of the pipe.

MINIMUM DURATION FOR AIR TEST PRESSURE DROP			
Pipe Size (inches)	Time (Minutes)		
12	7 ½		

Despite the results of a pressure test, it is intended to achieve a watertight system and any observed leaks shall be repaired by the CONTRACTOR until corrected at no additional cost to the owner.

S 3.08 SUBMITTALS

<u>Certifications.</u> Tests and Inspections required under this Section shall be certified in accordance with the Contract Documents and shall be submitted for review by ENGINEER.

Shop Drawings. Shop Drawings (1 copy) are required for the following:

(1) Product Data: Manufacturer's specifications with all pertinent information regarding dimensions, fittings, and installation instructions.

Other Submittals. Other submittals required are as follows:

- (1) Pipe Testing Procedure and Instruments
- (2) Pipe to Wet Well Wall Connectors
- (2) Trench Dewatering Method and Equipment (as necessary)
- (3) Bypass Pumping Procedure

END OF SECTION S-3

SECTION S-4 WET WELL

S 4.01 PRECAST CONCRETE WET WELL

Unless otherwise shown, the wet well shall be constructed of precast reinforced concrete riser sections, and a base section as shown or required, as manufactured by Connecticut Precast Corp. or equal. Manufacture shall be by wet, monolithic process.

Precast manhole sections shall be manufactured in accordance with ASTM Designation C478. The minimum compressive strength of the concrete for all sections shall be 4,000 lbs. per sq. inch. The maximum allowable absorption of the concrete shall not exceed 8% of the dry weight. Tests shall be similar to those described in ASTM C76. The circumferential reinforcement in the walls of all sections shall be a minimum of 0.12 sq. in. per linear ft. Reinforcement in flat slab top sections shall be designed for the load to be supported. Additional reinforcement shall be provided at all openings larger than 6 inches.

Joints of the wet well sections shall be formed entirely of concrete in accordance with ASTM Designated C361 and shall be made with a round rubber gasket installed in accordance with the manufacturer's recommendations. Joints shall be self-centered and watertight against internal and external hydrostatic pressure with only the gasket utilized as the sealing element. Ship lap joints with rubber butyl sealant may also be utilized, as approved by the Authority or its Engineer. Each joint shall be mortared on the outside before backfilling.

Base sections shall be furnished by the manufacturer with either embedded couplings or bells, or stubbed bells and spigots, of the same type joint as the adjoining pipe. Approved alternatives will include wet well with a compressible rubber ring as manufactured by Omega, or with a flexible manhole sleeve as manufactured by Interpace.

There shall be one (1) flexible joints on the pipe and within 24" outside the manhole wall, one of which may be embedded in the wet well wall.

4-inch thick internal slab shall be constructed in the field after the wet well has been installed, and shall conform to the shape and size of the wet well as shown on the Standard Details or ordered by the Brookfield Water Pollution Control Authority's Engineer. Special care shall be taken to form internal slab with the 1/4"/FT slope surface to the outlet pipe. The internal slab shall be entirely of monolithically poured concrete. Concrete used in forming the slab shall be a stiff, rich mix, as specified in Section S2, and shall be given a steel trowel finish.

Exterior surfaces of riser sections, and the undersides of the flat slab top sections, shall be given a protective lining consisting of 2 shop coats of asphaltic paint equal to Inertol No. 49. The total dry film thickness shall be not less than 8 mils. The lining shall be applied in accordance with the manufacturer's recommendations. Base sections, after construction of the internal slab shall be given 2 field coats of protective lining as specified hereinabove. Foundation material under wet well shall conform to the contract documents and that specified in Section S 1, Earthwork and Backfill.

Wet Well hatch shall be embedded in the top slab in the precast wet well opening. The hatch shall be 30"x48" H-20 aluminum hatch with safety grate as manufactured by EJ or approved equal.

S 4.02 SUBMITTALS

<u>Certifications.</u> Tests and Inspections required under this Section shall be certified in accordance with the Contract Documents and shall be submitted for review by Engineer.

Shop Drawings. Shop Drawings (1 copy) are required for the following:

- (1) Precast Concrete Wet Well signed and sealed by licensed CT Engineer
- (2) Wet Well Frame and Cover.

Other Submittals. Other submittals required are as follows:

- (1) Pipe Testing Procedure and Instruments
- (2) Trench Dewatering Method and Equipment
- (3) Bypass Pumping Procedure

END OF SECTION S-4

SECTION S-5 EROSION AND SEDIMENT CONTROL

S 5.01 WORK INCLUDED

Work of this Section includes all labor, materials, equipment and services necessary to complete the temporary erosion control measures as shown on the drawings or as ordered by the Engineer or Owner's Field Representative. The Contractor is responsible for maintaining all required and supplemental erosion and sediment control measures and water pollution control devises for the duration of this project. The required measures shall include but not be limited to silt fence, sediment bags (as necessary), temporary and permanent seeding, and dust control.

S 5.02 RELATED WORK

- A. S-1 Earthwork and Backfill
- B. S-3 Pipes
- C. S-6 Restoration of Surfaces

S 5.03 QUALITY ASSURANCE

The Contractor shall perform all his operations in accordance with the rules, regulations and ordinances of those governing bodies having jurisdiction.

Unless otherwise provided, the Owner will obtain all permits and the Contractor shall comply with applicable regulations of fish, wildlife and other agencies and all applicable, Federal, State and Local statutes relating the prevention and abatement of soil erosion and water pollution. The Contractor shall request assurance of these permits prior to beginning construction operations. In the event of conflict between the requirements of these Project Specifications and the pollution control laws, rules or regulations of Federal, State or Local agencies, the more restrictive laws, rules or regulations shall govern.

Soil erosion and water pollution control measures shall at all times be satisfactory to the Owner's Field Representative. When it becomes necessary, the Owner's Field Representative will inform the Contractor of unsatisfactory construction procedures and operations. If the unsatisfactory construction procedures and operations are not corrected promptly, the Owner's Field Representative may suspend the performance of any or all other construction until the unsatisfactory condition has been corrected, and such suspension shall not be the basis of any claim by the Contractor for additional compensation from the Owner nor for an extension of time to complete the Work. The Contractor is responsible for installing and maintaining adequate erosion and sediment control measures regardless of what is shown on the plans to ensure there are no adverse offsite erosion and sediment control impacts.

S 5.04 JOB CONDITIONS

The Contractor shall provide all necessary safeguards as may be required to prevent damage to property beyond the Work area or adjacent property.

The Contractor is responsible for maintaining all necessary erosion and sediment control measures for the life of the contract. The Contractor is responsible for making weekly site assessments or after each significant rainfall (significant for purposes of this section shall mean and rainfall in excess of 0.5") and make any and all necessary adjustments or repairs to the inplace measures.

Temporary erosion control measures shall be used to correct conditions which develop during construction that are needed prior to installation of permanent control features, or that are temporarily needed to control erosion that develops during normal construction practices, but which are not associated with permanent control features on the Project. All stockpile areas which will remain undisturbed and/or not topsoiled and seeded for a period of fifteen (15) days shall be temporarily seeded as specified on Drawings.

S 5.05 PRODUCTS

All materials shall be in accordance with the items specified on the Drawings and/or contained in the United States Department of Agriculture-Soil Conservation Service "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas".

S 5.06 INSPECTION

Examine the areas and conditions Erosion Control Measures are to be installed and notify the Engineer of conditions detrimental to the proper and timely completion of the Work. Do not proceed with the Work until unsatisfactory conditions have been corrected by the Contractor in a manner acceptable to the Engineer.

S 5.07 INSTALLATION

The Contractor shall conduct his operations to minimize erosion of soils and to prevent silting of lands adjacent to or affected by the Work, in accordance with the Drawings and these Project Specifications. Work that will contribute to the control of erosion and sedimentation shall be carried out in conjunction with earthwork operations or as soon thereafter as practical.

Throughout all operations covered by this Section, the Contractor shall provide all necessary measures to control dust through the use of water, calcium chloride, or other material in accordance with the approval of the Owner's Field Representative, at such locations and during such periods as he may direct, or as may be required by Local Ordinance or Authorities.

Temporary erosion control measures shall be used to correct conditions which develop during construction that are needed prior to installation of permanent control features, or that are temporarily needed to control erosion that develops during normal construction practices, but which are not associated with permanent control features on the Project.

Water from operations containing sediment shall be treated by filtration, sufficient to reduce the sediment content to no more than that of the stream into which it is discharged. Pollutants such as fuels, lubricants, bitumens, raw sewage, and other harmful materials shall not be discharged into or near rivers, streams, and impoundments or into natural or manmade channels leading thereto.

S 5.04 SUBMITTALS

Prior to the Start of the construction, the Contractor shall submit to the Engineer and Owner's Field Representative his program and schedule for accomplishment of temporary erosion control work applicable during all phases of construction, and his plan for disposal of waste materials. No Work shall be started until the erosion control schedule and methods of operations have been accepted by the Engineer and Owner's Field Representative.

The Contractor shall submit the following material designs for the type specified prior to materials being delivered to the site:

- (1) Silt Fence
- (2) Dust Control Materials, including application rates
- (3) Temporary Seeding, including application rates
- (4) Sediment Bags (as necessary)

END OF SECTION S-5

SECTION S-6 SITE PREPARATION

S 6.01 WORK INCLUDED

Work of this Section includes all labor, materials, equipment and services necessary to complete the Site Preparation as shown on the drawings and specified herein, including, but not limited to, the following:

- 1. Installation of erosion control devices as shown on drawings.
- 2. Protection of existing structures and utilities to remain.
- 3. Protection of landscaping, and natural features to remain.

S 6.02 EXISTING UTILITY

The contractor shall have all existing utilities on the project site located by a qualified Utility Locator Company.

S 6.03 QUALITY ASSURANCE

The Contractor shall perform all his operations in accordance with the rules, regulations and ordinances of those governing bodies having jurisdiction.

S 6.04 JOB CONDITIONS

The structures, obstructions, utilities, trees and shrubs shown on the Drawings are those known to exist, but their location is not guaranteed to be exact, nor is it guaranteed that all structures, obstructions, utilities, trees and shrubs are shown. The Contractor shall, however, be responsible for the protection of all structures, obstructions, utilities, trees and shrubs, whether shown on the Drawings or not. Should any discrepancy be found between points, lines, or grades shown on Drawings and actual field conditions, the Contractor shall immediately inform the Contract and Design Engineer of such discrepancy and shall not proceed with the work affected thereby until necessary instructions are received from the Contract and Design Engineer.

The Contractor shall provide all necessary safeguards including the installation of shoring, structural supports, protective fencing and barriers, etc., as may be required to prevent damage to adjacent property or injury to persons. All Work shall be performed in accordance with the requirements of the local building codes, and the rules, regulations and ordinances of all other governing bodies having jurisdiction. The Contractor will be held responsible for any claim arising from his failure to provide proper safeguards or for his failure to conduct his operation in a manner consistent with the rules, regulations and ordinances of these governing bodies having jurisdiction.

The Contractor shall at his own expense, repair or replace all ground surfaces, pavements, curbs, etc., which are to remain and which may become disturbed or damaged due to his

operations. Said repair or replacement shall be satisfactory to the Contract and Design Engineer and in accordance with the requirements of the governing bodies having jurisdiction.

The Contractor, at his own expense, shall make good, repair and/or replace all damage occurring as a direct or indirect result of his operations.

The Contractor shall notify all utility owners at least seventy-two (72) hours prior to the start of any operation that will affect utilities, whether to remain or to be discontinued, removed, relocated and/or reconstructed and at all other times as may be specified by law. The Contractor will be held responsible for any claims arising from his failure to make such notification, or for his failure to do the work in accordance with the rules and regulations of the governing authorities.

Upon completion of site preparation and prior to commencing site construction, clean areas within contract limits, remove tools and equipment. Provide site clear, clean, and free of materials and debris, and suitable for earthwork operations.

S 6.05 INSPECTION

Examine the areas and conditions where Site Preparation is to be performed and notify the WPCA of conditions detrimental to the proper and timely completion of the Work. Do not proceed with the Work until satisfactory conditions have been corrected by the Contractor in a manner acceptable to the Contract and Design Engineer.

S 6.06 STAKEOUT OF SITE LAYOUT AND GRADING

The Contractor shall engage a licensed professional surveyor approved by the Contract and Design Engineer to stakeout the proposed work throughout the construction period. Maintain all benchmarks, monuments, and any other existing or newly established reference points. Replace them if they are disturbed or destroyed. Locate, protect and maintain active utilities and site improvements to remain. The surveyor shall provide and maintain staking throughout the construction period as required for the accurate construction of each stage of work, subject to Contract and Design Engineer inspection and approval. Stake out locations of utility structures and changes of direction of utility lines, horizontal alignments, and all other elements to be constructed or installed to the dimensions specified on the Drawings. Set inverts of underground utilities. Set top of base elevations as required for utility structures, curbs, paving, and other improvements to be constructed or installed. Make field adjustments in lines and levels as required. On completion of stakeouts, prior to start of clearing, the Owner's Field Representative shall make a field inspection. At this time, the Contract and Design Engineer reserve the right to adjust the location of the layouts to minimize damage to trees to remain and areas to be left undisturbed.

S 6.07 REMOVALS

All waste materials generated during construction shall be disposed of offsite. In removing portions of pavements, curbs, driveways, and similar items where other portions of such items are to remain, removal shall be to an existing joint. Where this is not practical, as determined

by the WPCA, removal shall be to a reasonably true line with vertical face, which shall be cut with a power driven concrete saw or by other approved mechanical line cutting methods.

S 6.08 PROTECTION OF EXISTING STRUCTURES AND UTILITIES

The Contractor shall be responsible throughout the course of the Work for protection from injury or damage of all existing structures and utilities, which are to remain.

All existing gas, sewer, drainage and water lines, utility poles, wires, conduits, and other utilities which are to remain shall be carefully supported, maintained in operation and protected from injury or damage by the Contractor. The Contractor shall sling, support, shore up and secure in place all pipe or conduits, without damage thereto.

When pipe, conduits, or sewers are removed from trenches, leaving dead ends in the ground, the Contractor shall carefully plug or bulkhead such ends with brick and mortar or in such other manner as may be satisfactory to the Owner's Field Representative or representatives of the utility owner.

S 6.09 SUBMITTALS

The Contractor shall submit a schedule of his proposed methods and operations of Site Preparation for review and approval prior to start of Work.

END OF SECTION S-6

SECTION S-7 PHOTOGRAPHIC DOCUMENTATION

S 7.01 SUMMARY

This Section includes administrative and procedural requirements for the following:

- 1. Pre-construction photographs.
- 2. Progress photographs.

S 7.02 PHOTOGRAPHS

Before starting construction, take color photographs of Project site and surrounding properties, from different vantage points, as directed by Engineer. A key plan must be maintained with construction photographs that identifies each photographic location. Date and time stamp each photograph as it is being taken. Retain one set of prints of progress photographs in the field office at Project site, available at all times for reference. Photographs must be taken using the maximum range of depth of field, and that are in focus, to clearly show the Work.

S 7.03 BASIS OF PAYMENT

No separate payment will be made for Photographic Documentation. All work described in this section will be paid for in the prices bid for various items in the Schedule of Prices.

S 7.04 SUBMITTALS

- A. Key Plan: Submit key plan of Project site and mark for location and direction of each photograph. Include same label information as corresponding set of photographs.
- B. Photographs: Submit one digital copy of each photographic view within seven days of taking photographs.

FND OF SECTION S-7

SECTION S-8 ADMINISTRATIVE REQUIREMENTS

S 8.01 SECTION INCLUDES

- (1) Preconstruction meeting.
- (2) Site mobilization meeting.
- (3) Progress meetings.
- (4) Construction progress schedule.

S 8.02 PROJECT COORDINATION

The contractor shall be the project coordinator. The contractor shall cooperate with the WPCA in allocation of mobilization areas of site; for material storage, vehicular access, traffic, and parking facilities. During construction, the contractor shall maintain access to neighboring facilities. The contractor shall comply with WPCA procedures for intra-project communications; submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts. The contractor shall comply with instructions of the WPCA for use of temporary utilities and construction facilities.

The contractor shall coordinate field engineering and layout work under instructions of the WPCA.

- A. Make the following types of submittals to the Engineer:
 - 1. Requests for interpretation and/or information.
 - 2. Requests for substitution.
 - 3. Shop drawings, product data, and samples.
 - 4. Test and inspection reports.
 - 5. Manufacturer's instructions and field reports.
 - 6. Applications for payment and change order requests.
 - 7. Progress schedules.
 - 8. Coordination drawings.
 - 9. Closeout submittals.

S 8.03 PRECONSTRUCTION MEETING

- A. WPCA will schedule a meeting after Notice of Award.
- B. Attendance Required:
 - 1. WPCA.
 - 2. Langan.
 - 3. Professional Consultants (as required).

- 4. General Contractor.
- 5. Major Subcontractors.

C. Agenda:

- 1. Execution of Agreement.
- 2. Submission of executed bonds and insurance certificates.
- 3. Distribution of Contract Documents.
- 4. Submission of list of Subcontractors, list of Products, schedule of values, submittal schedule and construction schedule.
- 5. Designation of personnel representing the parties to Contract, Langan, and their consultants.
- 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
- 7. Scheduling.
- D. Record minutes and distribute copies within two days after meeting to participants, with one copy to Langan, WPCA, participants, and those affected by decisions made.

S 8.04 SITE MOBILIZATION MEETING

- A. The WPCA will schedule a meeting at the Project site prior to commencement of construction.
- B. Attendance Required:
 - 1. WPCA.
 - 2. Langan.
 - 3. Professional Consultants (as required).
 - 4. General Contractor.
 - 5. Major Subcontractors.
 - 6. Construction Manager.

C. Agenda:

- 1. Use of premises by relevant parties.
- 2. WPCA requirements.
- 3. Construction facilities and controls.
- 4. Temporary utilities.
- 5. Survey and layout.
- 6. Security and housekeeping procedures.
- 7. Schedules.
- 8. Application for payment procedures.
- 9. Procedures for testing.
- 10. Procedures for maintaining record documents.
- 11. Requirements for start-up of equipment.
- 12. Inspection and acceptance of equipment put into service during construction period.
- 13. Utility location.

D. The Contractor will record minutes and distribute copies within two days after meeting to participants, with one copy to Langan, WPCA participants, and those affected by decisions made.

S 8.05 PROGRESS MEETINGS

- A. The contractor will schedule and administer meetings throughout progress of the Work at maximum intervals of one per month.
- B. The contractor will make arrangements for meetings, prepare agenda with copies for participants that preside at meetings.
- C. Attendance Required:
 - 1. WPCA.
 - 2. Langan.
 - 3. Professional Consultants (as required).
 - 4. General Contractor.
 - 5. Major Subcontractors.
 - 6. Construction Manager.

D. Agenda:

- 1. Review minutes of previous meetings.
- 2. Review of Work progress.
- 3. Field observations, problems, and decisions.
- 4. Identification of problems or concerns, including those that impede, or will impede, planned progress.
- 5. Review of submittals schedule and status of submittals.
- 6. Review of off-site fabrication and delivery schedules.
- 7. Maintenance of progress schedule.
- 8. Corrective measures to regain projected schedules.
- 9. Planned progress during succeeding work period.
- 10. Coordination of projected progress.
- 11. Maintenance of quality and work standards.
- 12. Effect of proposed changes on progress schedule and coordination.
- 13. Other business relating to Work.
- E. The contractor will record minutes and distribute copies within two days after meeting to participants with copies to all attendees, General Contractor and those affected by decisions made.

S 8.06 CONSTRUCTION PROGRESS SCHEDULE

Within 10 days after date of the Agreement, submit preliminary schedule defining planned operations for the first 60 days of Work, with a general outline for remainder of Work. If preliminary schedule requires revision after review, submit revised schedule within 10 days. Within 20 days after review of preliminary schedule, submit draft of proposed complete schedule for review. Include written certification that major contractors have reviewed and accepted proposed schedule.

Within 10 days after joint review, submit complete schedule. Submit updated schedule with each Application for Payment.

END OF SECTION S-8

SECTION S-9 EXECUTION REQUIREMENTS

S9.01 QUALITY ASSURANCE

Land Surveyor Qualifications: A professional land surveyor who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing land-surveying services of the kind indicated.

S 9.02 EXAMINATION

Existing Conditions: The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work. Before construction, verify the location and points of connection of utility services.

Existing Utilities: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning site work, investigate and verify the existence and location of underground utilities and other construction affecting the Work.

- Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; underground electrical services, and fuel line services.
- Furnish location data for work related to Project that must be performed by public utilities serving Project site.

Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.

Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:

- Description of the Work.
- List of detrimental conditions, including substrates.
- List of unacceptable installation tolerances.
- Recommended corrections.

S 9.03 PREPARATION

Existing Utility Information: Furnish information to ENGINEER that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility

appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.

Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to ENGINEER. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

S 9.04 CONSTRUCTION LAYOUT

Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify ENGINEER promptly. CONTRACTOR will be provided with electronic drawings of the entire project before construction begins. CONTRACTOR will be responsible for utilizing these drawings as he sees fit to create the layout plans as required by the ENGINEER.

General: Engage a professional land surveyor to lay out the Work using accepted surveying practices.

- Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.
- Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.

Inform installers of lines and levels to which they must comply.

• Check the location, level and plumb, of every major element as the Work progresses.

Notify ENGINEER when deviations from required lines and levels exceed allowable tolerances.

• Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.

Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and invert elevations.

Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.

Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by ENGINEER.

S 9.05 CONSTRUCTION AS-BUILTS

All as-built submissions will be considered shop drawings and will be reviewed by the ENGINEER and returned to the CONTRACTOR within the time frame allowed by the contract documents. Each as-built must be approved by the ENGINEER before the CONTRACTOR can proceed with construction.

Before As-Builts begin, the CONTRACTOR shall verify the benchmark information provided by the ENGINEER and insure the as-builts will be performed in the same coordinate system that was provided by the ENGINEER.

Final As-Builts shall be performed after all items of construction are complete.

S9.06 FIELD ENGINEERING

Identification: Owner will identify existing benchmarks, control points, and property corners.

Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.

- Do not change or relocate existing benchmarks or control points without prior written approval of ENGINEER. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to ENGINEER before proceeding.
- Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.

Benchmarks: Establish and maintain a minimum of two (2) permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.

- Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
- Where the actual location or elevation of layout points cannot be marked, provide temporary reference points sufficient to locate the Work.
- Remove temporary reference points when no longer needed. Restore marked construction to its original condition.

S9.07 INSTALLATION

General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.

- Make vertical work plumb and make horizontal work level.
- Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
- Conceal pipes in finished areas, unless otherwise indicated.

Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.

Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.

Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.

Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.

Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.

Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.

- Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by ENGINEER.
- Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.

Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

S9.08 OWNER-INSTALLED PRODUCTS

Site Access: Provide access to Project site for Owner's construction forces.

Coordination: Coordinate construction and operations of the Work with work performed by Owner's construction forces.

• Construction Schedule: Inform Owner of Contractor's preferred construction schedule for Owner's portion of the Work. Adjust construction schedule based on a mutually agreeable timetable. Notify Owner if changes to schedule are required due to differences in actual construction progress.

S 9.09 PROGRESS CLEANING

General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.

- Comply with requirements in NFPA 241 for removal of combustible waste materials and debris
- Do not hold materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above 80 deg F (27 deg C).
- Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.

Site: Maintain Project site free of waste materials and debris.

Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.

- Remove liquid spills promptly.
- Where dust would impair proper execution of the Work, provide water trucks to suppress dust.

Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.

Concealed Spaces: Remove debris from concealed spaces before enclosing the space.

Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers will not be permitted.

During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

Limiting Exposures: Supervise construction operations to assure that no part of the construction completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

S9.10 STARTING AND ADJUSTING

Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.

Adjust operating components for proper operation without binding. Adjust equipment for proper operation.

Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

Manufacturer's Field Service: If a factory-authorized service representative is required to inspect field-assembled components and equipment installation, comply with qualification requirements in Division 1 Section "Quality Requirements."

S 9.11 PROTECTION OF INSTALLED CONSTRUCTION

Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

Comply with manufacturer's written instructions for temperature and relative humidity.

S 9.12 CORRECTION OF THE WORK

Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Division 1 Section "Cutting and Patching."

• Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.

Restore permanent facilities used during construction to their specified condition.

Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.

Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.

S 9.13 SUBMITTALS

Qualification Data: Professional Land Surveyor licensed in the state of New York.

Certificates: Submit certificate signed by a professional land surveyor certifying that location and elevation of improvements comply with requirements.

Certified Layout and Cut Sheets: Submit two (2) paper copies, signed by professional land surveyor, and one electronic drawing in AutoCADD format, latest version, of the layout plan and cut sheets before earthwork operations begin.

Certified Final As-Built: Submit two (2) paper copies, signed by professional land surveyor, and one electronic drawing in AutoCADD format, latest version, of the final as-built of the entire site after all construction operations are complete.

END OF SECTION S-9

SECTION 16010 ELECTRICAL DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

- 1. Provide all labor, material and equipment to perform all electrical demolition as specified and as shown on the Drawings.
- 2. All equipment selected for demolition shall have power and communication cables deenergized and disconnected. All disconnected cables shall be removed.
- 3. All Power and Lighting panels circuit breakers shall be relabeled as spare where power was once fed to demolished equipment.
- 4. All conduit shall be disconnected and removed from demolished equipment.
- 5. Contractor is responsible for making equipment scheduled for demolition safe for removal.

PART 2 - PRODUCTS

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that field measurements and circuitry arrangements are as shown on the Drawings.
- B. Verify that abandoned wiring and equipment serve only abandoned facilities.
- C. Demolition work indicated on drawings are based on casual field observation and existing record documents. Report discrepancies to Engineer before disturbing any existing installation.
- D. The Contractor accepts existing conditions by starting demolition work.

3.2 PREPARATION

- A. Investigate the existing conditions of electrical system in walls, floors and ceilings scheduled for removal.
- B. Disconnect and deliver to the Owner those items requested to remain the Owner's property.
- C. Provide temporary wiring and connections to maintain existing systems in service where needed. When work must be performed on energized equipment or circuits, use personnel experienced in such operations.

3.3 DEMOLITION OF ELECTRICAL FACILITIES

- A. All items indicated to be removed shall become Contractor's property and removed from the site, except for items specified or requested in writing to remain the Owner's property.
- B. For demolition in buildings that are to remain in service after completion of demolition work:
 - 1. Remove exposed abandoned raceways, including abandoned raceways above accessible ceiling finishes. Cut conduit flush with walls and floors, and patch surfaces.
 - 2. Disconnect abandoned outlets and remove devices. Remove abandoned outlet boxes if conduit servicing them is abandoned and removed. Provide blank cover for abandoned outlet boxes which are not removed.
 - 3. Repair adjacent construction and finishes damaged during demolition and extension work.
 - 4. Maintain access to existing electrical installations which remain active. Modify installation or provide access panel as appropriate.
 - 5. Patch concrete pads to provide uniform surface.

3.4 DISPOSAL OF DEMOLISHED MATERIALS

- A. Except for items or materials indicated to be recycled, reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, remove demolished materials from Project site and legally dispose of them in an EPA-approved landfill.
 - 1. Do not allow demolished materials to accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas
 - 3. Transport demolished materials off Owner's property and legally dispose of them.

3.5 CLEANING AND REPAIR (FOR FACILITIES TO REMAIN IN SERVICE)

A. General

1. Clean and repair existing materials and equipment which remain or are to be reused.

B. Panelboards

1. Clean exposed surfaces and check tightness of electrical connections. Replace damaged circuit breakers and provide closure plates for vacant positions. Provide typed circuit directory showing revised circuiting arrangement.

C. Luminaires

1. Remove existing luminaires for cleaning. Use mild detergent to clean all exterior and interior surfaces; rinse with clean water and wipe dry. Replace lamps, ballasts, and broken electrical parts.

SECTION 16050 BASIC ELECTRICAL MATERIALS AND METHODS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Electrical equipment coordination and installation.
 - 2. Sleeves for raceways and cables.
 - 3. Sleeve seals.
 - 4. Common electrical installation requirements.

1.3 DEFINITIONS

- A. ATS: Acceptance Testing Specifications.
- B. EPDM: Ethylene-propylene-diene terpolymer rubber.
- C. NBR: Acrylonitrile-butadiene rubber.

1.4 SUBMITTALS

A. Product Data: For each type of product indicated.

1.5 QUALITY ASSURANCE

A. Test Equipment Suitability and Calibration: Comply with NETA ATS, "Suitability of Test Equipment" and "Test Instrument Calibration."

1.6 COORDINATION

- A. Coordinate arrangement, mounting, and support of electrical equipment:
 - 1. To allow maximum possible headroom unless specific mounting heights that reduce headroom are indicated.
 - 2. To provide for ease of disconnecting the equipment with minimum interference to other installations.
 - 3. To allow right of way for piping and conduit installed at required slope.

- 4. So connecting raceways, cables, wireways, cable trays, and busways will be clear of obstructions and of the working and access space of other equipment.
- B. Coordinate installation of required supporting devices and set sleeves in cast-in-place concrete, masonry walls, and other structural components as they are constructed.
- C. Coordinate electrical testing of electrical, mechanical, and architectural items, so equipment and systems that are functionally interdependent are tested to demonstrate successful interoperability.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
 - 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, manufacturers specified.
 - 2. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.

2.2 SLEEVES FOR RACEWAYS AND CABLES

- A. Steel Pipe Sleeves: ASTM A 53/A 53M, Type E, Grade B, Schedule 40, galvanized steel, plain ends.
- B. Sleeves for Rectangular Openings: Galvanized sheet steel with minimum 0.052- or 0.138-inch thickness as indicated and of length to suit application.

2.3 SLEEVE SEALS

- A. Description: Modular sealing device, designed for field assembly, to fill annular space between sleeve and raceway or cable.
 - 1. Available Manufacturers:
 - a. Advance Products & Systems, Inc.
 - b. Calpico, Inc.
 - c. Metraflex Co.
 - d. Pipeline Seal and Insulator, Inc.
 - e. Approved equal.
 - 2. Sealing Elements: EPDM interlocking links shaped to fit surface of cable or conduit. Include type and number required for material and size of raceway or cable.
 - 3. Pressure Plates: Plastic. Include two for each sealing element.

4. Connecting Bolts and Nuts: Carbon steel with corrosion-resistant coating of length required to secure pressure plates to sealing elements. Include one for each sealing element.

PART 3 - EXECUTION

3.1 COMMON REQUIREMENTS FOR ELECTRICAL INSTALLATION

- A. Comply with NECA 1.
- B. Measure indicated mounting heights to bottom of unit for suspended items and to center of unit for wall-mounting items.
- C. Headroom Maintenance: If mounting heights or other location criteria are not indicated, arrange and install components and equipment to provide maximum possible headroom consistent with these requirements.
- D. Equipment: Install to facilitate service, maintenance, and repair or replacement of components of both electrical equipment and other nearby installations. Connect in such a way as to facilitate future disconnecting with minimum interference with other items in the vicinity.
- E. Right of Way: Give to raceways and piping systems installed at a required slope.

3.2 SLEEVE INSTALLATION FOR ELECTRICAL PENETRATIONS

- A. Electrical penetrations occur when raceways, cables, wireways, cable trays, or busways penetrate concrete slabs, concrete or masonry walls, or fire-rated floor and wall assemblies.
- B. Concrete Slabs and Walls: Install sleeves for penetrations unless core-drilled holes or formed openings are used. Install sleeves during erection of slabs and walls.
- C. Use pipe sleeves unless penetration arrangement requires rectangular sleeved opening.
- D. Rectangular Sleeve Minimum Metal Thickness:
 - 1. For sleeve cross-section rectangle perimeter less than 50 inches and no side greater than 16 inches, thickness shall be 0.052 inch.
 - 2. For sleeve cross-section rectangle perimeter equal to, or greater than, 50 inches and 1 or more sides equal to, or greater than, 16 inches, thickness shall be 0.138 inch.
- E. Cut sleeves to length for mounting flush with both surfaces of walls.
- F. Extend sleeves installed in floors 2 inches above finished floor level.
- G. Size pipe sleeves to provide 1/4-inch annular clear space between sleeve and raceway or cable unless sleeve seal is to be installed.
- H. Seal space outside of sleeves with grout for penetrations of concrete and masonry and with approved joint compound for gypsum board assemblies.

- I. Interior Penetrations of Non-Fire-Rated Walls and Floors: Seal annular space between sleeve and raceway or cable, using joint sealant appropriate for size, depth, and location of joint.
- J. Roof-Penetration Sleeves: Seal penetration of individual raceways and cables with flexible boot-type flashing units applied in coordination with roofing work.
- K. Aboveground, Exterior-Wall Penetrations: Seal penetrations using sleeves and mechanical sleeve seals. Select sleeve size to allow for 1-inch annular clear space between pipe and sleeve for installing mechanical sleeve seals.
- L. Underground, Exterior-Wall Penetrations: Install cast-iron "wall pipes" for sleeves. Size sleeves to allow for 1-inch annular clear space between raceway or cable and sleeve for installing mechanical sleeve seals.

3.3 SLEEVE-SEAL INSTALLATION

- A. Install to seal underground, exterior wall penetrations.
- B. Use type and number of sealing elements recommended by manufacturer for raceway or cable material and size. Position raceway or cable in center of sleeve. Assemble mechanical sleeve seals and install in annular space between raceway or cable and sleeve. Tighten bolts against pressure plates that cause sealing elements to expand and make watertight seal.

3.4 FIELD QUALITY CONTROL

A. Inspect installed sleeve and sleeve-seal installations and associated firestopping for damage and faulty work.

END OF SECTION 16050

SECTION 16060 GROUNDING AND BONDING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes methods and materials for grounding systems and equipment.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Plans showing dimensioned as-built locations of grounding features specified in Part 3 "Field Quality Control" Article, including the following:
 - 1. Bonding to water pipes.
 - 2. Bonding to foundation reinforcing steel.
- C. Field quality-control test reports.

1.4 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70 by a qualified testing agency and marked for intended use.
- B. Comply with UL 467 for grounding and bonding materials and equipment.

PART 2 - PRODUCTS

2.1 CONDUCTORS

- A. Insulated Conductors: Copper or tinned-copper wire or cable insulated for 600 V unless otherwise required by applicable Code or authorities having jurisdiction.
- B. Bare Copper Conductors:
 - 1. Solid Conductors: ASTM B 3.
 - 2. Stranded Conductors: ASTM B 8.
 - 3. Tinned Conductors: ASTM B 33.

2.2 CONNECTORS

- A. Listed and labeled by a nationally recognized testing laboratory acceptable to authorities having jurisdiction for applications in which used, and for specific types, sizes, and combinations of conductors and other items connected.
- B. Bolted Connectors for Conductors and Pipes: Copper or copper alloy, bolted pressure-type, with at least two bolts.
 - 1. Pipe Connectors: Clamp type, sized for pipe.
- C. Welded Connectors: Exothermic-welding kits of types recommended by kit manufacturer for materials being joined and installation conditions.

PART 3 - EXECUTION

3.1 APPLICATIONS

- A. Conductors: Install solid conductor for No. 12 AWG and smaller, and stranded conductors for No. 10 AWG and larger, unless otherwise indicated.
- B. Underground Grounding Conductors: Install bare copper conductor, No. 2/0 AWG minimum.
 - 1. Bury at least 24 inches below grade.
 - 2. Ground rings shall be buried a minimum of 30 inches below grade.
- C. Conductor Terminations and Connections:
 - 1. Pipe and Equipment Grounding Conductor Terminations: Bolted connectors.
 - 2. Underground Connections: Welded connectors.
 - 3. Connections to Structural Steel: Welded connectors.
 - 4. Connection to Foundation Reinforcing Steel: Welded connectors.

3.2 EQUIPMENT GROUNDING

A. Install insulated equipment grounding conductors with all feeders and branch circuits.

3.3 INSTALLATION

- A. Grounding Conductors: Route along shortest and straightest paths possible, unless otherwise indicated or required by Code. Avoid obstructing access or placing conductors where they may be subjected to strain, impact, or damage.
- B. Bonding to Concrete Foundation Reinforcing Steel: Use exothermic-welded connectors to bond to 20 ft or more of 1/2 in. foundation and/or footing reinforcing steel at each buildings and structure. Where 20 ft of reinforcing steel is not available, imbed 20 ft or more of bare copper not smaller than 4 AWG.

- C. Bonding Straps and Jumpers: Install in locations accessible for inspection and maintenance, except where routed through short lengths of conduit.
 - 1. Bonding to Structure: Bond straps directly to basic structure, taking care not to penetrate any adjacent parts.
 - 2. Bonding to Equipment Mounted on Vibration Isolation Hangers and Supports: Install so vibration is not transmitted to rigidly mounted equipment.
 - 3. Use exothermic-welded connectors for outdoor locations, but if a disconnect-type connection is required, use a bolted clamp.

D. Grounding and Bonding for Piping:

- 1. Install insulated copper grounding conductors, in conduit, from building's main service equipment or electrical grounding bus to metal piping entrances to building. Connect grounding conductors to metal water pipes using a bolted clamp connector or by bolting a lug-type connector to a pipe flange, using one of the lug bolts of the flange. Bond metal grounding conductor conduit or sleeve to conductor at each end.
- 2. Use braided-type bonding jumpers to electrically bypass water meters. Connect to pipe with a bolted connector.
- 3. Bond each aboveground portion of gas piping system downstream from equipment shutoff valve.

3.4 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections and prepare test reports:
 - 1. After installing grounding system but before permanent electrical circuits have been energized, test for compliance with requirements.
 - 2. Test completed grounding system at each location where a maximum ground-resistance level is specified, at service disconnect enclosure grounding terminal, and at individual ground rods. Make tests at ground rods before any conductors are connected.
 - a. Measure ground resistance not less than two full days after last trace of precipitation and without soil being moistened by any means other than natural drainage or seepage and without chemical treatment or other artificial means of reducing natural ground resistance.
 - b. Perform tests by fall-of-potential method according to IEEE 81.
- B. Report measured ground resistances that exceed 10 ohms and include recommendations to reduce ground resistance.

END OF SECTION 16060

SECTION 16073 HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Hangers and supports for electrical equipment and systems.
 - 2. Construction requirements for concrete bases.

1.3 DEFINITIONS

- A. RNC: Rigid non-metallic conduit.
- B. RMC: Rigid metal conduit.

1.4 PERFORMANCE REQUIREMENTS

- A. Design supports for multiple raceways capable of supporting combined weight of supported systems and its contents.
- B. Design equipment supports capable of supporting combined operating weight of supported equipment and connected systems and components.
- C. Rated Strength: Adequate in tension, shear, and pullout force to resist maximum loads calculated or imposed for this Project, with a minimum structural safety factor of five times the applied force.

1.5 SUBMITTALS

- A. Product Data: For the following:
 - 1. Steel slotted support systems.
- B. Shop Drawings: Show fabrication and installation details and include calculations for the following:
 - 1. Steel slotted channel systems. Include Product Data for components.
 - 2. Equipment supports.

1.6 QUALITY ASSURANCE

A. Comply with NFPA 70.

1.7 COORDINATION

A. Coordinate size and location of concrete bases. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified in Division 3.

PART 2 - PRODUCTS

2.1 SUPPORT, ANCHORAGE, AND ATTACHMENT COMPONENTS

- A. Steel Slotted Support Systems: Comply with MFMA-4, factory-fabricated components for field assembly.
 - 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Cooper B-Line, Inc.; a division of Cooper Industries.
 - b. Thomas & Betts Corporation.
 - c. Unistrut; Tyco International, Ltd.
 - d. Approved equal.
 - 2. Metallic Coatings: Hot-dip galvanized after fabrication and applied according to MFMA-4.
 - 3. Nonmetallic Coatings: Manufacturer's standard PVC, polyurethane, or polyester coating applied according to MFMA-4.
 - 4. Painted Coatings: Manufacturer's standard painted coating applied according to MFMA-4.
 - 5. Channel Dimensions: Selected for applicable load criteria.
- B. Raceway and Cable Supports: As described in NECA 1 and NECA 101.
- C. Conduit and Cable Support Devices: Steel and malleable-iron hangers, clamps, and associated fittings, designed for types and sizes of raceway or cable to be supported.
- D. Support for Conductors in Vertical Conduit: Factory-fabricated assembly consisting of threaded body and insulating wedging plug or plugs for non-armored electrical conductors or cables in riser conduits. Plugs shall have number, size, and shape of conductor gripping pieces as required to suit individual conductors or cables supported. Body shall be malleable iron.
- E. Structural Steel for Fabricated Supports and Restraints: ASTM A 36/A 36M, steel plates, shapes, and bars; black and galvanized.
- F. Mounting, Anchoring, and Attachment Components: Items for fastening electrical items or their supports to building surfaces include the following:

- 1. Powder-Actuated Fasteners: Threaded-steel stud, for use in hardened portland cement concrete, steel, or wood, with tension, shear, and pullout capacities appropriate for supported loads and building materials where used.
 - a. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1) Hilti Inc.
 - 2) ITW Ramset/Red Head; a division of Illinois Tool Works, Inc.
 - 3) MKT Fastening, LLC.
 - 4) Simpson Strong-Tie Co., Inc.; Masterset Fastening Systems Unit.
- 2. Mechanical-Expansion Anchors: Insert-wedge-type, stainless steel, for use in hardened portland cement concrete with tension, shear, and pullout capacities appropriate for supported loads and building materials in which used.
 - a. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1) Cooper B-Line, Inc.; a division of Cooper Industries.
 - 2) Empire Tool and Manufacturing Co., Inc.
 - 3) Hilti Inc.
 - 4) ITW Ramset/Red Head; a division of Illinois Tool Works, Inc.
 - 5) MKT Fastening, LLC.
- 3. Concrete Inserts: Steel or malleable-iron, slotted support system units similar to MSS Type 18; complying with MFMA-4 or MSS SP-58.
- 4. Clamps for Attachment to Steel Structural Elements: MSS SP-58, type suitable for attached structural element.
- 5. Through Bolts: Structural type, hex head, and high strength. Comply with ASTM A 325.
- 6. Toggle Bolts: All-steel springhead type.
- 7. Hanger Rods: Threaded steel.

PART 3 - EXECUTION

3.1 APPLICATION

- A. Comply with NECA 1 and NECA 101 for application of hangers and supports for electrical equipment and systems except if requirements in this Section are stricter.
- B. Maximum Support Spacing and Minimum Hanger Rod Size for Raceway: Space supports for RNC and RMC as required by NFPA 70. Minimum rod size shall be 1/4 inch in diameter.
- C. Spring-steel clamps designed for supporting single conduits without bolts may be used for 1-1/2-inch and smaller raceways serving branch circuits and communication systems above suspended ceilings and for fastening raceways to trapeze supports.

3.2 SUPPORT INSTALLATION

- A. Comply with NECA 1 and NECA 101 for installation requirements except as specified in this Article.
- B. Strength of Support Assemblies: Where not indicated, select sizes of components so strength will be adequate to carry present and future static loads within specified loading limits. Minimum static design load used for strength determination shall be weight of supported components plus 200 lb.
- C. Mounting and Anchorage of Surface-Mounted Equipment and Components: Anchor and fasten electrical items and their supports to building structural elements by the following methods unless otherwise indicated by code:
 - 1. To Wood: Fasten with lag screws or through bolts.
 - 2. To New Concrete: Bolt to concrete inserts.
 - 3. To Masonry: Approved toggle-type bolts on hollow masonry units and expansion anchor fasteners on solid masonry units.
 - 4. To Existing Concrete: Expansion anchor fasteners.
 - 5. Instead of expansion anchors, powder-actuated driven threaded studs provided with lock washers and nuts may be used in existing standard-weight concrete 4 inches thick or greater. Do not use for anchorage to lightweight-aggregate concrete or for slabs less than 4 inches thick.
 - 6. To Steel: Beam clamps (MSS Type 19, 21, 23, 25, or 27) complying with MSS SP-69, Spring-tension clamps.
 - 7. To Light Steel: Sheet metal screws.
 - 8. Items Mounted on Hollow Walls and Nonstructural Building Surfaces: Mount cabinets, panelboards, disconnect switches, control enclosures, pull and junction boxes, transformers, and other devices on slotted-channel racks attached to substrate.
- D. Drill holes for expansion anchors in concrete at locations and to depths that avoid reinforcing bars.

3.3 PAINTING

- A. Touchup: Comply with requirements in Division 9 painting Sections for cleaning and touchup painting of field welds, bolted connections, and abraded areas of shop paint on miscellaneous metal.
- B. Galvanized Surfaces: Clean welds, bolted connections, and abraded areas and apply galvanizing-repair paint to comply with ASTM A 780.

END OF SECTION 16073

SECTION 16075 ELECTRICAL IDENTIFICATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following
 - 1. Identification for raceway.
 - 2. Identification for conductors and communication and control cable.
 - 3. Underground-line warning tape.
 - 4. Warning labels and signs.
 - 5. Instruction signs.
 - 6. Equipment identification labels.
 - 7. Miscellaneous identification products.

1.3 SUBMITTALS

- A. Product Data: For each electrical identification product indicated.
- B. Wire and cable labeling scheme.
 - 1. Submit table detailing wire scheme for each control circuit installed under this Contract.
 - 2. Table shall include each terminating end point with terminal number, signal type, conduit number, and a unique wire identification number.

1.4 QUALITY ASSURANCE

- A. Comply with ANSI A13.1 and ANSI C2.
- B. Comply with NFPA 70.
- C. Comply with 29 CFR 1910.145.

1.5 COORDINATION

A. Coordinate identification names, abbreviations, colors, and other features with requirements in the Contract Documents, Shop Drawings, manufacturer's wiring diagrams, and the Operation

- and Maintenance Manual, and with those required by codes, standards, and 29 CFR 1910.145. Use consistent designations throughout Project.
- B. Coordinate installation of identifying devices with completion of covering and painting of surfaces where devices are to be applied.
- C. Coordinate installation of identifying devices with location of access panels and doors.

PART 2 - PRODUCTS

2.1 RACEWAY IDENTIFICATION MATERIALS

- A. Comply with ANSI A13.1 for minimum size of letters for legend and for minimum length of color field for each raceway and cable size.
- B. Color for Printed Legend:
 - 1. Power Circuits: Black letters on an orange field.
 - 2. Legend: Indicate system or service and voltage, if applicable.
- C. Self-Adhesive Vinyl Labels: Preprinted, flexible label laminated with a clear, weather- and chemical-resistant coating and matching wraparound adhesive tape for securing ends of legend label.
- D. Self-Adhesive Vinyl Tape: Colored, heavy duty, waterproof, fade resistant; 2 inches wide; compounded for outdoor use.

2.2 CONDUCTOR AND COMMUNICATION- AND CONTROL-CABLE IDENTIFICATION MATERIALS

- A. Color-Coding Conductor Tape: Colored, self-adhesive vinyl tape not less than 3 mils (0.08 mm) thick by 1 to 2 inches (25 to 50 mm) wide.
- B. Marker Tapes: Vinyl or vinyl-cloth, self-adhesive wraparound type, with circuit identification legend machine printed by thermal transfer or equivalent process.
- C. Write-On Tags: Polyester tag, 0.010 inch thick, with corrosion-resistant grommet and polyester or nylon tie for attachment to conductor or cable.
 - 1. Marker for Tags: Permanent, waterproof, black ink marker recommended by tag manufacturer.

