

BAER PARK PLAYGROUND
IMPROVEMENTS PROJECT
FOR THE CITY OF READING
PENNSYLVANIA



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The City of Reading recognizes the benefits of recycling, and actively supports recycling. This specification is printed double-sided on recycled paper, 20% post consumer waste.

NOTICE AND INSTRUCTIONS

CITY OF READING, PENNSYLVANIA

NOTICE TO CONTRACTORS

The City of Reading will receive sealed proposals via the PennBid program at www.pennbidprocureware.com until 3:00 PM, prevailing time on December 14, 2022 for the Baer Park Playground Improvements Project for the City of Reading, Pennsylvania, as per the specifications.

There will be a non-mandatory prebid meeting for this project on November 8, 2022 at 1:00 PM in City Halls 3rd Floor Conference room.

Each proposal shall be accompanied by bid surety in the amount of ten percent (10%) of the proposal. A certified check or bid bond will be accepted.

Attention is called to the fact that Davis-Bacon Act prevailing wage rates must be paid by the contractor and that employees shall not be discriminated against because of race, color, age, religion, sex or national origin.

The City of Reading reserves the right to accept or reject any and all bids, and to accept or reject any part of a bid, as may be in the public interest.

Funding for this project is from the City of Reading's Community Development Block Grant.

Purchasing Coordinator

INSTRUCTIONS TO BIDDERS

PROPOSAL SUBMISSION

Proposals shall be submitted on the PennBid website at www.pennbidprocureware.com on December 14, 2022 at 3:00 PM prevailing time.

Bids received at the Office of the Purchasing Coordinator after the hour specified, will not be considered. Bidders are invited to be present at the opening of bids.

BONDS

Bid security, in the amount of ten percent (10%) of the bid price shall accompany each proposal. This bid security may be a Certified or Cashier's Check, or a bid bond furnished by a surety company, satisfactory to the City of Reading. The successful bidder, upon award of contract, shall furnish at the time of execution of the same, a Maintenance Bond, Payment Bond, and Performance Bond by a surety company acceptable to the City of Reading, in an amount equal to ONE HUNDRED PERCENT (100%) of the contract to guarantee satisfactory performance. All bonds are subject to approval by the City Solicitor.

In case the contract is awarded to a bidder who fails to enter the contract or to deliver all required bonds and affidavits, the cash or check deposited shall become absolute property of the City; or if a bond has been deposited, it shall become payable immediately. Cash, checks or bonds deposited will be returned to unsuccessful bidders as soon as the contract is awarded, or all bids rejected.

INSURANCE

The Contractor, at the time of execution of the contract, shall also furnish the City with insurance certificates of adequate limits, as later indicated, to protect the City of Reading, its agents, and employees from any litigation involving Worker's Compensation, Public Liability and Property Damage, involved in the work. All subcontractors must also furnish copies of their liability insurance and Worker's Compensation Insurance certificates to the City. No subcontractor will be allowed to perform any work under this contract by the City unless such certificates are submitted to and approved by the City beforehand.

WORKERS' COMPENSATION AND PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE

The status of the Contractor in the work to be performed by the Contractor is that of any independent Contractor and as such, he shall properly safeguard against any and all injury or damage to the public, to public and private property, materials and things, and as such he alone shall be responsible for any and all damage, loss or injury to persons or property that may arise, or be incurred, in or during the conduct or progress of said work without regard to whether or not the Contractor, his sub-contractors, agents, or employees have been negligent, and the Contractor shall keep the City free and discharged of and from any and all responsibility and liability therefore of any sort or kind. The Contractor shall assume all responsibility for risks or casualties of every description, for any or all damage, loss or injury to persons or property arising out of the nature of the work from the action of the elements, or from any unforeseen or unusual difficulty. The Contractor shall assume and be liable for all blame and loss of whatsoever nature by reason of neglect or violation of any Federal, State, County or Local laws, regulations, or ordinances; the Contractor shall indemnify and save harmless the City from all suits or actions of law of any kind whatsoever in connection with this work and shall if required by the City, produce evidence of settlement of any such action before final payment shall be made by the City. Contractor's Liability Insurance Certificate shall include the save harmless clause and shall be filed with the City.

The Contractor shall maintain such insurance as will protect him from claims under worker's compensation acts and from claims for damages because of bodily injury, including death, and property damage, which may arise from and during operations under this Contract, whether such operations be by himself, by any subcontractor or anyone directly or indirectly employed by either of them. Contractor's liability insurance shall be in the names of the Contractor and the City, as their respective interests may appear. Certificates of such insurance shall be filed with the City Risk and Safety Manager.

The minimum amount of liability insurance to be maintained by the Contractor during the life of the contract shall be as follows:

Comprehensive General Liability – for bodily injury and property damage – including any liability normally covered by a general liability policy with limits of not less than \$1,000,000 per occurrence and \$2,000,000 in the annual aggregate.

Business Automobile Liability – For owned, non-owned, leased and hired vehicles with a combined single limit of not less than \$1,000,000 for bodily injury and property damage.

Professional Liability – in minimum amounts of \$1,000,000 per occurrence and \$2,000,000 aggregate.

Worker's Compensation – Statutory limits in each state in which Service Provider is required to provide Worker's Compensation coverage including "All States" and "Voluntary Compensation" endorsement, and a Waiver of Subrogation endorsement in favor of the County.

Employer's Liability – with limits of not less than \$100,000 Accident – Each Accident, \$100,000 Disease – Each Employee; and \$500,000 Disease – Policy Limit.

Prior to commencement of performance of this Agreement, Contractor shall furnish to the City a certificate of insurance evidencing all required coverage in at least the limits required herein, **naming the City of Reading, its elected officials, agents, and employees as additional insureds under the Comprehensive General Liability coverage**, and providing that no policies may be modified or cancelled without thirty (30) days advance written notice to the City. Such certificate shall be issued to: **City of Reading, 815 Washington Street, Reading, PA 19601**. All policies shall be in effect with companies holding an A.M. Best rating of "A-" or better and shall be licensed to do business in the Commonwealth of Pennsylvania. Such companies shall also be acceptable to the City.

Please forward a certificate of insurance verifying these insurance requirements.

Liability insurance shall include automobile coverage, including "hired automobiles and non-ownership automobiles."

Liability insurance shall include the hazard of collapse, damage to underground utilities, underground blasting, and excavation. Prior to any blasting which may be required, blasting insurance shall be obtained by the Contractor in an amount satisfactory to the City Engineer.

Liability insurance shall include the hazard of building collapse and of damage to adjoining properties and/or to individuals located within or adjacent to each project site.

All subcontractors performing work under this contract must furnish to the City a copy of their Certificate of Insurance for Workers' Compensation and liability for bodily injury and property damage.

WAGES AND EMPLOYMENT REQUIREMENTS

Bidder agrees that not less than the Federal Davis Bacon Act prevailing wages will be paid.

EQUAL EMPLOYMENT OPPORTUNITY

During the performance of this Contract, the Contractor agrees as follows:

The Contractor will not discriminate against any employees or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices which may be provided by the City setting forth the provisions of this nondiscrimination clause.

The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

The Contractor will send to each labor union or representative of workers with which the Contractor has a collective bargaining agreement or other contract or understanding, a notice advising the labor union or workers' representatives of the Contractor, commitments under this Section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

In the event of the Contractor's noncompliance with the non-discrimination clauses of this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further City contracts.

The Contractor will include the provisions of these paragraphs in every subcontract or purchase order unless exempted.

EMPLOYMENT OF CERTAIN PERSONS PROHIBITED

No person who, at the time, is serving sentence in a penal or correctional institution shall be employed on the work covered by this Contract.

SUPERVISION OF WORKERS

The Contractor shall provide qualified supervision of each crew at all times while working under this contract. Each supervisor shall be authorized by the Contractor to accept and act upon all directives issued by the City. Failure for the supervisor to act on said directives shall be sufficient cause to give notice that the Contractor is in default of the contract unless such directives would create potential personal injury or safety hazards.

This contract will be under the direct supervision of the City or its authorized representatives. Any alterations or modifications of the work performed under this contract shall be made only by written agreement between the Contractor and the City authorized representatives and shall be made prior to commencement of the altered or modified work. No claims for extra work or materials shall be allowed unless covered by written agreement.

SUBCONTRACTS

The Contractor will not be allowed to subcontract work under this contract unless written approval is granted by the City. The Subcontractor, as approved, shall be bound by the conditions of the contract between the City and the Contractor. The authorization of a Subcontractor is to perform in accordance with all terms of the contract and specifications. All required notices, work orders, directives, and requests for emergency services will be directed to the Contractor. All directions given to the Subcontractor in the field shall bind the Contractor as if the notice had been given directly to the Contractor.

QUALITY

Where a bid is asked for a certain article or "Approved Equal" and the bidder intends to furnish an article which the bidder considers equal to the one named, the bidder must specify in the bid the name and grade of said article. All disputes concerning grade and quality of materials or work shall be determined by a person duly authorized by the City.

TIME OF COMPLETION

The bidders are herewith cautioned that the time of completion shall be as stated on the bid form. To insure timely completion, the successful bidder will be required to furnish adequate equipment, and qualified personnel in sufficient numbers at all times.

Where a date is set for delivery of materials or the performance of work, said materials must be delivered, or work performed, in accordance with the specifications or description herein contained on or before said date, or the order to the delinquent party will be canceled and awarded to the next lowest responsible bidder.

BUSINESS PRIVILEGE TAX

The City of Reading imposes a Business Privilege License, at \$55.00 per calendar year. In addition, a Business Privilege Tax is imposed at the rate of 2-1/4 mills upon the gross receipts attributable to business conducted within the City of Reading.

PERMITS/LICENSES

The Contractor shall, at his expense, pay all fees and procure all necessary licenses and permits needed to conduct the work required under the terms of this contract. The Contractor shall give any and all necessary formal notices required in conjunction with the lawful prosecution of the work of this contract.

BASIS OF PAYMENT

All prices to be quoted F.O.B. Reading, PA destination. The City of Reading is tax exempt.

OBSERVANCE OF LAWS, ORDINANCES AND REGULATIONS

The Contractor at all times during the term of this contract shall observe and abide by all Federal, State, and Local laws which in any way affect the conduct of the work and shall comply with all decrees and orders of courts of competent jurisdiction. The Contractor shall comply fully and completely with any and all applicable State and Federal Statutes, rules and regulations as they relate to hiring, wages, and any other applicable conditions of employment.

PRE-BID MEETING

There will be a non-mandatory prebid meeting for this project on November 8, 2022 at 1:00 PM, prevailing time, at City Hall (815 Washington Street, 3rd floor conference room), Reading, PA.

WITHDRAWAL OF PROPOSALS/BIDS

After a bid has been opened, it may not be withdrawn except as provided by Act of January 23, 1974, P.L. 9 No. 4, as same may be amended.

No bids may be withdrawn for a period of ninety (90) days following the formal opening and receipt of bids by the City of Reading.

BID REJECTION

The City of Reading reserves the right to reject any or all bids and to accept or reject any part of any bid. It also reserves the right to waive any technical defects or minor irregularities, which in its discretion, is in the best interest of the City.

EXECUTION OF CONTRACT

The successful Bidder shall, within ten (10) calendar days after mailing of contract documents by the City to the Principal, enter into contract with the City on form as included within the bidding documents for the appropriate bonds, indemnities and insurances required hereunder.