2.3 UNDERGROUND-LINE WARNING TAPE

- A. Description: Permanent, bright-colored, continuous-printed, polyethylene tape.
 - 1. Not less than 6 inches wide by 4 mils thick.
 - 2. Compounded for permanent direct-burial service.

- 3. Embedded continuous metallic strip or core.
- 4. Printed legend shall indicate type of underground line.

2.4 WARNING LABELS AND SIGNS

- A. Comply with NFPA 70 and 29 CFR 1910.145.
- B. Self-Adhesive Warning Labels: Factory printed, multicolor, pressure-sensitive adhesive labels, configured for display on front cover, door, or other access to equipment, unless otherwise indicated.
- C. Warning label and sign shall include, but are not limited to, the following legends:
 - 1. Multiple Power Source Warning: "DANGER ELECTRICAL SHOCK HAZARD EQUIPMENT HAS MULTIPLE POWER SOURCES."
 - 2. Workspace Clearance Warning: "WARNING OSHA REGULATION AREA IN FRONT OF ELECTRICAL EQUIPMENT MUST BE KEPT CLEAR FOR 36 INCHES."

2.5 INSTRUCTION SIGNS

- A. Engraved, laminated acrylic or melamine plastic, minimum 1/16 inch thick for signs up to 20 sq. in. and 1/8 inch thick for larger sizes.
 - 1. Engraved legend with black letters on white face.
 - 2. Punched or drilled for mechanical fasteners.
 - 3. Framed with mitered acrylic molding and arranged for attachment at applicable equipment.

2.6 EQUIPMENT IDENTIFICATION LABELS

A. Engraved, Laminated Acrylic or Melamine Label: Punched or drilled for screw mounting. White letters on a dark-gray background. Minimum letter height shall be 3/8 inch.

PART 3 - EXECUTION

3.1 APPLICATION

- A. Accessible Raceways and Metal-Clad Cables, 600 V or Less, for Service, Feeder, and Branch Circuits More Than 30 A: Identify with orange self-adhesive vinyl label.
- B. Power-Circuit Conductor Identification: For conductors No. 1/0 AWG and larger in vaults, pull and junction boxes, manholes, and handholds use color-coding conductor tape and marker tape. Identify source and circuit number of each set of conductors. For single conductor cables, identify phase in addition to the above.

- C. Branch-Circuit Conductor Identification: Where there are conductors for more than three branch circuits in same junction or pull box, use marker tape. Identify each ungrounded conductor according to source and circuit number.
- D. Auxiliary Electrical Systems Conductor Identification: Identify field-installed alarm, control, signal, sound, intercommunications, voice, and data connections.
 - 1. Identify conductors, cables, and terminals in enclosures and at junctions, terminals, and pull points. Identify by system and circuit designation.
 - 2. Use system of marker tape designations that is uniform and consistent with system used by manufacturer for factory-installed connections.
 - 3. Coordinate identification with Project Drawings, manufacturer's wiring diagrams, and Operation and Maintenance Manual.

E. Control Circuit Point to Point Identification and Labeling:

- 1. Wire label to contain unique wire number and shall identifying each terminating end point.
- 2. Wire Label shall be applied at each end of each circuit, and shall include:
 - a. Each terminating end point with terminal number.
 - b. Signal type (DI, DO, AI or AO)
 - c. Conduit number
 - d. A unique wire identification number.
- F. Locations of Underground Lines: Identify with underground-line warning tape for power, lighting, communication, and control wiring and optical fiber cable..
- G. Warning Labels for Indoor Cabinets, Boxes, and Enclosures for Power and Lighting: Comply with 29 CFR 1910.145 and apply self-adhesive warning labels. Identify system voltage with black letters on an orange background. Apply to exterior of door, cover, or other access.
 - 1. Equipment with Multiple Power or Control Sources: Apply to door or cover of equipment including, but not limited to, the following:
 - a. Power transfer switches.
 - b. Controls with external control power connections.
 - 2. Equipment Requiring Workspace Clearance According to NFPA 70: Unless otherwise indicated, apply to door or cover of equipment but not on flush panelboards and similar equipment in finished spaces.

H. Instruction Signs:

- 1. Operating Instructions: Install instruction signs to facilitate proper operation and maintenance of electrical systems and items to which they connect. Install instruction signs with approved legend where instructions are needed for system or equipment operation.
- 2. Emergency Operating Instructions: Install instruction signs with white legend on a red background with minimum 3/8-inch- high letters for emergency instructions at equipment used for power transfer.

- I. Equipment Identification Labels: On each unit of equipment, install unique designation label that is consistent with wiring diagrams, schedules, and Operation and Maintenance Manual. Apply labels to disconnect switches and protection equipment, central or master units, control panels, control stations, terminal cabinets, and racks of each system. Systems include power, lighting, control, communication, signal, monitoring, and alarm systems unless equipment is provided with its own identification.
 - 1. Labeling Instructions:
 - a. Indoor Equipment: Engraved, laminated acrylic or melamine label. Unless otherwise indicated, provide a single line of text with 1/2-inch- high letters on 1-1/2-inch- high label; where 2 lines of text are required, use labels 2 inches high.
 - b. Outdoor Equipment: Engraved, laminated acrylic or melamine label.
 - c. Elevated Components: Increase sizes of labels and letters to those appropriate for viewing from the floor.
 - 2. Equipment to Be Labeled:
 - a. Panelboards, electrical cabinets, and enclosures.
 - b. Transformers.
 - c. Disconnect switches.
 - d. Enclosed circuit breakers.
 - e. Power transfer equipment.
 - f. Power-generating units.
 - g. Monitoring and control equipment.

3.2 INSTALLATION

- A. Verify identity of each item before installing identification products.
- B. Location: Install identification materials and devices at locations for most convenient viewing without interference with operation and maintenance of equipment.
- C. Apply identification devices to surfaces that require finish after completing finish work.
- D. Self-Adhesive Identification Products: Clean surfaces before application, using materials and methods recommended by manufacturer of identification device.
- E. System Identification Color Banding for Raceways and Cables: Each color band shall completely encircle cable or conduit. Place adjacent bands of two-color markings in contact, side by side. Locate bands at changes in direction, at penetrations of walls and floors, at 50-foot maximum intervals in straight runs, and at 25-foot maximum intervals in congested areas.
- F. Color-Coding for Phase Identification, 600 V and Less: Use the colors listed below for ungrounded service, feeder, and branch-circuit conductors.
 - 1. Color shall be factory applied or, for sizes larger than No. 10 AWG if authorities having jurisdiction permit, field applied.
 - 2. Colors for 208/240/120-V Circuits:
 - a. Phase A: Black.

- b. Phase B: Red.c. Phase C: Blue.
- 3. Colors for 480/277-V Circuits:
 - a. Phase A: Brown.b. Phase B: Orange.c. Phase C: Yellow.
- 4. Field-Applied, Color-Coding Conductor Tape: Apply in half-lapped turns for a minimum distance of 6 inches from terminal points and in boxes where splices or taps are made. Apply last two turns of tape with no tension to prevent possible unwinding. Locate bands to avoid obscuring factory cable markings.
- G. Underground-Line Warning Tape: During backfilling of trenches install continuous underground-line warning tape directly above line at 6 to 8 inches below finished grade. Use multiple tapes where width of multiple lines installed in a common trench exceeds 16 inches overall.

END OF SECTION 16075

SECTION 16120 CONDUCTORS AND CABLES

SECTION 16120 - CONDUCTORS AND CABLES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Building wires and cables rated 600 V and less.
 - 2. Connectors, splices, and terminations rated 600 V and less.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Field quality-control test reports.

1.4 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- B. Comply with NFPA 70.

PART 2 - PRODUCTS

2.1 CONDUCTORS AND CABLES

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. American Insulated Wire Corp.; a Leviton Company.
 - 2. General Cable Corporation.
 - 3. Southwire Company.
 - 4. Approved equal.

- B. Copper Conductors: Comply with NEMA WC 70.
- C. Conductor Insulation: Comply with NEMA WC 70 for Types XHHW and SO.
- D. Multiconductor Cable: Comply with NEMA WC 70 for armored cable, Type AC and Type SO with ground wire.

2.2 CONNECTORS AND SPLICES

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. O-Z/Gedney; EGS Electrical Group LLC.
 - 2. 3M; Electrical Products Division.
 - 3. Tyco Electronics Corp.
 - 4. Approved equal.
- B. Description: Factory-fabricated connectors and splices of size, ampacity rating, material, type, and class for application and service indicated.

PART 3 - EXECUTION

3.1 CONDUCTOR MATERIAL APPLICATIONS

- A. Feeders: Copper, Stranded.
- B. Branch Circuits to wiring devices: Copper. Solid for No. 14 AWG and smaller; stranded for No. 12 AWG and larger.
 - 1. For circuits terminating at wiring devices: Provide spade lugs on stranded conductors if wiring device is not provided with a screw and clamp back wire termination listed for stranded wire.
 - 2. For other electrical loads: Provide crimped ferrule or spade lugs on stranded conductors if terminating end is not a box lug or other similar compression connection.

3.2 CONDUCTOR INSULATION AND MULTICONDUCTOR CABLE APPLICATIONS AND WIRING METHODS

- A. Type XHHW single conductors in raceway.
- B. Cord Drops and Portable Appliance Connections: Type SO, hard service cord with stainless-steel, wire-mesh, strain relief device at terminations to suit application.

3.3 INSTALLATION OF CONDUCTORS AND CABLES

A. Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.

- B. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips, that will not damage cables or raceway.
- C. Install exposed cables parallel and perpendicular to surfaces of exposed structural members, and follow surface contours where possible.
- D. Identify and color-code conductors and cables according to Division 16 Section "Electrical Identification."

3.4 CONNECTIONS

- A. Tighten electrical connectors and terminals according to manufacturer's published torquetightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.
- B. Make splices and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors.

3.5 FIELD QUALITY CONTROL

- A. Perform tests and inspections and prepare test reports.
- B. Tests and Inspections:
 - 1. After installing conductors and cables and before electrical circuitry has been energized, test service entrance and feeder conductors for compliance with requirements.
 - 2. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
- C. Test Reports: Prepare a written report to record the following:
 - 1. Test procedures used.
 - 2. Test results that comply with requirements.
 - 3. Test results that do not comply with requirements and corrective action taken to achieve compliance with requirements.
- D. Remove and replace malfunctioning units and retest as specified above.

END OF SECTION 16120

SECTION 16130 RACEWAYS AND BOXES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes raceways, fittings, boxes, enclosures, and cabinets for electrical wiring.

1.3 DEFINITIONS

- A. EPDM: Ethylene-propylene-diene terpolymer rubber.
- B. FMC: Flexible metal conduit.
- C. LFMC: Liquidtight flexible metal conduit.
- D. NBR: Acrylonitrile-butadiene rubber.
- E. RNC: Rigid nonmetallic conduit.

1.4 SUBMITTALS

- A. Product Data: For surface raceways, wireways and fittings, hinged-cover enclosures, and cabinets.
- B. Shop Drawings: For the following raceway components. Include plans, elevations, sections, details, and attachments to other work.
 - 1. For handholes and boxes for underground wiring, including the following:
 - a. Duct entry provisions, including locations and duct sizes.
 - b. Frame and cover design.
 - c. Grounding details.
 - d. Dimensioned locations of cable rack inserts, and pulling-in and lifting irons.
 - e. Joint details.
- C. Coordination Drawings: Conduit routing plans, drawn to scale, on which the following items are shown and coordinated with each other, based on input from installers of the items involved:
 - 1. Structural members in the paths of conduit groups with common supports.

- 2. HVAC and plumbing items and architectural features in the paths of conduit groups with common supports.
- D. Source quality-control test reports.

1.5 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- B. Comply with NFPA 70.

PART 2 - PRODUCTS

2.1 METAL CONDUIT AND TUBING

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Allied Tube & Conduit; a Tyco International Ltd. Co.
 - 2. Anamet Electrical, Inc.; Anaconda Metal Hose.
 - 3. O-Z Gedney; a unit of General Signal.
 - 4. Wheatland Tube Company.
 - 5. Approved equal.
- B. Rigid Steel Conduit: ANSI C80.1.
- C. PVC-Coated Steel Conduit: PVC-coated rigid steel conduit.
 - 1. Comply with NEMA RN 1.
 - 2. Coating Thickness: 0.040 inch, minimum.
- D. LFMC: Flexible steel conduit with PVC jacket.
- E. EMT: ANSI C80.3.
- F. Fittings for Conduit (Including all Types and Flexible and Liquidtight), EMT, and Cable: NEMA FB 1; listed for type and size raceway with which used, and for application and environment in which installed.
 - 1. Coating for Fittings for PVC-Coated Steel Conduit: Minimum thickness, 0.040 inch, with overlapping sleeves protecting threaded joints.
 - 2. Fittings for EMT: Steel, compression type
- G. Joint Compound for Rigid Steel Conduit or IMC: Listed for use in cable connector assemblies, and compounded for use to lubricate and protect threaded raceway joints from corrosion and enhance their conductivity.

2.2 NONMETALLIC CONDUIT

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. AFC Cable Systems, Inc.
 - 2. Anamet Electrical, Inc.; Anaconda Metal Hose.
 - 3. Arnco Corporation.
 - 4. CANTEX Inc.
 - 5. CertainTeed Corp.; Pipe & Plastics Group.
 - 6. Condux International, Inc.
 - 7. ElecSYS, Inc.
 - 8. Electri-Flex Co.
 - 9. Lamson & Sessions; Carlon Electrical Products.
 - 10. Manhattan/CDT/Cole-Flex.
 - 11. RACO; a Hubbell Company.
 - 12. Thomas & Betts Corporation.
- B. RNC: NEMA TC 2, Type EPC-40-PVC, unless otherwise indicated.
- C. LFNC: UL 1660.
- D. Fittings for RNC: NEMA TC 3; match to conduit type and material.
- E. Fittings for LFNC: UL 514B.

2.3 BOXES, ENCLOSURES, AND CABINETS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Cooper Crouse-Hinds; Div. of Cooper Industries, Inc.
 - 2. EGS/Appleton Electric.
 - 3. Hoffman.
 - 4. Hubbell Incorporated; Killark Electric Manufacturing Co. Division.
 - 5. O-Z/Gedney; a unit of General Signal.
 - 6. RACO; a Hubbell Company.
 - 7. Robroy Industries, Inc.; Enclosure Division.
 - 8. Thomas & Betts Corporation..
 - 9. Approved equal.
- B. Sheet Metal Outlet and Device Boxes: NEMA OS 1.
- C. Cast-Metal Outlet and Device Boxes: NEMA FB 1, ferrous alloy, Type FD, with gasketed cover.
- D. Small Sheet Metal Pull and Junction Boxes: NEMA OS 1.
- E. Cast-Metal Access, Pull, and Junction Boxes: NEMA FB 1, cast aluminum with gasketed cover.

F. Cabinets:

- 1. NEMA 250, Type 1, galvanized-steel box with removable interior panel and removable front, finished inside and out with manufacturer's standard enamel.
- 2. Hinged door in front cover with flush latch and concealed hinge.
- 3. Key latch to match panelboards.
- 4. Metal barriers to separate wiring of different systems and voltage.
- 5. Accessory feet where required for freestanding equipment.

PART 3 - EXECUTION

3.1 RACEWAY APPLICATION

- A. Outdoors: Apply raceway products as specified below, unless otherwise indicated:
 - 1. Exposed Conduit: Rigid steel conduit.
 - 2. Underground Conduit, Direct Buried: PVC-Coated Steel Conduit.
 - 3. Underground, Concrete Encased: Rigid Nonmetallic Conduit
 - 4. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): LFMC.
 - 5. Boxes and Enclosures, Aboveground: NEMA 250, Type 4X 316 stainless steel.
- B. Indoors: Apply raceway products as specified below, unless otherwise indicated:
 - 1. Exposed, Dry Location: Rigid Steel Conduit. Painted white to match existing conduits.
 - 2. Embedded in concrete floors and walls, and below concrete floors and slabs: RNC
 - a. Use PVC-Coated Steel Conduit where conduits pass through, stub-up or leave concrete floors and walls.
 - b. Use PVC-Coated Steel Conduit where conduits stub-up or leave outdoor grade level.
 - 3. Boxes and Enclosures: NEMA 250, Type 12.
- C. Minimum Raceway Size:
 - 1. Direct buried: 1 inch trade size.
 - 2. All other applications: 3/4-inch trade size.
- D. Raceway Fittings: Compatible with raceways and suitable for use and location.
 - 1. Rigid and Intermediate Steel Conduit: Use threaded rigid steel conduit fittings, unless otherwise indicated.
 - 2. PVC-Coated Steel Conduit: Use only fittings listed for use with that material. Patch and seal all joints, nicks, and scrapes in PVC coating after installing conduits and fittings. Use sealant recommended by fitting manufacturer.

3.2 INSTALLATION

- A. Comply with NECA 1 for installation requirements applicable to products specified in Part 2 except where requirements on Drawings or in this Article are stricter.
- B. Keep raceways at least 6 inches away from parallel runs of flues and steam or hot-water pipes. Install horizontal raceway runs above water and steam piping.
- C. Complete raceway installation before starting conductor installation.
- D. Support raceways as specified in Division 16 Section "Hangers and Supports for Electrical Systems."
- E. Arrange stub-ups so curved portions of bends are not visible above the finished slab.
- F. Conceal conduit within finished walls, ceilings, and floors, unless otherwise indicated.
- G. Raceways Embedded in Slabs:
 - 1. Run conduit larger than 1-inch trade size, parallel or at right angles to main reinforcement. Where at right angles to reinforcement, place conduit close to slab support.
 - 2. Arrange raceways to cross building expansion joints at right angles with expansion fittings.
- H. Install pull wires in empty raceways. Use polypropylene or monofilament plastic line with not less than 200-lb tensile strength. Leave at least 12 inches of slack at each end of pull wire.
- I. Flexible Conduit Connections: Use maximum of 72 inches of flexible conduit for equipment subject to vibration, noise transmission, or movement; and for transformers and motors.
- J. Recessed Boxes in Masonry Walls: Saw-cut opening for box in center of cell of masonry block, and install box flush with surface of wall.
- K. Set metal floor boxes level and flush with finished floor surface.
- L. Set nonmetallic floor boxes level. Trim after installation to fit flush with finished floor surface.

3.3 INSTALLATION OF UNDERGROUND CONDUIT

A. Direct-Buried Conduit:

- 1. Excavate trench bottom to provide firm and uniform support for conduit. Prepare trench bottom as specified in Division 2 Section "Earthwork" for pipe less than 6 inches in nominal diameter.
- 2. Install backfill as specified in Division 2 Section "Earthwork."
- 3. After installing conduit, backfill and compact. Start at tie-in point, and work toward end of conduit run, leaving conduit at end of run free to move with expansion and contraction as temperature changes during this process. Firmly hand tamp backfill around conduit to provide maximum supporting strength. After placing controlled backfill to within 12

- inches of finished grade, make final conduit connection at end of run and complete backfilling with normal compaction as specified in Division 2 Section "Earthwork."
- 4. Install manufactured rigid steel conduit elbows for stub-ups at poles and equipment and at building entrances through the floor.
 - a. Couple steel conduits to ducts with adapters designed for this purpose, and encase coupling with 3 inches of concrete.
 - b. For stub-ups at equipment mounted on outdoor concrete bases, extend steel conduit horizontally a minimum of 60 inches from edge of equipment pad or foundation. Install insulated grounding bushings on terminations at equipment.
- 5. Warning Planks: Bury warning planks approximately 12 inches above direct-buried conduits, placing them 24 inches o.c. Align planks along the width and along the centerline of conduit.

3.4 SLEEVE INSTALLATION FOR ELECTRICAL PENETRATIONS

- A. Concrete Slabs and Walls: Install sleeves for penetrations unless core-drilled holes or formed openings are used. Install sleeves during erection of slabs and walls.
- B. Use pipe sleeves unless penetration arrangement requires rectangular sleeved opening.
- C. Rectangular Sleeve Minimum Metal Thickness:
 - 1. For sleeve cross-section rectangle perimeter less than 50 inches and no side greater than 16 inches, thickness shall be 0.052 inch.
 - 2. For sleeve cross-section rectangle perimeter equal to, or greater than, 50 inches and 1 or more sides equal to, or greater than, 16 inches, thickness shall be 0.138 inch.
- D. Cut sleeves to length for mounting flush with both surfaces of walls.
- E. Extend sleeves installed in floors 2 inches above finished floor level.
- F. Size pipe sleeves to provide 1/4-inch annular clear space between sleeve and raceway unless sleeve seal is to be installed.
- G. Interior Penetrations of Non-Fire-Rated Walls and Floors: Seal annular space between sleeve and raceway, using joint sealant appropriate for size, depth, and location of joint. Refer to Division 7 Section "Joint Sealants" for materials and installation.
- H. Roof-Penetration Sleeves: Seal penetration of individual raceways with flexible, boot-type flashing units applied in coordination with roofing work.
- I. Aboveground, Exterior-Wall Penetrations: Seal penetrations using sleeves and mechanical sleeve seals. Select sleeve size to allow for 1-inch annular clear space between pipe and sleeve for installing mechanical sleeve seals.
- J. Underground, Exterior-Wall Penetrations: Install cast-iron "wall pipes" for sleeves. Size sleeves to allow for 1-inch annular clear space between raceway and sleeve for installing mechanical sleeve seals.

3.5 SLEEVE-SEAL INSTALLATION

- A. Install to seal underground, exterior wall penetrations.
- B. Use type and number of sealing elements recommended by manufacturer for raceway material and size. Position raceway in center of sleeve. Assemble mechanical sleeve seals and install in annular space between raceway and sleeve. Tighten bolts against pressure plates that cause sealing elements to expand and make watertight seal.

3.6 PROTECTION

- A. Provide final protection and maintain conditions that ensure coatings, finishes, and cabinets are without damage or deterioration at time of Substantial Completion.
 - 1. Repair damage to galvanized finishes with zinc-rich paint recommended by manufacturer.
 - 2. Repair damage to PVC or paint finishes with matching touchup coating recommended by manufacturer.

END OF SECTION 16130

SECTION 16231 PACKAGED ENGINE GENERATOR

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes packaged engine-generator sets for standby power supply with the following features:
 - 1. Propane / Natural Gas engine.
 - 2. Unit-mounted cooling system.
 - 3. Unit-mounted control and monitoring.
 - 4. Outdoor Aluminum Winter Protective Sound Enclosure with Exhaust.
- B. Related Sections include the following:
 - 1. Division 16 Section "Transfer Switches" for transfer switching including sensors and relays to initiate automatic-starting and -stopping signals for engine-generator sets.

1.3 DEFINITIONS

A. Operational Bandwidth: The total variation from the lowest to highest value of a parameter over the range of conditions indicated, expressed as a percentage of the nominal value of the parameter.

1.4 SUBMITTALS

- A. Product Data: For each type of packaged engine generator indicated. Include rated capacities, operating characteristics, and furnished specialties and accessories. In addition, include the following:
 - 1. Thermal damage curve for generator.
 - 2. Time-current characteristic curves for generator protective device.
- B. Shop Drawings: Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
 - 1. Dimensioned outline plan and elevation drawings of engine-generator set and other components specified.

- 2. Design Calculations: Signed and sealed by a qualified professional engineer. Calculate requirements for selecting vibration isolators and seismic restraints and for designing vibration isolation bases.
- 3. Vibration Isolation Base Details: Signed and sealed by a qualified professional engineer. Detail fabrication, including anchorages and attachments to structure and to supported equipment. Include base weights.
- 4. Wiring Diagrams: Power, signal, and control wiring.
- 5. EPA Emissions Certification
- C. Qualification Data: For installer.
- D. Source quality-control test reports.
 - 1. Certified summary of prototype-unit test report.
 - 2. Certified Test Reports: For components and accessories that are equivalent, but not identical, to those tested on prototype unit.
 - 3. Certified Summary of Performance Tests: Certify compliance with specified requirement to meet performance criteria for sensitive loads.
 - 4. Report of factory test on units to be shipped for this Project, showing evidence of compliance with specified requirements.
 - 5. Report of sound generation.
 - 6. Report of exhaust emissions showing compliance with applicable regulations.
 - 7. Certified Torsional Vibration Compatibility: Comply with NFPA 110.
- E. Field quality-control test reports.
- F. Operation and Maintenance Data: For packaged engine generators to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 1 Section "Operation and Maintenance Data," include the following:
 - 1. List of tools and replacement items recommended to be stored at Project for ready access. Include part and drawing numbers, current unit prices, and source of supply.
- G. Warranty: Special warranty specified in this Section.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.
 - 1. Maintenance Proximity: Not more than four hours' normal travel time from Installer's place of business to Project site.
 - 2. Engineering Responsibility: Preparation of data for vibration isolators, including Shop Drawings, based on testing and engineering analysis of manufacturer's standard units in assemblies similar to those indicated for this Project.
- B. Manufacturer Qualifications: A qualified manufacturer. Maintain, within 200 miles of Project site, a service center capable of providing training, parts, and emergency maintenance repairs.

- C. Source Limitations: Obtain packaged generator sets and auxiliary components through one source from a single manufacturer.
- D. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- E. Comply with ASME B15.1.
- F. Comply with NFPA 37.
- G. Comply with NFPA 70.
- H. Comply with NFPA 110 requirements for Level 2 emergency power supply system.
- I. Comply with UL 2200.
- J. Engine Exhaust Emissions: Comply with applicable state and local government requirements.

1.6 PROJECT CONDITIONS

- A. Environmental Conditions: Engine-generator system shall withstand the following environmental conditions without mechanical or electrical damage or degradation of performance capability:
 - 1. Ambient Temperature: 5 to 40 deg C.
 - 2. Relative Humidity: 0 to 95 percent.
 - 3. Altitude: Sea level to 4850 ft.

1.7 COORDINATION

A. Coordinate size and location of concrete bases for package engine generators. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified in Division 3.

1.8 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of packaged engine generators and associated auxiliary components that fail, including all parts and labor, in materials or workmanship within specified warranty period.
 - 1. Warranty Period: 5 years from date of Substantial Completion.

1.9 MAINTENANCE SERVICE

A. Initial Maintenance Service: Beginning at Substantial Completion, provide 12 months' full maintenance by skilled employees of manufacturer's designated service organization. Include quarterly exercising to check for proper starting, load transfer, and running under load. Include

routine preventive maintenance as recommended by manufacturer and adjusting as required for proper operation. Provide parts and supplies same as those used in the manufacture and installation of original equipment.

1.10 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Fuses: One for every 10 of each type and rating, but no fewer than one of each.
 - 2. Indicator Lamps: Two for every six of each type used, but no fewer than two of each.
 - 3. Filters: One set each of lubricating oil, fuel, and combustion-air filters.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide the Cummins Power System product indicated on Drawings or a comparable product by one of the following:
 - 1. Caterpillar; Engine Div.
 - 2. MTU Detroit Diesel/Onsite Energy
 - 3. Approved equal

2.2 ENGINE-GENERATOR SET

- A. Factory-assembled and -tested, engine-generator set.
- B. Mounting Frame: Maintain alignment of mounted components without depending on concrete foundation; and have lifting attachments.
 - 1. Rigging Diagram: Inscribed on metal plate permanently attached to mounting frame to indicate location and lifting capacity of each lifting attachment and generator-set center of gravity.

C. Capacities and Characteristics:

- 1. Power Output Ratings: Nominal ratings as indicated, with capacity as required to operate as a unit as evidenced by records of prototype testing.
- 2. Output Connections: Three-phase, four wire.
- 3. Nameplates: For each major system component to identify manufacturer's name and address, and model and serial number of components.

D. Generator-Set Performance:

1. Steady-State Voltage Operational Bandwidth: 3 percent of rated output voltage from no load to full load.

- 2. Transient Voltage Performance: Not more than 20 percent variation for 50 percent step-load increase or decrease. Voltage shall recover and remain within the steady-state operating band within three seconds.
- 3. Steady-State Frequency Operational Bandwidth: 0.5 percent of rated frequency from no load to full load.
- 4. Steady-State Frequency Stability: When system is operating at any constant load within the rated load, there shall be no random speed variations outside the steady-state operational band and no hunting or surging of speed.
- 5. Transient Frequency Performance: Less than 5 percent variation for 50 percent step-load increase or decrease. Frequency shall recover and remain within the steady-state operating band within five seconds.
- 6. Output Waveform: At no load, harmonic content measured line to line or line to neutral shall not exceed 5 percent total and 3 percent for single harmonics. Telephone influence factor, determined according to NEMA MG 1, shall not exceed 50 percent.
- 7. Sustained Short-Circuit Current: For a three-phase, bolted short circuit at system output terminals, system shall supply a minimum of 250 percent of rated full-load current for not less than 10 seconds and then clear the fault automatically, without damage to generator system components.
- 8. Start Time: Comply with NFPA 110, Type 10, system requirements.
- E. Provide winterized enclosure with the following accessories: Coolant Heater, Oil Pan Heater, Alternator Heater, Battery Charger, and load center panel.

2.3 ENGINE

- A. Emissions: EPA Nonroad Tier 2
- B. Fuel: Propane.
- C. Rated Engine Speed: 1800 rpm.
- D. Maximum Piston Speed for Four-Cycle Engines: 2250 fpm.
- E. Lubrication System: The following items are mounted on engine or skid:
 - 1. Filter and Strainer: Rated to remove 90 percent of particles 5 micrometers and smaller while passing full flow.
 - 2. Thermostatic Control Valve: Control flow in system to maintain optimum oil temperature. Unit shall be capable of full flow and is designed to be fail-safe.
 - 3. Crankcase Drain: Arranged for complete gravity drainage to an easily removable container with no disassembly and without use of pumps, siphons, special tools, or appliances.
- F. Coolant Jacket Heater: Electric-immersion type, factory installed in coolant jacket system. Comply with NFPA 110 requirements for Level 2 equipment for heater capacity. Heater prewired to factory installed AC distribution panel.
- G. Governor: Adjustable isochronous, with speed sensing.

- H. Cooling System: Closed loop, liquid cooled, with radiator factory mounted on engine-generator-set mounting frame and integral engine-driven coolant pump.
 - 1. Coolant: Solution of 50 percent ethylene-glycol-based antifreeze and 50 percent water, with anticorrosion additives as recommended by engine manufacturer.
 - 2. Size of Radiator: Adequate to contain expansion of total system coolant from cold start to 110 percent load condition.
 - 3. Temperature Control: Self-contained, thermostatic-control valve modulates coolant flow automatically to maintain optimum constant coolant temperature as recommended by engine manufacturer.
 - 4. Coolant Hose: Flexible assembly with inside surface of nonporous rubber and outer covering of aging-, ultraviolet-, and abrasion-resistant fabric.
 - a. Rating: 50-psig maximum working pressure with coolant at 180 deg F, and non-collapsible under vacuum.
 - b. End Fittings: Flanges or steel pipe nipples with clamps to suit piping and equipment connections.
- I. Muffler/Silencer: Critical Grade type, sized as recommended by engine manufacturer and selected with exhaust piping system to not exceed engine manufacturer's engine backpressure requirements.
 - 1. Minimum sound attenuation of 18 dB at 500 Hz.
 - 2. Sound level measured at a distance of 10 feet from exhaust discharge after installation is complete shall be 79dBA or less.
- J. Air-Intake Filter: Heavy-duty, engine-mounted air cleaner with replaceable dry-filter element and "blocked filter" indicator.
- K. Starting System: 24-V electric, with negative ground.
 - 1. Components: Sized so they will not be damaged during a full engine-cranking cycle with ambient temperature at maximum specified in Part 1 "Project Conditions" Article.
 - 2. Cranking Motor: Heavy-duty unit that automatically engages and releases from engine flywheel without binding.
 - 3. Cranking Cycle: As required by NFPA 110 for system level specified.
 - 4. Battery: Adequate capacity within ambient temperature range specified in Part 1 "Project Conditions" Article to provide specified cranking cycle at least twice without recharging.
 - 5. Battery Cable: Size as recommended by engine manufacturer for cable length indicated. Include required interconnecting conductors and connection accessories.
 - 6. Battery-Charging Alternator: Factory mounted on engine with solid-state voltage regulation and 35-A minimum continuous rating.
 - 7. Battery Charger

2.4 GASEOUS FUEL SYSTEM

- A. Gas Train: Comply with NFPA 37.
- B. Engine Fuel System:

- 1. Propane, Vapor-Withdrawal System:
 - a. Carburetor.
 - b. Fuel-Shutoff Solenoid Valves: NRTL-listed, normally closed, safety shutoff valves; one for each fuel source.
 - c. Fuel Filters: One for each fuel type.
 - d. Manual Fuel Shutoff Valves: One for each fuel type.
 - e. Flexible Fuel Connectors: Minimum one for each fuel connection.
- 2. Capable of being converted to natural gas engine in the future.

2.5 CONTROL AND MONITORING

- A. Automatic Starting System Sequence of Operation: When mode-selector switch on the control and monitoring panel is in the automatic position, remote-control contacts in one or more separate automatic transfer switches initiate starting and stopping of generator set. When mode-selector switch is switched to the on position, generator set starts. The off position of same switch initiates generator-set shutdown. When generator set is running, specified system or equipment failures or derangements automatically shut down generator set and initiate alarms. Operation of a remote emergency-stop switch also shuts down generator set.
- B. Configuration: Operating and safety indications, protective devices, basic system controls, and engine gages shall be grouped in a common control and monitoring panel mounted on the generator set. Mounting method shall isolate the control panel from generator-set vibration.
- C. Indicating and Protective Devices and Controls:
 - 1. AC voltmeter.
 - 2. AC ammeter.
 - 3. AC frequency meter.
 - 4. DC voltmeter (alternator battery charging).
 - 5. Engine-coolant temperature gage.
 - 6. Engine lubricating-oil pressure gage.
 - 7. Running-time meter.
 - 8. Ammeter-voltmeter, phase-selector switch(es).
 - 9. Generator-voltage adjusting rheostat.
 - 10. Start-stop switch.
 - 11. Overspeed shutdown device.
 - 12. Coolant high-temperature shutdown device.
 - 13. Coolant low-level shutdown device.
 - 14. Oil low-pressure shutdown device.
 - 15. Generator overload.
- D. Supporting Items: Include sensors, transducers, terminals, relays, and other devices and include wiring required to support specified items. Locate sensors and other supporting items on engine or generator, unless otherwise indicated.
- E. Common Remote Audible Alarm: Comply with NFPA 110 requirements for Level 1 systems. Include necessary contacts and terminals in control and monitoring panel.
 - 1. Overcrank shutdown.

- 2. Coolant low-temperature alarm.
- 3. Control switch not in auto position.
- 4. Battery-charger malfunction alarm.
- 5. Battery low-voltage alarm.

2.6 GENERATOR OVERCURRENT AND FAULT PROTECTION

- A. Generator Circuit Breaker: Molded-case, thermal-magnetic type; 100 percent rated; complying with NEMA AB 1 and UL 489.
 - 1. Tripping Characteristic: Designed specifically for generator protection.
 - 2. Trip Rating: Matched to generator rating.
 - 3. Shunt Trip: Connected to trip breaker when generator set is shut down by other protective devices.
 - 4. Mounting: Adjacent to or integrated with control and monitoring panel.

2.7 GENERATOR, EXCITER, AND VOLTAGE REGULATOR

- A. Comply with NEMA MG 1.
- B. Drive: Generator shaft shall be directly connected to engine shaft. Exciter shall be rotated integrally with generator rotor.
- C. Electrical Insulation: Class H or Class F.
- D. Stator-Winding Leads: Brought out to terminal box to permit future reconnection for other voltages if required.
- E. Construction shall prevent mechanical, electrical, and thermal damage due to vibration, overspeed up to 125 percent of rating, and heat during operation at 110 percent of rated capacity.
- F. Enclosure: Drip proof.
- G. Voltage Regulator: Solid-state type, separate from exciter, providing performance as specified.
 - 1. Adjusting rheostat on control and monitoring panel shall provide plus or minus 5 percent adjustment of output-voltage operating band.
- H. Strip Heater: Thermostatically controlled unit arranged to maintain stator windings above dew point. Heater pre-wired to factory installed AC distribution panel.
- I. Windings: Two-thirds pitch stator winding and fully linked amortisseur winding.
- J. Subtransient Reactance: 12 percent, maximum.

2.8 VIBRATION ISOLATION DEVICES

A. Restrained Spring Isolators: Freestanding, steel, open-spring isolators with seismic restraint.

- 1. Housing: Steel with resilient vertical-limit stops to prevent spring extension due to wind loads or if weight is removed; factory-drilled baseplate bonded to 1/4-inch- thick, elastomeric isolator pad attached to baseplate underside; and adjustable equipment mounting and leveling bolt that acts as blocking during installation.
- 2. Outside Spring Diameter: Not less than 80 percent of compressed height of the spring at rated load.
- 3. Minimum Additional Travel: 50 percent of required deflection at rated load.
- 4. Lateral Stiffness: More than 80 percent of rated vertical stiffness.
- 5. Overload Capacity: Support 200 percent of rated load, fully compressed, without deformation or failure.

2.9 OUTDOOR GENERATOR-SET ENCLOSURE

- A. Description: Aluminum Winter Protective Sound Enclosure with Exhaust, vandal-resistant, weatherproof housing, wind resistant up to 100 mph. Multiple panels shall be lockable and provide adequate access to components requiring maintenance. Panels shall be removable by one person without tools. Instruments and control shall be mounted within enclosure.
- B. Description: Prefabricated or pre-engineered skin-tight enclosure with the following features:
 - 1. Construction: Galvanized-steel, metal-clad, integral structural-steel-framed building erected on concrete foundation.
 - 2. Structural Design and Anchorage: Comply with ASCE 7 for wind loads.
 - 3. Louvers: Equipped with bird screen and filter arranged to permit air circulation when engine is not running while excluding exterior dust, birds, and rodents.
 - 4. Hinged Doors: With padlocking provisions.
 - 5. Ventilation: Louvers equipped with bird screen and filter arranged to permit air circulation while excluding exterior dust, birds, and rodents.
 - 6. Thermal Insulation: Manufacturer's standard materials and thickness selected in coordination with space heater to maintain winter interior temperature within operating limits required by engine-generator-set components.
 - 7. Muffler Location: Within enclosure.
- C. Engine Cooling Airflow through Enclosure: Maintain temperature rise of system components within required limits when unit operates at 110 percent of rated load for 2 hours with ambient temperature at top of range specified in system service conditions.
 - 1. Louvers: Fixed-engine, cooling-air inlet and discharge. Storm-proof and drainable louvers prevent entry of rain and snow.
- D. Interior Lights with Switch: Factory-wired, vapor proof-type fixtures within housing; arranged to illuminate controls and accessible interior. Pre-wired to factory installed AC distribution panel.
 - 1. AC lighting system for operation when remote source is available.
 - 2. DC lighting system for operation when remote source and generator are both unavailable.
- E. Convenience Outlets: Factory wired, GFCI. Pre-wired to factory installed AC distribution panel.

F. AC Distribution Panel: 120/208 V, 3 phase, 3 wire, 50 A main circuit breaker, branch breakers as required for generator set auxiliary loads.

2.10 FINISHES

A. Indoor and Outdoor Enclosures and Components: Manufacturer's standard finish over corrosion-resistant pretreatment and compatible primer.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas, equipment bases, and conditions, with Installer present, for compliance with requirements for installation and other conditions affecting packaged engine-generator performance.
- B. Examine roughing-in of piping systems and electrical connections. Verify actual locations of connections before packaged engine-generator installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with packaged engine-generator manufacturers' written installation and alignment instructions and with NFPA 110.
- B. Install packaged engine generator to provide access, without removing connections or accessories, for periodic maintenance.
- C. Install packaged engine generator with restrained spring isolators having a minimum deflection of 1 inch on 4-inch- high concrete base. Secure sets to anchor bolts installed in concrete bases.
- D. Electrical Wiring: Install electrical devices furnished by equipment manufacturers but not specified to be factory mounted.

3.3 CONNECTIONS

- A. Ground equipment according to Division 16 Section "Grounding and Bonding."
- B. Connect wiring according to Division 16 Section "Conductors and Cables."

3.4 IDENTIFICATION

A. Identify system components according to Division 16 Section "Electrical Identification."

3.5 FIELD QUALITY CONTROL

A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust components, assemblies, and equipment installations, including connections. Report results in writing.

B. Tests and Inspections:

- 1. Perform tests recommended by manufacturer and each electrical test and visual and mechanical inspection for "AC Generators and for Emergency Systems" specified in NETA Acceptance Testing Specification. Certify compliance with test parameters.
- 2. NFPA 110 Acceptance Tests: Perform tests required by NFPA 110 that are additional to those specified here including, but not limited to, single-step full-load pickup test.
- 3. Battery Tests: Equalize charging of battery cells according to manufacturer's written instructions. Record individual cell voltages.
 - a. Measure charging voltage and voltages between available battery terminals for full-charging and float-charging conditions. Check electrolyte level and specific gravity under both conditions.
 - b. Test for contact integrity of all connectors. Perform an integrity load test and a capacity load test for the battery.
 - c. Verify acceptance of charge for each element of the battery after discharge.
 - d. Verify that measurements are within manufacturer's specifications.
- 4. Battery-Charger Tests: Verify specified rates of charge for both equalizing and float-charging conditions.
- 5. System Integrity Tests: Methodically verify proper installation, connection, and integrity of each element of engine-generator system before and during system operation. Check for air, exhaust, and fluid leaks.
- 6. Voltage and Frequency Transient Stability Tests: Use recording oscilloscope to measure voltage and frequency transients for 50 and 100 percent step-load increases and decreases, and verify that performance is as specified.
- 7. Harmonic-Content Tests: Measure harmonic content of output voltage under 25 percent and at 100 percent of rated linear load. Verify that harmonic content is within specified limits.
- C. Coordinate tests with tests for transfer switches and run them concurrently.
- D. Test instruments shall have been calibrated within the last 12 months, traceable to standards of NIST, and adequate for making positive observation of test results. Make calibration records available for examination on request.
- E. Leak Test: After installation, charge system and test for leaks. Repair leaks and retest until no leaks exist.
- F. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation.
- G. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

- H. Remove and replace malfunctioning units and retest as specified above.
- I. Retest: Correct deficiencies identified by tests and observations and retest until specified requirements are met.
- J. Report results of tests and inspections in writing. Record adjustable relay settings and measured insulation resistances, time delays, and other values and observations. Attach a label or tag to each tested component indicating satisfactory completion of tests.

3.6 FUEL

- A. Provide all propane fuel required for testing, startup, and inspection purposes.
- B. Provide full tanks of propane fuel for substantial completion.

3.7 TRAINING

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain packaged engine generators. Refer to Division 1 Section "Training."

END OF SECTION 16231

SECTION 16415 AUTOMATIC TRANSFER SWITCHES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes transfer switches rated 600 V and less, including the following:
 - 1. Automatic transfer switches.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include rated capacities, weights, operating characteristics, furnished specialties, and accessories.
- B. Shop Drawings: Dimensioned plans, elevations, sections, and details showing minimum clearances, conductor entry provisions, gutter space, installed features and devices, and material lists for each switch specified.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For manufacturer.
- B. Field quality-control reports.

1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For each type of product to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 01 "Operation and Maintenance Data," include the following:
 - 1. Features and operating sequences, both automatic and manual.
 - 2. List of all factory settings of relays; provide relay-setting and calibration instructions, including software, where applicable.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Maintain a service center capable of providing training, parts, and emergency maintenance repairs within a response period of less than eight hours from time of notification.
- B. Source Limitations: Obtain automatic transfer switches through one source from a single manufacturer.
- C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- D. Comply with NEMA ICS 1.
- E. Comply with NFPA 70.
- F. Comply with NFPA 110.
- G. Comply with UL 1008 unless requirements of these Specifications are stricter.

1.7 FIELD CONDITIONS

- A. Interruption of Existing Electrical Service: Do not interrupt electrical service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary electrical service:
 - 1. Notify Owner no fewer than fourteen calendar days in advance of proposed interruption of electrical service.
 - 2. Do not proceed with interruption of electrical service without Owner's written permission.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Basis of design product: ASCO 300 ATS. Subject to compliance with requirements, provide products by one of the following:
 - 1. Cummins Power Systems.
 - 2. Russelectric, Inc.
 - 3. Approved Equal

2.2 GENERAL TRANSFER-SWITCH PRODUCT REQUIREMENTS

A. Indicated Current Ratings: Apply as defined in UL 1008 for continuous loading and total system transfer, including tungsten filament lamp loads not exceeding 30 percent of switch ampere rating, unless otherwise indicated.

- B. Tested Fault-Current Closing and Withstand Ratings: Adequate for duty imposed by protective devices at installation locations in Project under the fault conditions indicated, based on testing according to UL 1008.
- C. Solid-State Controls: Repetitive accuracy of all settings shall be plus or minus 2 percent or better over an operating temperature range of minus 20 to plus 70 deg C.
- D. Resistance to Damage by Voltage Transients: Components shall meet or exceed voltage-surge withstand capability requirements when tested according to IEEE C62.41. Components shall meet or exceed voltage-impulse withstand test of NEMA ICS 1.
- E. Electrical Operation: Accomplish by a nonfused, momentarily energized solenoid or electric-motor-operated mechanism, mechanically and electrically interlocked in both directions.
- F. Switch Characteristics: Designed for continuous-duty repetitive transfer of full-rated current between active power sources.
 - 1. Limitation: Switches using molded-case switches or circuit breakers or insulated-case circuit-breaker components are not acceptable.
 - 2. Switch Action: Double throw; mechanically held in both directions.
 - 3. Contacts: Silver composition or silver alloy for load-current switching. Conventional automatic transfer-switch units, rated 225 A and higher, shall have separate arcing contacts.
- G. Neutral Terminal: Solid and fully rated, unless otherwise indicated.
- H. Oversize Neutral: Ampacity and switch rating of neutral path through units indicated for oversize neutral shall be double the nominal rating of circuit in which switch is installed.
- I. Factory Wiring: Train and bundle factory wiring and label, consistent with Shop Drawings, either by color-code or by numbered or lettered wire and cable tape markers at terminations. Color-coding and wire and cable tape markers are specified in Section 16075 "Electrical Identification."
 - 1. Designated Terminals: Pressure type, suitable for types and sizes of field wiring indicated.
 - 2. Power-Terminal Arrangement and Field-Wiring Space: Suitable for top, side, or bottom entrance of feeder conductors as indicated.
 - 3. Control Wiring: Equipped with lugs suitable for connection to terminal strips.
- J. Enclosures: General-purpose NEMA 250, Type 1, complying with NEMA ICS 6 and UL 508, unless otherwise indicated.

2.3 AUTOMATIC TRANSFER SWITCHES

- A. Comply with Level 2 equipment according to NFPA 110.
- B. Switching Arrangement: Double-throw type, incapable of pauses or intermediate position stops during normal functioning, unless otherwise indicated.

C. Manual Switch Operation: Under load, with door closed and with either or both sources energized. Transfer time is same as for electrical operation. Control circuit automatically disconnects from electrical operator during manual operation.