The contract, when executed, shall be deemed to include the entire agreement between the parties; the Contractor shall not base any claim for modification of the contract upon any prior representation or promise made by the representatives or the City, or other persons.

All attachments are considered as part of this document.

METHOD OF PAYMENT

Payments shall be based on an invoice submitted by the General Contractor or approved representative Construction Manager. The City shall have the right to withhold disbursement funds if in the City's opinion construction work for which payment has been requested is of poor workmanship, contrary to any applicable codes and contract specifications, violation of appropriate paperwork requirements that are not up to date and approved for this billing period, General Contractor fails to comply with this Agreement, or for other conditions or circumstances which the City deems not to be in the best interest of the public.

Ten percent (10%) of each General Contractor invoice request shall be retained by the City on this contract until it is completed up to City codes and contract specifications and approved by a City Official or person representing a City Official (Architect or Engineer).

ACCESS TO ACCOUNTING RECORDS

The contractor shall certify that all materials, equipment, and labor charged to the City are accounted for and shall keep such full and detailed accounts as may be necessary for proper financial management under this Agreement. The City or its representative shall be afforded access to all the Contractor's records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to this Contract, and the Contractor shall preserve all such records for a period of three (3) years, or for such longer period as may be required by law, after the final payment.

ASSIGNMENT OF REFUND RIGHTS

The City is not subject to federal, state, or local sales or use tax or federal excise tax. Contractor hereby assigns to City all of its rights, title, and interest in any sales or use tax which may be refunded as a result of the purchase of any materials purchased in connection with the Contract and Contractor, unless directed by the City, shall not file a claim for any sales or use tax refund subject to this assignment. Contractor authorizes the City, in its own name or the name of the Contractor, to file a claim for a refund of any sales or use tax subject to this assignment.

CONTRACTS WITH SUBCONTRACTORS

The Contractor agrees to include the above references paragraphs in any contract with subcontractors and to provide proof thereof to the City of Reading if requested.

NOTICE TO PROCEED

The Contractor shall begin work on the job site within ten (10) days after receiving Notice to Proceed from the City.

DISCONTINUANCE OF WORK

Any practice obviously hazardous as determined by the City shall be immediately discontinued by the Contractor upon receipt of either written or oral notice to discontinue such practice.

CONTRACT TERMINATION

The City shall have the right to terminate a contract or a part thereof before the work is completed in the event:

1. Previous unknown circumstances arise making it desirable in the public interest to void the contract.
2. The contractor is not adequately complying with the specifications.
3. The contractor refuses, neglects, or fails to supply properly trained or skilled supervisory personal and/or workers or proper equipment.
4. The contractor in the judgment of the City is unnecessarily or willfully delaying the performance and completion of the work.
5. The contractor refuses to proceed with work when and as directed by the City.
6. The contractor abandons the work.

Contractors who have questions concerning various aspects of this Contract should contact the following persons:

QUESTIONS REGARDING SPECIFICATIONS OR BID PROCESS

To ensure fair consideration for all proposers, the City prohibits communication to or with any department director, division manager or employee during the submission process with the exception of those questions relative to interpretation of specifications or the proposal process. No interpretations of the meaning of the RFP documents will be made to any bidder orally.

Every request for such interpretation shall be submitted via the PennBid Program (pennbid.procureware.com) to be given consideration must be sent in prior to 11:00 a.m., prevailing time, on November 28, 2022.

Any and all such interpretation will be in the form of an Addendum to the Contract Documents and will be issued via PennBid to all prospective proposers no later than December 5, 2022.

Notice: Payment of invoices are subject to the terms and conditions of the sources of funding for this project.

THE FOLLOWING INSTRUCTIONS FOR CONTRACTORS REGARDING AFFIRMATIVE ACTION ARE PROVIDED FOR INFORMATION PURPOSES. THE SUCCESSFUL BIDDER ASSUMES THE OBLIGATION TO TAKE WHATEVER AFFIRMATIVE ACTIONS ARE NECESSARY TO ASSURE EQUAL EMPLOYMENT OPPORTUNITY IN ALL ASPECTS OF EMPLOYMENT, IRRESPECTIVE OF RACE, COLOR, CREED, OR NATIONAL ORIGIN.

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION
TO ENSURE EQUAL EMPLOYMENT
OPPORTUNITY (EXECUTIVE ORDER 11246, AS AMENDED)**

(1) The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

(2) The goals are timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables	Goals for Minority Participation in Each Trade	Goals for Female Participation for Each Trade
Until Further Notice	2.5% for all trades	6.9% for All Trades

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

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

(3) **THE CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO THE DIRECTOR OF THE OFFICE OF FEDERAL CONTRACT COMPLIANCE PROGRAMS WITHIN 10 WORKING DAYS OF AWARD OF ANY CONSTRUCTION SUBCONTRACT IN EXCESS OF \$10,000 AT ANY TIER FOR CONSTRUCTION WORK UNDER THE CONTRACT RESULTING FROM THIS SOLICITATION. THE NOTIFICATION SHALL LIST THE NAME, ADDRESS AND TELEPHONE NUMBER OF THE SUBCONTRACTOR; EMPLOYER IDENTIFICATION NUMBER; ESTIMATED DOLLAR AMOUNT OF THE SUBCONTRACT; ESTIMATED STARTING AND COMPLETION DATES OF THE SUBCONTRACT; AND, THE GEOGRAPHICAL AREA IN WHICH THE CONTRACT IS TO BE PERFORMED.**

**OFFICE OF FEDERAL CONTRACT COMPLIANCE PROGRAMS
THE CURTIS CENTER SUITE 750 WEST
170 SOUTH INDEPENDENCE MALL WEST
PHILADELPHIA, PA 19106-3309
PHONE (215) 861-5764**

As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is the City of Reading, Pennsylvania.

State of _____)
County of _____) ss.

I, _____, *Notary Public*, being duly sworn, deposes and says that he
is _____ of _____,
(Name of Organization)
and that the answers to the foregoing questions and all statements therein contained are true and
correct.

Subscribed and sworn to before me this _____ day of _____, _____.

NOTARY PUBLIC

My Commission Expires:

DOCUMENTS TO BE SUBMITTED WITH BID

PROPOSAL

Proposal of:

Name:

Address:

TO: Mayor Moran
City of Reading
815 Washington Street
Reading, PA 19601

Dear Mayor Moran:

In conformity with City Plans and specifications, all as prepared by the Public Works Department and after an examination of the site of the work, and the Contract Documents, including the instructions to Bidders, Form of Proposal, Bid Bond and Conditions, the undersigned submits this proposal, and encloses herewith as proposal guaranty, a Certified or Treasurer's Check, or Bid Bond, in an amount not less than ten percent (10%) of the bid herein submitted, which it is understood will be forfeited if this proposal is accepted by the City of Reading, and the undersigned fails to furnish approved bonds and execute the contract within the time stipulated; otherwise, the guarantee will be returned.

The undersigned declares that no Member of Council, Director of Department, Division Manager, deputy thereof or clerk therein, or other officer of the City of Reading, is directly or indirectly interested as principal, surety of otherwise in this proposal or has any supervision or overall responsibility for the implementation in administration of the contract.

It is certified that the undersigned is the only person(s) interested in this proposal as principal and that the proposal is made without collusion with any person, firm, or corporation.

It is hereby agreed to execute the contract and furnish surety company bonds, on the forms enclosed in the Contract Documents, in the amount of one hundred percent (100%) of the contract price within ten (10) days of mailing of the contract documents from the City to the Principal, and to begin work within ten (10) days after receipt of Notice to Proceed from the City of Reading.

It is proposed to furnish and deliver all materials, tools, equipment, power, tests and transportation, perform all labor, superintendence, and all means of construction, and do all incidental work, and to execute, construct and finish in an expeditious and workman-like manner, in accordance with the plans and specifications, to the satisfaction and acceptance of the Department of Public Works of the City of Reading and its Engineer for the total base bid as herein bid:

_____ (written)

\$ _____ (figures).

IN WITNESS WHEREOF, this proposal has been executed this ____ day _____ A.D. 20____, by the setting hereunto of his or its hand and seal.

(INDIVIDUAL: PRINCIPAL)

_____(Seal)
(Signature of Individual)

Witness:

Trading and Doing Business as:

(PARTNERSHIP PRINCIPAL)

Witness:	_____ (Seal) (Name of Partnership)
_____	By: _____ (Seal) (Partner)
Witness:	
_____	By: _____ (Seal) (Partner)
Witness:	
_____	By: _____ (Seal) (Partner)
Witness:	
_____	By: _____ (Seal) (Partner)

(CORPORATION PRINCIPAL)

Attest:

(Assistant Secretary)

(Name of Corporation)

By: _____

(Vice) President

(CORPORATE SEAL)

or (if appropriate)

(Name of Corporation)

By: _____

Authorized Representative

FORM OF BID BOND

BOND

KNOW ALL MEN BY THESE PRESENTS that we, the undersigned,

_____, as Principal (the "Principal"), and _____

a corporation organized and existing under laws of the _____ of _____, as

Surety (the "Surety"), are held and firmly bound unto _____ as

Obligee (the "Obligee"), as hereinafter set forth, in the full and just sum of

_____ Dollars

(\$ _____),

lawful money of the United States of America, for the payment of which sum we bind ourselves, our heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WITNESSETH THAT:

WHEREAS, the Principal herewith is submitting a Proposal to the Obligee to perform the _____ Work in connection with the construction of _____ pursuant to plans, specifications and other documents constituting the Contract Documents which are incorporated into said Proposal by reference (the "Contract Documents"), as prepared by the Department of Public Works, City Hall, 815 Washington Streets, Reading, PA 19601-3690.

WHEREAS, it is a condition of the receipt and consideration by the Obligee of said Proposal that it shall be accompanied by proposal guaranty to be held by the Obligee on terms hereinafter set forth.

NOW, THEREFORE, the condition of this Bond shall be such that, if the Principal, within ten (10) days after mailing of contract document by the City to Principal, shall furnish to the Obligee a Performance Bond, Payment Bond and upon award of a contract to him by the Obligee, shall execute and deliver the Agreement and furnish to the Obligee proper evidence of effectiveness of insurance coverage, respectively within the time, in the forms and in the amounts, as appropriate, required by the Contract Documents, then this Bond shall be void, otherwise, this Bond shall remain in full force and effect.

The Principal and the Surety agree to pay to the Obligees the difference between the amount of said Proposal, as accepted by the Obligees, and any higher amount for which the required work shall be contracted for by the Obligees, together with any additional advertising costs, architect's fees, legal fees and any all other fees and expenses incurred by the Obligees by reason of the failure of the Principal to enter into such Agreement with the obligee, or to furnish such Contract Bonds, or to furnish evidence of effectiveness of such insurance coverage; provided, however, that (1) the obligation of the Surety shall not exceed the stated principal amount of this Bond; and (2) if the Obligees should not procure an executed contract with any other person for the performance of the work contemplated in said Proposal, as accepted by the Obligees, upon the same terms and conditions, other than price, as provided in the Contract Documents, within the period provided in the Contract Documents during which no proposals of bidders may be withdrawn, whether because of the lack of other proposals, or because of the inability or refusal of any other bidder to enter into an appropriate contract, or because the cost under any higher proposal would be greater than the Obligees shall determine, in its sole discretion, that it can afford, then the Principal and the Surety agree to pay to the Obligees the full amount of this Bond as liquidated damages.