D. Automatic Transfer-Switch Features:

- 1. Adjustable Time Delay: For override of normal-source voltage sensing to delay transfer and engine start signals. Adjustable from zero to six seconds, and factory set for one second.
- 2. Voltage/Frequency Lockout Relay: Prevent premature transfer to generator. Pickup voltage shall be adjustable from 85 to 100 percent of nominal. Factory set for pickup at 90 percent. Pickup frequency shall be adjustable from 90 to 100 percent of nominal. Factory set for pickup at 95 percent.
- 3. Time Delay for Retransfer to Normal Source: Adjustable from 0 to 30 minutes, and factory set for 10 minutes to automatically defeat delay on loss of voltage or sustained undervoltage of emergency source, provided normal supply has been restored.
- 4. Test Switch: Simulate normal-source failure.
- 5. Switch-Position Pilot Lights: Indicate source to which load is connected.
- 6. Source-Available Indicating Lights: Supervise sources via transfer-switch normal- and emergency-source sensing circuits.
 - a. Normal Power Supervision: Green light with nameplate engraved "Normal Source Available."
 - b. Emergency Power Supervision: Red light with nameplate engraved "Emergency Source Available."
- 7. Unassigned Auxiliary Contacts: Two normally open, single-pole, double-throw contacts for each switch position, rated 10 A at 240-V ac.
- 8. Transfer Override Switch: Overrides automatic retransfer control so automatic transfer switch will remain connected to emergency power source regardless of condition of normal source. Pilot light indicates override status.
- 9. Engine Starting Contacts: One isolated and normally closed, and one isolated and normally open; rated 10 A at 32-V dc minimum.
- 10. Engine Shutdown Contacts: Instantaneous; shall initiate shutdown sequence at remote engine-generator controls after retransfer of load to normal source.
- 11. Engine-Generator Exerciser: Solid-state, programmable-time switch starts engine generator and transfers load to it from normal source for a preset time, then retransfers and shuts down engine after a preset cool-down period. Initiates exercise cycle at preset intervals adjustable from 7 to 30 days. Running periods are adjustable from 10 to 30 minutes. Factory settings are for 7-day exercise cycle, 20-minute running period, and 5-minute cool-down period. Exerciser features include the following:
 - a. Exerciser Transfer Selector Switch: Permits selection of exercise with and without load transfer.
 - b. Push-button programming control with digital display of settings.
 - c. Integral battery operation of time switch when normal control power is not available.

2.4 MULTIFUNCTION DIGITAL METERING MONITOR

- A. Provide a UL listed, microprocessor-based unit suitable for three- or four-wire systems and with the following features:
 - 1. Inputs from sensors or 5 A current-transformer secondaries and potential terminals rated to 600V.
 - 2. Switch-selectable digital display of the following:
 - a. Phase Currents, Each Phase: $\pm 1\%$.
 - b. Phase-to-Phase Voltages, Three Phase: $\pm 1\%$.
 - c. Phase-to-Neutral Voltages, Three Phase: $\pm 1\%$.
 - d. Three-Phase Real Power: $\pm 2\%$.
 - e. Three-Phase Reactive Power: $\pm 2\%$.
 - f. Power Factor: $\pm 2\%$.
 - g. Frequency: $\pm 0.5\%$.
 - h. Integrated Demand: $\pm 2\%$.
 - 1) Demand Interval: Selectable from 5 to 60 Minutes.
 - 3. Mounting: Display and control unit flush or semi-flush mounted in instrument compartment door.

2.5 SOURCE QUALITY CONTROL

A. Factory test and inspect components, assembled switches, and associated equipment. Ensure proper operation. Check transfer time and voltage, frequency, and time-delay settings for compliance with specified requirements. Perform dielectric strength test complying with NEMA ICS 1.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Wall-Mounting Switch: Anchor to wall by bolting.
- B. Identify components according to Division 16 "Electrical Identification."
- C. Set field-adjustable intervals and delays, relays, and engine exerciser clock.

3.2 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections with the assistance of a factory-authorized service representative:
 - 1. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect components, assemblies, and equipment installations, including connections

- 2. After installing equipment and after electrical circuitry has been energized, test for compliance with requirements.
- 3. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
- 4. Measure insulation resistance phase-to-phase and phase-to-ground with insulation-resistance tester. Include external annunciation and control circuits. Use test voltages and procedure recommended by manufacturer. Comply with manufacturer's specified minimum resistance.
 - a. Check for electrical continuity of circuits and for short circuits.
 - b. Inspect for physical damage, proper installation and connection, and integrity of barriers, covers, and safety features.
 - c. Verify that manual transfer warnings are properly placed.
 - d. Perform manual transfer operation.
- 5. After energizing circuits, demonstrate interlocking sequence and operational function for each switch at least three times.
 - a. Simulate power failures of normal source to automatic transfer switches and of emergency source with normal source available.
 - b. Verify time-delay settings.
 - c. Verify pickup and dropout voltages by data readout or inspection of control settings.
 - d. Verify proper sequence and correct timing of automatic engine starting, transfer time delay, retransfer time delay on restoration of normal power, and engine cooldown and shutdown.
- 6. Ground-Fault Tests: Coordinate with testing of ground-fault protective devices for power delivery from both sources.
 - a. Verify grounding connections and locations and ratings of sensors.
- B. Coordinate tests with tests of generator and run them concurrently.
- C. Report results of tests and inspections in writing. Record adjustable relay settings and measured insulation and contact resistances and time delays. Attach a label or tag to each tested component indicating satisfactory completion of tests.
- D. Remove and replace malfunctioning units and retest as specified above.
- E. Prepare test and inspection reports.

3.3 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain transfer switches and related equipment as specified below. Refer to Section 01820 "Demonstration and Training."
- B. Coordinate this training with that for generator equipment.

END OF SECTION 16415



CONTRACT ITEM 1 MOBILIZATION AND DEMOBILIZATION

Sect. 1.01 WORK INCLUDED AND PAYMENT

Mobilization and Demobilization shall consist of the cost of initiating the contract. Payment for Mobilization and Demobilization will be made at the lump sum price bid for this item in the proposal, which price shall include the cost of initiating the contract. The provisions for payment for the Item Mobilization and Demobilization supersede any provisions elsewhere in the specifications for including the cost of these initial services and facilities in the prices bid for the various items scheduled in the proposal. Fifty percent (50%) of the lump sum price bid for Mobilization and Demobilization shall be payable to the Contractor whenever he/she shall have completed 10 percent of the work of the contract. For the purposes of this Item, 10 percent of the work shall be considered complete when the total of payments earned, exclusive of the amount bid for this Item, shown on the monthly certificate of the approximate quantities of work done, shall exceed 10 percent of the total price bid for the contract. The remaining 50% shall be payable upon substantial completion of the project.

The lump sum price bid for Mobilization and Demobilization should not exceed 3% of the total contract value.

CONTRACT ITEM 2 12-FOOT DIAMETER WET WELL

Sect 2.01 WORK INCLUDED

Under this Item, the Contractor shall furnish and install one precast concrete watertight wet well, complete with appurtenances of the types and sizes, and depth range shown and as specified. This Item includes but is not limited to wet well conformity with the lines, grades, dimensions and details shown on the plans, or as ordered, and in accordance with the provisions of the specifications for the various materials and work which constitute the completed structure. Other work under this Bid Item includes:

- 1) Survey and Stake-Out by a licensed Connecticut Land Surveyor;
- 2) Conformance with State and Federal Safety Requirements;
- 3) Adhering to all regulations of WPCA (including obtaining all necessary permits);
- 4) Testing of wet well.

Sect. 2.02 WORK NOT INCLUDED

This Item does not include work described in, or payable under, other items in this contract.

Sect. 2.03 GENERAL REQUIREMENTS

Work under this Item, shall conform to the following General Specifications:

Sect. S 1 – Earthwork and Backfill

Sect. S 2 – Concrete

Sect. S 3 – Pipes

Sect. S 4 – Wet Well

Sect. 2.04 METHOD OF MEASUREMENT

The quantity to be measured for payment under this Item shall be the number of wet well.

Sect. 2.05 BASIS OF PAYMENT

The price bid shall cover all cost of furnishing and installing the wet well with all appurtenances including all materials, equipment, tools and labor incidental thereto. Price shall also include but not be limited to frame and cover; internal concrete slab and internal backfill material; excavation; removing and disposing of all excess material off-site including excavation materials and bedding; backfilling; compaction; sheeting; shoring and bracing; dewatering; concrete; rebar and all other work and materials described hereinabove.

CONTRACT ITEM 3 GENERATOR

Sect 3.01 WORK INCLUDED

Under this Item, the Contractor shall furnish, deliver and install the generator, and all related work including but not limited to site preparation, conduits, and electrical lines.

Sect. 3.02 WORK NOT INCLUDED

This Item does not include work described in, or payable under, other items in this contract.

Sect. 3.03 GENERAL REQUIREMENTS

This Item does not include work described in, or payable under, other items in this contract.

Sect. 3.04 METHOD OF MEASUREMENT

The generator construction shall be measured by each.

Sect. 3.05 BASIS OF PAYMENT

The price bid shall cover all cost of furnishing and installing the generator with all appurtenances including all materials, equipment, tools and labor incidental thereto.

CONTRACT ITEM 4 PROPANE TANK

Sect 4.01 WORK INCLUDED

Under this Item, the Contractor shall furnish, deliver and install the underground propane tanks, and all related work including but not limited to site preparation, and interconnection conduits.

Sect. 4.02 WORK NOT INCLUDED

This Item does not include work described in, or payable under, other items in this contract.

Sect. 4.03 GENERAL REQUIREMENTS

Work under this Item, shall conform to the following General Specifications:

Sect. S 1 – Earthwork and Backfill

Sect. 4.04 METHOD OF MEASUREMENT

The propane tank construction shall be measured by each.

Sect. 4.05 BASIS OF PAYMENT

The price bid shall cover all cost of furnishing and installing the underground propane tank with all appurtenances including all materials, equipment, tools and labor incidental thereto. Price shall also include but not be limited to excavation; bedding; backfill; removing and disposing of all excess material off-site including excavation materials and bedding; backfilling; compaction; sheeting; shoring and bracing; dewatering and all other work and materials described hereinabove.

CONTRACT ITEM 5 CONCRETE PAD

Sect 5.01 WORK INCLUDED

Under this Item, the Contractor shall construct the concrete pad in accordance with the contract documents.

Sect. 5.02 WORK NOT INCLUDED

This Item does not include work described in, or payable under, other items in this contract.

Sect. 5.03 GENERAL REQUIREMENTS

Work under this Item, shall conform to the following General Specifications:

Sect. S 2 – Concrete

Sect. 5.04 METHOD OF MEASUREMENT

The quantity to be measured for payment under this Item shall be the number of concrete pad.

Sect. 5.05 BASIS OF PAYMENT

The price bid shall cover all cost of constructing the concrete pad including all materials, equipment, tools and labor incidental thereto. Price shall also include but not be limited to excavation; removing and disposing of all excess material including excavation materials and concrete and all other work and materials described hereinabove.

CONTRACT ITEM 6 12" DIP CL 52 SEWER PIPE

Sect 6.01 WORK INCLUDED

Under this Item, the Contractor shall construct gravity sewer mains where shown on the plans. The work required under this Bid Item includes:

- 1) Temporary relocate existing wet well electrical lines;
- 2) Survey and Stake-Out by a licensed Connecticut Land Surveyor;
- 3) Removal, storage, and replacement of topsoil on sites of trench work;
- 4) Excavation in open or sheeted trench as shown or required in accordance with the depths and grades shown, including temporary storage of excavated material, and other work included under Section S1; also, segregation and storage of topsoil and excavated material which is suitable for backfill.
- 5) Protection in place as required of all subsurface utilities and utility structures, which might be endangered or demolished during construction, in order that continuity of utility services will not be interrupted; this work includes the protection in place of building services or utility laterals, including their repair and replacement if damaged; also, safety procedures to protect workers, visitors, and general public.
- 6) Furnishing and placing pipe foundation material as shown or specified;
- 7) Furnishing, placing, and compacting backfill as shown or specified.
- 8) Provide temporary bypass pumping as necessary.
- 9) Repairs to existing structures if necessary including but not limited to infill and parging.
- 10) Disposal of all surplus material from the excavation and from other construction operations;
- 11) Cleaning up as the work progresses, including provision of dust control as required, specified and approved;
- 12) Cleaning, and testing the completed pipe line and repairing all leaks and imperfections disclosed thereby;
- 13) All other work required for a complete and satisfactorily operating pipe line system;
- 14) Conformance with State and Federal Safety Requirements;
- 15) Adhering to all regulations of WPCA (including obtaining all necessary permits);
- 16) All work specified or shown which is not included under any other item.
- 17) Locating underground utilities
- 18) Relocating interfering utilities where such DIRECT conflicts are shown on the Contract Drawings indicate that the utility shall be relocated;
- 19) Special construction requirements as required by all permits and approvals (identified on the drawings or in these specifications or contractor acquired permits and approvals).
- 20) Obtaining and paying for permit for dewatering discharges.
- 21) Testing of lines (physical and hydrostatic).

Sect 6.02 WORK NOT INCLUDED

The following work is not included under this Item.

- a) Furnishing and placing additional foundation material for pipe, as ordered;
- b) Relocating interfering utilities, where direct conflict exists but is not shown on the Contract Drawings;
- c) Rock excavation; and,
- d) Furnishing and installing wet well, and appurtenances.
- e) This Item does not include work described in, or payable under, other items in this contract.

Sect 6.03 GENERAL REQUIREMENTS

Work under this Bid Item shall conform to the following General Specifications:

Section S1 – Earthwork and Backfill Section S3 – Pipes

The attention of the Contractor is directed to the requirement that no portion of trench will be permitted to remain exposed overnight, unless otherwise approved.

Connections to existing wet well shall be made as approved, using approved couplings or adapters so as to make a flexible, watertight joint, even with pipes of different materials.

Sect. 6.04 METHOD OF MEASUREMENT

The quantity of gravity sewer pipe to be measured shall be the number of linear feet of pipe installed. It should be noted that the contract documents represent the linear feet of pipe from the face of wet well to face of wet well.

Sect. 6.05 BASIS OF PAYMENT

The prices bid shall cover all costs of furnishing and installing the gravity pipe, including all materials, equipment, tools, and labor incidental thereto. The price bid shall cover all cost of connecting into the existing wet well with all appurtenances including materials, equipment, tools and labor incidental thereto. Prices shall include construction layout; pipe, fittings and appurtenances; flow diversion/by-pass pumping; excavation; protecting subsurface facilities; removing and disposing of all excess material including unsuitable excavation materials; pipe; bedding; backfilling; compaction; dewatering; testing and all other work and materials described hereinabove.

CONTRACT ITEM 7 CONNECT TO EXISTING WET WELL

Sect 7.01 WORK INCLUDED

Under this Item, the Contractor shall core drill through an existing wet well, and parge the pipe connection.

Sect. 7.02 WORK NOT INCLUDED

This Item does not include work described in, or payable under, other items in this contract.

Sect. 7.03 GENERAL REQUIREMENTS

Work under this Item, shall conform to the following General Specifications:

Sect. S 1 – Earthwork and Backfill

Sect. S 3 – Pipes

Sect. 7.04 METHOD OF MEASUREMENT

The quantity to be measured for payment under this Item shall be the number of connections to be made to existing wet well.

Sect. 7.05 BASIS OF PAYMENT

The price bid shall cover all cost of connecting into the existing wet well with all appurtenances including all materials, equipment, tools and labor incidental thereto. Price shall also include but not be limited to excavation; flow diversion/bypass pumping; removing and disposing of all excess material including excavation materials; backfilling; compaction; sheeting; shoring and bracing; dewatering; concrete and all other work and materials described hereinabove.

CONTRACT ITEM 9 TEMPORARY RELOCATE EXISTING WET WELL ELECTRICAL LINES AND VENT PIPE

Sect. 9.01 WORK INCLUDED

Under this Item, the Contractor shall temporary relocate existing wet well electrical lines and vent pipe to satisfactory operation and guarantee all work and equipment for a complete electrical and instrumentation system for the existing wet well. Contractor shall relocate the existing electrical lines and vent pipe to their existing location after the installation of the 12-inch sewer pipe or to a location specified by the BWPCA.

Sect. 9.02 WORK NOT INCLUDED

This Item does not include work described in or payable under other items of this contract.

All work shall conform to the requirements of the Specifications and all other Contract Documents.

Sect. 9.03 GENERAL REQUIREMENTS

Work under this item shall conform to the following General Specifications:

Section 16010 – Electrical Demolition; Section 16120 – Conductors and Cables; Section 16130 – Raceways and Boxes; and

Sect. 9.04 METHOD OF MEASUREMENT

Electrical work for the temporary relocation of the existing wet well electoral lines and vent pipe shall be measured by the lump sum.

Sect. 9.05 BASIS OF PAYMENT

The lump sum price bid under this Item shall cover all costs of electrical and instrumentation work specified and required, including all work specified in the Contract Drawings. This work shall include the temporary relocation and the final location at determined by the WPCA. Payment shall be made based upon the schedule of values to be agreed upon by the contractor and engineer.

CONTRACT ITEM 10 REPAIR EXISITNG WET WELL CONCRETE SLAB

Sect 10.01 WORK INCLUDED

Under this Item, the Contractor shall repair the existing wet well concrete slab in accordance with the contract documents. The contractor shall dowel with #4 bar into the existing concrete slab 6 inches and every 18 inches on center. The contractor shall place 4,000 psi concrete and match the existing thickness of the slab in the area shown in the contractor documents.

Sect. 10.02 WORK NOT INCLUDED

This Item does not include work described in, or payable under, other items in this contract.

Sect. 10.03 GENERAL REQUIREMENTS

Work under this Item, shall conform to the following General Specifications:

Sect. S 2 - Concrete

Sect. 10.04 METHOD OF MEASUREMENT

The quantity to be measured for payment under this Item shall be the square feet of concrete restoration.

Sect. 10.05 BASIS OF PAYMENT

The price bid shall cover all cost of repairing the existing wet well concrete slab including all materials, equipment, tools and labor incidental thereto. Price shall also include but not be limited to excavation; removing and disposing of all excess material including excavation materials and concrete and all other work and materials described hereinabove.

CONTRACT ITEM 11 REMOVE GENERATOR, FUEL TANK AND ASSOCIATED COMPONENTS

Sect. 11.01 WORK INCLUDED

Under this Item, the Contractor shall remove the generator, fuel tank and associated components in the pump house to the satisfaction of the Brookfield Water Pollution Control Authority.

Sect. 11.02 WORK NOT INCLUDED

This Item does not include work described in or payable under other items of this contract.

All work shall conform to the requirements of the Specifications and all other Contract Documents.

Sect. 11.03 GENERAL REQUIREMENTS

Work under this item shall conform to the following General Specifications:

Section 16010 - Electrical Demolition;

Sect. 11.04 METHOD OF MEASUREMENT

The removal of the generator, fuel tank and associated components work shall be measured by the lump sum.

Sect. 11.05 BASIS OF PAYMENT

The lump sum price bid under this Item shall cover all costs of the generator, fuel tank and associated components to be removed and disposed of off-site to the satisfaction of the Brookfield Water Pollution Control Authority. Payment shall be made based upon the schedule of values to be agreed upon by the contractor and engineer.

CONTRACT ITEM 12 REPAIR PUMP STATION BUILDING WALL WITH CONCRETE BLOCKS

Sect. 12.01 WORK INCLUDED

Under this Item, the Contractor shall repair pump station building wall at the location of the generator intake fan with concrete blocks to the satisfaction of the Brookfield Water Pollution Control Authority.

Sect. 12.02 WORK NOT INCLUDED

This Item does not include work described in or payable under other items of this contract.

All work shall conform to the requirements of the Specifications and all other Contract Documents.

Sect. 12.03 GENERAL REQUIREMENTS

This Item does not include work described in, or payable under, other items in this contract.

Sect. 12.04 METHOD OF MEASUREMENT

The repair of the pump station wall with concrete blocks work shall be measured by the lump sum.

Sect. 12.05 BASIS OF PAYMENT

The lump sum price bid under this Item shall cover all costs of the repair of the pump station building wall at the location of the generator intake fan off-site to the satisfaction of the Brookfield Water Pollution Control Authority. The lump sum price shall cover all costs furnishing and repairing the wall including all materials, equipment, tools and labor incidental thereto.

CONTRACT ITEM 13 LAWN RESTORATION

Sect. 13.01 DESCRIPTION

Under this item, the Contractor shall furnish all labor, materials, and equipment necessary to restore grassed areas in accordance with the plans and specifications.

Sect. 13.02 GENERAL REQUIREMENTS

This Item does not include work described in, or payable under, other items in this contract.

Section 13.03 METHOD OF MEASUREMENT

This work will be measured by the number of square feet of grass area restoration. It should be noted that the payment for lawn restoration will be made based on the quantity measured in the Field. There will be no additional payment for lawn disturbance beyond the necessary limit.

Section 13.04 BASIS OF PAYMENT

The square foot bid price for this item shall be full payment for furnishing all labor, equipment and materials, necessary to complete the lawn restoration as shown on the drawings and specified herein.

CONTRACT ITEM 14 REPAIR DRIVEWAY

Sect. 14.01 DESCRIPTION

Under this item, the Contractor shall furnish all labor, materials, and equipment necessary to place Item 4 in accordance with the plans and specifications. This driveway is to be maintained throughout construction. The driveway shall be ready to be placed asphalt at the end of construction.

Sect. 14.02 GENERAL REQUIREMENTS

This Item does not include work described in, or payable under, other items in this contract.

Section 14.03 METHOD OF MEASUREMENT

This work will be measured by the number of square feet of item 4. No measurement will be made for maintenance, repairs, or replacement of defective material. The item 4 disturbance limits demonstrated on the contract documents are the maximum Limits indicated. It should be noted that the payment for item 4 will be made based on the quantity measured in the Field. There will be no additional payment for item 4 disturbance beyond the maximum Limit unless previous approval is granted by the engineer or the Brookfield WPCA representatives in writing.

Section 14.04 BASIS OF PAYMENT

The square foot bid price for this item shall be full payment for furnishing all labor, equipment and materials, including the preparation, placing of item 4, and rolling necessary to complete the driveway repair as shown on the drawings and specified herein.

CONTRACT ITEM 15 SILT FENCE

Sect 15.01 WORK INCLUDED

Under this Item, the Contractor shall furnish and install silt fence as specified on the contract drawings. The Engineer may order additional control measures if the measures installed per the contract documents prove insufficient.

Sect. 15.02 WORK NOT INCLUDED

This Item does not include work described in, or payable under, other items in this contract.

Sect. 15.03 GENERAL REQUIREMENTS

Work under this Item, shall conform to the following General Specifications:

Sect. S 5 – Erosion and Sediment Control

Sect. 15.04 METHOD OF MEASUREMENT

This work will be measured by the number of linear feet (measured horizontally between the extreme outer limits of the silt fence) installed as shown on the plans or as ordered by the Engineer. No measurement will be made for maintenance, repairs, or replacement of defective material, seams, overlaps, or removal of fencing after the project area has been deemed stabilized by the WPCA. Refer to silt fence detail within contact documents for additional information.

Sect. 15.05 BASIS OF PAYMENT

The unit price bids for silt fence shall cover all costs of furnishing and installing silt fence noted in the contract documents including all materials, equipment, tools and labor incidental thereto.

CONTRACT ITEM 16 STABILIZED CONSTRUCTION ENTRANCE

Sect 16.01 WORK INCLUDED

Under this Item, the Contractor shall furnish and install the stabilized construction entrance as specified on the contract drawings. The Engineer or Brookfield Water Pollution Control Authority may order additional material to be placed if the measures installed per the contract documents prove insufficient.

Sect. 16.02 WORK NOT INCLUDED

This Item does not include work described in, or payable under, other items in this contract.

Sect. 16.03 GENERAL REQUIREMENTS

Work under this Item, shall conform to the following General Specifications:

Sect. S 5 – Erosion and Sediment Control

Sect. 16.04 METHOD OF MEASUREMENT

This work will be measured by the number of each stabilized construction entrance installed as shown on the plans or as ordered by the Engineer. No payment will be made for maintenance, repairs, or replacement of material, or removal of stabilized construction entrance after the project area has been deemed stabilized by the WPCA. Refer to stabilized construction entrance detail within contact documents for additional information.

Sect. 16.05 BASIS OF PAYMENT

The unit price bids for the stabilized construction entrance shall cover all costs of furnishing and installing the stabilized construction entrance noted in the contract documents including all materials, equipment, tools and labor incidental thereto.

CONTRACT ITEM 17 ELECTRICAL CONNECTION

Sect. 17.01 WORK INCLUDED AND PAYMENT

Under this Item, the Contractor shall furnish, deliver, install, test, place in satisfactory operation and guarantee all work and equipment for a complete electrical and instrumentation system for the generator as described in the supplementary specifications attached to these specifications and the contract drawings.

Sect. 17.02 WORK NOT INCLUDED

This Item does not include work described in or payable under other items of this contract.

All work shall conform to the requirements of the Specifications and all other Contract Documents.

Sect. 17.03 GENERAL REQUIREMENTS

Work under this item shall conform to the following General Specifications:

Section 16010 - Electrical Demolition

Section 16050 – Basic Electrical Materials and Methods

Section 16060 – Grounding and Bonding

Section 16073 – Hangers and Supports

Section 16075 – Electrical Identification

Section 16120 - Conductors and Cables

Section 16130 – Raceways and Boxes

Section 16231 – Packaged Engine Generator

Section 16415 – Automatic Transfer Switches

Sect. 17.04 METHOD OF MEASUREMENT

Electrical work for the generator shall be measured by the lump sum.

Sect. 17.05 BASIS OF PAYMENT

The lump sum price bid under this Item shall cover all costs of electrical and instrumentation work specified and required, including all work specified in the Supplementary Specifications. Payment shall be made based upon the schedule of values to be agreed upon by the contractor and engineer.

CONTRACT ITEM 18 GAS LINE

Sect. 18.01 DESCRIPTION

Under this item, the Contractor shall furnish all labor, materials and equipment necessary to install the gas line in accordance with the plans and specifications. The thickness will be as indicated on the construction documents.

Sect. 18.02 GENERAL REQUIREMENTS

Work under this Item, shall conform to the following General Specifications:

Sect. S 1 – Earthwork and Backfill

Sect. 18.03 METHOD OF MEASUREMENT

The gas line shall be measured by the linear feet. Items of work covered by this bid item are as indicated on the project plans.

Sect. 18.04 BASIS OF PAYMENT

The unit price bid of the item shall cover all costs of furnishing and installing the gas line as noted in the contract documents including all material, equipment, tools, backfill, compaction and labor incidental thereto.

CONTRACT ITEM 19 BOLLARDS

Sect. 19.01 DESCRIPTION

Under this item, the Contractor shall furnish all labor, materials and equipment necessary to construct the steel bollards in accordance with the plans and specifications.

Sect. 19.02 GENERAL REQUIREMENTS

This Item does not include work described in, or payable under, other items in this contract.

Sect. 19.03 METHOD OF MEASUREMENT

This work will be measured by each number of bollards installed.

Sect. 19.04 BASIS OF PAYMENT

The prices bid shall cover all costs of furnishing and installing the bollards as incidental thereto.

CONTRACT ITEM 20 WET WELL AND SEWER LINE SHEETING AND SHORING

Sect. 20.01 WORK INCLUDED AND PAYMENT

Note: All design and investigation is the responsibility of the contractor.

Work required under this item includes:

- 1) Temporary sheeting and bracing, soil consolidation, or any other approved construction methods required to safeguard working conditions, public or private property and traffic;
- 2) Permanent sheeting and bracing for trenches where called for by the drawings and specifications, including submission of design of same for approval if ordered;

Payment for Sewer Sheeting & Shoring will be made at the lump sum price bid for this item in the proposal. Payment shall be payable upon completion of the project. The lump sum price bid for this item shall include all labor, material, submittals, equipment, and all work necessary to satisfactorily complete the work as specified.

CONTRACT ITEM 21 AS-BUILT

Sect 21.01 WORK INCLUDED

Under this Item, the Contractor shall furnish all labor, materials, and equipment necessary to complete an As-Built in accordance with the WPCA regulations.

Sect. 21.02 WORK NOT INCLUDED

This Item does not include work described in, or payable under, other items in this contract.

Sect. 21.03 METHOD OF MEASUREMENT

All work performed under this item shall be a lump sum. It shall include employment of a CT licensed professional land surveyor and personnel with electronic total station equipment to perform all work and provide all materials necessary for the proper as-built of the final grade, the location of all above and below grade structures, pavement, sewer, pipe inverts, and any other item shown on the plans. It shall also include submission of all certified drawings and electronic files and all other work and materials described hereinabove and as required to as-built the final project.

CONTRACT ITEM 22 ALLOWANCE FOR DEWATERING

Sect. 22.01 DESCRIPTION

Under this item, the Contractor shall furnish all labor, material, and equipment required to accomplish dewatering work, necessitated by having encountered, during the course of the work, field conditions of a nature not determinable during design, or for which no unit prices are applicable.

Section 22.02 METHOD OF MEASUREMENT

Only that dewatering work shall be performed by the Contractor and will be paid for by the WPCA as has been authorized by the Engineer in writing, prior to this commencement.

Section 22.03 BASIS OF PAYMENT

The total amount paid to the Contractor will be determined in accordance with the signed contract defining dewatering work, and such payment will include only that overhead and profit that is applicable to the work performed under this item.

The Contractor shall include in his total bid the fixed lump sum value printed in the proposal opposite this item. It should be noted that the Contractor is only entitled to payment against this item for work performed by the Contractor and authorized by the Engineer in writing. The total fixed lump sum value is not owed to the contractor.

CONTRACT ITEM 23 MISCELLANEOUS ADDITIONAL WORK

Sect. 23.01 DESCRIPTION

Under this item, the Contractor shall furnish all labor, material, and equipment required to accomplish miscellaneous additional work, necessitated by having encountered, during the course of the work, field conditions of a nature not determinable during design, or for which no unit prices are applicable.

Section 23.02 METHOD OF MEASUREMENT

Only that miscellaneous additional work shall be performed by the Contractor and will be paid for by the WPCA as has been authorized by the Engineer in writing, prior to this commencement.

Special Conditions, entitled "Deletion of Work" will still apply regarding that the work under the contract may be increased or decreased.

Section 23.03 BASIS OF PAYMENT

The total amount paid to the Contractor will be determined in accordance with the signed contract defining additional work, and such payment will include only that overhead and profit that is applicable to the work performed under this item.

The Contractor shall include in his total bid the fixed lump sum value printed in the proposal opposite this item. It should be noted that the Contractor is only entitled to payment against this item for work beyond the contract scope that has a written extra work approval by the WPCA or authorized representative. The total fixed lump sum value is not owed to the contractor. This amount is given for the purpose of canvas, and any bid other than the specified amount will be considered informal.

ATTACHMENT 1

A GUIDE TO PREVAILING WAGE LAWS IN THE STATE OF CONNECTICUT AND PREVAILING WAGE RATES

I. Introduction

Public Contract Compliance Unit

The Wage and Workplace Standards Division administers a wide range of laws that protect and promote the interests of Connecticut's 1.7 million workers. The Division also devotes considerable resources to encourage and assist Connecticut's 97,000 employers to comply with the laws primarily through seminars and educational materials. The Division is comprised of three separate compliance units: Employment Regulation and Minors Compliance; Wage and Hour Compliance; and Public Contract Compliance.

The Wage and Workplace Standards Division has primary responsibility for enforcement of the state's prevailing wage law, although other governmental entities and private parties also have roles. The Division encourages voluntary compliance with the law, and enforcement activities are focused on bringing violators into compliance rather than punishing them.

The Public Contract Compliance Unit handles oversight of the law. We respond to telephone inquiries regarding the law, investigate complaints, conduct payroll audits, perform site inspections on public works projects, and participate in educational activities aimed at improving public understanding of the law. The Division's Agents are empowered with the statutory authority to investigate and ascertain wages paid to workers in the state, including entering a workplace to examine records.

Summary of Connecticut's Prevailing Wage Law

In the 1930's, the federal government and 18 states, including Connecticut, adopted prevailing wage laws to ensure that the hourly wages commonly paid to construction workers in that area were maintained, and prevented the low bid requirements from reducing the market price for labor to levels that would disrupt the local economy. There are currently 30 states with prevailing wage laws. Connecticut's prevailing wage law is codified in Connecticut General Statutes Section 31-53 and 31-53a. The law applies to each contract for the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project by the State or its agents, or by any political subdivision of the State.

Coverage: Conn. Gen. Stat. Section 31-53(g) provides monetary thresholds which must be met before the law is applicable. The prevailing wage law does not apply where the total cost of all work to be performed by all contractors and subcontractors in connection with new construction of a public works project is less than four hundred thousand (\$400,000) dollars. The prevailing wages law does not apply where the total cost of all work to be performed by all contractors and subcontractors in connection with remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project under one hundred thousand (\$100,000) dollars.

Prevailing Rate: The prevailing wage rate consists of a base rate and a fringe benefit rate which may be paid in cash and/or benefits. Conn. Gen. Stat. Section 31-53(d) permits the Labor Commissioner to adopt and use the prevailing wage rate determinations as have been made by the Secretary of Labor of the United States under the provisions of the Davis-Bacon Act, as amended. The agent empowered to let such contract shall contact the Labor Commissioner at least ten, but not more than twenty days, prior to the date such contracts will be advertised for bid, to ascertain the proper prevailing rate. Under Public Act 02-69 the rates will be adjusted annually on or before July 1st of each year. These new rates will be on the Department of Labor website.

Certifications: Both the Contractor and the Contracting Agent must provide certifications to the Labor Commissioner. Prior to the award of any contract subject to the prevailing wage law, the contracting agent shall certify in writing to the Labor Commissioner the total dollar amount of work to be done in connection with the public works project, regardless of whether such project consists of one or more contracts. Upon the award of a contract subject to the prevailing wage law, the contractor who is awarded the contract shall also certify, under oath, to the Labor Commissioner the pay scale to be used by the contractor and any of his subcontractors for the work to be performed under the contract. Additionally, each employer subject to the prevailing wage law must file weekly certified payrolls with the contracting agent including but not

limited to: employee names; occupations; hours worked; rates paid; and the employers compliance with various provisions of law.

Penalties: There are various civil, criminal and administrative penalties for violations of the prevailing wage law. Failure to pay the prevailing rate is a crime which may be a felony depending upon the amount of unpaid wages. Knowingly filing a false certified payroll or failure to file a certified payroll is a Class D felony for which an employer may be fined up to five thousand dollars, imprisoned for up to five years, or both. Disregarding obligations under Conn. Gen. Stat. Section 31-53 may result in an administrative debarment which may preclude any firm, corporation, partnership or association in which such person or firms have an interest from receiving an award of a contract until a period of up to three years have elapsed. Additionally, civil penalties of \$300 per violation of law may also be assessed upon the employer.

FOR ADDITIONAL INFORMATION CONTACT:

WAGE AND WORKPLACE STANDARDS DIVISION PUBLIC CONTRACT COMPLIANCE UNIT (860) 263-6543

Summary of Changes in Prevailing Wage Law

Full Restitution/Disqualification Period

In addition to being fined not less than two thousand five hundred dollars but not more than five thousand dollars for each offense of failure to pay the prevailing wage, for the first violation, a person shall be disqualified from bidding on contracts with the state or any political subdivision until the contractor or subcontractor has made full restitution of the back wages owed to such persons and for an additional six months thereafter. For subsequent violations, the disqualification may increase to not less than an additional two years.

Withholding Payment

The law has been clarified so that if it is found by the contracting officer representing the state or political subdivision that there was a failure to pay the required prevailing rate to a mechanic, laborer or workman employed on the site, the state or political subdivision may withhold payment of money to the contractor or subcontractor.

Filing of Certified Payroll/Failure to File Certified Payroll

An employer subject to the prevailing wage law must now file the weekly certified payroll on a monthly basis (rather than weekly) with the contracting agency by mail, first class postage prepaid. Failure to file a certified payroll pursuant to subdivision (2) of section 31-53(f) is a class D felony for which the employer may be fined up to five thousand dollars, imprisoned for up to five years, or both.

Contracting Agency Withhold Contractor's Payment

The Contracting Agency is authorized to withhold payment of money owed to any contractor and subcontractor when it is found the prevailing wage has not been paid.

Annual Adjustment

Any contract awarded on or after October 2, 2002 requires all contractors and subcontractors to pay the annual prevailing wage rate increases posted on or before July 1st each year, after the issuing of the initial rate schedule by DOL for the project. The rates can be found at www.ct.gov/dol go to Wage and Workplace Standards Division, Prevailing Wage Information, Annual Prevailing Wage Rates by Town or at: http://www.ctdol.state.ct.us/wgwkstnd/prevailing-rates/rates.htm.

Debarment Certification

Each contractor and subcontractor must certify in writing to the general contractor/prime contractor or construction manager that they are not debarred. Any contractor or subcontractor who performs work on a prevailing wage project while debarred will be fined \$1,000.00 per day.

The PERSONS Act

Effective October 1, 2005 ALL PERSONS who perform work as a mechanic or laborer on site MUST be paid the prevailing wage rate and be reported on the certified payroll. This includes Owners, Corporate Officers, LLC Members, and Independent Contractors. Reporting and payment of wages weekly is required regardless of any contractual relationship alleged to exist between the contractor and such person.

SOSHA SAFETY AND HEALTH CERTIFICATION

Any contract awarded on or after July 1,2009 requires any mechanic, laborer, or worker who performs work in a classification listed on the prevailing wage rate schedule on any public works project is required to complete a ten (10) hour federal OSHA safety and health course and provide proof of completion. Contractors must provide proof of completion by attaching a copy of each certification card with the first certified payroll in which such mechanic, laborer, or worker performed work.

For questions relating to the prevailing wage law, call Public Contract Compliance Unit, Wage & Workplace Standards Division at the Department of Labor (860) 263-6543.

Annual Adjustments Notice

~ Special Notice ~

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

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

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

- The prevailing wage rates applicable to any contract or subcontract awarded on or after October 1, 2002 are subject to annual adjustments each July 1st for the duration of any project which was originally advertised for bid on or after October 1, 2002.
- Each contractor affected by the above requirement shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.
- It is the **contractor's** responsibility to obtain the annual adjusted prevailing wage rate increases directly from the Department of Labor's Web Site. The annual adjustments will be posted on the Department of Labor Web page: http://www.ct.gov/dol. For those without Internet access, please contact the division listed below.
- The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project. All subsequent annual adjustments will be posted on our Web Site for contractor access.
- Contracting Agencies are under no obligation pursuant to State labor law to pay any increase due to the annual adjustment provision.

Any questions should be directed to the Contract Compliance Unit, Wage and Workplace Standards Division, Connecticut Department of Labor, 200 Folly Brook Blvd., Wethersfield, CT 06109 at (860) 263-6543.

Informational Bulletin The 10-Hour OSHA Construction Safety and Health Course

(Applicable to public works projects entered into *on or after July* 1, 2009, where the total cost of all work to be performed is at least \$100,000.)

- This requirement was created by Public Act No.08-83, which is codified in Section 31-53b of the Connecticut General Statutes (pertaining to the prevailing wage statutes);
- 2. The course is required for public works construction projects (projects funded in whole or in part by the state or any political subdivision of the state) entered into on or after July 1,2009;
- 3. It is required of mechanic, laborer, or worker (not state or municipal employees) and apprentices who perform manual labor for a general contractor or subcontractor on a public works project where the total cost of all work to be performed is at least \$100,000;
- 4. The ten-hour OSHA safety course pertains to the ten-hour Outreach Course conducted in accordance with federal OSHA Training Institute standards, and, for telecommunications workers, a ten-hour training course conducted in accordance with federal OSHA standard, 29 CFR 1910.268;
- 5. The internet website for the federal OSHA Training Institute is http://www.osha.gov/dte/oti/index.html;
 - The statutory language leaves it to the contractor and its employees to determine who pays for the cost of the ten-hour Outreach Course;
- 6. Proof of completion may be demonstrated through either: (a) the presentation of a bona fide student course completion card issued by the federal OSHA Training Institute; or (2) the presentation of documentation provided to an employee by a trainer certified by the Institute pending the actual issuance of the completion card;
- 7. Any card with an issuance date more than 5 years prior to the commencement date of the construction project shall not constitute proof of compliance;

- 8. Each employer shall affix a copy of the construction safety course completion card to the certified payroll submitted to the contracting agency in accordance with Conn. Gen. Stat. §31-53(f) on which such employee's name first appears;
- 9. Any mechanic, laborer, or worker who is found to be in non-compliance shall be subject to removal from the worksite if such mechanic, laborer, or worker does not provide satisfactory proof of course completion to the Labor Commissioner by the fifteenth day after the date the mechanic, laborer, or worker is determined to be in noncompliance;
- 10. Any such mechanic, laborer, or worker who is determined to be in noncompliance may continue to work on a public construction project for a maximum of fourteen consecutive calendar days while bringing his or her status into compliance;
- 11. The Labor Commissioner may make complaint to the prosecuting authorities regarding any contractor or agent of the contractor, or officer or agent of the corporation who files a false certified payroll with respect to the status of a mechanic, laborer, or worker who is performing manual labor on a public works construction project;
- 12. The statute provides the minimum standards required for the completion of a safety course by manual laborers on public works projects;, any contractor can exceed these minimum requirements; and
- 13. Regulations clarifying the statute are currently posted on the CTDOL website at: http://www.ctdol.state.ct.us/wgwkstnd/prevailwage.htm
 http://www.ctdol.state.ct.us/wgwkstnd/ConstSafetyFinalRegs.pdf
- 14. Any questions regarding this statute may be directed to the Wage and Workplace Standards Division of the Connecticut Labor Department by telephone at (860) 263-6543 or via the internet website of http://www.ctdol.state.ct.us/wgwkstnd/wgemenu.htm

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

II. Information for Contracting Agencies

Some Basic Definitions and Questions Regarding Section 31-53

What is a public works project?

Construction projects financed by the government for the benefit or use of the general public. Projects can be classified as building, heavy, highway or residential (under 4 stories). Note: Under current law, the state or political subdivision must award the contract and be a party to the contract and not be a mere grantor of funds for the project to be covered.

Are all public works projects covered under the prevailing wage law?

As of July 1, 1991, pursuant to public act 91-74, the prevailing wage law does not apply to the rehabilitation, remodeling, refinishing, refurbishing, alteration or repair of any project where the total cost of all work performed by contractors and subcontractors is less than \$100,000. Under new construction, the law does not apply when the total cost of all work performed is less than \$400,000. For a project to be considered "New" construction, the site of work must have had nothing there to begin with.

What is prevailing wage?

The minimum rate that is 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.

How is prevailing wage determined?

Since 1977, the Labor Commissioner has adopted and used the prevailing wage rate determinations as have been made by the United States Secretary of Labor, under the provisions of the Davis-Bacon Act, as amended.

What is the obligation of the contracting agency in obtaining prevailing wage rate schedules?

The contracting agency or agent empowered to let a public works contract shall contact the Labor Commissioner at least ten (10) days, but not more than twenty (20) days prior to the date such contracts will be advertised for bid. These initial Rate Schedules are "Project Specific" and cannot be downloaded from the DOL

Web page.

The Date on the initial rate schedule cannot be more than 20 days prior to the Advertise For Bid Date --- If the project is NOT advertised within 20 days of the Date appearing on the rate schedule, the Contracting Agency must contact the DOL by telephone or by Fax to obtain an updated Initial rate schedule. Rate schedules MUST be included in the Bid Documents / Bid Specifications at the time of Bid, and not provided later through an addendum.

Contracting agency shall request the initial prevailing wage rate schedules when:

- Entire Projects advertised and competitively bid awarded to GC or CM
- Solicitation of Bids for Design/Build project
- o Request for Proposals, individual Purchase Orders
- Each Phase of a project or each Prime Contract that is advertised separately by the CA or CM
- Lease arrangements where construction or renovation is required or authorized by State or Political Subdivision
- Contract Administrator or Construction manager negotiates a contract to administer a project for the Contracting Agency – Initial Rates required for each package when advertised

For example:

If a contract is advertised to bid on January 30, then the initial request for a prevailing wage rate schedule should be made no later than January 20 and no earlier than January 10 to comply with the law.

Any initial prevailing wage rate schedule dated more than twenty (20) days prior to the advertise for bid date is no longer valid and must be updated. The contracting agency can obtain updated rates by calling (860) 263-6549.

Also, be aware that contracting agencies cannot use the Annual Rates downloaded from the DOL website in the initial bid package. Annual Rates ONLY apply to ongoing projects and go into effect each July 1st. If the Annual Rates are improperly used in the initial bid package, the contracting agency may subject to a financial liability if the correct rates are higher.

Contracting Agency Responsibilities

The Contracting Agency may designate their Agents (Construction Administrator, Construction Manager, Clerk of the Works) to act on their behalf.

- 1. Contact the Department of Labor, in writing, to request a prevailing wage rate schedule for each prevailing wage project.
 - Rate Schedules are "Project Specific", not Generic.
 - Date on Rate Schedule cannot be more than 20 days prior to the Advertise for Bid Date.
 - Rate Schedules MUST be included in the Bid Specifications at the Time of Bid, not provided later through an addendum.
 - If the project does not go out to Bid within the 20 days from the date the Rate Schedule was issued, you must contact DOL (by Phone or Fax) to request an update.
- 2. Each contract must quote C.G.S. Section 31-53(a), that mandates the requirements of prevailing wage rates. A mere statutory reference is not sufficient.
- Certify to the Department of Labor the total dollar amount of work to be done in connection with the public works project, regardless of whether the project consists of One or More Contracts.
- 4. Provide Contractor's Wage Certification Form and up to date Certified Payroll Form to Contractor.
- 5. Review State Debarment List to ensure all contractors and subcontractors performing work on project are not Debarred.
- 6. Collect weekly certified payrolls on a monthly basis, by mail (retaining the envelope).
- Certified payrolls are a public document that must be made available to anyone upon request immediately if in person to view. Copies must be made available within 4 days upon receipt of written request.
- 8. Conduct on site labor wage checks and maintain Daily Job Reports/Diaries.

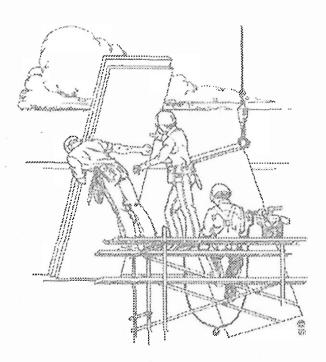
- 9. Review certified payrolls for compliance and Refer discrepancies to the Department of Labor for investigation.
- 10. Withhold payment where violation of wage payment is documented and pay directly to worker, or pay through the Department of Labor on behalf of worker all wages due.

TO ALL CONTRACTING AGENCIES

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

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

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



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

CONTRACTING AGENCY CERTIFICATION FORM

I,, acting in my official capacity as,			
authoriz	zed representative	title	
for	, locate	ed at	
con	tracting agency	address	
do hereby ce	rtify that the total dollar amount of w	work to be done in connection with	
	, lo	ocated at	
proje	ect name and number	address	
shall be \$, which includes all	work, regardless of whether such project	
consists of or	ne or more contracts.		
	CONTRACTOR	INFORMATION	
Name:			
Address:			
Authorized I	Representative:		
Approximate	e Starting Date:	· 	
Approximate	e Completion Date:		
	Signature	Date	
Return To:	Connecticut Department of Labor		
	Wage & Workplace Standards Di Contract Compliance Unit	vision	
•	200 Folly Brook Blvd.		
	Wethersfield, CT 06109		

CONNECTICUT DEPARTMENT OF LABOR

Wage and Workplace Standards Division PREVAILING WAGE RATES REQUEST FORM

CONTRACTING AGENCY/POLITICAL SUBDIVISION OR THEIR AGENT REQUESTING RATES

Project Name and Number (If Applicable):	
Location of Project: Project Description:	
Total Cost of Project:	
Estimated Duration of the Project: Start Date: End Date: Date Advertised to Bid:	
 ✓ CHECK THE TYPE OF SCHEDULE(S) NEEDED: 1) BUILDING □ 2) HEAVY/HIGHWAY □ 3) RESIDENTIAL □ 4) SPANISH RATES (available in Building Only upon request) □ 	
MAIL PICK-UP OR E-MAIL (provide email address)	
Please fax or mail to: Connecticut Department of Labor Wage & Workplace Standards Division Attention: Holly Carter 200 Folly Brook Blvd. Wethersfield, CT 06109 Fax Number (860)263-6541 Telephone Number (860)263-6549	

As required by law please submit requests for rates at least ten (10) days but not more than twenty (20) days prior to the

WWW.CTDOL.STATE,CT.US/WGWKSTND/FORMS/PREVWGFM,HTM

Request Initial Rates on Line:

NAME, ADDRESS, AND TELEPHONE NUMBER OF PERSON REQUESTING RATES:

date of advertisement for bid.