IN WITNESS WHEREOF, the Principal and the Surety cause this Bond to be signed, sealed and delivered this _____ day of _____, 20____.

(INDIVIDUAL PRINCIPAL)

(Seal)

(Signature of Individual)

Witness:

Trading and Doing Business as:

(PARTNERSHIP PRINCIPAL)

(PARTNERSHIP PRINCIPAL)

(Seal)

(Name of Partnership)

Witness:

By: _____
(Partner)

Witness:

By: _____
(Partner)

(Seal)

Witness:

By: _____
(Partner)

(Seal)

Witness:

By: _____
(Partner)

(Seal)

(CORPORATION PRINCIPAL)

(Name of Corporation)

By: _____
(Vice) President

Attest:

(Assistant Secretary)

(Corporate Seal)

(OR, IF APPROPRIATE)

(Name of Corporation)

By: _____
(Authorized Representative)

Signed _____

(Title)

Subscribed and sworn to before me on

this ___ day of _____, 20 ___

(Title)

My Commission Expires:

(CORPORATION SURETY)

(Name of Corporation)

By: _____
(Attorney-In-Fact)

Witness:

(Corporate Seal)

** Attach an appropriate Power of Attorney, valid and in effect as of the date of this affidavit, evidencing the authority of the Attorney-In-Fact to act in behalf of the corporation.

NON-COLLUSION AFFIDAVIT

INSTRUCTIONS FOR NON-COLLUSION AFFIDAVIT

This Non-Collusion Affidavit is material to any contract pursuant to this bid. According to the Pennsylvania Antirigging Act, 73 P.S. 1611 et seq., governmental agencies may require Non-Collusion Affidavits to be submitted together with bids.

This Non-Collusion affidavit must be executed by the member, officer, or employee of the bidder who is authorized to legally bind the bidder.

Bid rigging and other efforts to restrain competition, and the making of false sworn statements in connection with the submission of bids are unlawful and may be subject to criminal prosecution. The person who signs the Affidavit should examine it carefully before signing and assure himself or herself that each statement is true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with the bidder with responsibilities for the preparation, approval, or submission of the bid.

In the case of a bid submitted by a joint venture, each party to the venture must be identified in the bid documents, and an Affidavit must be submitted separately on behalf of each party.

The term "complementary bid" as used in the Affidavit has the meaning commonly associated with that term in the bidding process, and includes the knowing submission of bids higher than the bid of another firm, any intentionally high or noncompetitive bid, and any form of bid submitted for the purpose of giving a false appearance of competition.

Failure to file an Affidavit in compliance with these instructions will result in disqualification of the bid.

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

State of _____

County of _____

_____, being first duly sworn, deposes and says that:

He/She is _____ (Owner, Partner, Officer, Representative or Agent) of _____, the Bidder that has submitted the attached Bid or Bids;

He/She is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;

Such Bid is genuine and is not a collusive or sham Bid;

Neither the said Bidder nor any of its officers; partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication of conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Reading or any person interested in the proposed Contract;

The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant; and,

Neither the said Bidder nor any of its officers, partners, owners, agents or parties in interest, have any interest, present or prospective, that can be reasonably construed to result in a conflict of interest between them and the City of Reading, which the Bidder will be required to perform.

I state that _____ understands
(Name of Firm)

and acknowledges that the above representations are material and important, and will be relied on by the City of Reading in awarding the contract(s) for which this bid is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the City of Reading of the true facts relating to the submission of bids for this contract.

(Name and Company Position)

SWORN TO AND SUBSCRIBED
BEFORE ME THIS _____
DAY OF _____, 20__

Notary Public

My Commission Expires

**PROVIDER'S CERTIFICATION OF NON-INDEBTEDNESS
TO THE CITY OF READING**

Provider hereby certifies and represents that Provider and Provider's parent company(ies) and subsidiary(ies) are not currently indebted to the City of Reading (the "City"), and will not at any time during the term of this Contract (including any extensions or renewals thereof) be indebted to the City, for or on account of any delinquent taxes, liens, judgments, fees or other debts for which no written agreement or payment plan satisfactory to the City has been established. In addition to any other rights or remedies available to the City at law or in equity, Provider acknowledges that any breach or failure to conform to this certification may, at the option of the City, result in the withholding of payments otherwise due to Provider and, if such breach or failure is not resolved to the City's satisfaction within a reasonable timeframe specified by the City in writing, may result in the offset of any such indebtedness against said payments and/or the termination of this Contract for default (in which case Provider shall be liable for all excess costs and other damages resulting from the termination).

NAME OF PROVIDER

By: _____
AUTHORIZED SIGNATORY

Title: _____
PRESIDENT OR VICE PRESIDENT

Attest: _____

RESOLUTION NO. 192-92

WHEREAS, reportedly, twenty-five cement manufacturing facilities in the United States are currently burning well over two billion pounds a year of hazardous waste as a source of fuel and additional profit in the cement manufacturing process; and

WHEREAS, approximately twenty cement manufacturing facilities are seeking permission to start this practice; and

WHEREAS, sufficient data and evidence as to the safety of cement products made from hazardous waste has not been proven; and

WHEREAS, it is in the best interest of the citizens of the City of Reading in regard to their health and quality of life that cement derived from hazardous waste be banned from any City projects.

NOW, THEREFORE, the Council of the City of Reading resolves that the City of Reading will not purchase cement from any facility that burns hazardous waste as fuel in its manufacturing process, nor allow the use of concrete made from this type of cement. This policy shall be reflected in city bid specifications.

PASSED COUNCIL April 1, 1993

WARREN H. HAGGERTY, JR.
Mayor

ATTEST:

RUTH M. THOMPSON
City Clerk

STATEMENT REGARDING MANUFACTURE OF CEMENT

The following statement is to be signed by an authorized officer of the company.

The undersigned contractor hereby certifies in accordance with City of Reading Resolution #192-92, that any cement used in performance of this contract shall not have been manufactured by a process using hazardous materials, as defined by the Environmental Protection Agency, in the manufacture and makeup thereof.

CONTRACTOR

By: _____

Title: _____

ATTEST:

STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information he desires.

1. Name of Bidder: _____
2. Permanent main office address: _____
3. When organized: _____
4. If a corporation, where incorporated: _____
5. How many years have you been engaged in the contracting business under your present firm or trade name: _____
6. Contracts on hand: (Schedule these on an attached sheet, showing amount of each contract and the appropriate anticipated dates of completion.)
7. Have you ever failed to complete any work awarded to you? If so, where and why?

8. Have you ever defaulted on a contract ? _____. If so, where and why?

9. List the more important projects recently completed by your company on an attached sheet, stating the approximate cost of each, and the month and year completed.
10. List your major equipment available for this contract.

11. Describe experience in construction work similar in importance to this project on an attached sheet.

12. Background and experience of the principal members of your organization, including the officers.

13. Credit available: \$ _____

14. Give Bank reference: _____

15. Will you, upon request, fill out a detailed financial statement and furnish any other information that may be required by the City? _____

16. (A) Have you ever been a party to or otherwise involved in any action or legal proceeding involving matters related to race, color, nationality or religion? _____ If so, give full details.

- (B) Have you ever been accused of discrimination based upon race, color, nationality or religion in any action or legal proceeding including any proceeding related to any Federal Agency? _____. If so, give full details _____

17. All prospective bidders are required to present proof of an acceptable disposal method approved by the Pennsylvania Department of Environmental Protection. The proof may consist of a copy of a State Solid Waste Disposal Permit issued to the prospective bidder by the Pennsylvania Department of Environmental Protection, or a letter of approval from the Pennsylvania Department of Environmental Protection for the use of a proposed or existing disposal facility which has a permit or is under review for a permit. Same to be in accordance with Section 7 (a) application and permits, Pennsylvania Solid Waste Management - "Act 241."

- 18. The undersigned hereby authorizes and requests any person, firm or corporation to furnish any information requested by the "City of Reading" in verification of the recitals comprising this Statement of Bidder's Qualifications.

- 19. Name, address, phone number, and contact person at surety company who will provide bonding for this contract:

- 20. Name, address, phone number, and contact person at insurance company who will provide insurance coverage for this contract:

- 21. The undersigned hereby authorizes any person, firm or corporation to furnish any information requested by the City of Reading in verification of the recitals comprising this Statement of Bidder's Qualifications.

DATED at _____ this ____ day of _____, 20____.

(NAME OF BIDDER)

BY: _____

TITLE: _____

EQUAL EMPLOYMENT OPPORTUNITY AND SECTION 3 QUESTIONNAIRE

(Please complete the following information and answer all questions; use an attached sheet as necessary.)

1. (a) Contractor: How many persons from the City of Reading _____, low income City residents _____, and minorities: _____ Black, _____ Hispanic, _____ White, _____ Asian/Pacific Islander, _____ Other, are on your present basic payroll?

(b) Subcontractor: How many persons from the City of Reading _____, low income City residents _____, and minority groups: _____ Black, _____ Hispanic, _____ White, _____ Asian/Pacific Islander, _____ Other, are on your present basic payroll?

2. How many City of Reading residents _____, low income City residents _____, and minorities: _____ Black, _____ Hispanic, _____ White, _____ Asian/ Pacific Islander, _____ Other, are presently in training programs run by your company, your subcontractors, and associations to which you or your subcontractors may belong or with unions with which you and your subcontractors have collective bargaining agreements?

3. Does your firm, subcontractors, associations to which you or they belong or unions with which you or your subcontractors have collective bargaining agreements a definite plan for creating career situations, training and employment for residents of the City of Reading, low income citizens, and minorities? _____. If so, please include a copy of the plan with your formal bid and specify the number of individuals (from the groups referred to previously), to be placed in apprenticeship or other training situations. When is the program scheduled to begin? _____ What portion of the program is already in operation?

4. What plans does your firm have to utilize business concerns located in, or owned in substantial part by persons residing in the City?

CERTIFICATION OF NON-SEGREGATED FACILITIES

The Bidder certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The Bidder certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location under his control where segregated facilities are maintained. The Bidder agrees that a breach of this certification will be a violation of the Equal Opportunity clause in any contract resulting from acceptance of this bid. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion or national origin, because of habit, local custom or otherwise. The Bidder agrees that (except where he has obtained identical certification from proposed subcontractors for specific time periods) he will obtain identical certification from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause, and that he will retain such certifications in his files.

Note: The penalty for making false statement in offers is prescribed in 18 U.S.C. 1001.

DATE: _____,

BY: _____
(NAME OF BIDDER)

(TITLE)

OFFICIAL ADDRESS:

CONTRACTOR'S STATEMENT FOR PUBLIC DISCLOSURE *

1. a/ Name of Contractor:
b/ Address and Zip Code of Contractor:

2. If the Contractor is not an individual doing business under his own name, the Contractor has the status indicated below and is organized or operating under the laws of _____:
____ a corporation
____ a partnership known as:
____ a business association or a joint venture known as:
____ a Federal, State or Local government or instrumentality thereof
____ other (explain)

3. If the Contractor is not an individual or a government agency or instrumentality, give date of organization: _____

4. Names, addresses, title of position (if any), and nature and extent of the interest of the officers and principal members, shareholders, investors other than a government agency or instrumentality, are set forth as follows:
 - a/ If the Contractor is a corporation, the officers, directors, trustees, and each stockholder owning more than 10% of any share of stock.
 - b/ If the Contractor is a partnership, each partner, whether a general or limited partner, and either the percent of interest or a description of the character and extent of interest.
 - c/ If the Contractor is a business association or a joint venture, each participant and either the percent of interest or a description of the character and extent of interest.
 - d/ If the Contractor is some other entity, the officers, the members of the governing body, and each person having an interest of more than 10%.

* If space on this form is inadequate for any requested information, this should be furnished on an attached page which is referred to under the appropriate numbered item on the form.

	POSITION TITLE (if any) AND PERCENT OF INTEREST OR DESCRIPTION OF CHARACTER AND EXTENT OF INTEREST
NAME, ADDRESS & ZIP CODE	<u>CHARACTER AND EXTENT OF INTEREST</u>

5. Name, address and nature and extent of interest of each person or entity (not named in response to Item 4) who has a beneficial interest in any of the shareholders or investors named in response to Item 5 which gives such person or entity more than a computed 10% interest in the Contractor (for example, more than 20% of the stock in a corporation which holds 50% of the stock of the Contractor, or more than 50% of the stock in a corporation which holds 20% of the stock of the Contractor).

	DESCRIPTION OF CHARACTER AND EXTENT OF INTEREST
NAME, ADDRESS & ZIP CODE	<u>AND EXTENT OF INTEREST</u>

6. Names (if not given above) of officers and directors or trustees of any corporation or firm listed under Item 4 or Item 5 above:

7. Is the Contractor a subsidiary of or affiliated with any other corporation or any other firm or firms? ___ YES ___ NO. If yes, list each such corporation or firm by name and address, specify its relationship to the Contractor, and identify the officers and directors or trustees common to the Contractor and such other corporation or firm:

8. Other federal grant projects under Title I of the Housing and Community Development Act of 1974 (CP.L.93-383), as amended, in which the Contractor or any of the principals of the Contractor is or has been the contractor, or a stock-holder, officer, director or trustee, or partner of such a contractor:

9. If the Contractor or a parent corporation, a subsidiary, an affiliate or a principal of the Contractor is to participate in the work or services as a Subcontractor or consultant:

a/ Name and address of such Subcontractor or consultant:

b/ Has such Subcontractor within the last 10 years ever failed to qualify as a responsible bidder, refused to enter into a contract after an award has been made, or failed to complete a contract?

___ YES ___ NO. If yes, explain:

c/ Outstanding contract bids of such Subcontractor or consultant:

<u>Awarding Agency</u>	<u>Amount</u>	<u>Date Opened</u>
	\$	

10. Brief statement respecting equipment, experience, financial capacity, and other resources available to such Subcontractor or consultant for the performance of the work or services involved in the contract, specifying particularly the qualifications of the personnel, the nature of the equipment, and the general experience of the Subcontractor or consultant.

11. a/ Does any member of the governing body or employee of the Local Public Agency or any officer or employee of the Local Public Agency who exercises any functions or responsibilities in connection with the awarding and/or carrying out of the contract have any direct or indirect personal interest in the Contractor or in the Contractor's performance under the contract? ___YES ___NO. If yes, explain:

b/ Does any member of the governing body of the locality in which the Public Improvement Project is situated or any other public official of the locality, who exercises any functions or responsibilities in the review or approval of the awarding and/or carrying out of the contract have any direct or indirect personal interest in the Contractor or in the Contractor's performance under the contract? ___YES ___NO. If yes, explain:

CERTIFICATION

I (We) _____ certify that this Contractor's Statement for Public Disclosure is true and correct to the best of my (our) knowledge and beliefs.

DATED: _____

DATED: _____

(SIGNATURE)

(SIGNATURE)

(TITLE)

(TITLE)

(ADDRESS & ZIP CODE)

(ADDRESS & ZIP CODE)

1 - If the Contractor is an individual, this Statement should be signed by such individual; if a partnership, by one of the partners; if a corporation or other entity, by one of its chief officers having knowledge of the facts required by this Statement.

2 - Penalty For False Certification: Section 1001, Title 18, of the U.S.C. provides a fine of not more than \$10,000, or imprisonment of not more than five years, or both, for knowingly and willfully making or using any false writing or document, knowing the same to contain any false, fictitious or fraudulent statement or entry in a matter within the jurisdiction of any Department of the United States.

(ONLY AS NEEDED)

CERTIFICATE OF ACKNOWLEDGMENT OF RECEIPT OF ADDENDUM

THE CITY OF READING

ADDENDUM NO. _____ TO BID FOR: _____

OPENING DATE: _____

NOTICE

This addendum must be signed, attached to, and returned with your proposal to the City of Reading by the time and date indicated above. This sheet is now part of the Contract Documents.

I, HEREBY CERTIFY, THAT THE CHANGES COVERED BY THIS ADDENDUM HAVE BEEN TAKEN INTO ACCOUNT WITH THE TOTAL BID PRICE.

Firm Name (Type or Print) _____

Authorized Signature _____ Title _____

Name (Type or Print) _____ Date _____

CONTRACT DOCUMENTS

C O N T R A C T

NOTE; This contract is not to be filled in until contract is awarded.

THIS AGREEMENT, made and concluded this _____ day of _____, in the year two thousand and _____, by and between the City of Reading, a municipal corporation of the Commonwealth of Pennsylvania, located in the County of Berks, said Commonwealth, party of the first part, and _____, Contractor, party of the second part, pursuant to law and to the provisions and requirements of the ordinance of the City of Reading, Pennsylvania.

WITNESSETH, that the parties to these presents, each in consideration of the agreements on the part of the other herein contained, have agreed, and hereby do agree, the party of the first part for itself, its successors and assign, and the party of the second part for itself, himself, or themselves, its successors, or his or their executors and administrators as follows:

CONTRACTOR'S GENERAL AGREEMENT. The Contractor covenant, promises and agrees to and with the party of the first part, for the consideration hereinafter mentioned and contained, and under the penalty expressed in a bond bearing date of _____ and hereto attached, to furnish all the material, machinery, equipment, tools, labor and transportation, except as hereinafter otherwise provided, at his own cost, necessary or proper for the purpose of executing the work embraced in this contract in a good, substantial and workmanlike manner, and in strict accordance with the specifications pertaining to this contract a herein contained.

PARTS OF CONTRACT. The Location Map; Notice to Contractors; Bid Instructions; Documents to be Submitted with Bid; Contract Documents; Documents to be Submitted During the Course of the Contract; Wage Rate Determinations; Notice of Preconstruction Requirements and Pre-Construction Conference Questionnaire; Affirmative Action Requirements; General Provisions; Supplementary General Terms and Conditions; Technical Specifications; Supplementary Technical Specifications; and Correspondence and Supportive Documentation shall each form a part of the Contract.

THE CONTRACT SUM. The City shall pay the Contractor for the performance of the Contract, subject to additions and deductions provided therein, in current funds as follows: _____ (state here the lump sum amount, unit prices, or both as desired in individual cases.)

Where the quantities originally contemplated are so changed that application of the agreed unit price to the quantity of work performed is shown to create a hardship to the Owner or the Contractor, there shall be an equitable adjustment of the Contract to prevent such hardship.

TIME & MANNER OF DOING WORK. The party of the second part agrees to commence the construction of the work to be done under this contract, immediately upon receiving written notice from the Director of Public Works, or other applicable Director, so to do and to complete the entire work as specified in the technical specifications, it being expressly agreed and understood that the time of beginning, rates of progress and time of completion of the work are essential under this contract. Time is to be considered to be the essence of this contract.

STIPULATED DAMAGES. The Contractor shall begin work within ten (10) days of receipt of written notice from the applicable Director, to do so. If the Contractor fails to complete and finish the work in conformity with the terms and provisions of this Contract within the time hereinbefore specified, he shall pay to the City the sum of Five Hundred Dollars (\$500.00) for each and every day thereafter, including Sundays and holidays, that the finishing of the Contract is delayed, which sum shall be construed as stipulated and liquidated damages and not as a penalty and shall be deducted from the amount due by the terms of the Contract; provided, however, that in case of justifiable delay, the City shall extend the time for completion of said work as provided for in Article G.7, but no extension of time for any reason

beyond the time fixed herein for the completion of the work shall be deemed a waiver by the City of the right to abrogate this Contract for abandonment for delay.

LIENS. Neither the final payment nor any part of the retained percentage shall become due until the Contractor, if required, shall deliver to the City a complete release of all liens arising out of this Contract, or receipts in full in lien thereof, and, if required in either case, an affidavit that so far as he has knowledge or information the release and receipts include all the labor and material for which a lien could be filed. If any lien remains unsatisfied after all payments are made, the Contractor shall refund to the City all monies that the latter may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

BASIS OF CONTRACT. This contract is founded on _____

IN WITNESS WHEREOF, the said City of Reading has caused this Agreement to be executed by its Mayor, and its corporate seal to be hereunto affixed, duly attested by its City Clerk, and the party of the second part.

the day and year first above written.

CITY OF READING

By: _____
Mayor

ATTEST:

City Clerk

Signed and Sealed in the Presence of

CONTRACTOR

PRESIDENT

SECRETARY

PERFORMANCE BOND

Know All Men By These Presents that we, _____
(CONTRACTOR)

hereinafter called the PRINCIPAL, and _____
(SURETY)

hereinafter called the SURETY, a corporation organized and existing under the laws of
the _____ are held and firmly bound unto

_____ hereinafter called the OBLIGEE, as hereinafter

set forth, in the full and just sum of _____ Dollars

(\$ _____), lawful money of the United States of America, for the payment of which sum we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WITNESSETH THAT:

WHEREAS, the PRINCIPAL heretofore submitted to the OBLIGEE a certain PROPOSAL, dated _____, 20____, to perform the WORK for the OBLIGEE, in connection with the _____ as set forth in CONTRACT DOCUMENTS.

WHEREAS, the OBLIGEE is a "contracting body" under provisions of Act No. 385 of the General Assembly of the Commonwealth of Pennsylvania, approved by the Governor on December 20, 1967, known and cited as the "Public Works Contractors Bond Law of 1967" (the "Act"); and

WHEREAS, the Act, in Section 3(a), requires that, before an award shall be made to the PRINCIPAL by the OBLIGEE in accordance with the PROPOSAL, the PRINCIPAL shall furnish this BOND to the OBLIGEE, with this BOND to become binding upon the award of the CONTRACT to the PRINCIPAL by the OBLIGEE in accordance with the PROPOSAL; and

WHEREAS, it also is a condition of the CONTRACT DOCUMENTS that this BOND shall be furnished by the PRINCIPAL to the OBLIGEE; and

WHEREAS, under the CONTRACTOR DOCUMENTS, it is provided inter alia, that if the PRINCIPAL shall furnish this BOND to the OBLIGEE, and if the OBLIGEE shall make an award to the PRINCIPAL, in accordance with the PROPOSAL, then the PRINCIPAL and OBLIGEE shall enter into a CONTRACT with respect to performance of the WORK, the form of which CONTRACT is set forth in the CONTRACT DOCUMENTS.