What is a Public Works Project?

Connecticut General Statutes Section 31-53 Public Works Projects

This summary is intended to provide the basis for the Division's determinations as to whether projects by the State or its agents (and political subdivisions or their agents) are covered for prevailing wage purposes.

The prevailing wage law was enacted to provide for competitive bidding on a level playing field and at the same time provide an appropriate standard of living for Connecticut's workers. Over the years, the law has withstood many repeal attempts. In the 1993 and 1997 legislative sessions, the law was actually strengthened to ensure increased compliance.

However, the legislature has recognized that not all projects should be covered by the prevailing wage law. Instead of exempting specific construction projects the legislature has applied a monetary threshold test. There are essentially two categories of construction outlined in the statute (1) new construction and (2) any remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works projects. The threshold for new construction has increased over the years from \$50,000 of total cost of all work to be performed to the current \$400,000 which was mandated in 1991. The other category has increased from \$10,000 to the current \$100,000 of total cost. Again, the legislative response to exempting projects was to raise the monetary thresholds.

The Labor Department's role is to interpret the law consistently with legislative intent. Toward that end, the Division has had to commit extensive resources in enforcement of the law.

The Division issues prevailing wage schedules upon the request of the contracting agency or their agents. Agents can be purchasing officers, boards of education, architects and other individuals. The means that the initial assessment as to whether a project is covered is made by the contacting agency, not the Department of Labor. Section 31-53(e) states in part:

... The agent empowered to let such contract shall contact the Labor Commissioner at least ten but not more than twenty days prior to the date such contracts will be advertised for bid, to ascertain the proper rate of wages

However, when a contracting agency is unsure of the applicability of the law, it should contact the Division. The Division also determines coverage if a complaint is received where no rates have been issued.

The following guidelines are used by the Division to determine the applicability of the law.

- At the outset, a question arises as to what is a public works project. Although, section 31-53 does not specifically define public works project, the Division has historically relied upon the accepted dictionary definition of public works as "Construction projects, such as highways or dams financed by public funds and constructed by a government for the general public". Webster 's II New Riverside University Dictionary.
- The Division also looks to the Federal Davis-Bacon Act for guidance especially since Federal Davis-Bacon rates were adopted in 1977. The definition of a public works project under Title 29, Part 5 of the Code of Federal Regulations covers contracts federally financed or assisted construction. Section 5.2k provides:

the term "Public building" or "public work" includes building or work, the construction, prosecution, completion, or repair of which as defined above is carried on directly by authority of or with funds of a Federal Agency to serve the interest of the general public regardless of whether title thereof is in a federal agency.

These two definitions are consistent with each other and essentially require that the State's (or agent or political subdivision) funds are utilized for the construction, rehabilitation or repair of a project which serves the interest of the general public.

One common question relating to this definition is whether grant-in-aid agreements where the State or political subdivision is not the contracting agency for the construction, are considered projects subject to the prevailing wage law. The Department has historically concluded that when a grantee receives funds for a primarily private benefit, the subsequent construction would not be covered under Section 31-53. The state or political subdivision must be a party to the funding agreement and the entity for which the work is to be done. The basic rule has been utilized by the Division in finding that grant-in-aid agreements where (1) the State or political subdivision does not let out the contract, and (2) the general public does not receive a benefit - are not covered under Section 31-53.

Once it is determined that the project is a public works project several scenarios may develop where the coverage of the law is not evident or confusing to the contracting agencies. The following is a list of such scenarios with responses based on past enforcement practices of the Division:

Scenario #1: There is no classification of the work that will be performed.

Under Section 31-53(d) the Labor Commissioner may either (a) predetermine the prevailing rate of wages by holding hearings in the locality where the work is to be performed or (b) adopt and use the Federal Davis-Bacon rates which are published approximately every three months and are based upon surveys of prevailing practices in Connecticut. Since 1977, the practice of the Labor Commissioner has been to adopt and use the Federal Davis-Bacon rates. If a specific classification is not listed, the contracting agency can request the Department of Labor to issue a conformance rate specific to said project. This Division will look for conformity with existing classifications and again look at prevailing practice.

Scenario #2: The total cost of one part of the project does not exceed the threshold or the cost borders on the thresholds.

A question often asked is whether each aspect of a contract can be looked at separately. For example, can we look at just the electrical work, mechanical, or carpentry etc and if each segment does not reach the \$100,000 threshold separately is the project covered? Section 31-53(g) states that "the provisions of this section shall not apply where the total cost of all work to be performed by all contractors and subcontractors in connection with any remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project is less than \$100,000 dollars". This section has been interpreted to mean that the entire cost of the project must be included to determine whether the threshold should be met. The interpretation was conveyed to DAS in 1986 when it asked whether a task labor contract for work performed at UConn and UConn Health Center was covered. This contract asked for bids by the hour for electrical, painting, carpentry, and plumbing and although each aspect might be under \$100,000, the total cost of the contract was close to \$1 million. The Division responded that these contracts would be covered.

Another situation arises when the project is estimated at over the threshold, but the bids come in under the threshold. If the project bids are close to the threshold then in all likelihood one change order will push the project over the top. It has been the policy of the Division to apply the threshold requirements of Section 31-53(g) retroactively in the situation where a contractor bids a project and then subsequent change orders bring the total cost of all work to be performed on the project over the threshold amount. In this type of situation, the Division will look to the contractor or subcontractor for reimbursement of wages at the prevailing rate from the first day work was performed on the project. However, if the contractor can demonstrate that he/she bid in good faith, but there was a major factor - unknown at the time of the bid - which resulted in the change order, the prevailing rate will not be applied retroactively, but from the date of the discovered change in the project.

Scenario #3: The contract requires purchase of equipment and installation.

An issue may arise as to the coverage of a project when it requires purchases of supplies and installation, as well as construction components. For example, a contract which meets the threshold otherwise may involve an alteration to update a computer system and the substantial portion of the funds is for supplies and installation. Again, the Division looks to the Federal Davis-Bacon Act for guidance. Specifically, in the Field Operation Handbook for the U.S. Department of Labor, Section 15 d 10 discusses the criteria for determinations:

- a. Installation work performed in conjunction with supply or service (e.g., base support) contracts is covered by the DBRA where it involves more than an incidental amount of construction activity (i.e., the contract contains specific requirements for substantial amounts of construction, reconstruction, alteration, or repair work, and such work is physically or functionally separate from the contract (see Reg. 4.116(c)(2)). For example, D-B coverage has been extended to installing a security system or an intrusion detection system, installing permanent shelving which is attached to a structure, installing air-conditioning ducts, excavating outside cable trenches and laying cable, installing heavy generators, grounding systems, where a substantial amount of construction work is involved.
- b. Whether installation work involves more than an incidental amount of construction activity depends upon the special circumstances of each particular case and no fixed rules can be established which would accommodate the facts of every situation. Factors requiring consideration include the nature of the prime contract work, the type of work performed by the employees installing the equipment on the project site (i.e., the techniques, materials, and equipment used and the skills called for in its performance), the extent to which structural modifications to buildings are needed and the cost of the installation work -- either in terms of absolute amount or in relation to the cost of the equipment and the total project cost.

The above handbook sections are consistent with federal case law and administrative Wage Appeal Board cases. Obviously, these are fact specific cases and each situation has to be judged based on the particulars of each project. This issue has only recently been raised with respect to a large project involving the installation of a telecommunications system for an office building leased by the State. This project must be evaluated based upon the above criteria.

Scenario #4: The State or political subdivision has entered into a lease agreement.

Questions may also arise as to coverage when the State or political subdivision leases property where construction or renovation is involved. The Division has recently concluded that there is no requirement that the State or political subdivision be the holder of title to the property subject to construction, renovation, addition or alteration

as a prerequisite to coverage under Section 31-53. Like the Davis-Bacon Act, Connecticut's law does not specifically address such situations; however, the Courts have upheld the U.S. Department of Labor's practice of applying Davis-Bacon rates to projects where the property is leased not owned by the federal Government.

"The Court finds that it is reasonable to conclude, as the Wage Appeals Board has done, that the nature of the contract is not controlling so long as construction work is part of it." *Building and Construction Trades Department, AFL-CIO, et al., v. Turnge* Civ. A. No. 87-2827. U.S. Dist. Court, District of Columbia.

The Field Operations Handbook Sec. 15b06 also addresses lease situations:

Where the Government enters into a lease/purchase agreement D-B applies, because the cost of the construction is eventually paid for by the Government. D-B also applies to a lease option or to a term lease agreement where there is substantial and segregable construction activity, and where the structure is a public building or public work. This may be true, for example, where the building is built at the request of the Government pursuant to Government specifications for Government use or purpose for the period of the lease.

Recently, we have seen quite a few lease projects where title is not held with the State, but the construction is clearly authorized and paid for by the State. In this type of situation, there should be a contract which describes the construction work or renovations to be performed. Even if the contract is called a "lease agreement" and even if it is between the State and the owner of the property who eventually subcontracts the actual construction, it is work carried on by the authority of the State or with funds of the State and is thus subject to the mandates of Section 31-53.

In lease arrangements, it is necessary to confirm that the contract (or lease agreement) contains provisions regarding the construction or renovation, alteration or repair required or authorized by the State or political subdivision. If it can be shown that the construction is not required by the State or political subdivision before it will enter into or continue in a lease agreement, the mere increase in lease payments which reflects the owner passing along a portion of his cost in the improvements would not render the agreement subject to Section 31-53.

Our experience has shown that during economic times where private construction is minimal there is tremendous competition to win government contracts. It is also during this time that there is increased pressure on contracting agencies to lower the cost of projects. However, without regard to the various arguments surrounding the impact of prevailing wage on the cost of construction, it is important for the Labor Department to stay the course despite market fluctuation. Over the years, this has been done to the benefit of contractors, workers, and agencies who need to know there is consistency in maintaining a "level playing field".

Coverage When Bid Under \$100,000 Threshold

In response to the question regarding this agency's interpretation of the applicability of Connecticut General Statutes Section 31-53 to projects which are bid under \$100,000, but through change orders subsequently meet the threshold requirement of Connecticut General Statutes Section 31-53(g).

Connecticut General Statutes Section 31-53(g) states:

The provisions of this section shall not apply where the <u>total cost of all</u> work to be performed by all contractors and subcontractors in connection with new construction of any public works project is less than four hundred thousand dollars or where the <u>total cost of all work</u> to be performed by all contractors and subcontractors in connection with any remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project is less than one hundred thousand dollars.

It has been the policy of the Wage & Workplace Standards Division, the enforcement unit for the prevailing wage law, to apply the threshold requirements of Connecticut General Statutes Section 31-53(g), retroactively in the situation where a contractor bids a project and then subsequent change orders bring the total cost of all work to be performed on the project over the threshold amount (\$100,000 alteration, rehabilitation, renovation or \$400,000 new construction). In this type of situation the Division will look to the contractor or subcontractor for reimbursement of wages at the prevailing rate from the first day work was performed on the project.

The language of this section must be read consistent with the intent of the legislation in ensuring that mechanics, laborers or workers employed on substantial public works projects be paid the prevailing rate of pay. This is the only practical interpretation to be given to this provision to avoid the purposeful underbidding of contracts to avoid compliance with the statute. However, if the contractor can demonstrate that he/she bid in good faith, and there was a major factor - unknown at the time of the bid - which resulted in the change order, the prevailing rate will not be applied retroactively, but from the date of the discovered change in the project.

We do not look to the contracting agency to pay the difference in rate. From our perspective, it is the statutory responsibility of the contractor/ subcontractor to ensure that prevailing rates are paid to the workers on the job. It may be necessary for the Contracting Agency to confer with their attorney regarding your agency's contractual

obligation to pay the contractor or subcontractor the reimbursement for the prevailing wages in this type of situation.

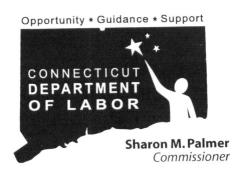
As a matter of policy, we suggest for projects which come close to prevailing rate thresholds, that prevailing rates be made a term in the contracts. This would serve the dual purpose of protecting the agency from potential contractual liability when the inevitable change orders start to appear and also would prevent the purposeful underbidding of contracts on public works projects.

State Debarment List

Connecticut General Statues, Section 31-53a directs the Commissioner of Labor to distribute a list of all persons and firms found to have disregarded their prevailing wage obligations. This list is published at least twice a year and posted on the DOL Web Page.

The law states that No contract shall be awarded to the person or firms appearing on this list or to any firm, corporation, partnership, or association in which such person or firms have an interest until the expiration date listed has elapsed.

This includes any other business in which the individual debarred has at least 10% interest. This prohibits a debarred individual from opening or operating another business for the purposes of performing work on prevailing wage while debarred as an individual.



State of Connecticut Debarment List Pursuant to Section 31-53a(a)

No contract shall be awarded to any person or firms appearing on this list or to any firm, corporation, partnership, or association in which such persons or firms have an interest until the expiration date listed has elapsed.

Please be informed that the following persons or firms have been debarred in accordance with Section 31-53a of the Connecticut General Statutes, as amended:

DEBARMENT LIST

Name of Person or Firm	Expiration Date
-Pine Ridge Enterprises Inc., Wallingford	August 7, 2013
Anai Kijewski, an individual	August 7, 2013
Chester Kijewski, an individual	August 7, 2013
-All Acoustical Ceilings LLC	December 1, 2014
Malissa L. Forti, an individual	December 1, 2014
-Royal Welding LLC, Charlotte, NC	February 3, 2015
Gilman Derosier, an individual	February 3, 2015
-Advanced Steel Reinforcing Company Inc.	August 13, 2015
Theresa DiCocco, an individual	August 13, 2015
Lori A. Prizio, an individual	August 13, 2015
-Gatollari Enterprises Inc., Rochelle Park, NJ	Indefinite
Robert Gatollari, an individual	Indefinite
-Canterbury Communications, Canterbury	Indefinite
Marion T. Mershon, an individual	Indefinite
-City Electrical Enterprises LLC, Hartford	Indefinite
Lloyd Thompson, an individual	Indefinite
-Elite Roofing, Cheshire	Indefinite
Sam Stevens, an individual	Indefinite

Any inquiries regarding this list should be directed to the Wage and Workplace Standards Division at (860)263-6790.

Sharon M. Palmer Labor Commissioner

200 Folly Brook Boulevard, Wethersfield, CT 06109-1114 Ph: 860.263.6505 • Fx: 860.263.6529 • www.ct.gov/dol An Equal Opportunity/Affirmative Action Employer



Modified: February 13, 2013

DEBARMENT LIST

The following persons or firms have been debarred under the Federal Davis Bacon Act and are to be included on this list pursuant to Connecticut General Statutes, Section 31-53a.

DATE OF

	CITY STATE	EXPIRATION
NAME OF FIRM OR INDIVIDUAL	CITY, STATE Orlando, FL	September 11, 2014
AnRod Construction	Orlando, FL	September 11, 2014
- Antonio Rodriguez, an individual		September 11, 2014
Big Bears Construction Inc.	Dale City, Ca	September 11, 2014
- Jack Wang, an individual	Dale City, Ca	September 29, 2014
Brick Staining Technology Inc.	Manchester, PA	그리고 그 경기를 가득하고 있다. 사람들은 아이를 하는 것이 없다면 하는데 하는데 되었다.
-Robert Bush, an individual	Manchester, PA	September 29, 2014
Certified Plumbing & Heating Inc.	Centereach, NY	September 11, 2014
-Claire Piscitelli, an individual	Centereach, NY	September 11, 2014
Compel Construction Company	LaPlata, MD	September 11, 2014
-Melvin Adams, an individual	LaPlata, MD	September 11, 2014
-Keelan McLaughlin, an individual	Bronx, NY	March 28, 2014
Federal Construction & Consulting LLC	Bronx, NY	September 29, 2014
- Fernando Madrigal, an individual	Bronx, NY	September 29, 2014
Metro Services Enterprises	Daytona Beach, FL	September 8, 2014
Metro Services Enterprises USA Corporation	Daytona Beach, FL	September 8, 2014
-Jose Ventura, an individual	Daytona Beach, FL	September 8, 2014
Morrison, Don J., an individual	Niehart, MT	Indefinite
Oz, Roni, an individual	Plantation, FL	Indefinite
Rainbow Electric Company	Great Falls, MT	Indefinite
SAS Finishes Inc.	East Windsor, CT	March 28, 2014
-Stephen Lateano, an individual	East Windsor, CT	March 28, 2014
Susquehanna Valley Mechanical Contractors	Inc. Selinsgrove, PA	March 28, 2014
-Gary Romig, Sr., an individual	Selinsgrove, PA	March 28, 2014
Veltri Electric Inc.	Washington, PA	September 29, 2014
	Washington, PA	September 29, 2014
-John Veltri, an individual	Providence, RI	September 29, 2014
Veterans Construction LLC	Providence, RI	September 29, 2014
-Larry Ervin, an individual	Falls River, MA	March 28, 2014
W.M. Painting Inc.	Falls River, MA	March 28, 2014
-Wayne Mello, an individual	rails River, with	

III. Information for Contractors and Subcontractors

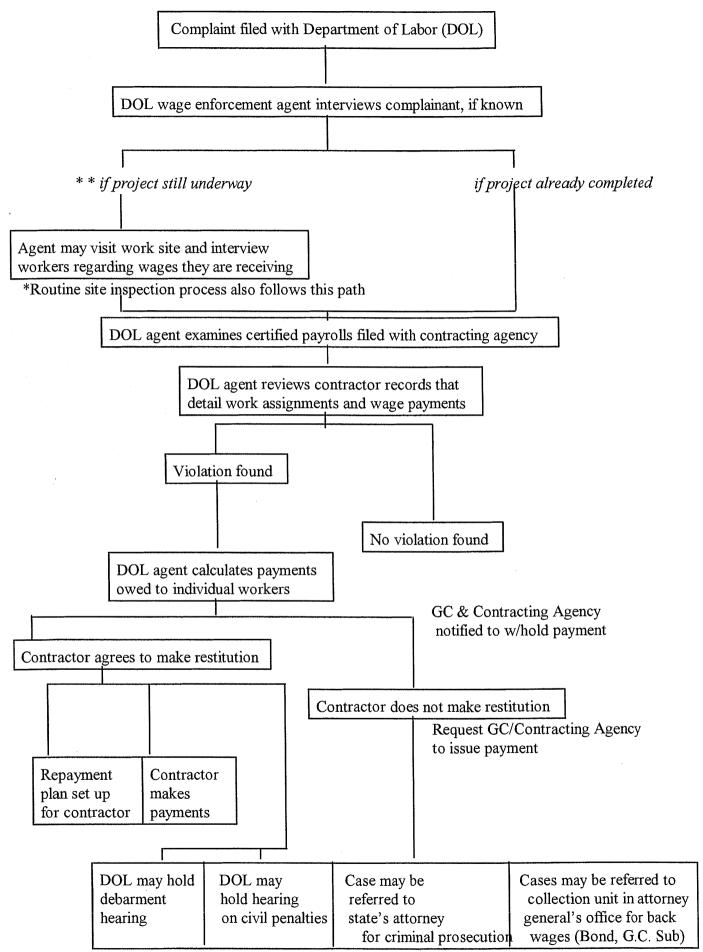
Investigation Process

During the course of an investigation, DOL wage enforcement agents interview workers, employers, and others connected with a project. They also examine payroll records, time records, daily logs, cancelled checks, fringe benefit and pension contributions, and other documents either at the job site or at the location where the contractor maintains the employment records for the business. Figure I summarizes the steps an agent may take in the complaint investigation process. (As noted on figure I, most of the same steps may be followed by DOL agents when they conduct a routine inspection.)

If a violation of the law is found, the DOL agent calculates the amount of back wages owed individual workers. If the contractor or subcontractor is willing to reimburse the workers but cannot pay the entire amount immediately, the agent may develop a repayment plan and monitor adherence to that plan.

If a contractor or subcontractor refuses to make restitution, the options available to the department depend on whether or not the project has been completed. If the project is still active and the party violating the law is still owed money, the contracting agency or the general contractor/prime contractor on the project can be asked to pay the workers out of those funds. If the project has been completed, the Department of Labor can refer the case to the collections unit within the Office of the Attorney General, which will pursue repayment. The department also has enforcement options to pursue enforcement and collection through criminal prosecution.

The department can also seek imposition of civil and criminal penalties on employers that violate the prevailing wage law. Paying the back wages owed to workers does not preclude other penalties, but the department is more likely to pursue legal action against businesses that refuse to provide restitution to workers who were underpaid. The imposition of civil penalties is mandated by statute and handled separately by the Department of Labor. Cases for criminal prosecution are referred to the Office of the Chief State's Attorney. Cases are reviewed to determine the nature of the violations and prior history. If the violations are determined to be serious, the case will be referred to the Commissioner of Labor recommending debarment.



General/Prime Contractor's Liability

LIABILITY OF GENERAL CONTRACTORS/PRIME CONTRACTORS WHEN SUBCONTRACTORS FAIL TO PAY PREVAILING WAGE RATES

The Department of Labor's position is that a general contractor/prime contractor is liable for wages due to all workers of a subcontractor when the subcontractor fails to pay its workers the prevailing rate of pay on a public works project subject to Connecticut General Statutes Section 31-53. Under the statute, it is the responsibility of the general contractor/prime contractor to ensure that the proper prevailing rate of pay is paid to their own workers as well as other workers on the project. Toward this end, each general contractor/prime contractor executes the Contractor's Wage Certification Form, which is a sworn statement that they and all of their subcontractors will pay all workers on the project the proper prevailing rate of pay.

The Attorney General's office has confirmed in writing its opinion that the general contractor/prime contractor is, in fact, liable in such circumstances based on an analysis of the statutory language of Connecticut General Statutes Section 31-53 and 31-53a. In 2004, the Department of Labor successfully pursued a general contractor in civil court for prevailing wages due to the subcontractor's employees: C.J.M. Services, Inc., et al. Commissioner of Labor v CJM 268Conn. 283(2004).

This division will continue to request that the general contractor/prime contractor withhold payments to the subcontractor from funds retained under the contract for violations which occurred. In such cases, if the subcontractor is in violation of the law, it is also in breach of their contract, relieving the general contractor/prime contractor from its obligation to promptly pay the subcontractor.

Although this department has pursued a general contractor/prime contractor for payment of wages to a subcontractor's workers, the practice of the Wage and Workplace Standards Division has always been to utilize this option as a last resort only when it is clear that any further attempts to collect from the subcontractor are futile.

CONNECTICUT DEPARTMENT OF LABOR WAGE AND WORKPLACE STANDARDS DIVISION

CONTRACTORS WAGE CERTIFICATION FORM

Ι,	of	
Officer, Owner, Authorized Rep.	Company Name	
do hereby certify that the		
	Company Name	
	Street	
	City	
and all of its subcontractors will pay all wo	orkers on the	
Project Name	e and Number	
Street and Ci	ity	
		c
the wages as listed in the schedule of prevai which is attached hereto).	ling rates required for such project (a	copy of
	Signed	·
Subscribed and sworn to before me this	day of	,2007.
	Notary Public	
Return to:		
Connecticut Department of I Wage & Workplace Standard		
200 Folly Brook Blvd.	ds Division	
Wethersfield, CT 06109		
Date issued:		

Who is Covered Under the Prevailing Wage Law?

Prevailing Wage is required to be paid to all **Laborers and Mechanics** who perform work on the project Site in a classification listed on the prevailing wage rate schedule.

Laborer and Mechanic is defined to include **ALL WORKERS** whose duties are manual or physical in nature as distinguished from mental or managerial. It does not include workers whose duties are primarily administrative, executive, professional, or clerical. Generally, mechanics are considered workers who use TOOLS or who are performing the work of a TRADE.

THE SITE OF WORK is limited to the physical place, where the construction called for in the contract, will remain when the work on it has been completed.

The Department of Labor looks to the Davis-Bacon Act for interpretation and enforcement:

- Site of Work is limited to the physical place or places where the construction called for in the contract remains after the work is completed, and other adjacent or virtually adjacent property used by the contractor that would be reasonable to include in the site of the work.
- Fabrication plants, mobile factories, batch plants, job headquarters, and tool yards are part of the site of work if:
 - 1. they are dedicated exclusively or nearly so to the contract AND,
 - 2. are located adjacent or virtually adjacent to the actual construction location.
- Not included: permanent home offices, fabrication plants, batch plants, tool
 yards whose location and continuance in operation are determined without
 regard to a particular project.

WHO IS REQUIRED TO BE PAID PREVAILING WAGE AND WHO IS EXEMPT?

INDIVIDUALS NOT COVERED under the prevailing wage law:

Architects, engineers, draftspersons, Security Guards / Watchmen, Material Suppliers or Carriers, Manufacturers, Supervisors, Superintendents, Project Managers who do not perform any trade/classification work, Government/State/Municipal employees, and

Truck Driver Owner/Operators delivering material to site or hauling off site except for time actually on site is covered (computed to nearest unit of 15 minutes)

INDIVIDUALS/WORKERS WHO ARE COVERED under the prevailing wage law:

Employees, family members – spouse, children, parents, etc., Owners, Equal Partner, Majority or equal corporate officer, LLC majority or equal member, Bona fide Independent Contractors determined based on site work only, Independent Contractors who do not meet the "ABC Test", working supervisors, Truck Drivers on site transporting and distributing materials, and Clean-up work performed as a condition to the acceptance of the building as satisfactorily complete - window scraping, window washing, sweeping.

INDEPENDENT CONTRACTORS VS. EMPLOYEE

EFFECTIVE 10/01/2005 ALL WORKERS who perform work ON SITE must be paid prevailing wage. Independent contractors are no longer exempt from the payment of prevailing wage. Currently, the Department of Labor also must determine if an Employer/Employee relationship exists on the site of work. A contract, certificate of insurance, 1099's, business cards, and certified payrolls are not the sole determining factors.

DOL WILL MAKE A DETERMINATION BASED UPON THE FOLLOWING:

- Bid Documents and Specifications for subcontract requirements
- Consumer Protection Licensing requirements
- Examine the portion of the specifications performed by the alleged independent contractor
- Observe the work being performed independent or side by side
- Review IRS 20 Common Law Factors and IRS SS-8 Questionnaire
- Determine if the on site work being performed meets all 3 criteria defined in C.G.S. Section 31-222 (ABC TEST)
 - 1. The worker is free from control and direction in connection with the performance of such service, both under his contract and in fact, **AND**
 - 2. Such service is performed either outside the usual course of business for which the service is performed, **AND**
 - 3. Such individual is customarily engaged in an independently established trade, occupation, profession or business of the same nature as that involved in the service performed.

The Department of Labor has found misclassification to commonly occur in the following trades: Sheetrocker, Taper, Flooring/Tile Setter, Masonry, and Carpentry.

Wage Payment Laws 31-71a-i and other Connecticut General Statutes

The following represents a summary of selected laws; sections 31-69a through 31-76k. To review the full text, consult Connecticut General Statutes.

Sec. 31-71a. Payment of Wages; Definitions. Whenever used in sections 31-71a to 31-71i, inclusive; (1) "Employer" includes any individual, partnership, association, joint stock company, trust, corporation, the administrator or executor of the estate of a deceased person, the conservator of the estate of an incompetent, or the receiver, trustee, successor or assignee of any of the same, employing any person; including the State and any political subdivision thereof; (2) "Employee" includes any person suffered or permitted to work by an employer; (3) "Wages " means compensation for labor or services rendered by an employee, whether the amount is determined on a time, task, piece, commission or other basis of calculation; (4) "Commissioner" means the labor commissioner.

Sec. 31-71b. Weekly payment of wages. (a) Except as otherwise provided in section 12-34b, each employer, by himself, his agent or representative, shall pay weekly all moneys due each employee on a regular pay day, designated in advance by the employer, by cash, by negotiable checks or, upon an employee's written request, by credit to such employee's account in any bank which has agreed with the employer to accept such wage deposits. (b) The end of the pay period for which payment is made on a regular pay day shall be not more than eight days before such regular pay day, provided, if such regular pay day falls on an non-work day, payment shall be made on the preceding work day.

Sec. 31-71c. Payment of wages on termination of employment. (a) Whenever an employee voluntarily terminates his employment, the employer shall pay the employee's wages in full not later than the next regular pay day, as designated under section 31-71b, either through the regular payment channels or by mail. (b) Whenever an employer discharges an employee, the employer shall pay the employee's wages in full no later than the business day next succeeding the date of such discharge. (c) When work of any employee is suspended as a result of a labor dispute, or when an employee for any reason is laid off, the employer shall pay in full to such employee the wages earned by him not later than the next regular pay day, as designated under section 31-71b.

Sec. 31-71d. Payment where wages disputed. (a) In case of a dispute over the amount of wages, the employer shall pay, without condition and within the time set by sections 31-71a to 31-71i, inclusive, all wages, or parts thereof, conceded by him to be due, and the employee shall have all remedies provided by law, including those under said

sections as to recovery of any balance claimed. (b) The acceptance by an employee of a payment under this section shall not constitute a release as to the balance of his claim and any release required by an employer as a condition to payment shall be void.

Sec. 31-71e. Withholding of part of wages. No employer may withhold or divert any portion of an employee's wages unless (1) the employer is required to do so by state or federal law, or (2) the employer has written authorization from the employee for deductions on a form approved by the commissioner, or (3) the deductions are authorized by the employee, in writing, for medical, surgical or hospital care or service, without financial benefit to the employer and recorded in the employer's wage record book, or (4) the deductions are for contributions attributable to automatic enrollment, as defined in section 2 of this act, in a retirement plan described in Section 401(k), 403(b), 408, 408A, or 457 of the Internal Revenue Code of 1986, or any subsequent corresponding internal revenue code of the United States, as from time to time amended, established by the employer.

Sec. 31-71f. Employer to furnish employee certain information. Each employer shall: (1) Advise his employees in writing, at the time of hiring, of the rate of remuneration, hours of employment and wage payment schedules, and (2) make available to his employees, either in writing or through a posted notice maintained in a place accessible to his employees, any employment practices and policies or change therein with regard to wages, vacation pay, sick leave, health and welfare benefits and comparable matters.

Sec. 31-71g. Penalty. Any employer or any officer or agent of an employer or any other person authorized by an employer to pay wages who violates any provision of this part may be: (1) Fined not less than two thousand nor more than five thousand dollars or imprisoned not more than five years or both for each offense if the total amount of all unpaid wages owed to an employee is more than two thousand dollars; (2) fined not less than one thousand nor more than two thousand dollars or imprisoned not more than one year or both for each offense if the total amount of all unpaid wages owed to an employee is more than one thousand dollars but not more than two thousand dollars; (3) fined not less than five hundred nor more than one thousand dollars or imprisoned not more than six months or both for each offense if the total amount of all unpaid wages owed to an employee is more than five hundred but not more than one thousand dollars; or (4) fined no less than two hundred nor more than five hundred dollars or imprisoned not more than three months or both for each offense if the total amount of all unpaid wages owed to an employee is five hundred dollars or less.

Sec. 31-71h. Regulations. The commissioner is authorized to issue regulations for the establishment of procedures for carrying out the provisions of sections 31-71a to 31-71i, inclusive.

Sec. 31-71i. Waiver of weekly payment requirement. The commissioner may, upon application, waive the provisions of section 31-71b with respect to any particular week or weeks, and may also, upon application, permit any employer, subject to the

provisions of this section to establish regular payday less frequently than weekly, provided each employee affected shall be paid in full at least once in each calendar month on a regularly established schedule.

Sec. 31-72. Civil action to collect wage claim or arbitration award. When any employer fails to pay an employee wages in accordance with the provisions, of sections 31-71a to 31-71i, inclusive or fails to compensate an employee in accordance with section 31-76k or where an employee or a labor organization representing an employee institutes an action to enforce an arbitration award which requires an employer to make an employee whole or to make payments to an employee welfare fund, such employee or labor organization may recover, in a civil action, twice the full amount of such wages, with costs and such reasonable attorney's fees as may be allowed by the court, and any agreement between him and his employer for payment of wages other than as specified in said sections shall be no defense to such action The labor commissioner may collect the full amount of any such unpaid wages, payments due to an employee welfare fund or such arbitration award, as well as interest calculated in accordance with the provisions of section 31-265 from the date the wages or payment should have been received, had payment been made in a timely manner. In addition, the labor commissioner may bring any legal action necessary to recover twice the full amount of unpaid wages, payments due to an employee welfare fund or arbitration award, and the employer shall be required to pay the costs and such reasonable attorney's fee as may be allowed by the court. The commissioner shall distribute any wages, arbitration awards or payments due to an employee welfare fund collected pursuant to this section to the appropriate person.

Sec 31-76k Payment of fringe benefits upon termination of employment. If an employer policy or collective bargaining agreement provides for the payment of accrued fringe benefits upon termination, including but not limited to paid vacations, holidays, sick days and earned leave, and an employee is terminated without having received such accrued fringe benefits, such employee shall be compensated for such accrued fringe benefits exclusive of normal pension benefits in the form of wages in accordance with such agreement or policy but in no case less than the earned average rate for the accrual period pursuant to sections 31-71a to 31-71i, inclusive.

See. 31-69a. Civil Penalty. In addition to the penalties provided in part III of Chapter 557 or of Chapter 558 of the general statutes, any employer, officer, agent, or other person who violates any provision of part III of Chapter 557 or Chapter 558 of the general statutes, or both shall be liable to the labor department for a civil penalty of three hundred dollars for each violation of said chapters. The Labor Commissioner has promulgated regulations to implement the assessment of the civil penalty. (amended by P.A. 97-263 to \$300.00, effective October 1, 1997).

Time Record Keeping Requirements: Section 31-60-12(c)

OVERTIME - ONE AND ONE-HALF TIMES THE EMPLOYEES REGULAR RATE OF PAY AFTER 40 HOURS PER WEEK. FOR EXCEPTIONS - SEE SECTION 31-76i OF THE CONNECTICUT GENERAL STATUTES

Sec. 31-60-12 Records.

- a. For the purpose of this regulation, "true and accurate records" means accurate legible records for each employee showing:
 - 1. His name;
 - 2. his home address;
 - 3. the occupation in which he is employed;
 - the total daily and total weekly hours worked, showing the beginning and ending time of each work period, computed to the nearest unit of 15 minutes;
 - 5. his total hourly, daily or weekly basic wage;
 - 6. his overtime wage as a separate item from his basic wage;
 - 7. additions to or deductions from his wages each pay period;
 - 8. his total wages paid each pay period;
 - 9. such other records as are stipulated in accordance with sections 31-60-1 through 31-60-16.
- b. The labor commissioner may authorize the maintenance of wage records and the retention of both wage and hour records as outlined either in whole or in part at a place other than the place of employment when it is demonstrated that the retention of such records at the place of employment either
 - 1. works an undue hardship on the employer without materially benefiting the inspection procedures of the labor department, or
 - 2. is not practical for enforcement purposes. Where permission is granted to maintain wage records at other than the place of employment, a record of total daily and weekly hours worked by each employee shall also be available for inspection in connection with such wage records.
- c. In the case of an employee who spends 75% or more of his working time away from his employer's place of business and the maintaining of time records showing the beginning and ending time of each work period for such employee either imposes an undue hardship upon the employer or exposes him to jeopardy because of his inability to control the accuracy of such entries, a record

of total daily and total weekly hours will be approved as fulfilling the record-keeping requirements of this section. However, in such cases, <u>the original</u> <u>time entries shall be made by the employee in his own behalf</u> and the time entries made by the employee shall be used as the basis for payroll records.

- d. The employer shall maintain and retain for a period of 3 years the following information and data on each individual employed in a bona fide executive, administrative or professional capacity;
 - 1. His name;
 - 2. his home address;
 - 3. the occupation in which he is employed;
 - 4. his total wages paid each work period;
 - 5. the date of payment and the pay period covered by payment.

Civil Penalties Regulations for Wage Violations Regulations

The regulations of Connecticut State Agencies are amended by adding Sections 31-71h-1 through 31-71h-6, inclusive, as follows:

Sec. 31-71h-1. Definitions

For the purposes of Section 31-71h-1 through 31-71h-6, inclusive, of these Regulations, the following definitions apply:

- 1. "Civil penalty" means a penalty of \$300.00 for each violation of part 111 of Chapter 557 or Chapter 558.
- "Commissioner" means the Labor Commissioner, whose mailing address is Labor Department, 200 Folly Brook Boulevard, Wethersfield, Connecticut 06109, or his designee.
- 3. "Division" means the Wage and Workplace Standards Division which is responsible for enforcement of part III of Chapter 557 and Chapter 558 of the Connecticut General Statutes whose mailing address is Labor Department, 200 Folly Brook Boulevard, Wethersfield, Connecticut 06109.
- 4. "Employer" means any employer, officer, agent or any other person who may have violated part III of Chapter 557 or Chapter 558 of the Connecticut General Statutes.
- 5. "Violation" means a failure by an employer, officer, agent or any other person to comply with any applicable provision of part III of Chapter 557 or Chapter 558.

Sec. 31-71h-2 Assessment of civil penalty

- a. In addition to and apart from any other penalties and/or remedies provided in part III Chapter 557 or Chapter 558 of the Connecticut General Statutes, the Labor Commissioner shall assess a civil penalty of \$300.00 upon the following determination:
 - 1. an employer has violated a statutory provision of part III of Chapter 557; or
 - 2. an employer has violated a statutory provision of Chapter 558.
- b. In determining the number of violations committed by an employer, the Commissioner shall assess a separate civil penalty for each individual employee adversely affected by the employer's violation.

c. In addition, the Commissioner may assess more than one civil penalty against an employer with respect to the same adversely affected employee if the employer has violated more than one statutory provision under Chapter 557 or Chapter 558.

Sec. 31-71h-3 Notice of violation

- a. The employer shall be notified of a civil penalty assessment by the 'Notice of Violation and Opportunity to Show Cause" which shall be sent to the employer along with the 'Notice to Employer - Unpaid Wages Due" statement, if applicable.
- b. In cases where there is a violation but no wages are due to any employees, the employer shall be notified of the civil penalty assessment by the "Notice of Violation and Opportunity to Show Cause" which shall be sent to the employer.
- c. The 'Notice of Violation and Opportunity to Show Cause" shall provide the following:
 - 1. the total civil penalty assessed;
 - 2. the right of the employer to request in writing a hearing to show cause why the civil penalty should not be assessed;
 - 3. an advisement that no hearing shall be granted unless a written request for hearing is received by the Division within twenty-one (21) days from the date of mailing of the notice; and
 - 4. the right of the employer to waive the right to request a hearing and to respond in writing to the notice within twenty-one (21) days of the date of mailing of the notice.

Sec. 31-71h-4 Request for hearing

Any employer who seeks to contest a civil penalty assessment shall file, within twenty-one (21) days of the date the "Notice of Violation and Opportunity to Show Cause" was issued, a written request for an opportunity to be heard which shall clearly state the reason(s) for such request, including facts to demonstrate that no violation has occurred.

Sec. 31-71h-5 Show cause hearing

a. If the Commissioner determines that the employer has stated adequate facts or legal grounds to warrant a hearing, the Commissioner shall provide written notice of the hearing to show cause why a civil penalty should not be assessed and shall mail written notice to the employer of the date, time and place of the hearing. Such determination shall be within the sole discretion of the Commissioner. The notice shall inform the employer of its rights in the show

cause hearing including:

- 1. the right to be represented by any person, including an attorney; and
- 2. the right to present documentary evidence and written and/or oral argument in support of the employer's position.
- b. A request for postponement of a hearing so scheduled shall only be granted where the rights of an employer would be substantially prejudiced by the denial of the request or in a medical emergency. The Commissioner has sole discretion to grant such requests.

Sec. 31-71h-6 **Determination of penalty**

- a. Following a hearing or after the employer has waived the right to request a hearing, the Commissioner may uphold or modify the civil penalty assessment, such determination shall be within the sole discretion of the Commissioner.
- If the employer requests a hearing but the Commissioner denies the request for a hearing, the total civil penalty assessed in the Notice shall be the final civil penalty.
- c. If the employer does not request a hearing or respond in writing to the Notice, the total civil penalty assessed in the Notice shall be the final civil penalty unless otherwise modified by the Commissioner.

Statement of purpose: To establish procedures and guidelines necessary to implement the assessment of civil penalties for violations of part III of Chapter 557 and/or Chapter 558, established in P. A. 93-392.

In Witness Whereof: March 17, 1994, Ronald F. Petronella, Commissioner.

Approved by the Attorney General as to legal sufficiency in accordance with Sec. 4-169, as amended, Connecticut General Statutes; March 30, 1994.

Approved by the Legislative Regulation Review Committee in accordance with Sec. 4-170, as amended, of the General Statutes: June 21, 1994.

IV. How to Calculate Prevailing Wage Payments

Prevailing Wage Components

The term "prevailing wage" means the total base hourly rate of pay and bona fide fringe benefits customary or prevailing for the same work in the same trade or occupation in the town where the project is to be constructed. The prevailing wage rate schedules developed by the U.S. Department of Labor (and used by the Connecticut Department of Labor) indicate specific amounts for both components of the rate.

Title 29, Part 5, Subpart B of the Code of Federal Regulations provides detailed information about the types of payments that can be used to meet prevailing wage requirements under the Davis-Bacon Act. These interpretations are also used by the Connecticut Department of Labor in its enforcement of the state's prevailing wage law.

Bona fide fringe benefits can include the contractor's expenditures for medical or hospital care, compensation for occupational injuries or illnesses, life insurance, disability and sickness insurance, pensions, vacation and holiday pay. However, these items only apply toward prevailing wage requirements if the contractor is not required by federal, state, or local law to provide the benefit.

If a contractor selected for a prevailing wage project does not typically provide benefits equal to the mandated level, cash payments (paid as taxable wages) can be made to employees in amounts sufficient to meet the required total wage rate (base hourly pay and fringe benefits). A worker would then have the option of using the additional money to purchase the type of benefit not provided (e.g., medical or life insurance), if feasible given the cost and availability of the commodity. Federal regulations also allow a contractor to pay less than the specified hourly pay component as long as the value of the fringe benefit component is high enough to produce a combined total equal to the required wage. In this instance, however, the worker must be paid at least their regular contractual hourly rate.

Certified Payroll Requirements

Blank certified payroll forms WWS-CP1-2 and sample copies are included in this guidebook.

The state certified payroll forms may be downloaded from the Department of Labor, Wage & Workplace Standards Division Website: www.ctdol.state.ct.us/wgwkstnd/forms/payrollcert.htm. (this form is in an adobe "fillable" format)

Federal certified payroll forms or out of state certified payroll forms do not meet the requirements of Connecticut General Statutes, Section 31-53(f) and cannot be used on projects covered under C.G.S. Section 31-53.

Computerized forms are acceptable provided they contain ALL the information requested on the Connecticut form. We recommend that you submit your computerized form to this department for approval prior to use.

Effective October 1, 1997, Public Act 97-263 requires weekly certified payrolls and compliance statements to be filed on a *monthly* basis with the contracting agency.

Effective: October 1, 2009, Public Act 09-25 mandates that certified payrolls must now be completed weekly and filed monthly "by mail, first class postage prepaid" to the contracting agency. The certified payrolls can still be processed through the existing format:

- 1. Mailed with their requisition to whom ever that contractor has a contract with.
- 2. Then each contractor level continues to submit the certified payrolls up the contractor chain until they arrive at the contracting agency.
- 3. Each contractor level should retain the envelope the certified payrolls were submitted in by stapling it to the applicable certified payroll as verification of compliance.

Certified Payrolls must be filed for Each Week, once work has been started on the project, even when NO Work is performed. If NO Work is performed for the entire month, this department will accept the filing of one certified payroll for entire month.

Please note that contractors do not list a worker's social security number on the state certified payroll forms. These certified payrolls shall be considered a public record, and every person shall have the right to inspect and copy such records in accordance with the provisions of Connecticut General Statutes, Section 1-15.

The Certified Statement of Compliance must be **signed by the "owner"**.

- 1. The owner is either: individual owner, major or equal officer of corporation, equal partner, or LLC managing or equal members only.
- 2. A stamp, photocopy, or electronic signature is not acceptable.
- 3. No employee can be authorized to sign on the owner's behalf.

What are you required to submit when the project is covered by both State prevailing wage and Federal Davis-Bacon prevailing wage requirements?

- A Department of Transportation project that is also covered under the Federal Davis-Bacon Act requires you to submit both the State of Connecticut Certified Payroll form WWS-CP1 and the U.S. Department of Labor Form WH-347.
- Federal Stimulus Money for ARRA work that is being performed on any state or municipal project, which exceeds the state's monetary thresholds, requires you to submit both the State of Connecticut Certified Payroll form WWS-CP1 and the U.S. Department of Labor Form WH-347.
 - a. To eliminate the necessity of completing two (2) separate certified payroll forms for each week, you may complete the front page of the State WWS-CP1 certified payroll form to report the time and wage information.
 - b. Submit both state and federal compliance certification statements (signing 2 separate compliance statements)
 - c. Include a separate detached sheet listing the worker's names and the last four digits of the worker's social security number.

On Connecticut Department of Transportation (CONNDOT) projects only, contractors are required to report ALL WORKERS under Section B who perform work on site but ARE NOT covered under the prevailing wage requirements. Example: Engineer, architect, project manager, surveyor, balancing technician, security guard, fire watchman, etc.

Note: The time and wage information needs to be reported for Section B workers, but is not required to be paid at prevailing wage if the work they are performing is not covered under any laborer or mechanic classification listed on the prevailing wage rate schedule.

Any questions regarding the use of this form may be directed to the Wage & Workplace Standards Division at (860) 263-6543.