NOW, THEREFORE, the terms and conditions of this BOND are and shall be that if the PRINCIPAL will truly and faithfully comply with and perform the WORK in accordance with the CONTRACT DOCUMENTS, at the time and in the manner provided in the CONTRACT DOCUMENTS, and if the PRINCIPAL shall satisfy all claims and demands incurred in or related to the performance of the WORK by the PRINCIPAL, and if the PRINCIPAL shall indemnify completely and shall hold harmless the OBLIGEE and all of its officers, agents and employees from any and all costs and damages which the OBLIGEE and all of its officers, agents and employees may sustain or suffer by reason of the failure of the PRINCIPAL to do so, and if the PRINCIPAL shall reimburse completely and shall pay to the OBLIGEE any and all costs and expenses which the OBLIGEE and all of its officers, agents or employees may incur by reason of any such default or failure of the PRINCIPAL, then this BOND shall be void; otherwise, this BOND shall remain in force and effect.

This BOND, is executed and delivered under and subject to the Act, to which reference hereby is made.

The PRINCIPAL and the SURETY agree that any alterations, changes and/or additions to the CONTRACT DOCUMENTS, and/or any alterations, changes and/or additions to the WORK to be performed in accordance with the CONTRACT DOCUMENTS, and/or any alterations, changes and/or additions to the CONTRACT , and/or any giving by the OBLIGEE of any extensions of time for the performance of the WORK in accordance with the CONTRACT DOCUMENTS, and/or any act of forbearance of either the PRINCIPAL or the OBLIGEE toward the other with respect to the CONTRACT DOCUMENTS, and/or the reduction of any percentage to be retained by the OBLIGEE as permitted by the CONTRACT DOCUMENTS, shall not release, in any manner whatsoever, the PRINCIPAL and the SURETY, or either of them, or their heirs, executors, administrators, successors and assigns, from liability and obligations under this BOND; and the SURETY, for value received, does waive notice of any such alterations, changes, additions, extensions of time, acts of forbearance and/or reduction of retained percentage.

IN WITNESS WHEREOF, the PRINCIPAL and the SURETY cause this BOND to be signed, sealed and delivered this _____ day of _____, 20____.

(INDIVIDUAL PRINCIPAL)

(Seal)

(Signature of Individual)

Witness:

Trading and Doing Business as:

(PARTNERSHIP PRINCIPAL)

_____ (Seal)
(Name of Partnership)

Witness:

(Seal)

By: _____

(Partner)

Witness:

(Seal)

By: _____

(Partner)

Witness:

(Seal)

By: _____

(Partner)

(CORPORATION PRINCIPAL)

(Name of Corporation)

By: _____
(Vice) President

Attest:

(Assistant Secretary)

(Corporate Seal)

(OR, IF APPROPRIATE)

(Name of Corporation)

By: _____
(Authorized Representative)

Signed _____

(Title)

(CORPORATION SURETY)

(Name of Corporation)

By: _____
(Attorney-In-Fact)

Witness:

(Corporate Seal)

** Attach an appropriate Power of Attorney, valid and in effect as of the date of this affidavit, evidencing the authority of the Attorney-In-Fact to act in behalf of the corporation.

PAYMENT BOND

Know All Men by These Presents:

That We, _____ (CONTRACTOR) hereinafter called the PRINCIPAL, and _____ (SURETY) hereinafter called the SURETY, a corporation organized and existing under laws of the _____ of _____ are held and firmly bound unto _____, hereinafter called the OBLIGEE, as hereinafter set forth, in the full and just sum of _____ dollar (_____), lawful money of the United States of America, for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

Witnesseth That:

WHEREAS, the PRINCIPAL heretofore submitted to the OBLIGEE a certain PROPOSAL, dated _____, 20 __, to perform the WORK for the OBLIGEE, in connection with the _____ as set forth in the CONTRACT, DOCUMENTS; and _____ Public Works, City of Reading, Pennsylvania.

WHEREAS, the OBLIGEE is a "contracting body" under provisions of the Act of the General Assembly of the Commonwealth of Pennsylvania, approved by the Governor on December 20, 1967, known as and cited as the "Public Works Contractors" Bond Law of 1967", P L 869 (the Act"): and

WHEREAS, the Act, in section 3(a), requires that, before an award shall be made to the PRINCIPAL by the OBLIGEE in accordance with the PROPOSAL, the PRINCIPAL shall furnish this BOND to the OBLIGEE, with this BOND to become binding upon the award of a CONTRACT to the PRINCIPAL by the OBLIGEE in accordance with the PROPOSAL: and

WHEREAS, it also is a condition of the CONTRACT DOCUMENTS that this BOND shall be furnished by the PRINCIPAL to the OBLIGEE; and

WHEREAS, under the CONTRACTOR DOCUMENTS, it is provided, inter alia, that if the PRINCIPAL shall furnish this BOND to the OBLIGEE, and if the OBLIGEE shall make an award to the PRINCIPAL in accordance with the PROPOSAL then the PRINCIPAL and the OBLIGEE shall enter into a CONTRACT with respect to performance of the WORK, the form of which CONTRACT is set forth in the CONTRACT DOCUMENTS.

NOW, THEREFORE, the terms and conditions of this BOND are and shall be that if the PRINCIPAL and any SUBCONTRACTOR of the PRINCIPAL to whom any portion of the WORK shall be subcontracted, and if all assignees of the PRINCIPAL and of any such SUBCONTRACTOR, promptly shall pay or shall cause to be paid, in full all money which may be due any claimant supplying labor or materials in the prosecution and performance of the WORK in accordance with the CONTRACT DOCUMENTS, including any amendment, extension or addition to the CONTRACT DOCUMENTS, for material furnished or labor supplied or labor performed, then this BOND shall be void; otherwise, this BOND shall be and shall remain in force and effect.

This BOND, as provided by the Act, shall be solely for the protection of claimants supplying labor or materials to the PRINCIPAL or to any SUBCONTRACTOR of the PRINCIPAL in the prosecution of the WORK covered by the CONTRACT DOCUMENTS, including any amendment, extension or addition thereto. The term "claimant", where used herein and as required by the Act, shall mean any individual, firm, partnership, association or corporation. The phrase "labor or materials", when used herein and as required by the Act, shall include public utility services and reasonable rentals of equipment, but only for periods when the equipment rented is actually used at the site of the WORK covered by the CONTRACT. As required by the Act, the provisions of this BOND shall be applicable whether or not the material

furnished or labor performed enters into and becomes a component part of the public building, public work or public improvement contemplated by the CONTRACT DOCUMENTS.

As provided and required by the Act, the PRINCIPAL and the SURETY agree that any claimant, who has performed labor or furnished material in the prosecution of the WORK in accordance with the CONTRACT DOCUMENTS, including any amendment, extension or addition to the CONTRACT DOCUMENTS, and who has not been paid therefore, in full, before the expiration of ninety (90) days after the last day on which such claimant performed the last of such labor or furnished the last of such materials for which payment is claimed, may institute an action upon this BOND, in the name of the claimant, in assumpsit, to recover any amount due the claimant for such labor or material, and may prosecute such action to final judgment and may have execution upon the judgment; provided, however, that:

(a) Any claimant who has a direct contractual relationship with any SUBCONTRACTOR of the PRINCIPAL, but has no contractual relationship, express or implied, with the PRINCIPAL, may institute an action upon this BOND only if such claimant first shall have given written notice, served in the manner provided in the Act, to the PRINCIPAL, within ninety (90) days from the date upon which such claimant performed in the last of the labor or furnished the last of the materials for which payment is claimed, stating, with substantial accuracy, the amount claimed and the name of the person for whom the WORK was performed or to whom the material was furnished; and

(b) No action upon this BOND shall be commenced after the expiration of one (1) year from the day upon which the last of the labor was performed or material was supplied, for the payment of which such action is instituted by the claimant; and

(c) Every action upon this BOND shall be instituted either in the appropriate court of the County where the WORK is to be performed or of such other County as Pennsylvania statutes shall provide, or in the United States District Court for the district in which the PROJECT, to which the CONTRACT relates, is situated, and not elsewhere.

This BOND is executed and delivered under and subject to the Act, to which reference hereby is made.

The PRINCIPAL and the SURETY agree that any alterations, changes and/or additions to the CONTRACT DOCUMENTS, and/or any alterations, changes and/or additions to the WORK to be performed in accordance with the CONTRACT DOCUMENTS, and/or any alterations, changes and/or additions to the CONTRACT, and/or any given by the OBLIGEE of any extensions of time for the performance of the WORK in accordance with the CONTRACT DOCUMENTS, and/or any act of forbearance of either the PRINCIPAL or the OBLIGEE toward the other with respect to the CONTRACT DOCUMENTS, and/or the reduction of any percentage to be retained by the OBLIGEE as permitted by the CONTRACT DOCUMENTS, shall not release, in any manner whatsoever, the PRINCIPAL and the SURETY, or either of them, or their heirs, executors, administrators, successors and assigns, from liability and obligations under this BOND; and the SURETY for value received, does waive notice of any such alterations, changes, additions, extensions of time, acts of forbearance and/or reduction of retained percentage.

If the PRINCIPAL is a foreign corporation (incorporated under the laws other than those of the Commonwealth of Pennsylvania) then further terms and conditions of this BOND are and shall be that the PRINCIPAL or the SURETY shall not be discharged from liability on this BOND, nor this BOND surrendered until such PRINCIPAL files with the OBLIGEE a certificate from the Pennsylvania Department of Revenue evidencing the payment in full of all bonus taxes, penalties and interest, and a certificate from the Bureau of Employment and Unemployment Compensation of the Pennsylvania Department of Labor and Industry, evidencing the payment of all unemployment compensation, contributions, penalties and interest due the Commonwealth from said PRINCIPAL or any foreign corporation,

SUBCONTRACTOR thereunder or for which liability has accrued but the time for payment has not arrived, all in accordance with provisions of the Act of June 10, 1947, P.L. 493, of the Commonwealth of Pennsylvania.

In Witness Whereof, the PRINCIPAL and the SURETY cause this BOND to be signed, sealed and delivered this day _____ of _____, 20 __.

(INDIVIDUAL PRINCIPAL)

(Seal)

(Signature of Individual)

Witness:

Trading and Doing Business as:

(PARTNERSHIP PRINCIPAL)

(Seal)

(Name of Partnership)

Witness:

(Seal)

By: _____
(Partner)

Witness:

(Seal)

By: _____
(Partner)

Witness:

(Seal)

By: _____
(Partner)

Witness:

(Seal)

By: _____
(Partner)

(CORPORATION PRINCIPAL)

(Name of Corporation)

By: _____
(Vice) President

Attest:

(Assistant Secretary)

(Corporate Seal)

(OR, IF APPROPRIATE)

(Name of Corporation)

By: _____
(Authorized Representative)

Signed _____

(Title)

(CORPORATION SURETY)

(Name of Corporation)

By: _____
(Attorney-In-Fact)

Witness:

(Corporate Seal)

** Attach an appropriate Power of Attorney, valid and in effect as of the date of this affidavit, evidencing the authority of the Attorney-In-Fact to act in behalf of the corporation.

MAINTENANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we, _____

_____ hereinafter called the PRINCIPAL, and
(CONTRACTOR)

_____ hereinafter called the SURETY, a corporation organized and existing
(SURETY)

under laws of the _____ of _____, are held and
firmly

bound unto _____, hereinafter called the OBLIGEE, as hereinafter set (OWNER)

forth, in the full and just sum of _____ Dollars (\$_____),

lawful money of the United States of America, for the payment of which we bind ourselves, our heirs,
executors, administrators, successors and assigns, jointly and severally, firmly by these presents,

WITNESSETH THAT:

Whereas, the PRINCIPAL heretofore submitted to the OBLIGEE a certain PROPOSAL, dated _____,
20___ to perform the WORK for the OBLIGEE, in connection with the construction of _____
_____ as set forth in the

CONTRACT
DOCUMENTS as prepared by the CITY OF READING.