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

In accordance with Connecticut General Statutes, 31-53 Certified Payrolls with a statement of compliance shall be submitted monthly to the contracting agency.								ERTIFIC	CATIO	N FOR	Connecticut Department of Labor Wage and Workplace Standards Division 200 Folly Brook Blvd. Wethersfield, CT 06109									
CONTRACTOR NAME AND ADDRESS:										SUBCONTRAC	ΓOR NAME &	ADDRESS		WORKER'S COMPENSATION INSURANCE CARRIER POLICY #						
PAYROLL NUMBER	Week-I Da	_	PROJECT NAME & A	& ADDRESS										EFFECTIVE DATE: EXPIRATION DATE:						
PERSON/WORKER,	APPR	MALE/	WORK			DA	Y AND DA				Total ST	BASE HOURLY	TYPE OF	GROSS PAY	T	OTAL DEDU	CTIONS		GROSS PAY FOR	
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7/13/2009 WWS-CP1		*IF REQU	JIKED									*SEE REVERSE	SIDE					P	AGE NUMBER	OF

*FRINGE BENEFITS EXPLANATION (P):

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

Please specify the type of benefits provide		
1) Medical or hospital care		
2) Pension or retirement		n, holiday
3) Life Insurance	6) Other (p	please specify)
CERTIFIED	STATEMENT OF C	COMPLIANCE
For the week ending date of	,	
I,of _		, (hereafter known as
Employer) in my capacity as		_(title) do hereby certify and state:
contributions paid or payable on I defined in Connecticut General of wages and the amount of paymemployee to any employee welfar subsection Connecticut General Seless than those which may also be c) The Employer has complied we section 31-53 (and Section 31-54). d) Each such employee of the Empolicy for the duration of his emponeracting agency; e) The Employer does not receive gift, gratuity, thing of value, or conditrectly, to any prime contractor employee for the purpose of improconnection with a prime contract subcontractor relating to a prime	General Statutes, section and accurate; and accurate; and accurate; and mechanic, laborer or behalf of each such en Statutes, section 31-52 ment or contributions per fund, as determined statutes, section 31-53 are required by contract; with all of the provision if applicable for state imployer is covered by olloyment which proof the kickbacks, which meaning the contractor entroperly obtaining or reform connection with contractor; and	workman and the amount of payment or imployee to any employee welfare fund, as 3 (h), are not less than the prevailing rate raid or payable on behalf of each such 1 by the Labor Commissioner pursuant to (d), and said wages and benefits are not (d), and said wages and benefits are not (e), and said wages and benefits are not (e), and worker's compensation insurance of coverage has been provided to the (e), and which is provided directly or imployee, subcontractor, or subcontractor ewarding favorable treatment in a prime contractor in connection with a
		which he knows to be false is a class D thousand dollars, imprisoned for up to
2. OSHA~The employer shall affix a training completion document to the cagency for this project on which such	ertified payroll requ	ired to be submitted to the contracting
(Signature)	(Title)	Submitted on (Date)
Section B: Applies to CONNDOT Pro That pursuant to CONNDOT contract listed under Section B who performed wage requirements defined in Connection	requirements for rep work on this project	are not covered under the prevailing
(Signature)	(Title)	Submitted on (Date)

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

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

PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS

Week-Ending Date:

Contractor or Subcontractor Business Name:

WEEKLY PAYROLL

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*IF REQUIRED

7/13/2009 WWS-CP2

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

PAGE NUMBER ____OF

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

Certified Payrolls with a shall be submitted mont	cordance with Connecticut General Statutes, 31-53 fied Payrolls with a statement of compliance be submitted monthly to the contracting agency. PAYROLL CERTIFICATION FOR PUBLIC WEEKLY PAYROLL WEEKLY PAYR										ROLL				Connecticut Department of Labor Wage and Workplace Standards Division 200 Folly Brook Blvd. Wethersfield, CT 06109						
CONTRACTOR NAME AND ADDRESS:											SUBCONTRAC		WORKER'S COMPENSATION INSURANCE CARRIER								
Landon Corporation, 15 Connecticut Avenue, Northford, CT 06472											XYZ Corporation Travelers Insurance Company 2 Main Street POLICY # #BAC8888928										
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*FRINGE BENEFITS EXPLANATION (P):

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

Please specify the type of benefits provided:							
Medical or hospital care Blue Cross Pension or retirement	_ 4) Disability						
2) Pension or retirement	5) Vacation, holiday						
3) Life Insurance Utopia	_ 6) Other (please specify)						
CERTIFIED STATE	MENT OF COMPLIANCE						
For the week ending date of 9/26/09							
I, Robert Craft of XYZ Con	poration , (hereafter known as						
Employer) in my capacity as Owner	(title) do hereby certify and state:						
Section A: 1. All persons employed on said project have be the week in accordance with Connecticut General hereby certify and state the following: a) The records submitted are true and accordance with Connecticut General hereby certify and state the following:							
contributions paid or payable on behalf of defined in Connecticut General Statutes of wages and the amount of payment or of employee to any employee welfare fund,	nic, laborer or workman and the amount of payment or f each such employee to any employee welfare fund, , section 31-53 (h), are not less than the prevailing rate contributions paid or payable on behalf of each such as determined by the Labor Commissioner pursuant to section 31-53 (d), and said wages and benefits are not ed by contract;						
c) The Employer has complied with all of section 31-53 (and Section 31-54 if appli	of the provisions in Connecticut General Statutes, cable for state highway construction);						
	is covered by a worker's compensation insurance t which proof of coverage has been provided to the						
gift, gratuity, thing of value, or compensation indirectly, to any prime contractor, prime employee for the purpose of improperly	cks, which means any money, fee, commission, credit, ation of any kind which is provided directly or contractor employee, subcontractor, or subcontractor obtaining or rewarding favorable treatment in mection with a prime contractor in connection with a tor; and						
	tified payroll which he knows to be false is a class D ned up to five thousand dollars, imprisoned for up to						
training completion document to the certified agency for this project on which such employ							
Robert Craft 04 (Signature) (1	Submitted on (Date)						
(Signature) /	Submitted on (Date)						
listed under Section B who performed work of wage requirements defined in Connecticut Ge	ements for reporting purposes only, all employees a this project are not covered under the prevailing neral Statutes Section 31-53.						
Signature) Craft Own	$\frac{10/2/09}{\text{Submitted on (Date)}}$						
(Digitature)	Submitted on (Date)						

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

THIS IS A PUBLIC DOCUMENT

DO NOT INCLUDE SOCIAL SECURITY NUMBERS

Discharging Fringe Benefit Obligations

DISCHARGING FRINGE BENEFIT OBLIGATIONS UNDER THE FEDERAL DAVIS BACON ACT, PART 5

Discharging Fringe Benefit Obligations = FB

- 1. Paid in cash.
- 2. Incurring cost for "bona fide" fringe benefits.
- 3. By a combination of the above.
- Contractor/Subcontractor can pay less than the required minimum hourly wages as long as hourly rate plus fringe benefit equals the total required.
- Crediting of FB Payments: (Reg. 5.5(a)(1)(I)) Contributions to FB plans must be made not less often than **quarterly**.
- Payments or cost incurred must be made in the hourly rate specified for each individual performing covered contract work.
- FB's must be "bona fide"; those common to the construction industry. No credit can be taken for any benefit required by law (social security contributions or workers compensation, etc.)
- If under payments have been determined, contractor/subcontractor can be allowed to make payments to a bona fide FB plan on behalf of the underpaid employees (15f10).
- Cash Equivalent Credit for FB payments: Period of time to be used is the period covered by the contribution. Contractor/subcontractor may offset annual cost by converting costs to an hourly cash equivalent Cost of FB divided by total number of working hours (both covered and noncovered hours since contractor/subcontractor's cannot use contributions made for non-government work to discharge or offset their obligations on covered work) (15f1 1). If the amount of contribution varies per worker, credit must be determined separately for the amount contributed on behalf of each worker(e.g. Single insurance coverage versus family coverage). contractor/subcontractor can use "previous" year's experience for total hours worked for a benefit paid for in advance (or for one that he/she anticipates to pay) as long as comparison or period chosen is reasonable.
- Workers excluded from a plan for whom contractor/subcontractor makes no contribution or incurs no cost must be paid in cash or furnished other bona fide FB's equal in monetary value. If plan requires contributions to be made during eligibility waiting period, credit may be taken, but no credit is allowed for contributions for

workers who by definition are not eligible to participate (due to age or part-time employment) (15f12).

- Pension profit Sharing Plans = PSPs (15f13).
- Contributions must be irrevocably made to a trustee or a third party.
- PSPs are not usually creditable towards meeting contractor/subcontractor 's prevailing wage obligation.
 - 1. Uncertainty.
 - 2. Discretionary nature.
 - If contributions made annually they would not meet quarterly requirement (or contractor/subcontractor must contribute irrevocably to an escrow account) (15f13(c))
- Vesting provisions are allowed if they meet the requirements of the Employee Retirement Income Act.
- Contractor may not use forfeitures (FB monies contributed on behalf of terminated, non-vested participants) as credit toward meeting FB obligation.
- Defined Contribution Pension Plan: Contributions are fully credited if plan provides for immediate participation & immediate vesting (= 100% vesting if 500 hours or less is worked). When there is no immediate vesting, credit is allowed based on the effective annual rate of contributions for all hours worked during the year. (e.g. \$2,000.00 contribution made on behalf of particular worker who worked a total of 2000 hours (covered and non-covered hours) would result in a credit of \$1.00/hour).
- Vacation, holiday, & sick leave plans: Generally "unfunded plans" if paid by a contractor "out of pocket", credit must be given for such payments.
- If worker is terminated before the benefit is received and contractor/subcontractor has taken a credit toward the prevailing wage FB obligation, the worker must be paid at termination.
- Costs incurred by an contractor/subcontractor for a bona fide apprenticeship program are creditable toward FB obligation (cost must be incurred for classification in which the individuals are working); 15f16© uses the following example:

\$450.00 fee to enroll an employee in an apprentice training program for carpenters; 45,000 hours is total (covered and non-covered) worked by carpenters and carpenter's apprentices (contractor's cost may not be offset cover a period longer than the training period the cost was intended to cover); E entitled to a credit of .0 1 /hour against prevailing wage FB obligation for all carpenters and carpenters' apprentices working on the project. *Full credit could probably be taken on behalf of individual enrolled*

 \rightarrow \$450.00 divided by 2000 total hours worked equals .23/hour credit.

- Benefit portion of the wage must be paid for hours worked on a covered project, but it would not be included in the calculation of the overtime premium ...
- contractor/subcontractor who is self-insured: can use previous year's experience (if it is reasonable)

<u>Total Cost</u> = <u>Average cost/employee =</u> Total # of employees covered Total hours worked

- Credit/hour ... or use actual cost incurred for each individual employee.
- No credit during waiting period if no cost incurred.
- Administrative Costs:
- 1. USDOL does not allow.

However, If costs are incurred by a third party administering an insurance or pension plan, etc., it seems reasonable to allow as part of cost incurred ...

Fringe Benefit Credits Recognized by the STATE

For the purposes of prevailing wage, Bona Fide Fringe benefits are health and welfare benefits only irrevocably paid by the contractor/subcontractor. Any payments required by state or federal law are not considered benefits.

If the benefits provided do not equal or exceed the published fringe benefit rate, the contractor must pay the balance as a "cash" payment combined to the worker's base rate and reported as a taxable wage.

Bona Fide prevailing wage Fringe Benefits include:

- Medical or Hospital coverage
- Life Insurance, Disability Insurance (not worker's compensation)
- Pension/Profit Sharing (paid no less frequently than quarterly)
- 401K matching contributions (paid no less frequently than quarterly)
- Holiday, Sick, Vacation, Paid Time Off (policy must be non-forfeitable)
- Supplemental Unemployment Benefit Plan (must be annualized)
- Apprentice Program Fees
- Costs incurred for OSHA-10 training (if paid by the contractor)

Fringe Benefits that cannot be credited towards prevailing wage:

- Travel Pay
- Gas cards
- Cell Phones
- Expense or Hotel reimbursements
- Meal allowance
- Discretionary Bonuses
- Gifts
- Overtime pay in excess of required by law

Payments not considered Fringe Benefits because they are required by State or Federal law:

- Court ordered garnishments
- Social security and Medicare contributions
- Worker's Compensation premium
- State income tax deduction
- Federal withholding
- Unemployment Quarterly contributions

Overtime at "Blended Rate" and "Rate In Effect"

Method #1: Blended Rate

Premium overtime is required to be paid at one and one-half times the worker's average hourly rate of pay for all hours physically worked that exceed 40 hours in a workweek. The contractor must establish a standard 7-day workweek.

Under the blended rate computation, an employer must first pay all straight-time wages by multiplying each straight-time rate by the physical hours worked at that rate, however few or many rates there may be. Then, divide the total earnings by the total hours worked to obtain the blended hourly rate. Next, multiply the hours in excess of 40 by ½ times the blended hourly rate. The worker's total earnings equals a combination of all straight-time pay and the ½ time overtime pay calculated. This same formula is used regardless of the number of jobs, rates, and nature of payments in any given week.

When computing the blended rate, each week is a separate calculation based on the varying number of hours worked at each rate of pay.

Method #2: Rate in Effect

In addition to the formula outlined above, a contractor can establish a policy, in writing, and compute premium overtime wages on the basis of the rate in effect for the job the worker is physically performing after the 40th hour physically worked. However, for an employer to be permitted to use this method of calculation, the worker's hours must truly fluctuate from job to job and from week to week among the different classifications. The employer must provide the worker with a written hiring agreement or a written contractual agreement, in accordance with C.G.S. Section 31-71f, stating the worker's rates of pay and formula for computing overtime.

*** This formula CANNOT be used where the worker is removed from the prevailing wage job during overtime hours.

Rate in Effect allows the contractor to clearly establish all straight-time rates of pay and all overtime rates of pay in their payroll for purposes of calculating wages due. ***** The contractor must establish the use of either method #1 or method #2 for the entire period of employment and cannot switch back and forth between the two methods.

For instance, a machine operator paid \$18.00 per hour sometimes works as a laborer in the warehouse for \$15.00 per hour, overtime (work after the fortieth hour in the workweek) can be paid at $$18.00 \times 1.5 = 27.00 per hour when working as a machine operator, and $15.00 \times 1.5 = 22.50 when working as a laborer.

Occupational Classifications

On any construction project, an assortment of workers are needed to carry out all of the required tasks. Workers include various skilled crafts people, machine operators, general laborers, and apprentices. Prevailing wage rate schedules identify the classes of workers likely to perform work on each of the four types of construction projects. (If a contractor wants to use a class of worker not listed in a wage determination, he must request the Department of Labor to issue a conformance rate specific to said project. This Division will look for conformity with existing classifications and again look at prevailing practice. A registered apprentice is not a separate prevailing wage job classification. A bonafide apprentice, registered with the Connecticut Department of Labor, can be paid a percentage of the base rate received by the craft that they are training to become and the full fringe rate. This percentage increases in steps, as the apprentice advances through the stages of the apprenticeship program.

The laborer and mechanic classification are not statutorily defined. However, supervisory personnel and individuals who work in an Executive, Administrative, or Professional classification are excluded from prevailing wage coverage. Certain other workers, such as truck drivers, are only covered by the law, when they spend a certain portion of the workday physically on-site at the project. Thus, only some of the workers on projects covered by the prevailing wage law must be paid at rates specified under the law.

The Connecticut Department of Labor has the responsibility to properly determine job classification. If you have any questions regarding proper classification, contact the Wage and Workplace Standards Division. The following definitions are being provided for guidance purposes only and represent only a small sampling of occupations and job duties commonly found in the construction industry. It is not an all-inclusive list of each occupation's duties. This list is being provided only to highlight some areas, where this department has found that contractors have been unclear regarding the proper classification.

Information Bulletin Occupational Classifications

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

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

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

ASBESTOS WORKERS

Applies all insulating materials, protective coverings, coatings and finishes to all types of mechanical systems.

• ASBESTOS INSULATOR

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

BOILERMAKERS

Erects hydro plants, incomplete vessels, steel stacks, storage tanks for water, fuel, etc. Builds incomplete boilers, repairs heat exchanges and steam generators.

• BRICKLAYERS, CEMENT MASONS, CEMENT FINISHERS, MARBLE MASONS, PLASTERERS, STONE MASONS, PLASTERERS. STONE MASONS, TERRAZZO WORKERS, TILE SETTERS

Lays building materials such as brick, structural tile and concrete cinder, glass, gypsum, terra cotta block. Cuts, tools and sets marble, sets stone, finishes concrete, applies decorative steel, aluminum and plastic tile, applies cements, sand, pigment and marble chips to floors, stairways, etc.

• CARPENTERS, MILLWRIGHTS. PILEDRIVERMEN. LATHERS. RESILEINT FLOOR LAYERS, DOCK BUILDERS, DIKERS, DIVER TENDERS

Constructs, erects, installs and repairs structures and fixtures of wood, plywood and wallboard. Installs, assembles, dismantles, moves industrial machinery. Drives piling into ground to provide foundations for structures such as buildings and bridges, retaining walls for earth embankments, such as cofferdams. Fastens wooden, metal or rockboard lath to walls, ceilings and partitions of buildings, acoustical tile layer, concrete form builder. Applies firestopping materials on fire resistive joint systems only. Installation of curtain/window walls only where attached to wood or metal studs. Installation of insulated material of all types whether blown, nailed or attached in other ways to walls, ceilings and floors of buildings. Assembly and installation of modular furniture/furniture systems. Free-standing furniture is not covered. This includes free standing: student chairs, study top desks, book box desks, computer furniture, dictionary stand, atlas stand, wood shelving, two-position information access station, file cabinets, storage cabinets, tables, etc.

CLEANING LABORER

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

• DELIVERY PERSONNEL

If delivery of supplies/building materials is to one common point and stockpiled there, prevailing wages are not required. If the delivery personnel are involved in the distribution of the material to multiple locations within the construction site then they would have to be paid prevailing wages for the type of work performed: laborer, equipment operator, electrician, ironworker, plumber, etc.

An example of this would be where delivery of drywall is made to a building and the delivery personnel distribute the drywall from one "stockpile" location to further sub-locations on each floor. Distribution of material around a construction site is the job of a laborer/tradesman and not a delivery personnel.

ELECTRICIANS

Install, erect, maintenance, alteration or repair of any wire, cable, conduit, etc., which generates, transforms, transmits or uses electrical energy for light, heat, power or other purposes, including the Installation or maintenance of telecommunication, LAN wiring or computer equipment, and low voltage wiring. *License required per Connecticut General Statutes: E-1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9.

ELEVATOR CONSTRUCTORS

Install, erect, maintenance and repair of all types of elevators, escalators, dumb waiters and moving walks. *License required by Connecticut General Statutes: R-1,2,5,6.

• FORK LIFT OPERATOR

Laborers Group 4) Mason Tenders - operates forklift solely to assist a mason to a maximum height of nine (9) feet only.

Power Equipment Operator Group 9 - operates forklift to assist any trade, and to assist a mason to a height over nine (9) feet.

GLAZIERS

Glazing wood and metal sash, doors, partitions, and 2 story aluminum storefronts. Installs glass windows, skylights, store fronts and display cases or surfaces such as building fronts, interior walls, ceilings and table tops and metal store fronts. Installation of aluminum window walls and curtain walls is the "joint" work of glaziers and ironworkers which requires either a blended rate or equal composite workforce.

IRONWORKERS

Erection, installation and placement of structural steel, precast concrete, miscellaneous iron, ornamental iron, metal curtain wall, rigging and reinforcing steel. Handling, sorting, and installation of reinforcing steel (rebar). Metal bridge rail (traffic), metal bridge handrail, and decorative security fence installation. Installation of aluminum window walls and curtain walls is the "joint" work of glaziers and ironworkers which requires either a blended rate or equal composite workforce. Insulated metal and insulated composite panels are still installed by the Ironworker.

INSULATOR

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

LABORERS

Acetylene burners, asphalt rakers, chain saw operators, concrete and power buggy operator, concrete saw operator, fence and guard rail erector (except metal bridge rail (traffic), metal bridge handrail, and decorative security fence installation.), hand operated concrete vibrator operator, mason tenders, pipelayers (installation of storm drainage or sewage lines on the street only), pneumatic drill operator, pneumatic gas and electric drill operator, powermen and wagon drill operator, air track operator, block paver, curb setters, blasters, concrete spreaders.

PAINTERS

Maintenance, preparation, cleaning, blasting (water and sand, etc.), painting or application of any protective coatings of every description on all bridges and appurtenances of highways, roadways, and railroads. Painting, decorating, hardwood finishing, paper hanging, sign writing, scenic art work and drywall hhg for any and all types of building and residential work.

LEAD PAINT REMOVAL

Painter's Rate

- 1. Removal of lead paint from bridges.
- 2. Removal of lead paint as preparation of any surface to be repainted.
- 3. Where removal is on a Demolition project prior to reconstruction.

Laborer's Rate

- 1. Removal of lead paint from any surface NOT to be repainted.
- 2. Where removal is on a *TOTAL* Demolition project only.

PLUMBERS AND PIPEFITTERS

Installation, repair, replacement, alteration or maintenance of all plumbing, heating, cooling and piping. *License required per Connecticut General Statutes: P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2 S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4.

POWER EQUIPMENT OPERATORS

Operates several types of power construction equipment such as compressors, pumps, hoists, derricks, cranes, shovels, tractors, scrapers or motor graders, etc. Repairs and maintains equipment. *License required, crane operators only, per Connecticut General Statutes.

ROOFERS

Covers roofs with composition shingles or sheets, wood shingles, slate or asphalt and gravel to waterproof roofs, including preparation of surface. (tear-off and/or removal of any type of roofing and/or clean-up of any and all areas where a roof is to be relaid)

SHEETMETAL WORKERS

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

SPRINKLER FITTERS

Installation, alteration, maintenance and repair of fire protection sprinkler systems. *License required per Connecticut General Statutes: F-1,2,3,4.

• TILE MARBLE AND TERRAZZO FINISHERS

Assists and tends the tile setter, marble mason and terrazzo worker in the performance of their duties.

TRUCK DRIVERS

Definitions:

- 1) "Site of the work" (29 Code of Federal Regulations (CFR) 5.2(l)(b) is the physical place or places where the building or work called for in the contract will remain and any other site where a significant portion of the building or work is constructed, provided that such site is established specifically for the performance of the contact or project;
- (a) Except as provided in paragraph (l) (3) of this section, job headquarters, tool yards, batch plants, borrow pits, etc. are part of the "site of the work"; provided they are dedicated exclusively, or nearly so, to the performance of the contract or project, and provided they are adjacent to "the site of work" as defined in paragraph (e)(1) of this section;
- (b) Not included in the "site of the work" are permanent home offices, branch plant establishments, fabrication plants, tool yards etc, of a contractor or subcontractor whose location and continuance in operation are determined wholly without regard to a particular State or political subdivision contract or uncertain and indefinite periods of time involved of a few seconds or minutes duration and where the failure to count such time is due to consideration justified by industrial realities (29 CFR 785.47)
- 2) "Engaged to wait" is waiting time that belongs to and is controlled by the employer which is an integral part of the job and is therefore compensable as hours worked. (29 CFR 785.15)
- 3) "Waiting to be engaged" is waiting time that an employee can use effectively for their own purpose and is not compensable as hours worked. (29 CFR 785.16)
- 4) "De Minimus" is a rule that recognizes that unsubstantial or insignificant periods of time which cannot as a practical administrative matter be precisely recorded for payroll purposes, may be disregarded. This rule applies only where there are uncertain and indefinite periods of time involved of a short duration and where the failure to count such time is due to consideration justified by worksite realities. For example, with respect to truck drivers on prevailing wage sites, this is typically less than 15 minutes at a time.

Coverage of Truck Drivers on State or Political subdivision Prevailing Wage Projects

Truck drivers are covered for payroll purposes under the following conditions:

- Truck Drivers for time spent working on the site of the work.
- Truck Drivers for time spent loading and/or unloading materials and supplies on the site of the work, if such time is not de minimus

- Truck drivers transporting materials or supplies between a facility that is deemed part of the site of the work and the actual construction site.
- Truck drivers transporting portions of the building or work between a site established specifically for the performance of the contract or project where a significant portion of such building or work is constructed and the physical places where the building or work outlined in the contract will remain.

For example: Truck drivers delivering asphalt are covered under prevailing wage while" engaged to wait" on the site and when directly involved in the paving operation, provided the total time is not "de minimus"

Truck Drivers <u>are not</u> covered in the following instances:

- Material delivery truck drivers while off "the site of the work"
- Truck Drivers traveling between a prevailing wage job and a commercial supply facility while they are off the "site of the work"
- Truck drivers whose time spent on the "site of the work" is de minimus, such as under 15 minutes at a time, merely to drop off materials or supplies, including asphalt.

These guidelines are similar to U.S. Labor Department policies. The application of these quidelines may be subject to review based on factual considerations on a case by case basis.

For example:

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

Any questions regarding the proper classification should be directed to:

Public Contract Compliance Unit

Wage and Workplace Standards Division

Connecticut Department of Labor

200 Folly Brook Blvd, Wethersfield, CT 06109

(860) 263-6543



AMPLE CALCULATIONS FOR FRINGE BENEFIT CREDITS

<u>First</u>: Calculate the employer's total cost for fringe benefits provided on an annual basis.

Second: Use the annualizing formula: Divide the total cost of fringe benefits provided by 2080 hours

(40h/w X 52w) to obtain your hourly fringe benefit credit (or total hours worked for seasonal

operations).

<u>Third</u>: Subtract your hourly fringe benefit credit from the "Benefit" rate on the prevailing wage rate

schedule.

<u>Fourth</u>: Any difference remaining is paid weekly as TAXABLE wages in the employee's pay check.

Fifth: Upon termination, the employer must recalculate the correct Benefit Credit based on all

actual hours worked (prevailing & private) and actual benefits paid.

Example 1. EMPLOYER PAYS 100% MEDICAL INSURANCE PREMIUM:

Monthly premium for employee: \$380.00 Annual cost: (\$380 x 12 months) = \$4,560.00

Fringe Benefit Credit: (Divide by 2080): \$2.19/hour

Carpenter prevailing wage rate: \$19.60 base + \$7.20 fringe

Fringe Benefit Credit: -2.19
Add to base wages due: \$5.01

Adjusted prevailing wage rate due: \$19.60 + \$5.01 = \$24.6l/hour.

Employee's regular hourly rate: \$18.00/hour.

Weekly payroll:

Regular Rate: 16 hours x \$18.00 = \$288.00 Prevailing Rate: 24 hours x \$24.61 = \$590.64 Total Wages Due: \$878.64

Example 2. EMPLOYER PAYS 50% MEDICAL INSURANCE PREMIUM:

Monthly premium for employee: \$380.00

Employer's Cost = \$190.00

Annual cost: (\$190 x 12 Months) = \$2,280.00 Fringe Benefit Credit: (Divide by 2080): \$1.09/hour

Carpenter prevailing wage rate: \$19.60 base plus \$7.20 fringe

Fringe Benefit Credit: -1.09
Add to base wages due: \$6.11

Adjusted prevailing wage rate due: \$19.60 + \$6.11 = \$25.71/hour.

Weekly payroll:

Regular Rate: 16 hours x \$18.00 = \$288.00 Prevailing Rate: 24 hours x \$25.71 = $\frac{$617.04}{$905.04}$



AMPLE CALCULATIONS FOR APPRENTICE RATES

First: Apprentices must be registered with the Connecticut Department of Labor, "Work Training

Standards for Apprenticeship and Training Programs"

<u>Second</u>: Registered Apprentices are allowed to be paid the appropriate percentage of the prevailing

base rate plus the full fringe benefit rate.

Third: All classifications that indicate a percentage of the fringe benefits must be calculated at the

percentage rate times the "Base Hourly Rate"

Fourth: The work site ratio shall not be less than one full-time journey person instructing and

supervising the work of one apprentice in a specific trade.

Example 1. EMPLOYER HAS A REGISTERED APPRENTICE AT 70% OF HIS COMPLETION

RATE OF \$18.00

(no fringe benefits provided)

Carpenter prevailing wage rate: \$19.60 base + \$7.20 fringe

Adjusted Apprentice Rate - 70%: \$13.72 base + \$7.20 fringe = \$20.92

Employee's regular hourly rate: \$12.60/hour. (70% of \$18.00)

Weekly payroll:

Regular Rate: 16 hours x \$12.60 = \$201.60Prevailing Rate: $24 \text{ hours } x \$20.92 = \frac{\$502.08}{\$703.68}$

Example 2. EMPLOYER HAS A REGISTERED APPRENTICE AT 50% OF HIS COMPLETION

RATE OF \$20.00

FRINGE BENEFIT RATE ON PREVAILING WAGE SCHEDULE HAS A

PERCENTAGE LISTED.

(no fringe benefits provided)

Electrician prevailing wage rate: \$22.00 base + \$7.14 fringe + 4.25% fringe

Journeyperson Due: \$22.00 + \$7.14 + \$0.94 = \$30.08

Adjusted Apprentice Rate - 50%: \$11.00 + \$7.14 + \$0.47 = \$18.61

Employee's regular hourly rate: \$10.00/hour.

Weekly payroll:

Regular Rate: 16 hours x \$10.00 = \$160.00Prevailing Rate: $24 \text{ hours } x \$18.61 = \underline{\$446.64}$ Total Wages Due: \$606.64



First: The employee must maintain a time record that lists the daily total of hours worked in each

classification, hours worked, and weekly total hours worked. These hours must be recorded

in the employee's own handwriting.

The fringe benefit rate is to be paid at straight time for all hours worked, including hours in Second:

excess of 40 per week.

Premium overtime, at one and one-half times the employee's average rate of pay must be paid Third:

for all hours "worked" in excess of 40 per week

Average rate is determined by taking the total straight time wages and dividing by total hours Fourth:

worked. Premium overtime rate is one-half the average rate.

Example 1. EMPLOYEE WORKS ALL HOURS ON PREVAILING WAGE

(no fringe benefits provided)

Carpenter prevailing wage rate: \$19.60 base + \$7.20 fringe = \$26.80

Employee's regular hourly rate: \$18.00/hour

Weekly payroll:

FringeBenefit

Prevailing Rate Hours: Base - $45 \times \$19.60 = \882.00

 $-45 \times 7.20 = 324.00

Overtime: $(\frac{1}{2} \times 19.60 = 9.80) \times 9.80 =$ \$ 49.00

Total Wages Due: \$1,225.00

Example 2. EMPLOYEE WORKS A COMBINATION OF RATE AND NON-RATE HOURS

(no fringe benefits provided)

Carpenter prevailing wage rate: \$19.60 base + \$7.20 fringe = \$26.80

Employee's regular hourly rate: \$18.00/hour

Weekly payroll:

Regular hours: 24 hours x 18.00 = \$ 432.00**\$19.60 = \$ 392.00 Prevailing Rate Hours:** Base - 20 x

Fringe Benefit - 20 x 7.20 = \$144.00**Overtime** 9.36 =

37.44 4 x

Total Wages Due: \$1,005.44

Overtime Calculations:

\$432.00 + \$392.00 = \$824.00 divided by 44 hours = \$18.73 (average rate)

Average Rate = \$18.73

Due $\frac{1}{2}$ times \$18.73 = \$9.36 (premium overtime)

S

AMPLE CALCULATIONS FOR MULTIPLE CLASSIFICATIONS

<u>First</u>: The employee must maintain a time record that lists the daily total of hours worked in each

classification, totaled daily hours worked, and weekly total hours worked These hours must

be recorded in the employee's own handwriting.

Second: The Connecticut Department of Labor has the responsibility to properly determine job

classification. Contact the Wage and Workplace Standards Division to correctly classify work

performed.

Third: The employee's pay stub must segregate the hours worked and rates paid for each

classification, listing overtime pay as a separate entry.

Fourth: Equipment operators must list the specific name of each piece of equipment operated (they

cannot simply list the words "equipment operator" and segregate the daily hours for each

piece of equipment).

Fifth: Prevailing wage rates must be paid for all hours worked at the job site. (For truck drivers,

please contact the Connecticut Department of Labor, Wage and Workplace Standards Division to determine what is covered work). (Shop work and travel time are not required to

be paid at the prevailing wage rate for State and Municipal prevailing wage projects).

Example 1. EMPLOYEE WORKS IN THREE DIFFERENT PREVAILING WAGE CLASSIFICATIONS IN THE SAME WORKWEEK

(No fringe benefits provided)

Rates of Pay:

Backhoe Operator Prevailing Wage Rate: \$22.62 + \$8.95 = \$31.57 Front End Loader Prevailing Wage Rate: \$21.48 + \$8.95 = \$30.43 Building Laborer Prevailing Wage Rate: \$16.00 + \$6.90 = \$22.90 Employee's Regular Hourly Rate: \$15.00 Travel Time Rate: \$6.00

Time Sheet:

Classification	Su	M	Tu	\mathbf{W}	Th	\mathbf{F}	Sa	Total
Backhoe			4	4		2		10
Front End Loader			3	3		2		8
Laborer					7			7
Shop		8				3		11
Travel			1	1	1	1		<u>4</u>
						***	11 70	4 1 40

Weekly Total = 40

Weekly Payroll:

Backhoe Rate: 10 hours x \$31.57 =\$315.70 8 hours x \$30.43 =**Loader Rate:** \$243.44 7 hours x \$22.90 =**Laborer Rate:** \$160.30 11 hours x \$15.00 =\$165.00 **Regular Rate: Travel Rate:** 4 hours x \$ 6.00 =\$ 24.00 \$908.44 **TOTAL DUE:**

V. Sample Prevailing Wage Rate Schedules

How is the Prevailing Wage Rate Determined?

The Commissioner of Labor is responsible for designating the prevailing wage rates. This can be done either by holding a hearing in the locality where the project will occur or by adopting rates set for Connecticut by the U.S. Secretary of Labor under the federal Davis-Bacon Act. The latter method has been used since 1977, when it first became an option. Because the Connecticut Department of Labor uses federal wage schedules, it also relies on federal Davis-Bacon regulations to guide its interpretation and enforcement of most aspects of the state law. (see Federal Davis-Bacon Act - Title 29, Part V, included in Section VIII of this packet).

The Davis-Bacon Act allows the U.S. Secretary of Labor to decide what method will be used to calculate the prevailing wage payable under the law. According to materials issued by the U.S. Department of Labor, the process used to determine rates is to survey contractors and subcontractors who have completed construction work in a particular geographic area during a particular time period regarding the wages they paid on those projects. Those surveyed are asked to indicate the hourly wages paid to designated classes of employees of specific types of projects completed during a specified time period (usually six to 12 months) preceding the survey.

Regional U.S. Department of Labor employees conduct the surveys and analyze the data. If a sufficient number of responses are received, the prevailing wage is calculated for the various job classifications in the specified area. If a majority of the workers in a classification receive the same wage, that amount will become the prevailing wage. In such cases, that rate is usually the one contained in a collective bargaining agreement (CBA). This is because union workers are the ones most likely to earn exactly the same hourly pay to the penny.

If no single wage is received by a majority of the workers in the sample, then a weighted average of the rates submitted for the specific classification will be used. After the regional office completes the new rate schedule, it is sent to the Wage and Hour Division of U.S. DOL in Washington. Once that office is satisfied with the validity of the work, the new schedule is released.

General wage determinations are set for geographic areas that have "well settled" wage patterns and are expected to have a large volume of construction work. They are published in the Federal Register and remain in effect until changed by the secretary of labor.

General wage determinations, are used by the Connecticut Labor Commissioner for the state's prevailing wage law. Each schedule of rates is issued for a specific project, based upon the county and type of construction -- buildings, heavy, highway, or residential (with heavy and highway rates usually being the same, at least in Connecticut).

The state prevailing wage rates are issued project specific at the time the contracting agency advertises the project for bid. These rates are the minimum rates that are 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. Since these are the minimum rates to pay, if they are below a worker's regular contractual hourly rate, the contractor must pay the higher rate. This may occur on residential projects where the posted prevailing wage rate is significantly lower than the worker's regular (contractual) hourly rate. The contractor is required to pay the higher contractual rate under the Connecticut wage payment laws 31-71 a-i.

Minimum Rates and Classifications for Building Construction

B 12878

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 SAMPLE Project Town Hartford

State#: FAP#

CLASSIFICATION	Hourly Rate	Benefits
1a) Asbestos Worker/Insulator (Includes application of insulating materials, protective coverings, coatings, & finishes to all types of mechanical systems; application of firestopping material for wall openings & penetrations in walls, floors, ceilings - Last updated 9/1/08	34.21	19.81
1b) Asbestos/Toxic Waste Removal Laborers: Asbestos removal and encapsulation (except its removal from mechanical systems which are not to be scrapped), toxic waste removers, blasters.**See Laborers Group 7**		
2) Boilermaker	33.79	34% + 8.96
3a) Bricklayer, Cement Mason, Concrete Finisher (including caulking), Plasterers, Stone Masons	32.10	19.48 + a

Project: S	SAMPLE
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3b) Tile Setter	30.78	16.98
3c) Terrazzo Workers, Marble Setters - Last updated 10/1/08	30.91	19.12
3d) Tile, Marble & Terrazzo Finishers	24.90	14.78
3e) Plasterer	32.10	19.48
LABORERS		
4) Group 1: Laborers (common or general), carpenter tenders, wrecking laborers, fire watchers.	24.25	14.45
4a) Group 2: Mortar mixers, plaster tender, power buggy operators, powdermen, fireproofer/mixer/nozzleman, fence erector.	24.50	14.45
4b) Group 3: Jackhammer operators, mason tender (brick) and mason tender (cement/concrete)	24.75	14.45

4c) **Group 4: Pipelayers (Installation of water, storm drainage or sewage lines outside of the building line with P6, P7 license) (the pipelayer rate shall apply only to one or two employees of the total crew who primary task is to actually perform the mating of pipe sections)[If using this classification call the Labor Department for	25.25	14.45
4d) Group 5: Air track operators, Sand blasters - Last updated 4/8/09	25.00	14.45
4e) Group 6: Nuclear toxic waste removers, blasters - Last updated 4/8/09	27.25	14.45
4f) Group 7: Asbestos removal and encapsulation (except it's removal from mechanical systems which are not to be scrapped) - Last updated 4/5/09	25.25	14.45
4g) Group 8: Bottom men on open air caisson, cylindrical work and boring crew - Last updated 4/8/09	24.75	14.45
4h) Group 9: Top men on open air caisson, cylindrical work and boring crew - Last updated 4/8/09	24.25	14.45
5) Carpenter, Acoustical Ceiling Installation, Soft Floor/Carpet Laying, Metal Stud Installation, Form Work and Scaffold Building, Drywall Hanging, Modular-Furniture Systems Installers, Lathers, Piledrivers, Resilient Floor Layers.	29.00	17.80
5a) Millwrights	29.75	17.80

Project: SAMPLE		
6) Electrical Worker (including low voltage wiring) (Trade License required: E1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9)	35.40	19.51
7a) Elevator Mechanic (Trade License required: R-1,2,5,6)	42.34	18.285+a+b
LINE CONSTRUCTION		
Groundman	22.67	6.50% + 6.20
Linemen/Cable Splicer	41.22	6.5% + 12.20
8) Glazier (Trade License required: FG-1,2)	31.73	14.55 + a
9) Ironworker, Ornamental, Reinforcing, Structural, and Precast Concrete Erection	32.75	25.08 + a

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. and over. (Trade License Required)	34.05	17.75 + a
Group 2: Cranes (100 ton rate capacity and over); Backhoe/Excavator over 2 cubic yards; Piledriver (\$3.00 premium when operator controls hammer). (Trade License Required)	33.73	17.75 + a
Group 3: Excavator, Backhoe/Excavator under 2 cubic yards; Cranes (under 100 ton rated capacity), Grader/Blade; 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	32.99	17.75 + a
Group 4: Trenching Machines; Lighter Derrick; Concrete Finishing Machine; CMI Machine or Similar; Koehring Loader (Skooper).	32.60	17.75 + a
Group 5: Specialty Railroad Equipment; Asphalt Paver; Asphalt Reclaiming Machine; Line Grinder; Concrete Pumps; Drills with Self Contained Power Units; Boring Machine; Post Hole Digger; Auger; Pounder; Well Digger; Milling Machine (over 24" Mandrell)	32.01	17.75 + a
Group 5 continued: Side Boom; Combination Hoe and Loader; Directional Driller.	32.01	17.75 + a
Group 6: Front End Loader (3 up to 7 cubic yards); Bulldozer (rough grade dozer).	31.70	17.75 + a
Group 7: Asphalt roller, concrete saws and cutters (ride on types), vermeer concrete cutter, Stump Grinder; Scraper; Snooper; Skidder; Milling Machine (24" and under Mandrell).	31.36	17.75 + a

Group 8: Mechanic, grease truck operator, hydroblaster; barrier mover; power stone spreader; welding; work boat under 26 ft.; transfer machine.	30.96	17.75 + a
Group 9: Front end loader (under 3 cubic yards), skid steer loader regardless of attachments, (Bobcat or Similar): forklift, power chipper; landscape equipment (including Hydroseeder).	30.53	17.75 + a
Group 10: Vibratory hammer; ice machine; diesel and air, hammer, etc.	28.49	17.75 + a
Group 11: Conveyor, earth roller, power pavement breaker (whiphammer), robot demolition equipment.	28.49	17.75 + a
Group 12: Wellpoint operator.	28.43	17.75 + a
Group 13: Compressor battery operator.	27.85	17.75 + a
Group 14: Elevator operator; tow motor operator (solid tire no rough terrain).	26.71	17.75 + a
Group 15: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater Operator.	26.30	17.75 + a

Project: S	SAMPLE
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Group 16: Maintenance Engineer/Oiler.	25.65	17.75 + a
Group 17: Portable asphalt plant operator; portable crusher plant operator; portable concrete plant operator.	29.96	17.75 + a
Group 18: Power safety boat; vacuum truck; zim mixer; sweeper; (Minimum for any job requiring a CDL license).	27.54	17.75 + a
PAINTERS (Including Drywall Finishing)		
10a) Brush, Roller	28.17	14.55
10b) Taper/Drywall Finisher	28.92	14.55
10c) Paperhanger	28.67	14.55
10e) Spray	31.17	14.55

Project: SAMPLE		
11) Plumber (excluding HVAC pipe installation) (Trade License required: P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2)	36.32	21.26
12) Post Digger, Well Digger, Pile Testing Machine	32.01	17.75 + a
13) Roofer (composition)	31.10	14.46
14) Roofer (slate & tile)	31.60	14.46
15) Sheetmetal Worker (Trade License required for HVAC and Ductwork: SM-1,SM-2,SM-3,SM-4,SM-5,SM-6)	31.57	25.92
16) Pipefitter (Including HVAC work) (Trade License required: S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4, G-1, G-2, G-8 & G-9)	36.32	21.26
TRUCK DRIVERS		

26.98

13.48 + a

17a) 2 Axle

17b) 3 Axle, 2 Axle Ready Mix	27.08	13.48 + a
17c) 3 Axle Ready Mix	27.13	13.48 + a
17d) 4 Axle, Heavy Duty Trailer up to 40 tons	27.18	13.48 + a
17e) 4 Axle Ready Mix	27.23	13.48 + a
17f) Heavy Duty Trailer (40 Tons and Over)	27.43	13.48 + a
17g) Specialized Earth Moving Equipment (Other Than Conventional Type on-the-Road Trucks and Semi-Trailers, Including Euclids)	27.23	13.48 + a
18) Sprinkler Fitter (Trade License required: F-1,2,3,4)	39.30	17.25 + a

Welders: Rate for craft to which welding is incidental.

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

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

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

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

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

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

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

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

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

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.

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.

Minimum Rates and Classifications for Heavy/Highway Construction

H 12865

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: SAMPLE Project Town: Hartford

FAP Number: State Number:

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

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

Project: SAMPLE		
6) Ironworkers: (Ornamental, Reinforcing, Structural, and Precast Concrete Erection	\$32.75	25.08 + a

7) Plumbers (Trade License required: (P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2) and	\$36.32	21.26
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)		

----LABORERS----

block pavers and curb setters

8) Group 1: Laborer (Unskilled); Common or General	\$24.25	14.45
9) Group 2: Chain saw operators, fence and guard rail erectors, pneumatic tool operators, powdermen, air tool operator	\$24.50	14.45
10) Group 3: Pipelayers (Installation of water, storm drainage or sewage lines outside of the building line with P6, P7 license)- Last updated 4/8/09	\$24.75	14.45
11) Group 4: Jackhammer/Pavement breaker (handheld); mason tenders (cement/concrete), catch basin builders, asphalt rakers, air track operators,	\$24.75	14.45

12) Group 5: Toxic waste workers (non-mechanical systems) - Last updated	\$26.25	14.45
4/8/09		

Project: SAMPLE		
13) Group 6: Blasters	\$26.00	14.45
Group 7: Asbestos Removal, non-mechanical systems (does not include leaded joint pipe) - Last updated 4/8/09	\$25.25	14.45
Group 8: Traffic control signalmen	\$16.00	14.45
LABORERS (TUNNEL CONSTRUCTION, FREE AIR). Shield Drive and Liner Plate Tunnels in Free Air Last updated 4/5/09		
13a) Miners, Motormen, Mucking Machine Operators, Nozzle Men, Grout Men, Shaft & Tunnel Steel & Rodmen, Shield & Erector, Arm Operator, Cable Tenders	\$28.58	14.45 + a
13b) Brakemen, Trackmen	\$27.75	14.45 + a
14) Concrete Workers, Form Movers, and Strippers	\$27.75	14.45 + a
15) Form Erectors	\$28.03	14.45 + a

----ROCK SHAFT LINING, CONCRETE, LINING OF SAME AND TUNNEL IN FREE AIR:----Last updated 4/5/09----

16) Brakemen, Trackmen, Tunnel Laborers, Shaft Laborers	\$27.75	14.45 + a
17) Laborers Topside, Cage Tenders, Bellman	\$27.65	14.45 + a
18) Miners	\$28.58	14.45 + a
TUNNELS, CAISSON AND CYLINDER WORK IN COMPRESSED AIR:Last updated 4/5/09		
18a) Blaster	\$34.19	14.45 + a
19) Brakemen, Trackmen, Groutman, Laborers, Outside Lock Tender, Gauge Tenders	\$34.02	14.45 + a
20) Change House Attendants, Powder Watchmen, Top on Iron Bolts	\$32.30	14.45 + a

Project: SAMPLE 21) Mucking Machine Operator	\$34.70	14.45 + a
TRUCK DRIVERS(*see note below)		
Two axle trucks	\$26.98	13.48 + a
Three axle trucks; two axle ready mix	\$27.08	13.48 + a
Three axle ready mix	\$27.13	13.48 + a
Four axle trucks, heavy duty trailer (up to 40 tons)	\$27.18	13.48 + a

\$27.23

\$27.43 13.48 + a

13.48 + a

Heavy duty trailer (40 tons and over)

Four axle ready-mix

Project:	SAMPL	E
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Specialized earth moving equipment other than conventional type on-the road trucks and semi-trailer (including Euclids)	\$27.23	13.48 + a
POWER EQUIPMENT OPERATORS		
Group 1: Crane handling or erecting structural steel or stone, hoisting engineer (2 drums or over), front end loader (7 cubic yards or over), Work Boat 26 ft. & Over. (Trade License Required)	\$34.05	17.75 + a
Group 2: Cranes (100 ton rate capacity and over); Excavator over 2 cubic yards; Piledriver (\$3.00 premium when operator controls hammer). (Trade License Required)	\$33.73	17.75 + a
Group 3: Excavator; Cranes (under 100 ton rated capacity), Gradall; Master Mechanic; Hoisting Engineer (all types of equipment where a drum and cable are used to hoist or drag material regardless of motive power of operation), Rubber Tire Excavator (Drott-1085 or similar); Grader Operator; Bulldozer Fine Grade (slopes, shaping, laser or GPS, etc.). (Trade License Required)	\$32.99	17.75 + a
Group 4: Trenching Machines; Lighter Derrick; CMI Machine or Similar; Koehring Loader (Skooper)	\$32.60	17.75 + a
Group 5: Specialty Railroad Equipment; Asphalt Paver; Asphalt Spreader; Asphalt Reclaiming Machine; Line Grinder; Concrete Pumps; Drills with Self Contained Power Units; Boring Machine; Post Hole Digger; Auger; Pounder; Well Digger; Milling Machine (over 24" Mandrell)	\$32.01	17.75 + a
Group 5 continued: Side Boom; Combination Hoe and Loader; Directional Driller.	\$32.01	17.75 + a

Project: SAMPLE		
Group 6: Front End Loader (3 up to 7 cubic yards); Bulldozer (rough grade dozer).	\$31.70	17.75 + a
Group 7: Asphalt Roller; Concrete Saws and Cutters (ride on types); Vermeer Concrete Cutter; Stump Grinder; Scraper; Snooper; Skidder; Milling Machine (24" and Under Mandrel).	\$31.36	17.75 + a
Group 8: Mechanic, Grease Truck Operator, Hydroblaster, Barrier Mover, Power Stone Spreader; Welder; Work Boat under 26 ft.; Transfer Machine.	\$30.96	17.75 + a
Group 9: Front End Loader (under 3 cubic yards), Skid Steer Loader regardless of attachments (Bobcat or Similar); Fork Lift, Power Chipper; Landscape Equipment (including hydroseeder).	\$30.53	17.75 + a
Group 10: Vibratory Hammer, Ice Machine, Diesel and Air Hammer, etc.	\$28.49	17.75 + a
Group 11: Conveyor, Earth Roller; Power Pavement Breaker (whiphammer), Robot Demolition Equipment.	\$28.49	17.75 + a
Group 12: Wellpoint Operator.	\$28.43	17.75 + a
Group 13: Compressor Battery Operator.	\$27.85	17.75 + a

Project: SAMPLE		
Group 14: Elevator Operator; Tow Motor Operator (Solid Tire No Rough Terrain).	\$26.71	17.75 + a
Group 15: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater Operator.	\$26.30	17.75 + a
Group 16: Maintenance Engineer/Oiler	\$25.65	17.75 + a
Group 17: Portable asphalt plant operator; portable crusher plant operator; portable concrete plant operator.	\$29.96	17.75 + a
Group 18: Power Safety Boat; Vacuum Truck; Zim Mixer; Sweeper; (minimum for any job requiring CDL license).	\$27.54	17.75 + a
**NOTE: SEE BELOW		
LINE CONSTRUCTION(Railroad Construction and Maintenance)Last updated 4/17/09		
20) Lineman, Cable Splicer, Dynamite Man	\$35.65	10.70 + 6.25%

Project: SAMPLE 21) Heavy Equipment Operator	\$22.09	10.70 + 6.25%
22) Equipment Operator, Tractor Trailer Driver, Material Men	\$30.30	10.70 + 6.25%
		10.70 + 6.250/
23) Driver Groundmen	\$26.74	10.70 + 6.25%
LINE CONSTRUCTIONLast updated 4/17/09		
24) Driver Groundmen	\$30.92	6.5% + 9.70
25) Groundmen	\$22.67	6.5% + 6.20
26) Heavy Equipment Operators	\$37.10	6.5% + 10.70

\$41.22 6.5% + 12.20

27) Linemen, Cable Splicers, Dynamite Men

28) Material Men, Tractor Trailer Drivers, Equipment Operators

\$35.04

6.5% + 10.45

Welders: Rate for craft to which welding is incidental.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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.