Now, therefore, the condition of this BOND shall be such that: If the PRINCIPAL shall remedy, without
cost to the OBLIGEE, all defects which may develop during the period of one (1) year from the date of
completion by the PRINCIPAL and final acceptance of the OBLIGEE of the WORK performed in
accordance with the CONTRACT DOCUMENTS, which defects, in the sole judgment of the OBLIGEE,
shall be caused by or shall result from defective or inferior materials or workmanship, and if the
PRINCIPAL shall satisfy all claims and demands arising from or related to such defects or growing out of
such defects. and if the PRINCIPAL shall indemnify completely and shall save harmless the OBLIGEE
from any and all costs and damages which the OBLIGEE may sustain or suffer by reason of the failure so
to do; and if the PRINCIPAL shall reimburse completely and shall pay to the OBLIGEE any and all costs
and expenses which the OBLIGEE may incur by reason of anv such default or failure of the PRINCIPAL,
then this BOND shall be void; otherwise, this BOND shall be and shall remain in full force and effect.

The PRINCIPAL and the SURETY agree that any alterations, changes and/or additions to the
CONTRACT DOCUMENTS, and/or any alterations, changes and/or additions to the WORK to be
performed in accordance with the CONTRACT DOCUMENTS, and/or any alterations, changes and/or
additions to the CONTRACT, and/or any giving by the OBLIGEE of any extensions of time for the
performance of the WORK in accordance with the CONTRACT DOCUMENTS, and/or any act of
forbearance of either the PRINCIPAL or the OBLIGEE toward the other with respect to the CONTRACT
DOCUMENTS, and/or the reduction of any percentage to be retained by the OBLIGEE as permitted by
the CONTRACT DOCUMENTS, shall not release, in any manner whatsoever, the PRINCIPAL and the
SURETY, or either of them, or their heirs, executors, administrators, successors and assigns from liability
and obligations under this BOND; and the SURETY for value received, does waive notice of any such
alterations, changes, additions, extensions of time, acts of forbearance and/or reduction of retained
percentage.

In Witness Whereof, the PRINCIPAL and the SURETY cause this BOND to be signed, sealed and delivered this _____ day of _____, 20_____.

(INDIVIDUAL PRINCIPAL)

_____ (Seal)
(Signature of Individual)

Witness:

Trading and Doing Business as:

(PARTNERSHIP PRINCIPAL)

_____ (Seal)
(Name of Partnership)

Witness:

(Seal)

By: _____
(Partner)

Witness:

(Seal)

By: _____
(Partner)

Witness:

(Seal)

By: _____
(Partner)

Witness:

(Seal)

By: _____
(Partner)

(CORPORATION PRINCIPAL)

(Name of Corporation)

By: _____
(Vice) President

Attest:

(Assistant Secretary)

(Corporate Seal)

(OR, IF APPROPRIATE)

(Name of Corporation)

By: _____
(Authorized Representative)

(CORPORATION SURETY)

(Name of Corporation)

By: _____
(Attorney-In-Fact)

Witness:

(Corporate Seal)

** Attach an appropriate Power of Attorney, valid and in effect as of the date of this affidavit, evidencing the authority of the Attorney-In-Fact to act in behalf of the corporation.

STATEMENT ACCEPTING PROVISIONS OF WORKERS' COMPENSATION ACT

STATE OF _____

ss.

COUNTY OF _____

The undersigned contractor has accepted the provisions of the Workers' Compensation Act of Pennsylvania, with all supplements, and has insured liability thereunder in accordance with the terms thereof with the insurance company whose signature is attached hereto.

For Individual

_____ (SEAL)

FOR CORPORATION

(Name of Corporation)

By: _____
(Official Title)

Attest: _____
(Secretary or Asst. Secretary)

FOR PARTNERSHIP

(Name of Partnership)

By: _____ (SEAL)

(Partners) (SEAL)

(Name of Insurance Company)

By: _____
(Attorney-In-Fact)

STIPULATION AGAINST LIENS

WHEREAS, _____, hereinafter called the CONTRACTOR, has entered into a CONTRACT, dated _____, 20____, with _____ hereinafter called the CITY, to provide materials and perform labor necessary for the manufacture and furnishing of the: as set forth in the CONTRACT DOCUMENTS as prepared by the City of Reading.

NOW, THEREFORE, it is hereby stipulated and agreed by and between the said parties, as part of the said CONTRACT, and for the consideration therein set forth, that neither the undersigned CONTRACTOR, any SUBCONTRACTOR or material man, nor any other person furnishing labor or materials to the said CONTRACTOR under this CONTRACT shall file a lien, commonly called a mechanic's lien, for WORK done or materials furnished for the above manufacture.

This stipulation is made and shall be filed with the Berks County Prothonotary within ten (10) days after execution, in accordance with the requirements of Section 1402 of the Mechanics Lien Law of 1963 of the Commonwealth of Pennsylvania in such case provided.

IN WITNESS WHEREOF, the parties hereto have caused the signature of their proper officers to be affixed thereto on this _____ day of _____ 20____ .

(SEAL)

(CITY OF READING)

BY: _____
TITLE: _____

ATTEST:

BY: _____
TITLE: _____

(SEAL)

(CONTRACTOR)

ATTEST:

BY: _____
TITLE: _____

BY: _____
TITLE: _____

INDEMNITY AGREEMENT & HOLD HARMLESS

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned has entered into a contract with the CITY OF READING, dated _____, 20 __, providing for the _____ City of Reading, Pennsylvania.

NOW, THEREFORE, in consideration of the award of said contract to the undersigned, _____, as well as in further consideration of the sum of ONE DOLLAR (\$1.00) in hand paid to the said _____ by the City of Reading, receipt whereof is hereby acknowledged, the said _____ agrees to indemnify and save harmless the CITY OF READING, its officers, agents, servants, and employees against any and all loss, damage, costs and expenses which the said CITY may hereafter suffer, incur, be put to or pay by reason of any bodily injury (including death) or damage to property arising out of any act or omission in performance of the work undertaken under the aforesaid contract.

EXECUTED this ____ day of _____, 20 __.

By: _____

Title: _____

ATTEST:

(Title)

NOTICE TO PROCEED

TO:

Project _____

Contract No. _____

Amount of Contract _____

You are hereby notified to commence work on the referenced contract on or before _____, 20____, and shall fully complete all of the work of said contract within _____ consecutive calendar days thereafter. Your completion date is therefore _____, 20____.

The contract provides for an assessment of the sum of \$_____ as liquidated damages for each consecutive calendar day after the above established contract completion date that the work remains incomplete.

Dated this _____ day of _____, 20____.

By _____

Title _____

ACCEPTANCE OF NOTICE

Receipt of foregoing Notice to Proceed is hereby acknowledged

By _____

this _____ day of _____ 20____.

By _____

Title _____

DAVIS-BACON LABOR & INDUSTRY WAGE RATES

TO: **ALL CONTRACTORS**
FROM: City of Reading Community Development
RE: Davis Bacon Prevailing Wage Act

Because of the use of federal funding, below is a checklist of items that contractors are required to properly complete and submit **in order for the CD Office to process the first payment request**:

- IRS Number
- Certified Payrolls
- Certificate Appointing Officer or Employee To Supervise Payment of Employees
- Contractor or Subcontractor Certification
- Attachments I and II
- Affirmative Action Plan (for contracts over \$100,000)
- Section 3 Certification (for contracts over \$100,000)
- Section 3 Statement
- Equal Employment / Section III Questionnaire
- Construction Start Date
- Fringe Benefit Plan
- Workforce Roster
- Apprenticeship Agreements (If Apprentice's work on project)

It is the **GENERAL CONTRACTOR'S** responsibility to explain, obtain and review the above documentation from their subcontractors. The Community Development Office will accept only documentation forwarded by the General Contractor.

NOTICE

THE DAVIS-BACON ACT PREVAILING WAGE RATES SPECIFIED ON THE FOLLOWING PAGES ARE FOR *ESTIMATING* PURPOSES ONLY AND ARE **SUBJECT TO CHANGE**.

THE RATES TO BE USED AND ENFORCED FOR THE PROJECT WILL BE MADE AVAILABLE BY THE CITY PURCHASING COORDINATOR VIA CONTRACT ADDENDUM TEN DAYS PRIOR TO THE BID OPENING DATE.

Please note the following:

- The Cement Mason classification is to be applied for the worker's that perform cement finishing work
- The Ironworker classification is to be applied for the worker's that assemble/install chain link fencing
- The Lineman classification is to be applied for the worker's that perform the electrical work (e.g. install conduits, cables, wires, and related equipment)
- The Power Equipment Operator (Heavy Construction) is to be applied for the worker's that operate power equipment

"General Decision Number: PA20220006 05/06/2022

Superseded General Decision Number: PA20210006

State: Pennsylvania

Construction Types: Heavy and Highway

Counties: Adams, Berks, Bradford, Carbon, Columbia, Cumberland, Dauphin, Juniata, Lackawanna, Lancaster, Lebanon, Lehigh, Luzerne, Lycoming, Monroe, Montour, Northampton, Northumberland, Perry, Pike, Schuylkill, Snyder, Sullivan, Susquehanna, Tioga, Union, Wayne, Wyoming and York Counties in Pennsylvania.

HEAVY AND HIGHWAY CONSTRUCTION PROJECTS (Excluding Sewer Grouting Projects and Excluding Sewage and Water Treatment Plant Projects)

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2022.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Modification Number	Publication Date
0	01/07/2022
1	01/28/2022
2	02/11/2022
3	02/25/2022
4	03/11/2022
5	05/06/2022

BOIL0013-003 01/01/2022

	Rates	Fringes
BOILERMAKER.....	\$ 50.17	34.96

 CARP0167-006 05/01/2019

BERKS, CARBON and LANCASTER

	Rates	Fringes
CARPENTER.....	\$ 32.07	15.49

 CARP0167-007 05/01/2021

LEHIGH and NORTHAMPTON COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 36.02	26.96

 CARP0219-007 05/01/2021

CARBON (Townships: East Penn, Lower Towamensing, Mahoning, Franklin, Towamensing, Penn Forest. Everything south of Route 903 and east to the Kidder Township Line. Boroughs: Hauto, Nesquehoning, Lansford, Summit Hill, Jim Thorpe, Weissport, Bownmanstown, Palmerton, Lehigh, and Parryville) , LEHIGH AND NORTHAMPTON COUNTIES

	Rates	Fringes
MILLWRIGHT.....	\$ 45.09	31.94

CARP0441-005 05/01/2021

BERKS, CARBON, LANCASTER, LEHIGH and NORTHAMPTON COUNTIES

	Rates	Fringes
PILEDRIVERMAN.....	\$ 43.73	37.99

CARP0443-002 05/01/2021

ADAMS, BRADFORD, CARBON (Banks, Lausanne, Lehigh, Packer, Kidder Twps., and part of Penn Forest Township north of Route 903) COLUMBIA, CUMBERLAND, DAUPHIN, JUNIATA, LEBANON, LUZERNE (lower part of) MONROE, MONTOUR, NORTHUMBERLAND, PERRY, PIKE, SCHUYLKILL, SNYDER, SULLIVAN, SUSQUEHANNA, TIOGA, UNION, WAYNE, WYOMING, YORK (New Cumberland Army Depot and Harrisburg State Airport) COUNTIES