Minimum Rates and Classifications for Residential Construction

R 12865

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 SAMPLE Project Town: Hartford

FAP#: State Number:

CLASSIFICATION Roofers: Composition	Hourly Rate 31.10	Benefits 14.46
Roofers: Slate & Tile	31.60	14.46
Sprinkler Fitters (Fire Sprinklers) (Trade License required: F-1,2,3,4)	39.30	17.25 + a
Cement Masons/Concrete Finisher	21.22	
Elevator Mechanics (Trade License required: R-1,2,5,6)	42.34	18.285+a+b
Power Equipment Operator: Backhoe/Excavator 2 Cubic Yards and Over	33.73	17.75 + a

Project:	SAMPL	E
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Power Equipment Operator: Bulldozer Fine Grade	32.99	17.75 + a
Power Equipment Operator: Combination Hoe and Loader	32.01	17.75 + a
Power Equipment Operator: Loader (3 cubic yards up to 7 cubic yards)	31.70	17.75 + a
Power Equipment Operator: Loader (7 cubic yards or over)	34.05	17.75 + a
Power Equipment Operator: Backhoe/Excavator under 2 cubic yards; Rubber Tire Backhoe/Excavator	32.99	17.75 + a
Power Equipment Operator: Bulldozer (Rough Grade Dozer)	31.70	17.75 + a
Power Equipment Operator: Loader (under 3 cubic yards)	30.53	17.75 + a
Sheet Metal Mechanics (Including HVAC Duct Installation) (Trade License required: SM-1,2,3,4,5,6)	31.57	25.92
Carpenter (Including Drywall Hanging)	15.50	
Electricians (Trade License required: E1,2 L-5,6 C-5,6 T-1,2 L-1,2, V-1,2,7,8,9)	19.99	2.00

15.33	1.56
16.25	2.70
13.09	1.63
14.96	4.63
	16.25 13.09

16.67

2.63

Plumber/Pipefitter (Including HVAC Pipe Installation)

Project: SAMPLE

Welders: Rate for craft to which welding is incidental.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Project: SAMPLE

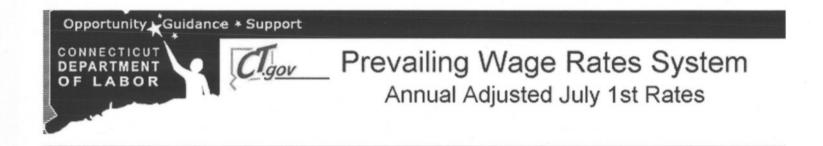
Effective October 1, 2005 - Public Act 05-50: any person performing the work of any mechanic, laborer, or worker shall be paid prevailing wage

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

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.



DOL Web Site O Wage and Workplace Issues O Wage Rates O Building Rates - Hartford

Building Rates - Hartford (effective July 1, 2009)

Classification	Hourly Rate	Benefits
1a) Asbestos Worker/Insulator (Includes application of insulating materials, protective coverings, coatings, & finishes to all types of mechanical systems; application of firestopping material for wall openings & penetrations in walls, floors, ceilings - Last updated 9/1/08	\$34.21	19.81
1b) Asbestos/Toxic Waste Removal Laborers: Asbestos removal and encapsulation (except its removal from mechanical systems which are not to be scrapped), toxic waste removers, blasters.**See Laborers Group 7**		
2) Boilermaker	\$33.79	34% + 8.96
3a) Bricklayer, Cement Mason, Concrete Finisher (including caulking), Plasterers, Stone Masons	\$32.10	19.48 + a
3b) Tile Setter	\$30.78	16.98
3c) Terrazzo Workers, Marble Setters - Last updated 10/1/08	\$30.91	19.12
3d) Tile, Marble & Terrazzo Finishers	\$24.90	14.78

3e) Plasterer	\$32.10	19.48
LABORERS		
4) Group 1: Laborers (common or general), carpenter tenders, wrecking laborers, fire watchers.	\$24.25	14.45
4a) Group 2: Mortar mixers, plaster tender, power buggy operators, powdermen, fireproofer/mixer/nozzleman, fence erector.	\$24.50	14.45
4b) Group 3: Jackhammer operators, mason tender (brick) and mason tender (cement/concrete)	\$24.75	14.45
4c) **Group 4: Pipelayers (Installation of water, storm drainage or sewage lines outside of the building line with P6, P7 license) (the pipelayer rate shall apply only to one or two employees of the total crew who primary task is to actually perform the m	\$25.25	14.45
4d) Group 5: Air track operators, Sand blasters - Last updated 4/8/09	\$25.00	14.45
4e) Group 6: Nuclear toxic waste removers, blasters - Last updated 4/8/09	\$27.25	14.45
4f) Group 7: Asbestos removal and encapsulation (except it's removal from mechanical systems which are not to be scrapped) - Last updated 4/5/09	\$25.25	14.45
4g) Group 8: Bottom men on open air caisson, cylindrical work and boring crew - Last updated 4/8/09	\$24.75	14.45
4h) Group 9: Top men on open air caisson, cylindrical work and boring crew - Last updated 4/8/09	\$24.25	14.45
5) Carpenter, Acoustical Ceiling Installation, Soft Floor/Carpet Laying, Metal Stud Installation, Form Work and Scaffold Building, Drywall Hanging, Modular-Furniture Systems Installers, Lathers, Piledrivers, Resilient Floor Layers.	\$29.00	17.80
5a) Millwrights	\$29.75	17.80
6) Electrical Worker (including low voltage wiring) (Trade License required: E1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9)	\$35.40	19.51
7a) Elevator Mechanic (Trade License required: R-1,2,5,6)	\$42.34	18.285+a+b
LINE CONSTRUCTION		
Groundman	\$22.67	6.50% + 6.20

Linemen/Cable Splicer	\$41.22	6.5% + 12.20
8) Glazier (Trade License required: FG-1,2)	\$31.73	14.55 + a
9) Ironworker, Ornamental, Reinforcing, Structural, and Precast Concrete Erection	\$32.75	25.08 + a
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. and over. (Trade License Required)	\$34.05	17.75 + a
Group 2: Cranes (100 ton rate capacity and over); Backhoe/Excavator over 2 cubic yards; Piledriver (\$3.00 premium when operator controls hammer). (Trade License Required)	\$33.73	17.75 + a
Group 3: Excavator, Backhoe/Excavator under 2 cubic yards; Cranes (under 100 ton rated capacity), Grader/Blade; Master Mechanic; Hoisting Engineer (all types of equipment where a drum and cable are used to hoist or drag material regardless of motive pow	\$32.99	17.75 + a
Group 4: Trenching Machines; Lighter Derrick; Concrete Finishing Machine; CMI Machine or Similar; Koehring Loader (Skooper).	\$32.60	17.75 + a
Group 5: Specialty Railroad Equipment; Asphalt Paver; Asphalt Reclaiming Machine; Line Grinder; Concrete Pumps; Drills with Self Contained Power Units; Boring Machine; Post Hole Digger; Auger; Pounder; Well Digger; Milling Machine (over 24" Mandrell)	\$32.01	17.75 + a
Group 5 continued: Side Boom; Combination Hoe and Loader; Directional Driller.	\$32.01	17.75 + a
Group 6: Front End Loader (3 up to 7 cubic yards); Bulldozer (rough grade dozer).	\$31.70	17.75 + a
Group 7: Asphalt roller, concrete saws and cutters (ride on types), vermeer concrete cutter, Stump Grinder; Scraper; Snooper; Skidder; Milling Machine (24" and under Mandrell).	\$31.36	17.75 + a
Group 8: Mechanic, grease truck operator, hydroblaster; barrier mover; power stone spreader; welding; work boat under 26 ft.; transfer machine.	\$30.96	17.75 + a
Group 9: Front end loader (under 3 cubic yards), skid steer loader regardless of attachments, (Bobcat or Similar): forklift, power chipper; landscape equipment (including Hydroseeder).	\$30.53	17.75 + a
Group 10: Vibratory hammer; ice machine; diesel and air, hammer, etc.	\$28.49	17.75 + a

Group 11: Conveyor, earth roller, power pavement breaker (whiphammer), robot demolition equipment.	\$28.49	17.75 + a
Group 12: Wellpoint operator.	\$28.43	17.75 + a
Group 13: Compressor battery operator.	\$27.85	17.75 + a
Group 14: Elevator operator; tow motor operator (solid tire no rough terrain).	\$26.71	17.75 + a
Group 15: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater Operator.	\$26.30	17.75 + a
Group 16: Maintenance Engineer/Oiler.	\$25.65	17.75 + a
Group 17: Portable asphalt plant operator; portable crusher plant operator; portable concrete plant operator.	\$29.96	17.75 + a
Group 18: Power safety boat; vacuum truck; zim mixer; sweeper; (Minimum for any job requiring a CDL license).	\$27.54	17.75 + a
PAINTERS (Including Drywall Finishing)		
10a) Brush, Roller	\$27.87	14.00
10b) Taper/Drywall Finisher	\$28.92	14.55
10c) Paperhanger	\$28.37	14.00
10e) Spray	\$30.87	14.00
11) Plumber (excluding HVAC pipe installation) (Trade License required: P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2)	\$36.32	21.26
12) Post Digger, Well Digger, Pile Testing Machine	\$32.01	17.75 + a
13) Roofer (composition)	\$31.10	14.46
14) Roofer (slate & tile)	\$31.60	14.46
15) Sheetmetal Worker (Trade License required for HVAC and Ductwork: SM-1,SM-2,SM-3,SM-4,SM-5,SM-6)	\$31.57	25.92

16) Pipefitter (Including HVAC work) (Trade License required: S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4, G-1, G-2, G-8 & G-9)	\$36.32	21.26
TRUCK DRIVERS		
17a) 2 Axle	\$26.98	13.48 + a
17b) 3 Axle, 2 Axle Ready Mix	\$27.08	13.48 + a
17c) 3 Axle Ready Mix	\$27.13	13.48 + a
17d) 4 Axle, Heavy Duty Trailer up to 40 tons	\$27.18	13.48 + a
17e) 4 Axle Ready Mix	\$27.23	13.48 + a
17f) Heavy Duty Trailer (40 Tons and Over)	\$27.43	13.48 + a
17g) Specialized Earth Moving Equipment (Other Than Conventional Type on-the-Road Trucks and Semi-Trailers, Including Euclids)	\$27.23	13.48 + a
18) Sprinkler Fitter (Trade License required: F-1,2,3,4)	\$38.35	16.25 + a

Welders: Rate for craft to which welding is incidental.

- Crane with boom including jib, 150 feet \$1.50 extra.
- Crane with boom including jib, 200 feet \$2.50 extra.
- Crane with boom including jib, 250 feet \$5.00 extra.
- Crane with boom including jib, 300 feet \$7.00 extra.
- Crane with boom including jib, 400 feet \$10.00 extra.

^{*}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.

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

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All Persons 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.

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Footnotes

Footnotes as of July 1, 2009

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

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

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

Bricklayers, Cement Masons, Cement Finishers, Concrete Finishers Plasters, Stone Masons

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

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

Bricklayer (Residential- Fairfield County)

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

Electricians

Fairfield County: West of the Five Mile River in Norwalk

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

Elevator Constructors: Mechanics

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

Glaziers

a. Paid Holidays: Labor Day and Christmas Day.

Power Equipment Operators

(Heavy and Highway Construction & Building Construction)

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

Ironworkers

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

Laborers (Tunnel Construction)

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

Roofers

a. Paid Holidays: July4th, Labor Day, and Christmas Day provided the employee is employed 15 days prior to the holiday.

Sprinkler Fitters

a. Paid Holidays: Memorial Day, July4th, Labor Day, Thanksgiving Day and Christmas Day, provided the employee has been in the employment of a contractor 20 working days prior to any such paid holiday.

Truck Drivers

(Heavy and Highway Construction & Building Construction)

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

VI. Website

The Following Prevailing Wage Information Can Be obtained Through Our Website at www.ct.gov/dol

- Section 3 1-53b; Construction Safety and Health Course. Proof of Completion Required for Employees on Public Building Projects
- Informational Bulletin: The 10-Hour OSHA Construction Safety and Health Course
- Final Regulations
- Annual Prevailing Wage Rates by Town
- General Statute Section 31-53: Summary of Connecticut's Prevailing Wage Law
- Initial Contracting Agency Prevailing Wage Rates Request Form (on line entry)
- Initial Contracting Agency Prevailing Wage Rates Request Form (downloading)
- Payroll Certification for Public Works Project (Sample)
- Federal Davis Bacon Act
- Debarment Lists
- To be Included in the Prevailing Wage Bid Package Below:
 - o CT General Statute 31-55a
 - Contracting Agency Certification Form
 - o Contractor's Wage Certification Form
 - o Payroll Certification Form
 - o Occupational Classification Bulletin
 - Footnotes

VII. Statutes

Section 31-53

Sec. 31-53. Construction, alteration or repair of public works projects by state or political subdivision; wage rates; certified payroll. Penalties for violations. (a) Each contract for the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project by the state or any of its agents, or by any political subdivision of the state or any of its agents, shall contain the following provision: "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 (h) of this section, 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) Any contractor or subcontractor who knowingly or wilfully employs any mechanic, laborer or worker in the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project for or on behalf of the state or any of its agents, or any political subdivision of the state or any of its agents, at a rate of wage on an hourly basis that is less than 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, remodeled, refinished, refurbished, rehabilitated, altered or repaired, or who fails to pay the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, or in lieu thereof to the person, as provided by subsection (a) of this section, shall be fined not less than two thousand five hundred dollars but not more than five thousand dollars for each offense and (1) for the first violation, shall be disqualified from bidding on contracts with the state or any political subdivision until the contractor or subcontractor has made full restitution of the back wages owed to such persons and for an additional six months thereafter and (2) for subsequent violations, shall be disqualified from bidding on contracts with the state or any political subdivision until the contractor or subcontractor has made full restitution of the back wages owed to such persons and for not less than an additional two years thereafter. In addition, if it is found by the contracting officer representing the state or political subdivision of the state that any mechanic, laborer or worker employed by the contractor or any subcontractor directly on the site for the work covered by the contract has been or is being paid a rate of wages less than the rate of wages required by the contract to be paid as required by this section, the state or contracting political subdivision of the state may (A) by written notice to the contractor,

terminate such contractor's right to proceed with the work or such part of the work as to which there has been a failure to pay said required wages and to prosecute the work to completion by contract or otherwise, and the contractor and the contractor's sureties shall be liable to the state or the contracting political subdivision for any excess costs occasioned the state or the contracting political subdivision thereby, or (B) withhold payment of money to the contractor or subcontractor. The contracting department of the state or the political subdivision of the state shall, not later than two days after taking such action, notify the Labor Commissioner, in writing, of the name of the contractor or subcontractor, the project involved, the location of the work, the violations involved, the date the contract was terminated, and steps taken to collect the required wages.

- (c) The Labor Commissioner may make complaint to the proper prosecuting authorities for the violation of any provision of subsection (b).
- (d) For the purpose of predetermining the prevailing rate of wage on an hourly basis and the amount of payment or contributions paid or payable on behalf of each person to any employee welfare fund, as defined in subsection (h) of this section, in each town where such contract is to be performed, the Labor Commissioner shall (1) hold a hearing at any required time to determine the prevailing rate of wages on an hourly basis and the amount of payment or contributions paid or payable on behalf of each person to any employee welfare fund, as defined in subsection (h) of this section, upon any public work within any specified area, and shall establish classifications of skilled, semiskilled and ordinary labor, or (2) adopt and use such appropriate and applicable prevailing wage rate determinations as have been made by the Secretary of Labor of the United States under the provisions of the Davis-Bacon Act, as amended.
- (e) The Labor Commissioner shall determine the prevailing rate of wages on an hourly basis and the amount of payment or contributions paid or payable on behalf of such person to any employee welfare fund, as defined in subsection (h) of this section, in each locality where any such public work is to be constructed, and the agent empowered to let such contract shall contact the Labor Commissioner, at least ten but not more than twenty days prior to the date such contracts will be advertised for bid, to ascertain the proper rate of wages and amount of employee welfare fund payments or contributions and shall include such rate of wage on an hourly basis and the amount of payment or contributions paid or payable on behalf of each person to any employee welfare fund, as defined in subsection (h) of this section, or in lieu thereof the amount to be paid directly to each person for such payment or contributions as provided in subsection (a) of this section for all classifications of labor in the proposal for the contract. The rate of wage on an hourly basis and the amount of payment or contributions to any employee welfare fund, as defined in subsection (h) of this section, or cash in lieu thereof, as provided in subsection (a) of this section, shall, at all times, be considered as the minimum rate for the classification for which it was established. Prior to the award of any contract subject to the provisions of this section, such agent shall certify in writing to the Labor Commissioner the total dollar amount of work to be done

in connection with such public works project, regardless of whether such project consists of one or more contracts. Upon the award of any contract subject to the provisions of this section, the contractor to whom such contract is awarded shall certify, under oath, to the Labor Commissioner the pay scale to be used by such contractor and any of the contractor's subcontractors for work to be performed under such contract.

(f) Each employer subject to the provisions of this section or section 31-54 shall (1) keep, maintain and preserve such records relating to the wages and hours worked by each person performing the work of any mechanic, laborer and worker and a schedule of the occupation or work classification at which each person performing the work of any mechanic, laborer or worker on the project is employed during each work day and week in such manner and form as the Labor Commissioner establishes to assure the proper payments due to such persons or employee welfare funds under this section or section 31-54, regardless of any contractual relationship alleged to exist between the contractor and such person, and (2) submit monthly to the contracting agency a certified payroll that shall consist of a complete copy of such records accompanied by a statement signed by the employer that indicates (A) such records are correct; (B) the rate of wages paid to each person performing the work of any mechanic, laborer or worker and the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, as defined in subsection (h) of this section, are not less than the prevailing rate of wages and the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, as determined by the Labor Commissioner pursuant to subsection (d) of this section, and not less than those required by the contract to be paid; (C) the employer has complied with the provisions of this section and section 31-54; (D) each such person is covered by a workers' compensation insurance policy for the duration of such person's employment, which shall be demonstrated by submitting to the contracting agency the name of the workers' compensation insurance carrier covering each such person, the effective and expiration dates of each policy and each policy number; (E) the employer does not receive kickbacks, as defined in 41 USC 52, from any employee or employee welfare fund; and (F) pursuant to the provisions of section 53a-157a, the employer is aware that filing a certified payroll which the employer knows to be false is a class D felony for which the employer may be fined up to five thousand dollars, imprisoned for up to five years, or both. This subsection shall not be construed to prohibit a general contractor from relying on the certification of a lower tier subcontractor, provided the general contractor shall not be exempted from the provisions of section 53a-157a if the general contractor knowingly relies upon a subcontractor's false certification. Notwithstanding the provisions of section 1-210, the certified payroll shall be considered a public record and every person shall have the right to inspect and copy such records in accordance with the provisions of section 1-212. The provisions of subsections (a) and (b) of section 31-59 and sections 31-66 and 31-69 that are not inconsistent with the provisions of this section or section 31-54 apply to this section. Failing to file a certified payroll pursuant to subdivision (2) of this subsection is a class D felony for which the employer may be fined up to five thousand dollars, imprisoned for up to five years, or both.

- (g) The provisions of this section do not apply where the total cost of all work to be performed by all contractors and subcontractors in connection with new construction of any public works project is less than four hundred thousand dollars or where the total cost of all work to be performed by all contractors and subcontractors in connection with any remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project is less than one hundred thousand dollars.
- (h) As used in this section, section 31-54 and section 31-89a, "employee welfare fund" means any trust fund established by one or more employers and one or more labor organizations or one or more other third parties not affiliated with the employers to provide from moneys in the fund, whether through the purchase of insurance or annuity contracts or otherwise, benefits under an employee welfare plan; provided such term shall not include any such fund where the trustee, or all of the trustees, are subject to supervision by the Banking Commissioner of this state or any other state or the Comptroller of the Currency of the United States or the Board of Governors of the Federal Reserve System, and "benefits under an employee welfare plan" means one or more benefits or services under any plan established or maintained for persons performing the work of any mechanics, laborers or workers or their families or dependents, or for both, including, but not limited to, medical, surgical or hospital care benefits; benefits in the event of sickness, accident, disability or death; benefits in the event of unemployment, or retirement benefits.

(1949 Rev., S. 7372; March, 1950, S. 3018d, 3019d; 1961, P.A. 486, S. 1; 1963, P.A. 240, S. 1; 1967, P.A. 494, S. 1; P.A. 73-566, S. 1; P.A. 75-90, S. 1, 2; P.A. 77-442; 77-614, S. 161, 610; P.A. 79-325; P.A. 80-482, S. 200, 348; P.A. 83-537, S. 2; P.A. 85-355, S. 1-3; P.A. 87-9, S. 2, 3; P.A. 91-74, S. 1; 91-407, S. 40, 42; P.A. 93-392, S. 1; 93-435, S. 65, 95; P.A. 97-263, S. 14; P.A. 03-84, S. 17; P.A. 05-50, S. 1.)

History: 1961 act added provisions re political subdivision and employee welfare funds and added Subsecs. (f) and (g) re records and schedules which must be kept and re inapplicability of provisions where total cost of work is less than five thousand dollars; 1963 act substituted "alteration" for "remodeling" and "public works project" for references to public buildings; 1967 act added Subsec. (h) defining "employee welfare fund" and "benefits under an employee welfare plan" and substituted references to Subsec. (h) for references to Sec. 31-78; P.A. 73-566 amended Subsec. (b) to add provisions re termination of contract when discovery is made that employees are being paid less than the amount required under contract; P.A. 75-90 added references to remodeling, refurnishing, refurbishing and rehabilitation of projects in Subsecs. (a), (b) and (g); P.A. 77-442 added Subdiv. (2) in Subsec. (d) requiring commissioner to adopt and use appropriate and applicable prevailing wage rate determinations made by U.S. Secretary of Labor; P.A. 77-614 replaced bank commissioner with banking commissioner within the department of business regulation and made banking department the division of banking within that department, effective January 1, 1979; P.A. 79-325 replaced former provisions of Subsec. (g) which had rendered section inapplicable where total cost of project is less than fifty thousand dollars with provision rendering

provisions inapplicable to new construction projects where total cost is less than fifty thousand dollars and to remodeling, refinishing etc. projects where total cost is less than ten thousand dollars; P.A. 80-482 restored banking division as independent department with commissioner as its head following abolition of business regulation department; P.A. 83-537 amended Subsec. (e) to require the local agent to contact the labor commissioner, to ascertain proper wage rates and payment levels, at least ten but not more than twenty days prior to putting the contract out to bid; P.A. 85-355 amended Subsec. (e) to require the agent to certify the total cost of work to be done on the public works project, and to require the contractor to certify the pay scale to be used on the project after having been awarded the contract and amended Subsec. (g) to make the prevailing wage requirements inapplicable to projects costing less than two hundred thousand dollars if new construction, or to projects costing less than fifty thousand dollars if remodeling; (Revisor's note: Pursuant to P.A. 87-9 "banking commissioner" was changed editorially by the Revisors to "commissioner of banking"); P.A. 91-74 made a technical change in Subsec. (a), amended Subsec. (b) to increase fines from one hundred dollars to not less than two thousand five hundred dollars but not more than five thousand dollars and amended Subsec. (g) by changing the cost thresholds from two hundred thousand dollars to four hundred thousand dollars and from fifty thousand dollars to one hundred thousand dollars; P.A. 91-407 changed effective date of P.A. 91-74 from October 1, 1991, to July 1, 1991; P.A. 93-392 deleted reference to Sec. 51-53 in Subsec. (a) and added Subdiv. (2) in Subsec. (f) requiring employers subject to the state prevailing wage laws to file weekly certified payrolls with the contracting public agency and designating such certified payrolls as public records; P.A. 93-435 made technical change in Subsec. (a) to reinstate language in existence prior to amendment made by P.A. 93-392, effective June 28, 1993; P.A. 97-263 amended Subsec. (b) to add Subdivs. (1) and (2) disqualifying bidders from bidding on contracts with the state until certain requirements are met and to add provision permitting the withholding of payment of money to the contractor or subcontractor, amended Subsec. (d) to change "employee" to "person", amended Subsec. (f) to require monthly submission of certified payroll and to make failure to file a certified payroll a class D felony, and amended Subsec. (h) by redefining "employee welfare fund" to include one or more other third parties not affiliated with the employers; P.A. 03-84 changed "Commissioner of Banking" to "Banking Commissioner" in Subsec. (h). effective June 3, 2003; P.A. 05-50 substituted "person" for "employee" and made technical changes throughout, amended Subsec. (a) to require payment of prevailing wage to persons performing the work of any mechanic, laborer or worker and to require contractor not obligated to contribute to employee welfare fund to pay to each mechanic, laborer or worker the amount of contribution for such person's classification, amended Subsec. (b) to impose penalties on any contractor or subcontractor who fails to pay prevailing wage or make required contributions to employee welfare fund, amended Subsec. (f) to require employer to keep, maintain and preserve records and schedule of occupation or work classification for each person performing the work of any mechanic, laborer and worker, adding "regardless of any contractual relationship alleged to exist between the contractor and such person" and amended Subsec. (h) to redefine "benefits under an employee welfare plan".

AN ACT CONCERNING CERTIFIED PAYROLLS.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. Subsection (f) of section 31-53 of the general statutes is repealed and the following is substituted in lieu thereof (Effective October 1, 2009):

(f) Each employer subject to the provisions of this section or section 31-54 shall (1) keep, maintain and preserve such records relating to the wages and hours worked by each person performing the work of any mechanic, laborer and worker and a schedule of the occupation or work classification at which each person performing the work of any mechanic, laborer or worker on the project is employed during each work day and week in such manner and form as the Labor Commissioner establishes to assure the proper payments due to such persons or employee welfare funds under this section or section 31-54, regardless of any contractual relationship alleged to exist between the contractor and such person, and (2) submit monthly to the contracting agency by mail, first class postage prepaid, a certified payroll that shall consist of a complete copy of such records accompanied by a statement signed by the employer that indicates (A) such records are correct; (B) the rate of wages paid to each person performing the work of any mechanic, laborer or worker and the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, as defined in subsection (h) of this section, are not less than the prevailing rate of wages and the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, as determined by the Labor Commissioner pursuant to subsection (d) of this section, and not less than those required by the contract to be paid; (C) the employer has complied with the provisions of this section and section 31-54; (D) each such person is covered by a workers' compensation insurance policy for the duration of such person's employment, which shall be demonstrated by submitting to the contracting agency the name of the workers' compensation insurance carrier covering each such person, the effective and expiration dates of each policy and each policy number; (E) the employer does not receive kickbacks, as defined in 41 USC 52, from any employee or employee welfare fund; and (F) pursuant to the provisions of section 53a-157a, the employer is aware that filing a certified payroll which the employer knows to be false is a class D felony for which the employer may be fined up to five thousand dollars, imprisoned for up to five years, or both. This subsection shall not be construed to prohibit a general contractor from relying on the certification of a lower tier subcontractor, provided the general contractor shall not be exempted from the provisions of section 53a-157a if the general contractor knowingly relies upon a subcontractor's false certification. Notwithstanding the provisions of section 1-210, the certified payroll shall be considered a public record and every person shall have the right to inspect and copy such records in accordance with the provisions of section 1-212. The provisions of subsections (a) and (b) of section 31-59 and sections 31-66 and 31-69 that

are not inconsistent with the provisions of this section or section 31-54 apply to this section. Failing to file a certified payroll pursuant to subdivision (2) of this subsection is a class D felony for which the employer may be fined up to five thousand dollars, imprisoned for up to five years, or both.

Section 31-53a

Sec. 31-53a. Distribution of accrued payments. Debarment list. Limitation on awarding contracts. Sworn affidavits required of subcontractors. Civil penalty. Right of action.

- (a) The State Comptroller or the contracting authority acting pursuant to section 31-53 is hereby authorized and directed to pay to mechanics, laborers and workers from any accrued payments withheld under the terms of a contract terminated pursuant to subsection (b) of said section 31-53 any wages found to be due such mechanics, laborers and workers pursuant to said section 31-53. The Labor Commissioner is further authorized and directed to distribute a list to all departments of the state and political subdivisions of the state giving the names of persons or firms whom the Labor Commissioner has found to have disregarded their obligations under said section 31-53 and section 31-76c to employees and subcontractors on public works projects or to have been barred from federal government contracts in accordance with the provisions of the Davis-Bacon Act, 49 Stat. 1011 (1931), 40 USC 276a-2.
- (b) (1) No contract shall be awarded by the state or any of its political subdivisions to the persons or firms appearing on the list distributed by the Labor Commissioner pursuant to subsection (a) of this section or to any firm, corporation, partnership, or association in which such persons or firms have an interest until a period of up to three years, as determined by the Labor Commissioner, has elapsed from the date of publication of the list containing the names of such persons or firms.
- (2) No general contractor that enters into a contract with the state or any of its agents, or with any political subdivision of the state or any of its agents, for the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project subject to the provisions of section 31-53 or for any state highway project that falls under the provisions of section 31-54, shall award any work under such contract to the persons or firms appearing on the list distributed by the Labor Commissioner pursuant to subsection (a) of this section or to any firm, corporation, partnership or association in which such persons or firms have an interest until a period of up to three years, as determined by the Labor Commissioner, has elapsed from the date of publication of the list containing the names of such persons or firms.
- (3) Prior to performing any work under a contract for the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project subject to the provisions of section 31-53 or for any state highway project that falls under the provisions of section 31-54, each person, firm, corporation, partnership or

association engaged by a general contractor to perform such work shall submit a sworn affidavit to the general contractor attesting that such person, firm, corporation, partnership or association does not hold an interest of ten per cent or greater in a firm appearing on the list distributed by the Labor Commissioner pursuant to subsection (a) of this section. The receipt and retention by a general contractor of such sworn affidavit shall fulfill the general contractor's obligation under subdivision (2) of this subsection.

- (4) Any person or firm that appears on the list distributed by the Labor Commissioner pursuant to subsection (a) of this section, for a period of up to three years from the date of publication of such list, shall be liable to the Labor Department for a civil penalty of one thousand dollars for each day or part of a day in which such person or firm performs any work under any contract with the state or any of its agents, or with any political subdivision of the state or any of its agents, for the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project subject to the provisions of section 31-53 or any state highway project that falls under the provisions of section 31-54. The Attorney General, upon complaint of the Labor Commissioner, shall institute a civil action to recover such civil penalty. Any amount recovered shall be deposited in the General Fund and credited to a separate nonlapsing appropriation to the Labor Department, for other current expenses, and may be used by the Labor Department to enforce the provisions of this part. As used in this subdivision, "person or firm" includes any firm, corporation, partnership or association in which a person or firm appearing on the list distributed by the Labor Commissioner pursuant to subsection (a) of this section holds an interest of ten per cent or greater.
- (c) If the accrued payments withheld under the terms of a contract terminated pursuant to subsection (b) of section 31-53 are insufficient to reimburse all the mechanics, laborers and workers with respect to whom there has been a failure to pay the wages required pursuant to said section 31-53, such mechanics, laborers and workers shall have the right of action and of intervention against the contractor and the contractor's sureties conferred by law upon persons furnishing labor or materials, and in such proceedings it shall be no defense that such mechanics, laborers and workers accepted or agreed to accept less than the required wages or that such persons voluntarily made refunds.

(P.A. 73-566, S. 2; P.A. 78-362, S. 1, 3; P.A. 91-74, S. 2; 91-407, S. 40, 42; P.A. 93-392, S. 2; P.A. 97-263, S. 15; P.A. 04-102, S. 1.)

History: P.A. 78-362 required that list distributed by commissioner to departments of the state and to its political subdivisions contain names of those who have been barred from federal government contracts in accordance with provisions of Davis-Bacon Act in Subsec. (a); P.A. 91-74 amended Subsec. (a) by increasing the period of ineligibility from three years to five years; P.A. 91-407 changed effective date of P.A. 91-74 from October 1, 1991, to July 1, 1991; P.A. 93-392 amended Subsec. (a) to add reference to Sec. 31-76c, to require that list distributed by labor commissioner to departments of the state and to its political subdivisions contain names of those who have violated overtime laws

of the state on public works projects and to decrease the period of ineligibility from five to a maximum of three years, as determined by the commissioner; P.A. 97-263 incorporated changes to Sec. 31-53 by reference; P.A. 04-102 made technical changes in Subsec. (a), designated portion of said Subsec. as new Subsec. (b) and amended same by designating existing provisions as Subdiv. (1), providing that list referred to in said Subdiv. is debarment list distributed by the Labor Commissioner pursuant to Subsec. (a), and adding Subdivs. (2), (3) and (4) re general contractors' and subcontractors' obligations and potential liability for civil penalties relative to service on public works or state highway projects, and redesignated existing Subsec. (b) as Subsec. (c), making technical changes therein.

Cited. 223 C. 573, 574, 577, 580-583, 587, 592, 593.

Section 31-53b

Sec. 31-53b. Construction safety and health course. New miner training program. Proof of completion required for mechanics, laborers and workers on public works projects. Enforcement. Regulations. Exceptions. (a) Each contract for a public works project entered into on or after July 1, 2009, by the state or any of its agents, or by any political subdivision of the state or any of its agents, described in subsection (g) of section 31-53, shall contain a provision requiring that each contractor furnish proof with the weekly certified payroll form for the first week each employee begins work on such project that any person performing the work of a mechanic, laborer or worker pursuant to the classifications of labor under section 31-53 on such public works project, pursuant to such contract, has completed a course of at least ten hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration or, has completed a new miner training program approved 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. (b) Any person required to complete a course or program under subsection (a) of this section who has not completed the course or program shall be subject to removal from the worksite if the person does not provide documentation of having completed such course or program by the fifteenth day after the date the person is found to be in noncompliance. The Labor Commissioner or said commissioner's designee shall enforce this section. (c) Not later than January 1, 2009, the Labor Commissioner shall adopt regulations, in accordance with the provisions of chapter 54, to implement the provisions of subsections (a) and (b) of this section. Such regulations shall require that the ten-hour construction safety and health courses required under subsection (a) of this section be conducted in accordance with federal Occupational Safety and Health Administration Training Institute standards, or in accordance with Federal Mine Safety and Health Administration Standards or in accordance with 29 CFR 1910.268, as appropriate. The Labor Commissioner shall accept

as sufficient proof of compliance with the provisions of subsection (a) or (b) of this section a student course completion card issued by the federal Occupational Safety and Health Administration Training Institute, or such other proof of compliance said commissioner deems appropriate, dated no earlier than five years before the commencement date of such public works project. (d) This section shall not apply to employees of public service companies, as defined in section 16-1, or drivers of commercial motor vehicles driving the vehicle on the public works project and delivering or picking up cargo from public works projects provided they perform no labor relating to the project other than the loading and unloading of their cargo.

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

History: P.A. 08-83 amended Subsec. (a) by making provisions applicable to public works project contracts entered into on or after July 1, 2009, replacing provision re total cost of work with reference to Sec. 31-53(g), requiring proof in certified payroll form that new mechanic, laborer or worker has completed a 10-hour or more construction safety course and adding provision re new miner training program, amended Subsec. (b) by substituting "person" for "employee" and adding "or program", amended Subsec. (c) by adding "or in accordance with Federal Mine Safety and Health Administration Standards" and setting new deadline of January 1, 2009, deleted former Subsec. (d) re "public building", added new Subsec. (d) re exemptions for public service company employees and delivery drivers who perform no labor other than delivery and made conforming and technical changes, effective January 1, 2009.

Section 31-54

Sec. 31-54. Rate of wages for work on state highways. The Labor Commissioner shall hold a hearing at any required time to determine the prevailing rate of wages upon any highway contract within any specified area on an hourly basis and the amount of payment or contributions paid or payable on behalf of each employee to any employee welfare fund, as defined in section 31-53, upon any classifications of skilled, semiskilled and ordinary labor. Said commissioner shall determine the prevailing rate of wages on an hourly basis and the amount of payment or contributions paid or payable on behalf of each employee to any employee welfare fund, as defined in section 31-53, in each locality where any highway or bridge is to be constructed, and the Commissioner of Transportation shall include such rate of wage on an hourly basis and the amount of payment or contributions paid or payable on behalf of each employee to any employee welfare fund, as defined in section 31-53, or in lieu thereof, in cash as part of wages each pay day, for each classification of labor in the proposal for the contract and in the contract. The rate and the amount so established shall, at all times, be considered as the minimum rate of wage on an hourly basis and the amount of payment or contributions to an employee welfare fund, or cash in lieu thereof, for the classification for which it was established. Any contractor who pays any person at a lower rate of wage on an

hourly basis or the amount of payment or contributions paid or payable on behalf of each employee to any employee welfare fund, as defined in section 31-53, or where he is not obligated by any agreement to make payment or contributions to the employee welfare funds, as defined in section 31-53, and fails to pay the amount of such payment or contributions directly to the employee as a part of his wages each pay day, than that so established for the classifications of work specified in any such contract shall be fined not more than two hundred dollars for each offense. The provisions of this section shall apply only to state highways and bridges on state highways.

(1949 Rev., S. 2206; March, 1950, S. 1194d; 1961, P.A. 486, S. 2; 1967, P.A. 494, S. 2; 1969, P.A. 768, S. 260; P.A. 97-263, S. 17.)

History: 1961 act added establishment of rate on hourly basis and provisions re employee welfare funds; 1967 act replaced references to Sec. 31-78 with references to Sec. 31-53; 1969 act replaced highway commissioner with commissioner of transportation; P.A. 97-263 increased amount of fine from one hundred to two hundred dollars.

See Sec. 7-112 re applicability of this section to construction, remodeling, etc. of public buildings by political subdivisions of state.

Section 31-55

Sec. 31-55. Posting of wage rates by contractors doing state work. Every contractor or subcontractor performing work for the state subject to the provisions of section 31-53 or 31-54 shall post the prevailing wages as determined by the Labor Commissioner in prominent and easily accessible places at the site of work or at such place or places as are used to pay its employees their wages.

(1955, S. 3020d; P.A. 97-263, S. 16.)

History: P.A. 97-263 incorporated changes to Secs. 31-53 and 31-54 by reference.

Section 31-55a

Sec. 31-55a. Annual adjustments to wage rates by contractors doing state work. Each contractor that is awarded a contract on or after October 1, 2002, for (1) the construction of a state highway or bridge that falls under the provisions of section 31-54, or (2) the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project that falls under the provisions of section

31-53 shall contact the Labor Commissioner on or before July first of each year, for the duration of such contract, to ascertain the prevailing rate of wages on an hourly basis and the amount of payment or contributions paid or payable on behalf of each mechanic, laborer or worker employed upon the work contracted to be done, and shall make any necessary adjustments to such prevailing rate of wages and such payment or contributions paid or payable on behalf of each such employee, effective each July first.

(P.A. 02-69, S. 1.)



Regulations, Part 5: Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction

Title 29, Part 5 of the Code of Federal Regulations

U. S. Department of Labor Employment Standards Administration Wage and Hour Division

Pt. 5

and health standards, the Regional Administrator of the Employment Standards Administration shall notify the appropriate Regional Administrator of the Occupational Safety and Health Administration who shall with respect to the safety and health violation take action commensurate with his responsibilities pertaining to safety and health standards.

- (e) Any report should contain the following:
- (1) The full name and address of the person or organization reporting the breach or violations.
- (2) The full name and address of the person against whom the report is made.
- (3) A clear and concise statement of the facts constituting the alleged breach or violation of any of the provisions of the McNamara-O'Hara Service Contract Act, or of any of the rules or regulations prescribed thereunder.

PART 5—LABOR STANDARDS PRO-VISIONS APPLICABLE TO CON-TRACTS COVERING FEDERALLY FINANCED AND ASSISTED CON-STRUCTION (ALSO LABOR STANDARDS PROVISIONS APPLI-CABLE TO NONCONSTRUCTION CONTRACTS SUBJECT TO THE CONTRACT WORK HOURS AND SAFETY STANDARDS ACT)

Subpart A—Davis-Bacon and Related Acts Provisions and Procedures

Sec.

- 5.1 Purpose and scope.
- 5.2 Definitions.
- 5.3-5.4 [Reserved]
- 5.5 Contract provisions and related matters.
- 5.6 Enforcement.
- $5.7\,\,$ Reports to the Secretary of Labor.
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- 5.9 Suspension of funds.
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- 5.11 Disputes concerning payment of wages.
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- 5.13 Rulings and interpretations.
- 5.14 Variations, tolerances, and exemptions from parts 1 and 3 of this subtitle and this part.
- 5.15 Limitations, variations, tolerances, and exemptions under the Contract Work Hours and Safety Standards Act.

- 5.16 Training plans approved or recognized by the Department of Labor prior to August 20, 1975.
- 5.17 Withdrawal of approval of a training program.

Subpart B—Interpretation of the Fringe Benefits Provisions of the Davis-Bacon Act

- 5.20 Scope and significance of this subpart.
- 5.21 [Reserved]
- 5.22 Effect of the Davis-Bacon fringe benefits provisions.
- 5.23 The statutory provisions.
- 5.24 The basic hourly rate of pay.
- 5.25 Rate of contribution or cost for fringe benefits.
- 5.26 ''* * * contribution irrevocably made * * * to a trustee or to a third person''.
- 5.27 "* * * fund, plan, or program."
- 5.28 Unfunded plans.
- 5.29 Specific fringe benefits.
- 5.30 Types of wage determinations.
- 5.31 Meeting wage determination obligations.
- 5.32 Overtime payments.

AUTHORITY: 40 U.S.C. 276a-276a-7; 40 U.S.C. 276c; 40 U.S.C. 327-332; Reorganization Plan No. 14 of 1950, 5 U.S.C. Appendix; 5 U.S.C. 301; 29 U.S.C. 259; and the statutes listed in §5.1(a) of this part.

SOURCE: 48 FR 19541, Apr. 29, 1983, unless otherwise noted.

Subpart A—Davis-Bacon and Related Acts Provisions and Procedures

SOURCE: 48 FR 19540, Apr. 29, 1983, unless otherwise noted.

EDITORIAL NOTE: Nomenclature changes to subpart A appear at 61 FR 19984, May 3, 1996.

§5.1 Purpose and scope.

(a) The regulations contained in this part are promulgated under the authority conferred upon the Secretary of Labor by Reorganization Plan No. 14 of 1950 and the Copeland Act in order to coordinate the administration and enforcement of the labor standards provisions of each of the following acts by the Federal agencies responsible for their administration and of such additional statutes as may from time to time confer upon the Secretary of Labor additional duties and responsibilities similar to those conferred upon the Secretary of Labor under Reorganization Plan No. 14 of 1950:

- 1. The Davis-Bacon Act (sec. 1-7, 46 Stat. 1949, as amended; Pub. L. 74-403, 40 U.S.C. 276a-276a-7).
- 2. Copeland Act (40 U.S.C. 276c).
- 3. The Contract Work Hours and Safety Standards Act (40 U.S.C. 327-332).
- 4. National Housing Act (sec. 212 added to c. 847, 48 Stat. 1246, by sec. 14, 53 Stat. 807; 12 U.S.C. 1715c and repeatedly amended).
- 5. Housing Act of 1950 (college housing) (amended by Housing Act of 1959 to add labor provisions, 73 Stat. 681; 12 U.S.C. 1749a(f)).
- 6. Housing Act of 1959 (sec. 401(f) of the Housing Act of 1950 as amended by Pub. L. 86-372, 73 Stat. 681; 12 U.S.C. 1701q(c)(3)).
- 7. Commercial Fisheries Research and Development Act of 1964 (sec. 7, 78 Stat. 199; 16 U.S.C. 779e(b)).
- 8. Library Services and Construction $\mbox{\sc Act}$ (sec. 7(a), 78 Stat. 13; 20 U.S.C. 355c(a)(4), as amended).
- 9. National Technical Institute for the Deaf Act (sec. 5(b)(5), 79 Stat. 126; 20 U.S.C. 684(b)(5)).
- 10. National Foundation on the Arts and Humanities Act of 1965 (sec. 5(k), 79 Stat. 846 as amended: 20 U.S.C. 954(i)).
- 11. Elementary and Secondary Education Act of 1965 as amended by Elementary and Secondary and other Education Amendments of 1969 (sec. 423 as added by Pub. L. 91-230, title IV, sec. 401(a)(10), 84 Stat. 169, and renumbered sec. 433, by Pub. L. 92-318; title III, sec. 301(a)(1), 86 Stat. 326; 20 U.S.C. 1232(b)). Under the amendment coverage is extended to all programs administered by the Commissioner of Education.
- 12. The Federal-Aid Highway Acts (72 Stat. 895, as amended by 82 Stat. 821; 23 U.S.C. 113, as amended by the Surface Transportation Assistance Act of 1982, Pub. L. 97-424).
- 13. Indian Self-Determination and Education Assistance Act (sec. 7, 88 Stat. 2205; 25 U.S.C. 450e)
- 14. Indian Health Care Improvement Act (sec. 303(b), 90 Stat. 1407; 25 U.S.C. 1633(b)).
- 15. Rehabilitation Act of 1973 (sec. 306(b)(5) 87 Stat. 384, 29 U.S.C. 776(b)(5)).
- 16. Comprehensive Employment and Training Act of 1973 (sec. 606, 87 Stat. 880, renumbered sec. 706 by 88 Stat. 1845; 29 U.S.C. 986; also sec. 604, 88 Stat. 1846; 29 U.S.C. 964(b)(3)).
- 17. State and Local Fiscal Assistance Act of 1972 (sec. 123(a)(6), 86 Stat. 933; 31 U.S.C. 1246(a)(6)).
- 18. Federal Water Pollution Control Act (sec. 513 of sec. 2, 86 Stat. 894; 33 U.S.C. 1372).
- 19. Veterans Nursing Home Care Act of 1964 Stat. 502. as amended: 5035(a)(8)).
- Postal Reorganization Act 20 (sec. 410(b)(4)(C); 84 Stat. 726 as amended; 39 U.S.C. 410(b)(4)(C)).
- 21. National Visitors Center Facilities Act of 1966 (sec. 110, 32 Stat. 45; 40 U.S.C. 808).

- 22. Appalachian Regional Development Act of 1965 (sec. 402, 79 Stat. 21; 40 U.S.C. App. 402)
- 23. Health Services Research, Health Statistics, and Medical Libraries Act of 1974 (sec. 107, see sec. 308(h)(2) thereof, 88 Stat. 370, as amended by 90 Stat. 378; 42 U.S.C. 242m(h)(2)).
- 24. Hospital Survey and Construction Act. as amended by the Hospital and Medical Facilities Amendments of 1964 (sec. 605(a)(5), 78 Stat 453: 42 U.S.C. 291e(a)(5))
- 25. Health Professions Educational Assistance Act (sec. 303(b), 90 Stat. 2254; 42 U.S.C. 293a(g)(1)(C); also sec. 308a, 90 Stat. 2258, 42 U.S.C. 293a(c)(7)).
- 26. Nurse Training Act of 1964 (sec. 941(a)(1)(C), 89 Stat. 384; 42 U.S.C. 296a(b)(5)).
- 27. Heart Disease, Cancer, and Stroke Amendments of 1965 (sec. 904, as added by sec. 2, 79 Stat. 928; 42 U.S.C. 299d(b)(4)).
- 28. Safe Drinking Water Act (sec. 2(a) see sec. 1450e thereof, 88 Stat. 1691; 42 U.S.C. 300j-9(e)).
- 29. National Health Planning and Resources Act (sec. 4, see sec. 1604(b)(1)(H), 88 Stat. 2261, 42 U.S.C. 3000–3(b)(1)(H)).
 30. U.S. Housing Act of 1937, as amended and recodified (88 Stat. 667; 42 U.S.C. 1437j).
- 31. Demonstration Cities and Metropolitan Development Act of 1966 (secs. 110, 311, 503, 1003, 80 Stat. 1259, 1270, 1277, 1284; 42 U.S.C. 3310; 12 U.S.C. 1715c; 42 U.S.C. 1437j).
- 32. Slum clearance program: Housing Act of 1949 (sec. 109, 63 Stat. 419, as amended; 42 U.S.C. 1459).
- 33. Farm housing: Housing Act of 1964 (adds sec. 516(f) to Housing Act of 1949 by sec. 503,
- 78 Stat. 797; 42 U.S.C. 1486(f)). 34. Housing Act of 1961 (sec. 707, added by sec. 907, 79 Štat. 496, as amended; 42 U.S.C. 1500c - 3
- 35. Defense Housing and Community Facilities and Services Act of 1951 (sec. 310, 65 Stat. 307: 42 U.S.C. 1592i).
- 36. Special Health Revenue Sharing Act of 1975 (sec. 303, see sec. 222(a)(5) thereof, 89 Stat. 324; 42 U.S.C. 2689j(a)(5)).
- 37. Economic Opportunity Act of 1964 (sec. 607, 78 Stat. 532; 42 U.S.C. 2947).
- 38. Headstart, Economic Opportunity, and Community Partnership Act of 1974 (sec. 11, see sec. 811 thereof, 88 Stat. 2327; 42 U.S.C. 2992a).
- 39. Housing and Urban Development Act of 1965 (sec. 707, 79 Stat. 492 as amended; 42 U.S.C. 3107).
- 40. Older Americans Act of 1965 (sec. 502. Pub. L. 89-73, as amended by sec. 501, Pub. L. 93-29; 87 Stat. 50; 42 U.S.C. 3041a(a)(4))
- 41. Public Works and Economic Development Act of 1965 (sec. 712; 79 Stat. 575 as amended; 42 U.S.C. 3222).
- 42. Juvenile Delinquency Prevention Act (sec. 1, 86 Stat. 536; 42 U.S.C. 3884).
- 43. New Communities Act of 1968 (sec. 410, 82 Stat. 516; 42 U.S.C. 3909).

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- 44. Urban Growth and New Community Development Act of 1970 (sec. 727(f), 84 Stat. 1803: 42 U.S.C. 4529).
- 45. Domestic Volunteer Service Act of 1973 (sec. 406, 87 Stat. 410; 42 U.S.C. 5046).
- 46. Housing and Community Development Act of 1974 (secs. 110, 802(g), 88 Stat. 649, 724; 42 U.S.C. 5310, 1440(g)).
- 47. Developmentally Disabled Assistance and Bill of Rights Act (sec. 126(4), 89 Stat. 488; 42 U.S.C. 6042(4); title I, sec. 111, 89 Stat. 491; 42 U.S.C. 6063(b)(19)).
- 48. National Energy Conservation Policy Act (sec. 312, 92 Stat. 3254; 42 U.S.C. 6371j).
- 49. Public Works Employment Act of 1976 (sec. 109, 90 Stat. 1001; 42 U.S.C. 6708; also sec. 208, 90 Stat. 1008; 42 U.S.C. 6728).
- 50. Energy Conservation and Production Act (sec. 451(h), 90 Stat. 1168; 42 U.S.C. 6881(h)).
- 51. Solid Waste Disposal Act (sec. 2, 90 Stat. 2823; 42 U.S.C. 6979).
- 52. Rail Passenger Service Act of 1970 (sec. 405d, 84 Stat. 1337; 45 U.S.C. 565(d)).
- 53. Urban Mass Transportation Act of 1964 (sec. 10, 78 Stat. 307; renumbered sec. 13 by 88 Stat. 715; 49 U.S.C. 1609).
- 54. Highway Speed Ground Transportation Study (sec. 6(b), 79 Stat. 893; 49 U.S.C. 1636(b)).
- 55. Airport and Airway Development Act of 1970 (sec. 22(b), 84 Stat. 231; 49 U.S.C. 1722(b)).
- 56. Federal Civil Defense Act of 1950 (50 U.S.C. App. 2281i).
- 57. National Capital Transportation Act of 1965 (sec. 3(b)(4), 79 Stat. 644; 40 U.S.C. 682(b)(4). NOTE. Repealed December 9, 1969, and labor standards incorporated in sec. 1-1431 of the District of Columbia Code).
- 58. Model Secondary School for the Deaf Act (sec. 4, 80 Stat. 1027, Pub. L. 89–694, but not in the United States Code).
- 59. Delaware River Basin Compact (sec. 15.1, 75 Stat. 714, Pub. L. 87-328) (considered a statute for purposes of the plan but not in the United States Code).
- 60. Energy Security Act (sec. 175(c), Pub. L. 96–294, 94 Stat. 611; 42 U.S.C. 8701 note).
- (b) Part 1 of this subtitle contains the Department's procedural rules governing requests for wage determinations and the issuance and use of such wage determinations under the Davis-Bacon Act and its related statutes as listed in that part.

§ 5.2 Definitions.

- (a) The term *Secretary* includes the Secretary of Labor, the Deputy Under Secretary for Employment Standards, and their authorized representatives.
- (b) The term *Administrator* means the Administrator of the Wage and Hour Division, Employment Standards Ad-

- ministration, U.S. Department of Labor, or authorized representative.
- (c) The term *Federal agency* means the agency or instrumentality of the United States which enters into the contract or provides assistance through loan, grant, loan guarantee or insurance, or otherwise, to the project subject to a statute listed in §5.1.
- (d) The term *Agency Head* means the principal official of the Federal agency and includes those persons duly authorized to act in the behalf of the Agency Head.
- (e) The term *Contracting Officer* means the individual, a duly appointed successor, or authorized representative who is designated and authorized to enter into contracts on behalf of the Federal agency.
- (f) The term *labor standards* as used in this part means the requirements of the Davis-Bacon Act, the Contract Work Hours and Safety Standards Act (other than those relating to safety and health), the Copeland Act, and the prevailing wage provisions of the other statutes listed in §5.1, and the regulations in parts 1 and 3 of this subtitle and this part.
- (g) The term *United States or the District of Columbia* means the United States, the District of Columbia, and all executive departments, independent establishments, administrative agencies, and instrumentalities of the United States and of the District of Columbia, including corporations, all or substantially all of the stock of which is beneficially owned by the United States, by the foregoing departments, establishments, agencies, instrumentalities, and including nonappropriated fund instrumentalities.
- (h) The term *contract* means any prime contract which is subject wholly or in part to the labor standards provisions of any of the acts listed in §5.1 and any subcontract of any tier thereunder, let under the prime contract. A State or local Government is not regarded as a contractor under statutes providing loans, grants, or other Federal assistance in situations where construction is performed by its own employees. However, under statutes requiring payment of prevailing wages to all laborers and mechanics employed on the assisted project, such as the

U.S. Housing Act of 1937, State and local recipients of Federal-aid must pay these employees according to Davis-Bacon labor standards.

- (i) The terms building or work generally include construction activity as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work. The terms include without limitation, buildings, structures, and improvements of all types, such as bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, heavy generators, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, canals, dredging, shoring, rehabilitation and reactivation of plants, scaffolding, drilling, blasting, excavating, clearing, and landscaping. The manufacture or furnishing of materials, articles, supplies or equipment (whether or not a Federal or State agency acquires title to such materials, articles, supplies, or equipment during the course of the manufacture or furnishing, or owns the materials from which they are manufactured or furnished) is not a building or work within the meaning of the regulations in this part unless conducted in connection with and at the site of such a building or work as is described in the foregoing sentence, or under the United States Housing Act of 1937 and the Housing Act of 1949 in the construction or development of the project.
- (j) The terms *construction, prosecution, completion,* or *repair* mean the following:
- (1) All types of work done on a particular building or work at the site thereof, including work at a facility which is deemed a part of the site of the work within the meaning of (paragraph (l) of this section by laborers and mechanics employed by a construction contractor or construction subcontractor (or, under the United States Housing Act of 1937; the Housing Act of 1949; and the Native American Housing Assistance and Self-Determination Act of 1996, all work done in the construction or development of the project), including without limitation—
- (i) Altering, remodeling, installation (where appropriate) on the site of the work of items fabricated off-site;

(ii) Painting and decorating;

(iii) Manufacturing or furnishing of materials, articles, supplies or equipment on the site of the building or work (or, under the United States Housing Act of 1937; the Housing Act of 1949; and the Native American Housing Assistance and Self-Determination Act of 1996 in the construction or development of the project);

(iv)(A) Transportation between the site of the work within the meaning of paragraph (l)(l) of this section and a facility which is dedicated to the construction of the building or work and deemed a part of the site of the work within the meaning of paragraph (l)(2) of this section; and

(B) Transportation of portion(s) of the building or work between a site where a significant portion of such building or work is constructed, which is a part of the site of the work within the meaning of paragraph (l)(1) of this section, and the physical place or places where the building or work will remain.

- (2) Except for laborers and mechanics employed in the construction or development of the project under the United States Housing Act of 1937; the Housing Act of 1949; and the Native American Housing Assistance and Self-Determination Act of 1996, and except as provided in paragraph (j)(1)(iv)(A) of this section, the transportation of materials or supplies to or from the site of the work by employees of the construction contractor or a construction sub-contractor is not "construction, pros-ecution, completion, or repair" (see Building and Construction Trades Department, AFL-CIO v. United States Department of Labor Wage Appeals Board (Midway Excavators, Inc.), 932 F.2d 985 (D.C. Čir. 1991)).
- (k) The term *public building* or *public work* includes building or work, the construction, prosecution, completion, or repair of which, as defined above, is carried on directly by authority of or with funds of a Federal agency to serve the interest of the general public regardless of whether title thereof is in a Federal agency.
- (l) The term *site of the work* is defined as follows:
- (1) *The site of the work* is the physical place or places where the building or

work called for in the contract will remain; and any other site where a significant portion of the building or work is constructed, *provided* that such site is established specifically for the performance of the contract or project;

- (2) Except as provided in paragraph (l)(3) of this section, job headquarters, tool yards, batch plants, borrow pits, etc., are part of the *site of the work, provided* they are dedicated exclusively, or nearly so, to performance of the contract or project, *and provided* they are adjacent or virtually adjacent to the *site of the work* as defined in paragraph (l)(1) of this section;
- (3) Not included in the site of the work are permanent home offices, branch plant establishments, fabrication plants, tool yards, etc., of a contractor or subcontractor whose location and continuance in operation are determined wholly without regard to a particular Federal or federally assisted contract or project. In addition, fabrication plants, batch plants, borrow pits, job headquarters, tool yards, etc., of a commercial or material supplier, which are established by a supplier of materials for the project before opening of bids and not on the site of the work as stated in paragraph (l)(1) of this section, are not included in the site of the work. Such permanent, previously established facilities are not part of the site of the work, even where the operations for a period of time may be dedicated exclusively, or nearly so, to the performance of a contract.
- (m) The term laborer or mechanic includes at least those workers whose duties are manual or physical in nature (including those workers who use tools or who are performing the work of a trade), as distinguished from mental or managerial. The term laborer or mechanic includes apprentices, trainees, helpers, and, in the case of contracts subject to the Contract Work Hours and Safety Standards Act, watchmen or guards. The term does not apply to workers whose duties are primarily administrative, executive, or clerical, rather than manual. Persons employed in a bona fide executive, administrative, or professional capacity as defined in part 541 of this title are not deemed to be laborers or mechanics. Working foremen who devote more

than 20 percent of their time during a workweek to mechanic or laborer duties, and who do not meet the criteria of part 541, are laborers and mechanics for the time so spent.

- (n) The terms *apprentice, trainee,* and *helper* are defined as follows:
- (1) Apprentice means (i) a person employed 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 Bureau, or (ii) a person in the 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 ap-
- (2) Trainee means a person registered and receiving on-the-job training in a construction occupation under a program which has been approved in advance by the U.S. Department of Labor, Employment and Training Administration, as meeting its standards for on-the-job training programs and which has been so certified by that Administration.
- (3) These provisions do not apply to apprentices and trainees employed on projects subject to 23 U.S.C. 113 who are enrolled in programs which have been certified by the Secretary of Transportation in accordance with 23 U.S.C. 113(c).
- (4) A distinct classification of "helper" will be issued in wage determinations applicable to work performed on construction projects covered by the labor standards provisions of the Davis-Bacon and Related Acts only where:
- (i) The duties of the helper are clearly defined and distinct from those of any other classification on the wage determination;
- (ii) The use of such helpers is an established prevailing practice in the area; and

- (iii) The helper is not employed as a trainee in an informal training program. A ''helper'' classification will be added to wage determinations pursuant to $\S5.5(a)(1)(ii)(A)$ only where, in addition, the work to be performed by the helper is not performed by a classification in the wage determination.
- (o) Every person performing the duties of a laborer or mechanic in the construction, prosecution, completion, or repair of a public building or public work, or building or work financed in whole or in part by loans, grants, or guarantees from the United States is employed regardless of any contractual relationship alleged to exist between the contractor and such person.
- (p) The term wages means the basic hourly rate of pay; any contribution irrevocably made by a contractor or subcontractor to a trustee or to a third person pursuant to a bona fide fringe benefit fund, plan, or program; and the rate of costs to the contractor or subcontractor which may be reasonably anticipated in providing bona fide fringe benefits to laborers and mechanics pursuant to an enforceable commitment to carry out a financially responsible plan of program, which was communicated in writing to the laborers and mechanics affected. The fringe benefits enumerated in the Davis-Bacon Act include medical or hospital care, pensions on retirement or death, compensation for injuries or illness resulting from occupational activity, or insurance to provide any of the foregoing; unemployment benefits; life insurance, disability insurance, sickness insurance, or accident insurance; vacation or holiday pay; defraying costs of apprenticeship or other similar programs; or other bona fide fringe benefits. Fringe benefits do not include benefits required by other Federal, State, or local law.
- (q) The term wage determination includes the original decision and any subsequent decisions modifying, superseding, correcting, or otherwise changing the provisions of the original decision. The application of the wage deter-

mination shall be in accordance with the provisions of §1.6 of this title.

[48 FR 19541, Apr. 29, 1983, as amended at 48 FR 50313, Nov. 1, 1983; 55 FR 50149, Dec. 4, 1990; 57 FR 19206, May 4, 1992; 65 FR 69693, Nov. 20, 2000; 65 FR 80278, Dec. 20, 2000]

§§ 5.3-5.4 [Reserved]

§5.5 Contract provisions and related matters.

- (a) The Agency head shall cause or require the contracting officer to insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a public building or public work, or building or work financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in §5.1, the following clauses (or any modifications thereof to meet the particular needs of the agency, Provided, That such modifications are first approved by the Department of Labor):
- (1) Minimum wages. (i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), 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

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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 (a)(1)(iv)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 §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 (a)(1)(ii) 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.

(ii)(A) 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:

- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) 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.

(C) 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 Administrator for determination. The 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

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or (C) 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.

(iii) 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.

(iv) 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 (write in name of Federal Agency or the loan or grant recipient) 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 (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, the (Agency) may, after written notice to the contractor, sponsor, applicant, 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.

(3) Payrolls and basic records. (i) 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 (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of

the project). 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.

(ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the (write in name of appropriate Federal agency) if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the (write in name of agency). The payrolls submitted shall set out accurately and completely all of the information required to be maintained under §5.5(a)(3)(i) of Regulations, 29 CFR part 5. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, DC 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

(B) 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:

(1) That the payroll for the payroll period contains the information required to be maintained under §5.5(a)(3)(i) of Regulations, 29 CFR part 5 and that such information is correct and complete;

(2) 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;

(3) 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.

(C) 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 (a) (3) (ii) (B) of this section.

(D) 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.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the (write the name of the agency) 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

Federal agency may, after written notice to the contractor, sponsor, applicant, or owner, 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—(i) Apprentices. 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.

(ii) Trainees. 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 pro-

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.

- (iii) 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.
- (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 in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the (write in the name of the Federal agency) may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses 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. (i) 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).
- (ii) 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).
- (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.
- (b) Contract Work Hours and Safety Standards Act. The Agency Head shall cause or require the contracting officer to insert the following clauses set forth in paragraphs (b)(1), (2), (3), and (4) of this section in full in any 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 §5.5(a) or 4.6 of part 4 of this title. 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 conract 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 work-week 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 work-week.
- (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(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 guards, employed in violation of the clause set forth in paragraph (b)(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 (b)(1) of this section.
- (3) Withholding for unpaid wages and liquidated damages. The (write in the name of the Federal agency or the loan or grant recipient) 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 (b)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(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 (b)(1) through (4) of this section.

(c) In addition to the clauses con-

tained in paragraph (b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in §5.1, the Agency Head shall cause or require the contracting officer to insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Agency Head shall cause or require the contracting officer to insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the (write the name of agency) and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

(The information collection, recordkeeping, and reporting requirements contained in the following paragraphs of this section were approved by the Office of Management and

Paragraph	OMB Con- trol Number
(a)(1)(ii)(B)	1215-0140
(a)(1)(ii)(C)	1215-0140
(a)(1)(iv)	1215-0140
(a)(3)(i)	1215-0140,
	1215-0017
(a)(3)(ii)(A)	1215-0149

Paragraph	OMB Con- trol Number
(c)	1215–0140, 1215–0017

[48 FR 19540, Apr. 29, 1983, as amended at 51 FR 12265, Apr. 9, 1986; 55 FR 50150, Dec. 4, 1990; 57 FR 28776, June 26, 1992; 58 FR 58955, Nov. 5, 1993; 61 FR 40716, Aug. 5, 1996; 65 FR 69693, Nov. 20, 2000]

EFFECTIVE DATE NOTE: At 58 FR 58955, Nov. 5, 1993, §5.5 was amended by suspending paragraph (a)(1)(ii) indefinitely.

§ 5.6 Enforcement.

(a)(1) It shall be the responsibility of the Federal agency to ascertain whether the clauses required by §5.5 have been inserted in the contracts subject to the labor standards provisions of the Acts contained in §5.1. Agencies which do not directly enter into such contracts shall promulgate the necessary regulations or procedures to require the recipient of the Federal assistance to insert in its contracts the provisions of §5.5. No payment, advance, grant, loan, or guarantee of funds shall be approved by the Federal agency unless the agency insures that the clauses required by §5.5 and the appropriate wage determination of the Secretary of Labor are contained in such contracts. Furthermore, no payment, advance, grant, loan, or guarantee of funds shall be approved by the Federal agency after the beginning of construction unless there is on file with the agency a certification by the contractor that the contractor and its subcontractors have complied with the provisions of §5.5 or unless there is on file with the agency a certification by the contractor that there is a substantial dispute with respect to the required provisions.

(2) Payrolls and Statements of Compliance submitted pursuant §5.5(a)(3)(ii) shall be preserved by the Federal agency for a period of 3 years from the date of completion of the contract and shall be produced at the request of the Department of Labor at any time during the 3-year period.

(3) The Federal agency shall cause such investigations to be made as may be necessary to assure compliance with the labor standards clauses required by §5.5 and the applicable statutes listed in §5.1. Investigations shall be made of all contracts with such frequency as may be necessary to assure compliance. Such investigations shall include interviews with employees, which shall be taken in confidence, and examinations of payroll data and evidence of registration and certification with respect to apprenticeship and training plans. In making such examinations, particular care shall be taken to determine the correctness of classifications and to determine whether there is a disproportionate employment of laborers and of apprentices or trainees registered in approved programs. Such investigations shall also include evidence of fringe benefit plans and payments thereunder. Complaints of alleged violations shall be given priority.

(4) In accordance with normal operating procedures, the contracting agency may be furnished various investigatory material from the investigation files of the Department of Labor. None of the material, other than computations of back wages and liquidated damages and the summary of back wages due, may be disclosed in any manner to anyone other than Federal officials charged with administering the contract or program providing Federal assistance to the contract, without requesting the permission and views of the Department of Labor.

(5) It is the policy of the Department of Labor to protect the identity of its confidential sources and to prevent an unwarranted invasion of personal privacy. Accordingly, the identity of an employee who makes a written or oral statement as a complaint or in the course of an investigation, as well as portions of the statement which would reveal the employee's identity, shall not be disclosed in any manner to anyone other than Federal officials without the prior consent of the employee. Disclosure of employee statements shall be governed by the provisions of the "Freedom of Information Act" U.S.C. 552, see 29 CFR part 70) and the "Privacy Act of 1974" (5 U.S.C. 552a).

(b) The Administrator shall cause to be made such investigations as deemed necessary, in order to obtain compliance with the labor standards provisions of the applicable statutes listed in §5.1, or to affirm or reject the recommendations by the Agency Head

with respect to labor standards matters arising under the statutes listed in §5.1. Federal agencies, contractors, subcontractors, sponsors, applicants, or owners shall cooperate with any authorized representative of the Department of Labor in the inspection of records, in interviews with workers, and in all other aspects of the investigations. The findings of such an investigation, including amounts found due, may not be altered or reduced without the approval of the Department of Labor. Where the underpayments disclosed by such an investigation total \$1,000 or more, where there is reason to believe that the violations are aggravated or willful (or, in the case of the Davis-Bacon Act, that the contractor has disregarded its obligations to employees and subcontractors), or where liquidated damages may be assessed under the Contract Work Hours and Safety Standards Act, the Department of Labor will furnish the Federal agency an enforcement report detailing the labor standards violations disclosed by the investigation and any action taken by the contractor to correct the violative practices, including any payment of back wages. In other circumstances, the Federal agency will be furnished a letter of notification summarizing the findings of the investigation.

§ 5.7 Reports to the Secretary of Labor.

(a) Enforcement reports. (1) Where underpayments by a contractor or subcontractor total less than \$1,000, and where there is no reason to believe that the violations are aggravated or willful (or, in the case of the Davis-Bacon Act that the contractor has disregarded its obligations to employees and subcontractors), and where restitution has been effected and future compliance assured, the Federal agency need not submit its investigative findings and recommendations to the Administrator, unless the investigation was made at the request of the Department of Labor. In the latter case, the Federal agency shall submit a factual summary report detailing any violations including any data on the amount of restitution paid, the number of workers who

received restitution, liquidated damages assessed under the Contract Work Hours and Safety Standards Act, corrective measures taken (such as "letters of notice"), and any information that may be necessary to review any recommendations for an appropriate adjustment in liquidated damages under §5.8.

- (2) Where underpayments by a contractor or subcontractor total \$1,000 or more, or where there is reason to believe that the violations are aggravated or willful (or, in the case of the Davis-Bacon Act, that the contractor has disregarded its obligations to employees and subcontractors), the Federal agency shall furnish within 60 days after completion of its investigation, a detailed enforcement report to the Administrator.
- (b) Semi-annual enforcement reports. To assist the Secretary in fulfilling the responsibilities under Reorganization Plan No. 14 of 1950, Federal agencies shall furnish to the Administrator by April 30 and October 31 of each calendar year semi-annual reports on compliance with and enforcement of the labor standards provisions of the Davis-Bacon Act and its related acts covering the periods of October 1through March 31 and April 1 through September 30, respectively. Such reports shall be prepared in the manner prescribed in memoranda issued to Federal agencies by the Administrator. This report has been cleared in accordance with FPMR 101-11.11 and assigned interagency report control number 1482-DOL-ŠA.
- (c) Additional information. Upon request, the Agency Head shall transmit to the Administrator such information available to the Agency with respect to contractors and subcontractors, their contracts, and the nature of the contract work as the Administrator may find necessary for the performance of his or her duties with respect to the labor standards provisions referred to in this part.
- (d) Contract termination. Where a contract is terminated by reason of violations of the labor standards provisions of the statutes listed in §5.1, a report shall be submitted promptly to the Administrator and to the Comptroller General (if the contract is subject to

the Davis-Bacon Act), giving the name and address of the contractor or sub-contractor whose right to proceed has been terminated, and the name and address of the contractor or subcontractor, if any, who is to complete the work, the amount and number of the contract, and the description of the work to be performed.

§5.8 Liquidated damages under the Contract Work Hours and Safety Standards Act.

- (a) The Contract Work Hours and Safety Standards Act requires that laborers or mechanics shall be paid wages 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 any workweek. In the event of violation of this provision, the contractor and any subcontractor shall be liable for the unpaid wages and in addition for liquidated damages, computed with respect to each laborer or mechanic employed in violation of the Act in the amount of \$10 for each calendar day in the workweek on which such individual was required or permitted to work in excess of forty hours without payment of required overtime wages. Any contractor of subcontractor aggrieved by the withholding of liquidated damages shall have the right to appeal to the head of the agency of the United States (or the territory of District of Columbia, as appropriate) for which the contract work was performed or for which financial assistance was provided.
- (b) Findings and recommendations of the Agency Head. The Agency Head has the authority to review the administrative determination of liquidated damages and to issue a final order affirming the determination. It is not necessary to seek the concurrence of the Administrator but the Administrator shall be advised of the action taken. Whenever the Agency Head finds that a sum of liquidated damages administratively determined to be due is incorrect or that the contractor or subcontractor violated inadvertently the provisions of the Act notwithstanding the exercise of due care upon the part of the contractor or subcontractor involved, and the amount of the liquidated damages computed for

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the contract is in excess of \$500, the Agency Head may make recommendations to the Secretary that an appropriate adjustment in liquidated damages be made or that the contractor or subcontractor be relieved of liability for such liquidated damages. Such findings with respect to liquidated damages shall include findings with respect to any wage underpayments for which the liquidated damages are determined.

(c) The recommendations of the Agency Head for adjustment or relief from liquidated damages under paragraph (a) of this section shall be reviewed by the Administrator or an authorized representative who shall issue an order concurring in the recommendations, partially concurring in the recommendations, or rejecting the recommendations, and the reasons therefor. The order shall be the final decision of the Department of Labor, unless a petition for review is filed pursuant to part 7 of this title, and the Administrative Review Board in its discretion reviews such decision and order; or, with respect to contracts subject to the Service Contract Act, unless petition for review is filed pursuant to part 8 of this title, and the Administrative Review Board in its discretion reviews such decision and

(d) Whenever the Agency Head finds that a sum of liquidated damages administratively determined to be due under section 104(a) of the Contract Work Hours and Safety Standards Act for a contract is \$500 or less and the Agency Head finds that the sum of liquidated damages is incorrect or that the contractor or subcontractor violated inadvertently the provisions of the Contract Work Hours and Safety Standards Act notwithstanding the exercise of due care upon the part of the contractor or subcontractor involved, an appropriate adjustment may be made in such liquidated damages or the contractor or subcontractor may be relieved of liability for such liquidated damages without submitting recommendations to this effect or a report to the Department of Labor. This delegation of authority is made under section 105 of the Contract Work Hours and Safety Standards Act and has been found to be necessary and proper in the

public interest to prevent undue hardship and to avoid serious impairment of the conduct of Government business.

[48 FR 19541, Apr. 29, 1983, as amended at 51 FR 12265, Apr. 9, 1986; 51 FR 13496, Apr. 21, 1986]

§ 5.9 Suspension of funds.

In the event of failure or refusal of the contractor or any subcontractor to comply with the labor standards clauses contained in §5.5 and the applicable statutes listed in §5.1, the Federal agency, upon its own action or upon written request of an authorized representative of the Department of Labor, shall take such action as may be necessary to cause the suspension of the payment, advance or guarantee of funds until such time as the violations are discontinued or until sufficient funds are withheld to compensate employees for the wages to which they are entitled and to cover any liquidated damages which may be due.

§5.10 Restitution, criminal action.

(a) In cases other than those forwarded to the Attorney General of the United States under paragraph (b), of this section, where violations of the labor standards clauses contained in §5.5 and the applicable statutes listed in §5.1 result in underpayment of wages to employees, the Federal agency or an authorized representative of the Department of Labor shall request that restitution be made to such employees or on their behalf to plans, funds, or programs for any type of bona fide fringe benefits within the meaning of section 1(b)(2) of the Davis-Bacon Act.

(b) In cases where the Agency Head or the Administrator finds substantial evidence that such violations are willful and in violation of a criminal statute, the matter shall be forwarded to the Attorney General of the United States for prosecution if the facts warrant. In all such cases the Administrator shall be informed simultaneously of the action taken.

§ 5.11 Disputes concerning payment of

(a) This section sets forth the procedure for resolution of disputes of fact or law concerning payment of prevailing wage rates, overtime pay, or

proper classification. The procedures in this section may be initiated upon the Administrator's own motion, upon referral of the dispute by a Federal agency pursuant to §5.5(a)(9), or upon request of the contractor or subcontractor(s).

(b)(1) In the event of a dispute described in paragraph (a) of this section in which it appears that relevant facts are at issue, the Administrator will notify the affected contractor and subcontractor(s) (if any), by registered or certified mail to the last known address, of the investigation findings. If the Administrator determines that there is reasonable cause to believe that the contractor and/or subcontractor(s) should also be subject to debarment under the Davis-Bacon Act or §5.12(a)(1), the letter will so indicate.

(2) A contractor and/or subcontractor desiring a hearing concerning the Administrator's investigative findings shall request such a hearing by letter postmarked within 30 days of the date of the Administrator's letter. The request shall set forth those findings which are in dispute and the reasons therefor, including any affirmative defenses, with respect to the violations and/or debarment, as appropriate.

(3) Upon receipt of a timely request for a hearing, the Administrator shall refer the case to the Chief Administrative Law Judge by Order of Reference, to which shall be attached a copy of the letter from the Administrator and response thereto, for designation of an Administrative Law Judge to conduct such hearings as may be necessary to resolve the disputed matters. The hearing shall be conducted in accordance with the procedures set forth in 29 CFR part 6.

(c)(1) In the event of a dispute described in paragraph (a) of this section in which it appears that there are no relevant facts at issue, and where there is not at that time reasonable cause to institute debarment proceedings under §5.12, the Administrator shall notify the contractor and subcontractor(s) (if any), by registered or certified mail to the last known address, of the investigation findings, and shall issue a ruling on any issues of law known to be in dispute.

(2)(i) If the contractor and/or subcontractor(s) disagree with the factual findings of the Administrator or believe that there are relevant facts in dispute, the contractor or subcontractor(s) shall so advise the Administrator by letter postmarked within 30 days of the date of the Administrator's letter. In the response, the contractor and/or subcontractor(s) shall explain in detail the facts alleged to be in dispute and attach any supporting documentation.

(ii) Upon receipt of a response under paragraph (c)(2)(i) of this section alleging the existence of a factual dispute, the Administrator shall examine the information submitted. If the Administrator determines that there is a relevant issue of fact, the Administrator shall refer the case to the Chief Administrative Law Judge in accordance with paragraph (b)(3) of this section. If the Administrator determines that there is no relevant issue of fact, the Administrator shall so rule and advise the contractor and subcontractor(s) (if any) accordingly.

(3) If the contractor and/or subcontractor(s) desire review of the ruling issued by the Administrator under paragraph (c)(1) or (2) of this section, the contractor and/or subcontractor(s) shall file a petition for review thereof with the Administrative Review Board within 30 days of the date of the ruling, with a copy thereof the Administrator. The petition for review shall be filed in accordance with part 7 of this title.

(d) If a timely response to the Administrator's findings or ruling is not made or a timely petition for review is not filed, the Administrator's findings and/or ruling shall be final, except that with respect to debarment under the Davis-Bacon Act, the Administrator shall advise the Comptroller General of the Administrator's recommendation in accordance with §5.12(a)(1). If a timely response or petition for review is filed, the findings and/or ruling of the Administrator shall be inoperative unless and until the decision is upheld by the Administrative Law Judge or the Administrative Review Board.

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§ 5.12 Debarment proceedings.

(a)(1) Whenever any contractor or subcontractor is found by the Secretary of Labor to be in aggravated or willful violation of the labor standards provisions of any of the applicable statutes listed in §5.1 other than the Davis-Bacon Act, such contractor or subcontractor or any firm, corporation, partnership, or association in which such contractor or subcontractor has a substantial interest shall be ineligible for a period not to exceed 3 years (from the date of publication by the Comptroller General of the name or names of said contractor or subcontractor on the ineligible list as provided below) to receive any contracts or subcontracts subject to any of the statutes listed in § 5.1.

(2) In cases arising under contracts covered by the Davis-Bacon Act, the Administrator shall transmit to the Comptroller General the names of the contractors or subcontractors and their responsible officers, if any (and any firms in which the contractors or subcontractors are known to have an interest), who have been found to have disregarded their obligations to employees, and the recommendation of the Secretary of Labor or authorized representative regarding debarment. The Comptroller General will distribute a list to all Federal agencies giving the names of such ineligible person or firms, who shall be ineligible to be awarded any contract or subcontract of the United States or the District of Columbia and any contract or subcontract subject to the labor standards provisions of the statutes listed in §5.1.

(b)(1) In addition to cases under which debarment action is initiated pursuant to §5.11, whenever as a result of an investigation conducted by the Federal agency or the Department of Labor, and where the Administrator finds reasonable cause to believe that a contractor or subcontractor has committed willful or aggravated violations of the labor standards provisions of any of the statutes listed in §5.1 (other than the Davis-Bacon Act), or has committed violations of the Davis-Bacon Act which constitute a disregard of its obligations to employees or subcontractors under section 3(a) thereof,

the Administrator shall notify by registered or certified mail to the last known address, the contractor or subcontractor and its responsible officers, if any (and any firms in which the contractor or subcontractor are known to have a substantial interest), of the finding. The Administrator shall afford such contractor or subcontractor and any other parties notified an opportunity for a hearing as to whether debarment action should be taken under paragraph (a)(1) of this section or section 3(a) of the Davis-Bacon Act. The Administrator shall furnish to those notified a summary of the investigative findings. If the contractor or subcontractor or any other parties notified wish to request a hearing as to whether debarment action should be taken, such a request shall be made by letter postmarked within 30 days of the date of the letter from the Administrator, and shall set forth any findings which are in dispute and the reasons therefor, including any affirmative defenses to be raised. Upon receipt of such request for a hearing, the Administrator shall refer the case to the Chief Administrative Law Judge by Order of Reference, to which shall be attached a copy of the letter from the Administrator and the response thereto, for designation of an Administrative Law Judge to conduct such hearings as may be necessary to determine the matters in dispute. In considering debarment under any of the statutes listed in §5.1 other than the Davis-Bacon Act, the Administrative Law Judge shall issue an order concerning whether the contractor or subcontractor is to be debarred in accordance with paragraph (a)(1) of this section. In considering debarment under the Davis-Bacon Act, the Administrative Law Judge shall issue a recommendation as to whether the contractor or subcontractor should be debarred under section 3(a) of the Act.

(2) Hearings under this section shall be conducted in accordance with 29 CFR part 6. If no hearing is requested within 30 days of receipt of the letter from the Administrator, the Administrator's findings shall be final, except with respect to recommendations regarding debarment under the DavisBacon Act, as set forth in paragraph (a)(2) of this section.

(c) Any person or firm debarred under §5.12(a)(1) may in writing request removal from the debarment list after six months from the date of publication by the Comptroller General of such person or firm's name on the ineligible list. Such a request should be directed to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210, and shall contain a full explanation of the reasons why such person or firm should be removed from the ineligible list. In cases where the contractor or subcontractor failed to make full restitution to all underpaid employees, a request for removal will not be considered until such underpayments are made. In all other cases, the Administrator will examine the facts and circumstances surrounding the violative practices which caused the debarment, and issue a decision as to whether or not such person or firm has demonstrated a current responsibility to comply with the labor standards provisions of the statutes listed in §5.1, and therefore should be removed from the ineligible list. Among the factors to be considered in reaching such a decision are the severity of the violations, the contractor or subcontractor's attitude towards compliance, and the past compliance history of the firm. In no case will such removal be effected unless the Administrator determines after an investigation that such person or firm is in compliance with the labor standards provisions applicable to Federal contracts and Federally assisted construction work subject to any of the applicable statutes listed in §5.1 and other labor statutes providing wage protection, such as the Service Contract Act, the Walsh-Healey Public Contracts Act, and the Fair Labor Standards Act. If the request for removal is denied, the person or firm may petition for review by the Administrative Review Board pursuant to 29 CFR part 7.

(d)(1) Section 3(a) of the Davis-Bacon Act provides that for a period of three years from date of publication on the ineligible list, no contract shall be awarded to any persons or firms placed on the list as a result of a finding by the Comptroller General that such persons or firms have disregarded obligations to employees and subcontractors under that Act, and further, that no contract shall be awarded to "any firm, corporation, partnership, or association in which such persons or firms have an interest." Paragraph (a)(1) of this section similarly provides that for a period not to exceed three years from date of publication on the ineligible list, no contract subject to any of the statutes listed in §5.1 shall be awarded to any contractor or subcontractor on the ineligible list pursuant to that paragraph, or to "any firm, corporation, partnership, or association" which such contractor or subcontractor has a "substantial interest." A finding as to whether persons or firms whose names appear on the ineligible list have an interest (or a substantial interest, as appropriate) in any other firm, corporation, partnership, or association, may be made through investigation, hearing, or otherwise.

(2)(i) The Administrator, on his/her own motion or after receipt of a request for a determination pursuant to paragraph (d)(3) of this section may make a finding on the issue of interest (or substantial interest, as appropriate).

(ii) If the Administrator determines that there may be an interest (or substantial interest, as appropriate), but finds that there is insufficient evidence to render a final ruling thereon, the Administrator may refer the issue to the Chief Administrative Law Judge in accordance with paragraph (d)(4) of this section.

(iii) If the Administrator finds that no interest (or substantial interest, as appropriate) exists, or that there is not sufficient information to warrant the initiation of an investigation, the requesting party, if any, will be so notified and no further action taken.

(iv)(A) If the Administrator finds that an interest (or substantial interest, as appropriate) exists, the person or firm affected will be notified of the Administrator's finding (by certified mail to the last known address), which shall include the reasons therefor, and such person or firm shall be afforded an opportunity to request that a hearing

be held to render a decision on the issue.

(B) Such person or firm shall have 20 days from the date of the Administrator's ruling to request a hearing. A detailed statement of the reasons why the Administrator's ruling is in error, including facts alleged to be in dispute, if any, shall be submitted with the request for a hearing.

(C) If no hearing is requested within the time mentioned in paragraph (d)(2)(iv)(B) of this section, the Administrator's finding shall be final and the Administrator shall so notify the Comptroller General. If a hearing is requested, the ruling of the Administrator shall be inoperative unless and until the administrative law judge or the Administrative Review Board issues an order that there is an interest (or substantial interest, as appropriate).

(3)(i) A request for a determination of interest (or substantial interest, as appropriate), may be made by any interested party, including contractors or prospective contractors and associations of contractor's representatives of employees, and interested Government agencies. Such a request shall be submitted in writing to the Administrator, Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210.

(ii) The request shall include a statement setting forth in detail why the petitioner believes that a person or firm whose name appears on the debarred bidders list has an interest (or a substantial interest, as appropriate) in any firm, corporation, partnership, or association which is seeking or has been awarded a contract of the United States or the District of Columbia, or which is subject to any of the statutes listed in §5.1. No particular form is prescribed for the submission of a request under this section.

(4) Referral to the Chief Administrative Law Judge. The Administrator, on his/her own motion under paragraph (d)(2)(ii) of this section or upon a request for hearing where the Administrator determines that relevant facts are in dispute, will by order refer the issue to the Chief Administrative Law Judge, for designation of an Adminis-

trative Law Judge who shall conduct such hearings as may be necessary to render a decision solely on the issue of interest (or substantial interest, as appropriate). Such proceedings shall be conducted in accordance with the procedures set forth at 29 CFR part 6.

(5) Referral to the Administrative Review Board. If the person or firm affected requests a hearing and the Administrator determines that relevant facts are not in dispute, the Administrator will refer the issue and the record compiled thereon to the Administrative Review Board to render a decision solely on the issue of interest (or substantial interest, as appropriate). Such proceeding shall be conducted in accordance with the procedures set forth at 29 CFR part 7.

[48 FR 19541, Apr. 29, 1983, as amended at 48 FR 50313, Nov. 1, 1983]

§5.13 Rulings and interpretations.

All questions relating to the application and interpretation of wage determinations (including the classifications therein) issued pursuant to part 1 of this subtitle, of the rules contained in this part and in parts 1 and 3, and of the labor standards provisions of any of the statutes listed in §5.1 shall be referred to the Administrator for appropriate ruling or interpretation. The rulings and interpretations shall be authoritative and those under the Davis-Bacon Act may be relied upon as provided for in section 10 of the Portal-to-Portal Act of 1947 (29 U.S.C. 259). Requests for such rulings and interpretations should be addressed to the Administrator, Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210.

§ 5.14 Variations, tolerances, and exemptions from parts 1 and 3 of this subtitle and this part.

The Secretary of Labor may make variations, tolerances, and exemptions from the regulatory requirements of this part and those of parts 1 and 3 of this subtitle whenever the Secretary finds that such action is necessary and proper in the public interest or to prevent injustice and undue hardship. Variations, tolerances, and exemptions may not be made from the statutory

requirements of any of the statutes listed in §5.1 unless the statute specifically provides such authority.

§5.15 Limitations, variations, tolerances, and exemptions under the Contract Work Hours and Safety Standards Act.

- (a) General. Upon his or her own initiative or upon the request of any Federal agency, the Secretary of Labor may provide under section 105 of the Contract Work Hours and Safety Standards Act reasonable limitations and allow variations, tolerances, and exemptions to and from any or all provisions of that Act whenever the Secretary finds such action to be necessary and proper in the public interest to prevent injustice, or undue hardship, or to avoid serious impairment of the conduct of Government business. Any request for such action by the Secretary shall be submitted in writing, and shall set forth the reasons for which the request is made.
- (b) Exemptions. Pursuant to section 105 of the Contract Work Hours and Safety Standards Act, the following classes of contracts are found exempt from all provisions of that Act in order to prevent injustice, undue hardship, or serious impairment of Government
- (1) Contract work performed in a workplace within a foreign country or within territory under the jurisdiction of the United States other than the following: A State of the United States; the District of Columbia; Puerto Rico; the Virgin Islands; Outer Continental Shelf lands defined in the Outer Continental Shelf Lands Act (ch. 345, 67 Stat. 462); American Samoa; Guam; Wake Island; Eniwetok Atoll; Kwajalein Atoll; and Johnston Island.
- (2) Agreements entered into by or on behalf of the Commodity Credit Corporation providing for the storing in or handling by commercial warehouses of wheat, corn, oats, barley, rye, grain sorghums, soybeans, flaxseed, rice, naval stores, tobacco, peanuts, dry beans, seeds, cotton, and wool.
- (3) Sales of surplus power by the Tennessee Valley Authority to States, counties, municipalities, cooperative organization of citizens or farmers, corporations and other individuals pur-

- suant to section 10 of the Tennessee Valley Authority Act of 1933 (16 U.S.C. 8311).
- (c) Tolerances. (1) The "basic rate of pay" under section 102 of the Contract Work Hours and Safety Standards Act may be computed as an hourly equivalent to the rate on which time-and-one-half overtime compensation may be computed and paid under section 7 of the Fair Labor Standards Act of 1938, as amended (29 U.S.C. 207), as interpreted in part 778 of this title. This tolerance is found to be necessary and proper in the public interest in order to prevent undue hardship.
- (2) Concerning the tolerance provided in paragraph (c)(1) of this section, the provisions of section 7(d)(2) of the Fair Labor Standards Act and §778.7 of this title should be noted. Under these provisions, payments for occasional periods when no work is performed, due to vacations, and similar causes are excludable from the "regular rate" under the Fair Labor Standards Act. Such payments, therefore, are also excludable from the "basic rate" under the Contract Work Hours and Safety Standards Act.
- (3) See §5.8(c) providing a tolerance subdelegating authority to the heads of agencies to make appropriate adjustments in the assessment of liquidated damages totaling \$500 or less under specified circumstances.
- (4)(i) Time spent in an organized program of related, supplemental instruction by laborers or mechanics employed under bona fide apprenticeship or training programs may be excluded from working time if the criteria prescribed in paragraphs (c)(4)(ii) and (iii) of this section are met.
- (ii) The apprentice or trainee comes within the definition contained in \$5.2(n).
- (iii) The time in question does not involve productive work or performance of the apprentice's or trainee's regular duties.
- (d) Variations. (1) In the event of failure or refusal of the contractor or any subcontractor to comply with overtime pay requirements of the Contract Work Hours and Safety Standards Act, if the funds withheld by Federal agencies for the violations are not sufficient to pay

§5.16

fully both the unpaid wages due laborers and mechanics and the liquidated damages due the United States, the available funds shall be used first to compensate the laborers and mechanics for the wages to which they are entitled (or an equitable portion thereof when the funds are not adequate for this purpose); and the balance, if any, shall be used for the payment of liq-

uidated damages.