	Rates	Fringes
MILLWRIGHT.....	\$ 36.08	53.41%+.86

CARP0443-010 05/01/2021

BERKS and LANCASTER COUNTIES

	Rates	Fringes
MILLWRIGHT.....	\$ 40.00	21.72

CARP2274-003 05/01/2021

Adams, Bradford, Columbia, Cumberland, Dauphin, Juniata, Lackawanna, Lebanon, Luzerne, Lycoming, Monroe, Montour, Northumberland, Perry, Pike, Schuylkill, Snyder, Sullivan, Susquehanna, Tioga, Union, Wayne, Wyoming and York

	Rates	Fringes
CARPENTER.....	\$ 33.12	17.74
PILEDRIVERMAN.....	\$ 33.12	17.74

ELEC0126-001 05/31/2021

ADAMS, BERKS, CUMBERLAND, DAUPHIN, JUNIATA, LANCASTER, LEBANON, LEHIGH, NORTHAMPTON, PERRY AND YORK COUNTIES

	Rates	Fringes
Line Construction:		
Cable Splicer.....	\$ 49.22	32.25%+11.00
Groundman.....	\$ 29.53	32.25%+11.00
Lineman.....	\$ 49.22	32.25%+11.00

Truck Driver.....	\$ 31.99	32.25%+11.00
Winch Truck Operator.....	\$ 34.45	32.25%+11.00

ELEC1319-001 01/01/2022

BRADFORD, CARBON, COLUMBIA, LACKAWANNA, LUZERNE, LYCOMING,
MONROE, MONTOUR, NORTHUMBERLAND, PIKE, SCHUYLKILL, SNYDER,
SULLIVAN, SUSQUEHANNA, TIOGA, UNION, WAYNE, AND WYOMING COUNTIES

	Rates	Fringes
Line Construction:		
Equipment Operator.....	\$ 60.72	21.91
Groundmen.....	\$ 37.65	13.23
Linemen.....	\$ 60.72	26.41
Truck Driver.....	\$ 39.47	13.36

* ENGI0542-004 05/01/2021

	Rates	Fringes
Power equipment operators: (HIGHWAY CONSTRUCTION AND WATER LINES CONSTRUCTION (OFF PLANT SITE))		
GROUP 1.....	\$ 39.10	24.70
GROUP 1a.....	\$ 41.35	25.38
GROUP 2.....	\$ 37.93	24.35
GROUP 3.....	\$ 37.23	24.15
GROUP 4.....	\$ 36.77	24.03
GROUP 5.....	\$ 36.26	23.88
GROUP 6.....	\$ 39.33	24.77
GROUP 6a.....	\$ 41.58	25.43

BOOM LENGTH PAY:

On all machines with booms, jibs, masts and leads 100 ft. and over, twenty five cents (\$0.25) per hour additional will be paid for each increment of 25 ft. over 100 ft. On machines with booms (including jibs, masts and leads, etc.), 200 ft. and over, two (2) Operating Engineers shall be required.

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1 - Pile drivers, all types of cranes, all types of backhoes, draglines, keystones, all types of shovels, derricks, trench shovels, trenching machines, paver (blacktop and concrete), gradalls, all front end loaders, tandem scrapers, pippin types backhoes, boat captains, batch plant with mixer, drill self contained (drill-master type), CMI Autograde, milling machine, vemeer saw, conveyor loader (euclid type) scraper and tournapulls, bulldozers and tractors, concrete pumps, motor patrols, mechanic welders, log skidder, side boom, bobcat type (with attachments), boring machines including directional boring

machines, chipper with boom, hydro ax, machines similar to the above including remote control equipment.

GROUP 1a: Crawler backhoes and Crawler gradalls over one cubic yard factory rating; Hydraulic backhoes over one cubic yard factory rating; All types of cranes 15 ton and over factory rating; Single person operation truck cranes 15 ton and over factory rating; Cherry picker type machinery and equipment 15 ton and over factory rating; Machines similar to above, including remote control equipment; Equipment in this Wage Group that does not require an oiler.

GROUP 2 - Spreaders, asphalt plant engineers, rollers (high grade finishing), machine similar to above, including remote control equipment, and forklifts 20ft and over.

GROUP 3 - Welding machine, well points, compressors, pump heaters, farm tractors, form line graders, ditch witch type trencher, road finishing machines, concrete breaking machines, rollers, miscellaneous equipment operator, seaman pulverizing mixer, power broom, seeding spreader, tireman - (for power equipment) conveyors, loaders other than EUC type, conveyors, driller second class, machines similar to the above including remote control equipment, and forklift under 20 ft.

GROUP 4 - Fireman and grease truck

GROUP 5 - Oilers and deck hands

GROUP 6 - All machines with booms (including jibs, masts, leads, etc.) 100 ft. and over.

GROUP 6a: All machines with Booms (including Jibs, Masts, Leads, etc.) 100 feet 15 ton and over factory rating; Machines similar to above, including remote control equipment; Equipment in this Wage Group that does not require an oiler.

TOXIC/HAZARDOUS WAST REMOVAL

Add 20 per cent to basic hourly rate for all classifications

* ENGI0542-022 05/01/2021

	Rates	Fringes
Power equipment operators:		
(HEAVY CONSTRUCTION:)		
GROUP 1.....	\$ 38.44	27.52+A
GROUP 1a.....	\$ 40.69	28.18+A
GROUP 2.....	\$ 38.16	27.43+A
GROUP 2a.....	\$ 40.41	28.10+A
GROUP 3.....	\$ 35.24	26.57+A

GROUP 4.....	\$ 34.10	26.24+A
GROUP 5.....	\$ 33.65	26.11+A
GROUP 6.....	\$ 32.77	25.85+A

HEAVY CONSTRUCTION:

FOOTNOTE:

A: PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day, the employee works the day before and the day after the holiday.

BOOM LENGTH PAY:

On all machines with booms, jibs, masts and leads 100 ft. from ground up, fifty (\$0.50) per hour additional will be paid for each increment of 25 ft. over 100 ft. On cranes with booms (including jibs, masts and leads, etc.) 200 ft. and over, two (2) operators shall be required, no Oilers will be required, with seventy five (\$0.75) in increments of 25 ft.

TOXIC/HAZARDOUS WASTE REMOVAL

Add 20 per cent to basic hourly rate for all classifications

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Machines doing hook work, any machine handling machinery, cable spinning machines, helicopters, machines similar to the above, including remote control equipment, all types of cranes, cableways, and draglines.

GROUP 1a: Machines doing hook work; Machines handling machinery; All types of cranes 15 ton and over factory rating; Cable ways; Draglines 15 ton and over factory rating; High Rail/Burro Crane 15 ton and over factory rating; Rail Loader (Winch Boom Type) 15 ton and over factory rating; Machines similar to above, including remote control equipment; Equipment in this Wage Group that does not require an oiler.

GROUP 2: Backhoes, keystones, shovels, derricks, trench shovels, trenching machines, hoist with two towers, pavers 21E and over, overhead cranes, building hoists (double drum) gradalls, mucking machines in tunnels, front end loaders, tandem scrapers, pippin type backhoes, boat captains, batch plant operators concrete drills, self-contained rotary drills, fork lifts, 20ft, lift and over, scrapers, tournapulls, spreaders, bulldozers and tractors, rollers (high grade finishing), mechanic-welder, motor patrols, concrete pumps, grease truck, bob cat type (all attachments), boring machines including directional boring machines, hydro ax, side boom, vermeer saw, chipper with boom, machines similar to the above including remote control equipment

GROUP 2a: Crawler backhoes and crawler gradalls over one cubic yard factory rating; Hydraulic backhoes over one cubic yard factory rating; Equipment 15 ton and over factory rating; Machines similar to above, including remote control equipment; Equipment in this Wage Group that does not require an oiler.

GROUP 3: Conveyors, building hoist (single drum), high or low pressure boilers, drill operators, well drillers, asphalt plant engineers, ditch witch type trencher, second class driller, forklift truck under 20ft. lift, stump grinder, tireman (for power equipment), machines similar to above including remote control equipment.

GROUP 4: Welding machines, well points, compressors, pumps, heaters, farm tractors, form line graders, road finishing machines, concrete breaking machines, rollers, seaman pulverizing mixer, power boom, seeding spreader, chipper without boom, machines similar to the above including remote control equipment.

GROUP 5: Fireman.

GROUP 6: Oilers and deck hands (personnel boats).

IRON0404-006 07/01/2021

ADAMS, BERKS, CUMBERLAND, DAUPHIN, JUANITA, LANCASTER, LEBANON, LEHIGH, LYCOMING, MONTOUR, NORTHAMPTON, NORTHUMBERLAND, PERRY, SCHUYLKILL, SNYDER, UNION and YORK COUNTIES

	Rates	Fringes
Ironworkers:.....	\$ 34.01	31.13

IRON0404-017 07/01/2021

BRADFORD, CARBON, COLUMBIA, LACKAWANNA, LUZERNE, MONROE, PIKE, SULLIVAN, TIOGA, SUSQUEHANNA, WAYNE and WYOMING COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 34.01	31.13

* LABO0158-001 05/01/2022

	Rates	Fringes
Laborers:		
GROUP 1.....	\$ 24.01	18.54
GROUP 2.....	\$ 30.63	18.54
GROUP 3.....	\$ 27.62	18.54
GROUP 4.....	\$ 27.97	18.54

GROUP 5.....	\$ 28.64	18.54
GROUP 6.....	\$ 28.06	18.54
GROUP 7.....	\$ 28.35	18.54
GROUP 8.....	\$ 28.83	18.54

LABORERS CLASSIFICATIONS

GROUP 1: Flag person

GROUP 2: Hazardous/Toxic/Asbestos Waste Handler, Lead Paint Handler

GROUP 3: Asphalt tamper, concrete pitman, puddlers, highway guide rail right of way and property fence slab reinforcement placers, Laborers, landscaper, seeders, planters, magazine tenders, laser beam men for pipe laying and paving machines,, railroad trackman, signalman, asphalt rakers, lute or screed man, pneumatic and electric tool operators, jackmammers, paving breakers, concrete saws, whacker vibrator, chainsaw, highway concrete block layers, sheet hammer, pipe layers, Walk Behind Rollers, Walk Behind Trencher

GROUP 4: Caisson-open air below 8 feet, cofferdam open air below 8 feet where excavations for circular caissons and cofferdams 8 ft and below level of natural grade adjacent to starting point, form setters (road) wagon drill diamond point drill, gunite nozzle operators, walk behind rollers and concrete rubbers, blaster.

GROUP 5: Form Setter, Reinforced Steel Placer, Bonding Aligning and Securing and Burning and welding in Conjunction wth Rebar, and Concrete Surfacers.