- (2) In the performance of any contract entered into pursuant to the provisions of 38 U.S.C. 620 to provide nursing home care of veterans, no contractor or subcontractor under such contract shall be deemed in violation of section 102 of the Contract Work Hours and Safety Standards Act by virtue of failure to pay the overtime wages required by such section for work in excess of 40 hours in the workweek to any individual employed by an establishment which is an institution primarily engaged in the care of the sick, the aged, or the mentally ill or defective who reside on the premises if, pursuant to an agreement or understanding arrived at between the employer and the employee before performance of the work, a work period of 14 consecutive days is accepted in lieu of the workweek of 7 consecutive days for the purpose of overtime compensation and if such individual receives compensation for employment in excess of 8 hours in any workday and in excess of 80 hours in such 14-day period at a rate not less than 11/2 times the regular rate at which the individual is employed, computed in accordance with the requirements of the Fair Labor Standards Act of 1938, as amended.
- (3) Any contractor or subcontractor performing on a government contract the principal purpose of which is the furnishing of fire fighting or suppression and related services, shall not be deemed to be in violation of section 102 of the Contract Work Hour and Safety Standards Act for failing to pay the overtime compensation required by section 102 of the Act in accordance with the basic rate of pay as defined in paragraph (c)(1) of this section, to any pilot or copilot of a fixed-wing or rotary-wing aircraft employed on such contract if:

- (i) Pursuant to a written employment agreement between the contractor and the employee which is arrived at before performance of the work.
- (A) The employee receives gross wages of not less than \$300 per week regardless of the total number of hours worked in any workweek, and
- (B) Within any workweek the total wages which an employee receives are not less than the wages to which the employee would have been entitled in that workweek if the employee were paid the minimum hourly wage required under the contract pursuant to the provisions of the Service Contract Act of 1965 and any applicable wage determination issued thereunder for all hours worked, plus an additional premium payment of one-half times such minimum hourly wage for all hours worked in excess of 40 hours in the workweek;
- (ii) The contractor maintains accurate records of the total daily and weekly hours of work performed by such employee on the government contract. In the event these conditions for the exemption are not met, the requirements of section 102 of the Contract Work Hours and Safety Standards Act shall be applicable to the contract from the date the contractor or subcontractor fails to satisfy the conditions until completion of the con-

(Reporting and recordkeeping requirements in paragraph (d)(2) have been approved by the Office of Management and Budget under control numbers 1215-0140 and 1215-0017. Reporting and recordkeeping requirements in paragraph (d)(3)(ii) have been approved by the Office of Management and Budget under control number 1215-0017)

[48 FR 19541, Apr. 29, 1983, as amended at 51 FR 12265, Apr. 9, 1986; 61 FR 40716, Aug. 5,

§5.16 Training plans approved or recognized by the Department of Labor prior to August 20, 1975.

(a) Notwithstanding the provisions of §5.5(a)(4)(ii) relating to the utilization of trainees on Federal and federally assisted construction, no contractor shall be required to obtain approval of a training program which, prior to August 20, 1975, was approved by the Department of Labor for purposes of the

Davis-Bacon and Related Acts, was established by agreement of organized labor and management and therefore recognized by the Department, and/or was recognized by the Department under Executive Order 11246, as amended. A copy of the program and evidence of its prior approval, if applicable shall be submitted to the Employment and Training Administration, which shall certify such prior approval or recognition of the program. In every other respect, the provisions of §5.5(a)(4)(ii) including those relating to registration of trainees, permissible ratios, and wage rates to be paid—shall apply to these programs.

(b) Every trainee employed on a contract executed on and after August 20, 1975, in one of the above training programs must be individually registered in the program in accordance with Employment and Training Administration procedures, and must be paid at the rate specified in the program for the level of progress. Any such employee listed on the payroll at a trainee rate who is not registered and participating in a program certified by ETA pursuant to this section, or approved and by ETA pursuant certified §5.5(a)(4)(ii), must be paid the wage rate determined by the Secretary of Labor for the classification of work actually performed. The ratio of trainees to journeymen shall not be greater than permitted by the terms of the program.

(c) In the event a program which was recognized or approved prior to August 20, 1975, is modified, revised, extended, or renewed, the changes in the program or its renewal must be approved by the Employment and Training Administration before they may be placed into effect.

§5.17 Withdrawal of approval of a training program.

If at any time the Employment and Training Administration determines, after opportunity for a hearing, that the standards of any program, whether it is one recognized or approved prior to August 20, 1975, or a program subsequently approved, have not been complied with, or that such a program fails to provide adequate training for participants, a contractor will no longer

be permitted to utilize trainees at less than the predetermined rate for the classification of work actually performed until an acceptable program is approved.

Subpart B—Interpretation of the Fringe Benefits Provisions of the Davis-Bacon Act

SOURCE: 29 FR 13465, Sept. 30, 1964, unless otherwise noted.

§ 5.20 Scope and significance of this subpart.

The 1964 amendments (Pub. L. 88-349) to the Davis-Bacon Act require, among other things, that the prevailing wage determined for Federal and federallyassisted construction include: (a) The basic hourly rate of pay; and (b) the amount contributed by the contractor or subcontractor for certain fringe benefits (or the cost to them of such benefits). The purpose of this subpart is to explain the provisions of these amendments. This subpart makes available in one place official interpretations of the fringe benefits provisions of the Davis-Bacon Act. These interpretations will guide the Department of Labor in carrying out its responsibilities under these provisions. These interpretations are intended also for the guidance of contractors, their associations, laborers and mechanics and their organizations, and local, State and Federal agencies, who may be concerned with these provisions of the law. The interpretations contained in this subpart are authoritative and may be relied upon as provided for in section 10 of the Portal-to-Portal Act of 1947 (29 U.S.C. 359). The omission to discuss a particular problem in this subpart or in supplementing interpretations should not be taken to indicate the adoption of any position by the Secretary of Labor with respect to such problem or to constitute an administrative interpretation, practice, or enforcement policy. Questions on matters not fully covered by this subpart may be referred to the Secretary for interpretation as provided in §5.12.

IX. Appendix

Appendix B Changes in the Projects Covered by Connecticut's Prevailing Wage Law

Year	Type of Project	Type of Work	Threshold
1933	any public building	construction, remodeling, or repair	no limit
1961	any public building	construction, remodeling, or repair	\$5,000 +
1963	any public works project	construction, remodeling, or repair	\$5,000 +
1975	any public works project	construction, remodeling, refinishing, rehabilitation, refurbishing, alteration, or repair	\$5,000 +
1979	any public works project	new construction	\$50,000 +
		remodeling, refinishing, rehabilitation, refurbishing, alteration, or repair	\$10,000 +
1985	any public works project	new construction	\$200,000 +
		remodeling, refinishing, rehabilitation, refurbishing, alteration, or repair	\$50,000 +
1991	any public works project	new construction	\$400,000 +
		remodeling, refinishing, rehabilitation, refurbishing, alteration, or repair	\$100,000 +

Note: The 1993 language is the original law; subsequent changes are shown in bold type. Special Acknowledgment to Legislative Program Review and Investigations Committee for all data in Appendix B.

Sources of Data: Connecticut General Statutes and Public Acts

Appendix B-1 Dates Specific Projects First Covered by Connecticut Prevailing Wage Law (C.G.S. 31-53)

C.G.S. Sec.	Entities Affected	Projects Covered by the Law	Effective Date
7-112	any political subdivision of Conn. (or its agents)	construction, remodeling, or repair of any public building	1955
7-502(a)	governmental units, primarily municipalities	construction, reconstruction, or rehabilitation of development property as defined I Chap. 114 (City/Town Development Act)	1975
8-74	eligible developers*	moderate rental housing projects constructed under Chap. 128 Part II	1955
8-94	eligible developers*	homes constructed/rehabilitated under Chap. 128 Part III (if 10 + units)	1950
8-117a	housing authorities*	housing for elderly persons under Chap. 128 Part VI	1959
8-169d(c)(6)	contractors or subcontractors	construction or rehabilitation work for most community development plan programs	1975
10a-255(a)	Univ. of Conn. Health Center Finance Corp. or subsidiary hospital facility	contracts for construction	1987
31-53 re prevailing wage rates	the state or any political subdivision of it (or their agents)	construction, remodeling, refmishing, refixbishing, rehabilitation, alteration or repair of any public works project where total cost of work is: \$400,00 + for new construction \$100,000 + for other categories	1933- the state 1961 - political subdivision

^{*}Terminology of contracting party modified over the years - entity listed is current language.

Effective date listed is first reference to provisions of Section 31-53.

Appendix B-2 Penalties for Failure to Comply with Components of Connecticut's Prevailing Wage Law

Statutory Section	Nature of Violation	Current Penalty	History
31-53(b) re prevailing wage (hourly rate and employee fund contributions) on public works projects	knowingly and willfully employing persons at wages below customary or prevailing	\$2,500-\$5,000 for each offense; contract can be terminated	established in 1933 as \$100 for each offense; termination option added in 1973; current fines adopted in 1991
31-53 re prevailing wage (hourly rate and employee fund contributions) on state highways/bridges	paying persons at rate of wage lower than customary or prevailing	\$100 for each offense	adopted in 1935
31-69a re state contracts	additional penalties for violation Chap. 557, Part III	\$150 for each violation of chapter	adopted in 1993
31-69b re employee protection	discriminating against employee(s) for providing info re Chap. 557	appropriate relief (job, back wages, benefits, atty. fees, etc.)	adopted in 1993
53a-119 re larceny	knowingly filing a false payroll under Sec. 31-53 and failing to pay welfare fund amount	varies, depending on amount of underpayment involved	adopted in 1993
53a-157a re false statement in first degree	intentionally making false written statement on certified payroll filed under 31-53 with intent to deceive	Class D felony (up to \$5,000 fine and/or 5 years jail)	adopted in 1993

Appendix B-3 Changes in Process for Determining Prevailing Wage Rates

Year	Party Setting Rate	Nature of Responsibility	Tasks
1933	commissioner of labor and factory inspection	in case of dispute as to "customary or prevailing rate of wage in any town after proper investigation, determine the customary or prevailing rate of wage in such town"	if "no direct data available," commissioner "make make investigation and obtain data from towns adjoining thereto"
1937	three-person labor board (representing labor, construction employers, and the state)	"predetermining the prevailing rate of wage in each town where such (construction, remodeling, or repair) contract is to be performed"	"hold a hearing any required time to determine the prevailing rate of wages upon any public work within any specified area and, shall establish c1assifications of skilled, semi-skilled and ordinary labor." "determine the prevailing rate of wages in each locality where any such public work is to be construction."
1950	labor commissioner	same as above	same as above
1961	labor commissioner	"predetermining the prevailing rate of wage on an hourly basis and the amount of payment or contributions paid or payable on behalf of each employee to any employee welfare fund, as defined in section 31-78, in each town where such contract is to be performed.	"hold a hearing at any required time to determine the prevailing rate of wages on an hourly basis and the amount of payment or contributions paid or payable on behalf of each employee to any employee welfare fund, as defined in section 31-78, upon any public work within any specified area, and shall establish classifications of skilled, semi-skilled and ordinary labor." "determine the prevailing rate of wages on an hourly basis and the amount of payment or contributions paid or payable on behalf of each employee to any employee welfare fund, as defined in section 31-78, in each locality where any such public work is to be constructed."
1967	labor commissioner	same as above, except to reference Sec. 31-75 replace with Sec. 31- 53(h)	same as above, except to reference Sec. 31-78 replace with Sec. 53-53(h)
1977	labor commissioner	same as above	same as above re holding hearing, but also have option to "adopt and use such appropriate and applicable prevailing wage rate determinations as have been made by the Secretary of Labor of the United States under the provisions of the Davis-Bacon Act, as amended."

Appendix C Status of Prevailing Wage Laws in Individual States

State	Year Adopted	Threshold (Nov. 1995)	Definition of prevailing wage	Penalties
Alabama	1969	repealed 1980		
Alaska	1931	\$2,000	wage paid for work of similar nature in region where public work to be done	\$100-\$1,000 fine and/or 90 days jail
Arizona	1912	repealed 1984		
Arkansas	1955	\$75,000	minimum wage rate prevailing in county where work to be performed	\$500-\$1,000 fine 56 months jail, and/or 10% of greater of contract value/wages due
California	1931	\$1,000	not less than prevailing per diem wages for work of similar character in same locality	1-3 year ban on bidding public works contracts
Colorado	1933	repealed 1985		
Connecticut	1933	\$400,000 new \$100,000 remodel	customary or prevailing for same work in same trade or occupation in town where project being constructed	\$2,500-\$5,000 fine and/or 5 years jail, contract termination; ≤ 3 year ban on bidding
Delaware	1962	\$100,000 new \$15,000 remodel	prevailing minimum for similar work based on average actual wages paid majority of laborers and mechanics on similar construction work in same county	\$500-\$2,000 fine; 3-year ban from working on public works projects

D.C.	1931	\$2,000 (federal Davis-Bacon Act)	prevailing for corresponding classes of workers employed on projects similar to contract work in area where work to be performed	termination of contract; up to 3- year ban on bidding; possible criminal prosecution
Florida	1933	repealed 1979		
Georgia	n/a			
Hawaii	1955	\$2,000	not less than rate paid under federal Davis Bacon Act	\$1,000 fine, 10% of contract amount, or 3-year suspension (depending on offense number)
Idaho	1911	repealed 1985		
Illinois	1931	None	prevailing hourly rate including fringe benefits for work of similar character in same locality	2-yr. ban from public works jobs; class B misdemeanor for records violations
Indiana	1935	\$5,000 (law for \$150,000 in court)	not less than prevailing scale for each class of workers in immediate locality	class B misdemeanor; forfeit contract and payments on second offense
Iowa	n/a			
Kansas	1891	repealed 1987		
Kentucky	1982	\$398,760 (will be reduced to \$250,000 later in 1996)	basic hourly rate paid majority of workers employed in each class in county where work to be performed (if no majority rate, then the average rate)	\$1 00-\$1,000 fine; 2-year ban from public jobs
Louisiana	1968	repealed 1988		

Maina	1022	¢10,000	المناسم المناس	¢50 ¢350 £:
Maine	1933	\$10,000	hourly wage paid median number of workers employed in same trade/occupation in second/third week of Sept.	\$50-\$250 fine
Maryland	1945	\$500,000	hourly rate, including fringe benefits, paid 50% or more workers in same class in locality where work to be performed	restitution; \$10/day underpaid employee fine; 1- year ban from public works jobs
Massachusetts	1914	None	at least rate paid laborers who work for municipality where construction taking place	\$1,000-\$10,000 fine
Michigan	1965	invalidated by court 1994; on appeal	wage and fringe benefits prevailing in locality where work to be performed	misdemeanor
Minnesota	1973	\$2,500 1 trade involved; \$25,000 if > 1	prevailing hourly rates including fringe benefits	< \$700 fine and/or < 90 days jail
Mississippi	n/a			
Missouri	1957	None	hourly wages plus fringe benefits prevailing in county where work to be performed	\$10/day underpaid worker; (\$500 fine and/or < 6 months jail
Montana	1931	\$25,000	prevailing wages including fringe benefits paid for similar work in district where work to be performed	\$25/day/underpaid worker + 20% of delinquent wages and other costs
Nebraska	1923	None (except public school district \$40,000)	wages paid by at least 50% of contractors in same business or field	\$25-\$2,000 fine

Nevada	1937	\$100,000	hourly or daily rate prevailing in county where work performed	misdemeanor; restitution; fine < cost of prosecution
New Hampshire	1941	repealed 1985		
New Jersey	1913	\$2,000	wage and age benefits prevailing in locality where work performed	\$100-\$1,000 fine, 10-90 days jail and/or admin. penalty; 3-year ban from public works jobs
New Mexico	1937	\$20,000	prevailing wages of those employed in similar projects in state or locality	\$10/day underpaid worker, 3-year ban from public works jobs
New York	1897	None	rates prescribed in union contracts if apply to 30%+ workers in same trade or occupation in locality (if < 30% average wages paid occupation/trade in locality in last 12 months)	\$500 fine and 30 days jail; \$1,000 fine and forfeit contract on second offense
North Carolina	n/a			
North Dakota	n/a			
Ohio	1931	\$50,000 new \$15,000 remodel (adjusted per construction price deflator +6%)	prevailing wage including fringe benefits payable in same trade or occupation in same trade or occupation in same locality under union contracts (if no contract, union rate in nearest locality where there is contract)	\$25-\$500 fine
Oklahoma	1965	invalidated by court 1995	[had used federal David-Bacon rates]	

Oregon	1959	\$25,000	hourly wage with fringe benefits paid majority of workers employed in same occupation or trade on similar projects in locality where work to be performed	wages
Pennsylvania	1961	\$25,000	determined by labor secretary	3-year ban on public works jobs; damages equal to underpayment
Rhode Island	1935	\$1,000	hourly rate + fringe benefits paid in appropriate political subdivision of state to corresponding types of employees on similar project	\$100/day noncompliance and next lowest bidder may sue for damages
South Carolina	n/a			
South Dakota	n/a			
Tennessee	1953	\$50,000	prevailing wage for same work in same district	suit by employee or labor commissioner; forfeit contract
Texas	1933	None	daily rates for similar work in same locality	\$60/day employee
Utah	1933	repealed 1981		
Vermont	n/a			
Virginia	n/a			
Washington	1945	None (separate law for higher ed is \$17,500	hourly rate paid majority of workers in same trade in same locality (if no majority, avg. rate)	\$500 fine; 1-2 year ban from public works jobs (depending on offense #)

West Virginia	1933	None	wage paid workers in same trade or occupation in county where work performed	\$50-\$250 fine
Wisconsin	1931	\$11,000 1 trade & \$110,000 > 1 trade for state & munic; none for State. highway	hourly wage including fringe benefits paid majority of workers employed in same occupation/trade in same area where work performed	\$50-\$200 fine and/or <- 18 months jail; employee knowingly accepting less \$20 fine and/or 30 days jail
Wyoming	1967	\$25,000	local prevailing hourly rate paid construction workers	500 fine and/or < 6 months jail

NA = not applicable (because state never had a prevailing wage law)

Appendix D Public Act 11-63 An Act Concerning Construction Safety Refresher Training Courses

Substitute Senate Bill No. 480

Public Act No. 11-63

AN ACT CONCERNING CONSTRUCTION SAFETY REFRESHER TRAINING COURSES.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. Section 31-53b of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

- (a) Each contract for a public works project entered into on or after July 1, 2009, by the state or any of its agents, or by any political subdivision of the state or any of its agents, described in subsection (h) of section 31-53, shall contain a provision requiring that each contractor furnish proof with the weekly certified payroll form for the first week each employee begins work on such project that any person performing the work of a mechanic, laborer or worker pursuant to the classifications of labor under section 31-53 on such public works project, pursuant to such contract, has completed a course of at least ten hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration or, has completed a new miner training program approved by the Federal Mine Safety and Health Administration in accordance with 30 CFR [48] 46 or, in the case of telecommunications employees, has completed at least ten hours of training in accordance with 29 CFR 1910.268, and, on or after Tuly 1, 2012, that any plumber or electrician subject to the continuing education requirements of section 20-334d, who 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 five or more years prior to the date such electrician or plumber begins work on such public works project, has completed a supplemental refresher training course of at least four hours in duration in construction safety and health taught by a federal Occupational Safety and Health Administration authorized trainer.
- (b) Any person required to complete a course or program under subsection (a) of this section who has not completed the course or program shall be subject to removal from the worksite if the person does not provide documentation of having completed such course or program by the fifteenth day after the date the person is found to be in

noncompliance. The Labor Commissioner or said commissioner's designee shall enforce this section.

- (c) Not later than January 1, [2009] 2012, the Labor Commissioner shall adopt regulations, in accordance with the provisions of chapter 54, to implement the provisions of subsections (a) and (b) of this section. Such regulations shall require that the ten-hour construction safety and health courses required under subsection (a) of this section be conducted in accordance with federal Occupational Safety and Health Administration Training Institute standards, or, in the case of a supplemental refresher training course, shall include, but not be limited to, an update of revised Occupational Safety and Health Administration standards and a review of required construction hazards training, or in accordance with Federal Mine Safety and Health Administration Standards or in accordance with 29 CFR 1910.268, as appropriate. The Labor Commissioner shall accept as sufficient proof of compliance with the provisions of subsection (a) or (b) of this section a student course completion card issued by the federal Occupational Safety and Health Administration Training Institute, or such other proof of compliance said commissioner deems appropriate, dated no earlier than five years before the commencement date of such public works project or, in the case of supplemental refresher training, a student course completion card issued by said Occupational Safety and Health Administration authorized trainer dated not earlier than five years prior to the date such electrician or plumber begins work on such public works project.
- (d) This section shall not apply to employees of public service companies, as defined in section 16-1, or drivers of commercial motor vehicles driving the vehicle on the public works project and delivering or picking up cargo from public works projects provided they perform no labor relating to the project other than the loading and unloading of their cargo.

Approved July 1, 2011





THIS IS A PUBLIC WORKS PROJECT

Covered by the

PREVAILING WAGE LAW

CT General Statutes Section 31-53

If you have QUESTIONS regarding your wages CALL (860) 263-6790

Section 31-55 of the CT State Statutes requires every contractor or subcontractor performing work for the state to post in a prominent place the prevailing wages as determined by the Labor Commissioner.

Sec. 31-53b. Construction safety and health course. New miner training program. Proof of completion required for mechanics, laborers and workers on public works projects. Enforcement. Regulations. Exceptions. (a) Each contract for a public works project entered into on or after July 1, 2009, by the state or any of its agents, or by any political subdivision of the state or any of its agents, described in subsection (g) of section 31-53, shall contain a provision requiring that each contractor furnish proof with the weekly certified payroll form for the first week each employee begins work on such project that any person performing the work of a mechanic, laborer or worker pursuant to the classifications of labor under section 31-53 on such public works project, pursuant to such contract, has completed a course of at least ten hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration or, has completed a new miner training program approved 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.

- (b) Any person required to complete a course or program under subsection (a) of this section who has not completed the course or program shall be subject to removal from the worksite if the person does not provide documentation of having completed such course or program by the fifteenth day after the date the person is found to be in noncompliance. The Labor Commissioner or said commissioner's designee shall enforce this section.
- (c) Not later than January 1, 2009, the Labor Commissioner shall adopt regulations, in accordance with the provisions of chapter 54, to implement the provisions of subsections (a) and (b) of this section. Such regulations shall require that the ten-hour construction safety and health courses required under subsection (a) of this section be conducted in accordance with federal Occupational Safety and Health Administration Training Institute standards, or in accordance with Federal Mine Safety and Health Administration Standards or in accordance with 29 CFR 1910.268, as appropriate. The Labor Commissioner shall accept as sufficient proof of compliance with the provisions of subsection (a) or (b) of this section a student course completion card issued by the federal Occupational Safety and Health Administration Training Institute, or such other proof of compliance said commissioner deems appropriate, dated no earlier than five years before the commencement date of such public works project.
- (d) This section shall not apply to employees of public service companies, as defined in section 16-1, or drivers of commercial motor vehicles driving the vehicle on the public works project and delivering or picking up cargo from public works projects provided they perform no labor relating to the project other than the loading and unloading of their cargo.

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

Safety and Health Administration Standards" and setting new deadline of January 1, 2009, deleted former Subsec. (d) re "public building", added new Subsec. (d) re exemptions for public service company employees and delivery drivers who perform no labor other than delivery and made conforming and technical changes, effective January 1, 2009.

Informational Bulletin

THE 10-HOUR OSHA CONSTRUCTION SAFETY AND HEALTH COURSE

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

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

- (10) Each employer shall affix a copy of the construction safety course completion card to the certified payroll submitted to the contracting agency in accordance with Conn. Gen. Stat. § 31-53(f) on which such employee's name first appears;
- (11) Any employee found to be in non-compliance shall be subject to removal from the worksite if such employee does not provide satisfactory proof of course completion to the Labor Commissioner by the fifteenth day after the date the employee is determined to be in noncompliance;
- (12) Any such employee who is determined to be in noncompliance may continue to work on a public building construction project for a maximum of fourteen consecutive calendar days while bringing his or her status into compliance;
- (13) The Labor Commissioner may make complaint to the prosecuting authorities regarding any employer or agent of the employer, or officer or agent of the corporation who files a false certified payroll with respect to the status of an employee who is performing manual labor on a public building construction project;
- (14) The statute provides the minimum standards required for the completion of a safety course by manual laborers on public construction contracts; any contractor can exceed these minimum requirements; and
- (15) Regulations clarifying the statute are currently in the regulatory process, and shall be posted on the CTDOL website as soon as they are adopted in final form.
- (16) Any questions regarding this statute may be directed to the Wage and Workplace Standards Division of the Connecticut Labor Department via the internet website of http://www.ctdol.state.ct.us/wgwkstnd/wgemenu.htm; or by telephone at (860)263-6790.

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

Notice

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

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

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

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

Forklift Operator:

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

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

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

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

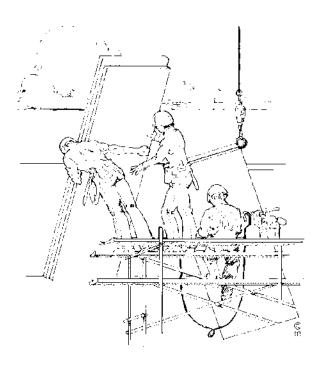
~NOTICE~

TO ALL CONTRACTING AGENCIES

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

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

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



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

CONTRACTING AGENCY CERTIFICATION FORM

I,	, acting in my official of	capacity as
	representative	title
for	, located at	
	tracting agency	address
do hereby ce	ertify that the total dollar amount of work to	be done in connection with
	, located at	
proje	ect name and number	address
shall be \$, which includes all work,	regardless of whether such project
consists of o	one or more contracts.	
	CONTRACTOR INFO	RMATION
Name:		
Address:		
Authorized l	Representative:	
Approximate	e Starting Date:	
Approximate	e Completion Date:	
S	Signature	Date
Return To:	Connecticut Department of Labor	
	Wage & Workplace Standards Division	
	Contract Compliance Unit 200 Folly Brook Blvd.	
	Wethersfield, CT 06109	
	,	
Date Issued:		

CONNECTICUT DEPARTMENT OF LABOR WAGE AND WORKPLACE STANDARDS DIVISION

CONTRACTORS WAGE CERTIFICATION FORM

Construction Manager at Risk/General Contractor/Prime Contractor

I <u>,</u>		of	
Officer, Owner, Author	orized Rep.	Company Name	
do hereby certify that the			
		Company Name	
_		Street	
_		City	
and all of its subcontractors	will pay all work	ters on the	
	Project Name and	d Number	
	Street and City	7	
the wages as listed in the scattached hereto).	hedule of prevaili	ng rates required for such project (a co	py of which is
		Signed	
Subscribed and sworn to be	fore me this	day of,	·
		Notary Public	_
Return to:	D		
Wage & Wo 200 Folly Br	Department of Lorkplace Standard rook Blvd. d, CT 06109		
Rate Schedule Issued (Da	nte):		

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

In accordance with Connecticut General Statutes, 31-53 Certified Payrolls with a statement of compliance shall be submitted monthly to the contracting agency.								AYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS WEEKLY PAYROLL										Connecticut Department of Labor Wage and Workplace Standards Division 200 Folly Brook Blvd. Wethersfield, CT 06109						
CONTRACTOR NAME AND ADDRESS:										SUBCONTRAC	TOR NAME &	ADDRESS		WORKER'S			SURANCE CARRIER	l .						
PAYROLL NUMBER	Week-E	Ending	PROJECT NAME & A	ADDRESS												POLICY #								
	Dat	_														EFFECTIVE EXPIRATION								
	APPR		WORK			DA	Y AND DA					BASE HOURLY	TYPE OF	GROSS PAY	TO	OTAL DEDUC			GROSS PAY FOR					
ADDRESS and SECTION	%	FEMALE AND RACE*	CLASSIFICATION Trade License Type & Number - OSHA 10 Certification Number	S		T HOURS WO		TH ACH DAY	F	S	Hours Total O/T Hours	RATE TOTAL FRINGE BENEFIT PLAN CASH	FRINGE BENEFITS Per Hour 1 through 6 (see back)	FOR ALL WORK PERFORMED THIS WEEK	FICA	FEDERAL WITH- HOLDING	WITH-	LIST OTHER	THIS PREVAILING RATE JOB	CHECK # AND NET PAY				
												\$ Base Rate \$ Cash Fringe	1. \$ 2. \$ 3. \$ 4. \$ 5. \$ 6. \$											
												\$ Base Rate \$ Cash Fringe	1. \$ 2. \$ 3. \$ 4. \$ 5. \$ 6. \$											
												\$ Base Rate \$ Cash Fringe	1. \$ 2. \$ 3. \$ 4. \$ 5. \$ 6. \$											
		****										\$ Base Rate \$ Cash Fringe	1. \$ 2. \$ 3. \$ 4. \$ 5. \$ 6. \$											
12/9/2013 WWS-CP1		*IF REQU	JIKED									*SEE REVERSE	SIDE					P	AGE NUMBER	OF				

*FRINGE BENEFITS EXPLANATION (P):

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

Please specify the type of benefits pr	
_	4) Disability
	5) Vacation, holiday
5) Life insurance	6) Other (please specify)
CERTIFI	IED STATEMENT OF COMPLIANCE
For the week ending date of	
I,	of, (hereafter known as
Employer) in my capacity as	(title) do hereby certify and state:
Section A:	
	roject have been paid the full weekly wages earned by them during eticut General Statutes, section 31-53, as amended. Further, I g:
a) The records submitted are	e true and accurate;
contributions paid or payable defined in Connecticut Gene of wages and the amount of person to any employee well	be each mechanic, laborer or workman and the amount of payment or e on behalf of each such person to any employee welfare fund, as eral Statutes, section 31-53 (h), are not less than the prevailing rate payment or contributions paid or payable on behalf of each such fare fund, as determined by the Labor Commissioner pursuant to eral Statutes, section 31-53 (d), and said wages and benefits are not lso be required by contract;
	lied with all of the provisions in Connecticut General Statutes, 31-54 if applicable for state highway construction);
	ered by a worker's compensation insurance policy for the duration of f of coverage has been provided to the contracting agency;
gift, gratuity, thing of value, indirectly, to any prime cont employee for the purpose of	ceeive kickbacks, which means any money, fee, commission, credit, or compensation of any kind which is provided directly or tractor, prime contractor employee, subcontractor, or subcontractor improperly obtaining or rewarding favorable treatment in attract or in connection with a prime contractor in connection with a rime contractor; and
	at filing a certified payroll which he knows to be false is a class D ver may be fined up to five thousand dollars, imprisoned for up to
- ·	ffix a copy of the construction safety course, program or the certified payroll required to be submitted to the contracting such persons name first appears.
(Signature)	(Title) Submitted on (Date)

Weekly Payroll Certification For Public Works Projects (Continued)

PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS

Week-Ending Date:

Contractor or Subcontractor Business Name:

WEEKLY PAYROLL

PERSON/WORKER,	APPR	MALE/	WORK			DAY	AND D	ATE			Total ST	BASE HOURLY	TYPE OF	GROSS PAY	TOTAL DE	EDUCTIONS	S	GROSS PAY FOR	
ADDRESS and SECTION	RATE	FEMALE	CLASSIFICATION	S	M	T	W	TH	F	S	Hours	RATE	FRINGE	FOR ALL WORK	FEDERAL	STATE		THIS PREVAILING	CHECK # AND
	%	AND											BENEFITS	PERFORMED				RATE JOB	NET PAY
		RACE*	Trade License Type									TOTAL FRINGE	Per Hour	THIS WEEK					
			& Number - OSHA									BENEFIT PLAN	1 through 6				OTHER		
			10 Certification Number		НО	URS WO	RKED I	EACH DA	ΛY		O/T Hour		(see back)		HOLDING	HOLDING			
													1. \$						
													2. \$]					
													3. \$	<u> </u>					
													4. \$						
													5. \$						
												Cash Fringe	6. \$						
													1. \$						
												\$	2. \$						
												Base Rate	3. \$]					
													4. \$						
												\$	5. \$						
												Cash Fringe	6. \$	1					
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													4. \$	1					
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													2. \$	1					
													3. \$	4					
													3. \$ 4. \$	1					
														1					
													5. \$	4					
		*IE DEOLI	IDED					I				Cash Fringe	6. \$						

*IF REQUIRED

12/9/2013 WWS-CP2

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

PAGE NUMBER ____OF

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

Certified Payrolls with a shall be submitted mont	accordance with Connecticut General Statutes, 31-53 rtified Payrolls with a statement of compliance all be submitted monthly to the contracting agency. PAYROLL CERTIFICATION FOR PUBLIC WEEKLY PAYR WEEKLY PAYR											ROLL				Connecticut Department of Labor Wage and Workplace Standards Division 200 Folly Brook Blvd. Wethersfield, CT 06109							
CONTRACTOR NAME AND ADDRESS:												SUBCONTRAC	TOR NAME &	ADDRESS		WORKER'S	COMPENS	ATION IN	SURANCE CARRIE	ARRIER			
Landon Corporation, 15	Conne	ecticut Ave	nue, Northford, CT 06	6472							XYZ Corporation Travelers Insurance Company 2 Main Street POLICY # #BAC8888928												
PAYROLL NUMBER	Week-	Ending	PROJECT NAME &	ADDRE	SS							Yantic, CT 063	89										
1	9/26/	ate 09	DOT 105-296, Rout	e 82													E DATE: 1/ON DATE: 1						
PERSON/WORKER,	APPR	MALE/	WORK			D.	AY AND D	DATE			Total ST	BASE HOURLY	TYPE OF	GROSS PAY		TOTAL DEDUCTIONS GROSS PAY FOR							
ADDRESS and SECTION	RATE	FEMALE	CLASSIFICATION	S	M	T	W	TH	F	S	Hours	RATE	FRINGE	FOR ALL		FEDERAL	STATE		THIS PREVAILING	CHECK # ANI			
	%	AND RACE*	Trade License Type & Number - OSHA	20	21	22	23	24	25	26	Total	TOTAL FRINGE BENEFIT PLAN	BENEFITS Per Hour 1 through 6	WORK PERFORMED THIS WEEK	FICA	WITH-	WITH-	LIST OTHER	RATE JOB	NET PAY			
			10 Certification Number		_	HOURS V	VORKED I	EACH DAY		_	O/T Hour	CASH	(see back)		_	HOLDING	HOLDING	-					
Robert Craft 81 Maple Street Willimantic, CT 06226		M/C	Electrical Lineman E-1 1234567 Owner		8	8	8	8	8		S-TIME 40	§ 30.75 Base Rate	1. \$ 5.80 2. \$ 3. \$ 2.01	\$1,582.80				P-xxxx	\$1,582.80	#123 \$ xxx.xx			
			OSHA 123456								O-TIME	§ 8.82 Cash Fringe	4. \$ 5. \$ 6. \$							\$ XXX.XX			
Ronald Jones 212 Elm Street Norwich, CT 06360	65%	M/B	Electrical Apprentice		8	8	8	8	8		S-TIME	\$ 19.99 Base Rate	1. \$ 2. \$ 3. \$	\$1,464.80	хх.хх	xxx.xx	xx.xx	G-xxx	\$1,464.80	#124			
Norwich, CT 06360			OSHA 234567								O-TIME	§ 16.63 Cash Fringe	4. \$ 5. \$ 6. \$							\$xxx.xx			
Franklin T. Smith 234 Washington Rd.		M/H	Project Manager			8					S-TIME	\$ Base Rate	1. \$ 2. \$ 3. \$	\$1,500.00	xx.xx	xx.xx	xx.xx	M-xx.x		#125			
New London, CT 06320 SECTION B											O-TIME	\$ Cash Fringe	4. \$ 5. \$							xxx.xx			
											S-TIME	\$ Base Rate	1. \$ 2. \$ 3. \$										
											O-TIME	\$ Cash Fringe	4. \$ 5. \$ 6. \$										
7/13/2009 WWS-CP1		*IF REQU	JIRED									*SEE REVERSE							AGE NUMBER	1_of 2			

*FRINGE BENEFITS EXPLANATION (P):

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

Please specify the type of benefits provided:								
Medical or hospital care Blue Cross Pension or retirement	_ 4) Disability							
2) Pension or retirement	5) Vacation, holiday							
3) Life Insurance Utopia	_ 6) Other (please specify)							
CERTIFIED STATE	MENT OF COMPLIANCE							
For the week ending date of 9/26/09								
I, Robert Craft of XYZ Con	poration , (hereafter known as							
Employer) in my capacity as Owner	(title) do hereby certify and state:							
Section A: 1. All persons employed on said project have be the week in accordance with Connecticut General hereby certify and state the following: a) The records submitted are true and accordance with Connecticut General hereby certify and state the following:								
contributions paid or payable on behalf of defined in Connecticut General Statutes of wages and the amount of payment or of employee to any employee welfare fund,	nic, laborer or workman and the amount of payment or f each such employee to any employee welfare fund, , section 31-53 (h), are not less than the prevailing rate contributions paid or payable on behalf of each such as determined by the Labor Commissioner pursuant to section 31-53 (d), and said wages and benefits are not ed by contract;							
c) The Employer has complied with all of section 31-53 (and Section 31-54 if appli	of the provisions in Connecticut General Statutes, cable for state highway construction);							
	is covered by a worker's compensation insurance t which proof of coverage has been provided to the							
gift, gratuity, thing of value, or compensation indirectly, to any prime contractor, prime employee for the purpose of improperly	cks, which means any money, fee, commission, credit, ation of any kind which is provided directly or contractor employee, subcontractor, or subcontractor obtaining or rewarding favorable treatment in mection with a prime contractor in connection with a tor; and							
	tified payroll which he knows to be false is a class D ned up to five thousand dollars, imprisoned for up to							
training completion document to the certified agency for this project on which such employ								
Robert Craft 04 (Signature) (1	Submitted on (Date)							
(Signature) /	Submitted on (Date)							
listed under Section B who performed work of wage requirements defined in Connecticut Ge	ements for reporting purposes only, all employees a this project are not covered under the prevailing neral Statutes Section 31-53.							
Signature) Craft Own	$\frac{10/2/09}{\text{Submitted on (Date)}}$							
(Digitature)	Submitted on (Date)							

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

THIS IS A PUBLIC DOCUMENT

DO NOT INCLUDE SOCIAL SECURITY NUMBERS

Information Bulletin Occupational Classifications

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

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

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

• ASBESTOS WORKERS

Applies all insulating materials, protective coverings, coatings and finishes to all types of mechanical systems.

ASBESTOS INSULATOR

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

• BOILERMAKERS

Erects hydro plants, incomplete vessels, steel stacks, storage tanks for water, fuel, etc. Builds incomplete boilers, repairs heat exchanges and steam generators.

 BRICKLAYERS, CEMENT MASONS, CEMENT FINISHERS, MARBLE MASONS, PLASTERERS, STONE MASONS, PLASTERERS. STONE MASONS, TERRAZZO WORKERS, TILE SETTERS

Lays building materials such as brick, structural tile and concrete cinder, glass, gypsum, terra cotta block. Cuts, tools and sets marble, sets stone, finishes concrete, applies decorative steel, aluminum and plastic tile, applies cements, sand, pigment and marble chips to floors, stairways, etc.

• <u>CARPENTERS, MILLWRIGHTS. PILEDRIVERMEN. LATHERS. RESILEINT FLOOR</u> LAYERS, DOCK BUILDERS, DIKERS, DIVER TENDERS

Constructs, erects, installs and repairs structures and fixtures of wood, plywood and wallboard. Installs, assembles, dismantles, moves industrial machinery. Drives piling into ground to provide foundations for structures such as buildings and bridges, retaining walls for earth embankments, such as cofferdams. Fastens wooden, metal or rockboard lath to walls, ceilings and partitions of buildings, acoustical tile layer, concrete form builder. Applies firestopping materials on fire resistive joint systems only. Installation of curtain/window walls only where attached to wood or metal studs. Installation of insulated material of all types whether blown, nailed or attached in other ways to walls, ceilings and floors of buildings. Assembly and installation of modular furniture/furniture systems. Free-standing furniture is not covered. This includes free standing: student chairs, study top desks, book box desks, computer furniture, dictionary stand, atlas stand, wood shelving, two-position information access station, file cabinets, storage cabinets, tables, etc.

LABORER, CLEANING

• The clean up of any construction debris and the general (heavy/light) cleaning, including sweeping, wash down, mopping, wiping of the construction facility and its furniture, washing, polishing, and dusting.

DELIVERY PERSONNEL

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

ELECTRICIANS

Install, erect, maintenance, alteration or repair of any wire, cable, conduit, etc., which generates, transforms, transmits or uses electrical energy for light, heat, power or other purposes, including the Installation or maintenance of telecommunication, LAN wiring or computer equipment, and low voltage wiring. *License required per Connecticut General Statutes: E-1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9.

• ELEVATOR CONSTRUCTORS

Install, erect, maintenance and repair of all types of elevators, escalators, dumb waiters and moving walks. *License required by Connecticut General Statutes: R-1,2,5,6.

• FORK LIFT OPERATOR

Laborers Group 4) Mason Tenders - operates forklift solely to assist a mason to a maximum height of nine (9) feet only.

Power Equipment Operator Group 9 - operates forklift to assist any trade, and to assist a mason to a height over nine (9) feet.

GLAZIERS

Glazing wood and metal sash, doors, partitions, and 2 story aluminum storefronts. Installs glass windows, skylights, store fronts and display cases or surfaces such as building fronts, interior walls, ceilings and table tops and metal store fronts. Installation of aluminum window walls and curtain walls is the "joint" work of glaziers and ironworkers, which require equal composite workforce.

• <u>IRONWORKERS</u>

Erection, installation and placement of structural steel, precast concrete, miscellaneous iron, ornamental iron, metal curtain wall, rigging and reinforcing steel. Handling, sorting, and installation of reinforcing steel (rebar). Metal bridge rail (traffic), metal bridge handrail, and decorative security fence installation. Installation of aluminum window walls and curtain walls is the "joint" work of glaziers and ironworkers which require equal composite workforce.

INSULATOR

 Installing fire stopping systems/materials for "Penetration Firestop Systems": transit to cables, electrical conduits, insulated pipes, sprinkler pipe penetrations, ductwork behind radiation, electrical cable trays, fire rated pipe penetrations, natural polypropylene, HVAC ducts, plumbing bare metal, telephone and communication wires, and boiler room ceilings.

LABORERS

Acetylene burners, asphalt rakers, chain saw operators, concrete and power buggy operator, concrete saw operator, fence and guard rail erector (except metal bridge rail (traffic), decorative security fence (non-metal).

installation.), hand operated concrete vibrator operator, mason tenders, pipelayers (installation of storm drainage or sewage lines on the street only), pneumatic drill operator, pneumatic gas and electric drill operator, powermen and wagon drill operator, air track operator, block paver, curb setters, blasters, concrete spreaders.

PAINTERS

Maintenance, preparation, cleaning, blasting (water and sand, etc.), painting or application of any protective coatings of every description on all bridges and appurtenances of highways, roadways, and railroads. Painting, decorating, hardwood finishing, paper hanging, sign writing, scenic art work and drywall hhg for any and all types of building and residential work.

• LEAD PAINT REMOVAL

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

• PLUMBERS AND PIPEFITTERS

Installation, repair, replacement, alteration or maintenance of all plumbing, heating, cooling and piping. *License required per Connecticut General Statutes: P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2 S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4.

• POWER EQUIPMENT OPERATORS

Operates several types of power construction equipment such as compressors, pumps, hoists, derricks, cranes, shovels, tractors, scrapers or motor graders, etc. Repairs and maintains equipment. *License required, crane operators only, per Connecticut General Statutes.

ROOFERS

Covers roofs with composition shingles or sheets, wood shingles, slate or asphalt and gravel to waterproof roofs, including preparation of surface. (demolition or removal of any type of roofing and or clean-up of any and all areas where a roof is to be relaid.)

• SHEETMETAL WORKERS

Fabricate, assembles, installs and repairs sheetmetal products and equipment in such areas as ventilation, air-conditioning, warm air heating, restaurant equipment, architectural sheet metal work, sheetmetal roofing, and aluminum gutters. Fabrication, handling, assembling, erecting, altering, repairing, etc. of coated metal material panels and composite metal material panels when used on building exteriors and interiors as soffits, facia, louvers, partitions, canopies, cornice, column covers, awnings, beam covers, cladding, sun shades, lighting troughs, spires, ornamental roofing, metal ceilings, mansards, copings, ornamental and ventilation hoods, vertical and horizontal siding panels, trim, etc. The sheet metal classification also applies to the vast variety of coated metal material panels and composite metal material panels that have evolved over the years as an alternative to conventional ferrous and non-ferrous metals like steel, iron, tin, copper, brass, bronze, aluminum, etc. Fabrication, handling, assembling, erecting, altering, repairing, etc. of architectural metal roof, standing seam roof, composite metal roof, metal and composite bathroom/toilet partitions, aluminum gutters, metal and composite lockers and shelving, kitchen equipment, and walk-in coolers. To include testing and air -balancing ancillary to installation and construction.

• SPRINKLER FITTERS

Installation, alteration, maintenance and repair of fire protection sprinkler systems. *License required per Connecticut General Statutes: F-1,2,3,4.

• <u>TILE MARBLE AND TERRAZZO FINISHERS</u>

Assists and tends the tile setter, marble mason and terrazzo worker in the performance of their duties.

• TRUCK DRIVERS

~How to pay truck drivers delivering asphalt is under <u>REVISION</u>~

Truck Drivers are requires to be paid prevailing wage for time spent "working" directly on the site. These drivers remain covered by the prevailing wage for any time spent transporting between the actual construction location and facilities (such as fabrication, plants, mobile factories, batch plant, borrow pits, job headquarters, tool yards, etc.) dedicated exclusively, or nearly so, to performance of the contract or project, which are so located in proximity to the actual construction location that it is reasonable to include them. *License required, drivers only, per Connecticut General Statutes.

For example:

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

Any questions regarding the proper classification should be directed to:
Public Contract Compliance Unit
Wage and Workplace Standards Division
Connecticut Department of Labor
200 Folly Brook Blvd, Wethersfield, CT 06109
(860) 263-6543.

Connecticut Department of Labor Wage and Workplace Standards Division FOOTNOTES

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

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

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

Bricklayers, Cement Masons, Cement Finishers, Concrete Finishers, Stone Masons (Building Construction) and

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

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

Elevator Constructors: Mechanics

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

Glaziers

a. Paid Holidays: Labor Day and Christmas Day.

Power Equipment Operators

(Heavy and Highway Construction & Building Construction)

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

Ironworkers

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

Laborers (Tunnel Construction)

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

Roofers

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

Sprinkler Fitters

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

Truck Drivers

(Heavy and Highway Construction & Building Construction)

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