FREE AIR TUNNELS AND ROCK SHAFTS

GROUP 6: Outside labers in conjunction with tunnels and rock shafts

GROUP 7: Chuck tenders, muckers, nippers, miners, inside laborers

GROUP 8: Miners, drillers, blasters, pneumatic shield operators, lining, spotting and timber workmen, rebar steel placer, bonding and securing, welders, and concrete surfacers

PAIN0021-026 05/01/2021

ADAMS, CUMBERLAND, DAUPHIN, LANCASTER, PERRY, AND YORK COUNTIES

	Rates	Fringes
Painters:		
Bridge.....	\$ 33.72	16.30

Brush.....	\$ 25.84	16.30
Spray, Sandblast.....	\$ 27.97	16.30

PAIN0057-021 06/01/2021

JUNIATA COUNTY

	Rates	Fringes
Painters:		
Bridge, Towers.....	\$ 36.25	21.61
Commercial Brush & Roller...	\$ 29.15	21.61
Industrial Brush & Roller...	\$ 34.00	21.61
Spray.....	\$ 29.15	21.61

PAIN1021-001 05/01/2012

BERKS, CARBON, LEBANON, LEHIGH, NORTHAMPTON, AND MONROE COUNTIES

	Rates	Fringes
Painters:		
Bridge; Brush, Roller.....	\$ 30.85	14.80
Bridge; Spray.....	\$ 31.85	14.80
Brush and Roller.....	\$ 26.55	14.80
Spray and Sandblast.....	\$ 27.55	14.80

PAIN1021-002 05/01/2009

BRADFORD, COLUMBIA, LACKWANNA, LUZERNE, LYCOMING, MONTOUR,
NORTHUMBERLAND, PIKE, SCHUYLKILL, SNYDER, SULLIVAN,
SUSQUEHANNA, TIOGA, UNION, WAYNE, WYOMING COUNTIES

	Rates	Fringes
Painters:		
Bridge; Brush, Roller.....	\$ 25.60	12.05
Bridge; Spray.....	\$ 26.60	12.05
Brush and roller.....	\$ 22.75	12.05
Spray, Sandblast.....	\$ 23.75	12.05

PLAS0592-004 06/01/2021

MONROE COUNTY; (EXCEPT TOBYHANNA DEPOT)

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 35.88	13.30

PLAS0592-005 06/01/2021

COLUMBIA COUNTY

	Rates	Fringes
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CEMENT MASON/CONCRETE FINISHER...\$ 35.88 13.30

PLAS0592-017 05/01/2021

Rates Fringes

CEMENT MASON/CONCRETE FINISHER
BERKS (Northeastern part
lying North of a line
starting from the Southern
boundary line of Lehigh
County continuing through
Huffs Church,
Fredericksville, Dryville,
Lyon Station, Kutztown,
Krumsville, and Stoney Run
in Berks County to the
Lehigh County line),
CARBON, LEHIGH,
NORTHAMPTON (Northwest
part including the towns
of Walnutport, Bath, and
Northampton) COUNTIES.....\$ 32.65 23.43

PLAS0592-018 05/01/2021

Rates Fringes

Cement Mason/Concrete Finisher
Adams, Lancaster and York
Counties.....\$ 31.75 21.50
PLASTERER
Adams, Berks (Portions
of), Lancaster, and
Lebanon Counties.....\$ 28.33 20.90

PLAS9592-002 06/01/2021

MONROE COUNTY (TOBYHANNA ARMY DEPOT)

Rates Fringes

CEMENT MASON/CONCRETE FINISHER...\$ 35.88 13.30

TEAM0229-003 05/01/2021

Rates Fringes

TRUCK DRIVER (ADAMS, BERKS,
CARBON, COLUMBIA, CUMBERLAND,
DAUPHIN, JUNIATA, LACKAWANA,
LANCASTER, LEBANON, LEHIGH,
LUZERNE, LYCOMING, MONROE,
MONTOUR, NORTHAMPTON,
NORTHUMBERLAND, PERRY, PIKE,
SCHUYKILL, SNYDER, SULLIVAN,

SUSQUEHANNA, UNION, WAYNE,
WYOMING, AND YORK COUNTIES)

GROUP 1.....	\$ 37.72	0.00
GROUP 2.....	\$ 37.79	0.00
GROUP 3.....	\$ 38.28	0.00

Truck drivers: (BRADFORD AND
TIOGA COUNTIES)

GROUP 1.....	\$ 22.66	13.46
GROUP 2.....	\$ 22.73	13.46
GROUP 3.....	\$ 23.22	13.46

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Flat Bed Truck (Single-Axle), Dump Trucks (Under 10 Yds Single Axle), Stake Body Trck (Single Axle), Dumpster (Single Axle)

GROUP 2: Dump Truck (Over 10 Yds), Asphalt Distributors, Transit Mix (Under 5 Yds), Transit Mix (Over 5 Yds.), Flat or Stake Body (Tandem), Fuel Truck A-Frame/Winch Trucks, Dry Batch Truck, Truck Mounted Sweeper and Vac Trucks, Buses, Dumpster (Tandem)

GROUP 3: Euclid-Type, Off Highway Equipment-Back or Double Bottom Dump Trucks (Over 20 Tons), Straddle Trucks, Pusher, Articulate Dumped Trucks, Low Boy Trailers, Semi Trailers

Water Tank, Sprinkler Trucks, Winch Trucks and Fuel Trucks shall be governed by the appropriate classification as listed above.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

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

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISIO"

U.S. Department of Labor
Employment Standards Administration
Wage and Hour Division
Washington, D.C. 20210

GENERAL WAGE DETERMINATIONS ISSUED UNDER THE DAVIS-BACON AND RELATED ACTS

DAVIS-BACON WAGE DETERMINATION REFERENCE MATERIAL

Section A: Introduction

This section includes a short discussion of the Davis-Bacon and related Acts and their requirements, and a brief explanation of wage determinations and their use.

Section B: How to Interpret General Wage Determinations

This section includes a discussion of how to interpret the information contained in Davis-Bacon General Wage Determinations.

Section C: Questions and Answers on the use of Davis-Bacon Wage Determinations

This section includes the answers to several of the most frequently asked questions about administration of the Davis-Bacon and related Acts.

Section A

INTRODUCTION

THE DAVIS-BACON AND RELATED ACTS (DBRA)

The Davis-Bacon Act as amended, requires that each contract over \$2,000 to which the United States or the District of Columbia is a party for the construction, alteration, or repair of public buildings or public works shall contain a clause setting forth the minimum wages to be paid to various classes of laborers and mechanics employed under the contract. Under the provisions of the Act, contractors or their subcontractors are to pay workers employed directly upon the site of the work no less than the locally prevailing wages and fringe benefits paid on projects of a similar character. The Davis-Bacon Act directs the Secretary of Labor to determine such local prevailing wage rates.

In addition to the Davis-Bacon Act itself, Congress has added prevailing wage provisions to approximately 60 statutes which assist construction projects through grants, loans, loan guarantees, and insurance. These "related Acts" involve construction in such areas as transportation, housing, air and water pollution reduction, and health. If a construction project is funded or assisted under more than one Federal statute, the Davis-Bacon prevailing wage provisions may apply to the project if any of the applicable statutes require payment of Davis-Bacon wage rates.

The geographic scope of the Davis-Bacon Act is limited, by its terms, to the 50 States and the District of Columbia. By the same token, the scope of each of the related Acts is determined by the terms of the particular statute under which the Federal assistance is provided. For example, Davis-Bacon prevailing wage provisions would apply to a construction contract located in Guam or the Virgin Islands funded under the Housing and Community Development Act of 1974, even though the Davis-Bacon Act itself does not apply to Federal construction contracts to be performed outside the 50 States and the District of Columbia.

WAGE DETERMINATIONS

A "wage determination" is the listing of wage rates and fringe benefit rates for each classification of laborers and mechanics which the Administrator of the Wage and Hour Division of the U.S. Department of Labor has determined to be prevailing in a given area for a particular type of construction (e.g., building, heavy, highway, or residential).

The Wage and Hour Division issues two types of wage determinations: general determinations, also known as area determinations, and project determinations. The term "wage determination" is defined as including not only the original decision but any subsequent decisions modifying, superseding, correcting, or otherwise changing the rates and scope of the original decision.

General wage determinations reflects those rates determined by the Division to be prevailing in a specific geographic area for the type of construction described. General wage decisions and modifications and supersedeas decisions thereto, contain no expiration dates and are effective from their date of notice in the Federal Register, or on the date written notice is received by the agency, whichever is earlier. If a contracting agency has a proposed construction project to which a general determination would be applicable, the published determination may be used by the contracting agency without consulting the Department of Labor, provided that questions concerning its use shall be referred to the Department of Labor.

Project wage determinations are issued at the specific request of a contracting agency; each is applicable to the named project only; and expires 180 calendar days from the date of issuance unless an extension of the expiration date is requested by the agency and approved by the Wage and Hour Division. If such a determination is not used in the period of its effectiveness, it is void. Project determinations are issued in response to contracting agencies submitting to the Wage and Hour Division a Standard Form 308 requesting a wage determination.

Modifications of general and project wage determinations are issued to update data in the original determination. Where a contract will be entered pursuant to competitive bidding procedures, a modification, notice of which is published in the Federal Register less than 10 days before the opening of bids shall be effective unless the agency finds that there is not a reasonable time still available before bid opening to notify bidders of the modification and a report of the finding is inserted in the contract file. (For projects assisted under the National Housing Act, and for projects to receive housing assistance payments under section 8 of the U.S. Housing Act of 1937, dates other than bid opening apply. See Regulations, 29 CFR Part 1, section 1.6). If the contracting officer chooses to disregard a modification, a report of this action shall be inserted in the contract file and made available to the Wage and Hour Division upon request.

If a contract has not been awarded within 90 days after bid opening, modifications prior to award to a general wage determination in the contract shall be effective with respect to that contract unless the agency requests and obtains an extension of the 90-day period from the Wage and Hour Division.

Supersedeas Wage Determinations are issued annually to replace general decisions issued in the previous edition of the publication entitled General Wage Determinations Issued Under the Davis-Bacon and Related Acts. Supersedeas project wage determinations may also be issued. Supersedeas decisions affecting determinations are effective under the same circumstances as "modifications." Whereas a modification to a wage determination may make changes in only selected provisions of the wage determination, a supersedeas determination replaces the entire existing wage decision.

Notice is published in the Federal Register each week (usually on Friday) to advise the public of the publication of general wage determinations, modifications, supersedeas actions, withdrawal actions, and corrections affecting such wage determinations.

Extensions of Wage Determinations

When a general wage determination has not been awarded within 90 days after bid opening, the head of the contracting/assisting agency may request an extension of the 90 day period from the Wage and Hour Administrator. When, due to unavoidable circumstances, a project wage determination expires before award but after bid opening, the head of the contracting/assisting agency may request an extension of the expiration date of the project wage determination in the bid specifications instead of issuing a new wage determination. (For projects assisted under the National Housing Act, and for projects to receive housing assistance payment under section 8 of the U.S. Housing Act of 1937, dates other than bid opening apply. See Regulations 29 CFR, Part 1, section 1.6.)

Extension requests should be supported by a written finding including a brief statement of the factual support, that extension of the expiration date of the determination is necessary and proper in the public interest to prevent injustice or undue hardship or to avoid serious impairment in the conduct of Government business.

The Administrator will either grant or deny the request for an extension after consideration of all the circumstances, including an examination to determine if the previously issued rates remain prevailing. If a request for the extension of a project wage determination is denied, a new wage determination will be issued to replace an expired project wage determination.

Section B

How to Interpret General Wage Determinations

A. WAGE DETERMINATIONS ARE STRUCTURED ACCORDING TO THE FOLLOWING FORMAT:

Each wage determination begins with a cover sheet that defines its applicability. Included on this sheet are:

The decision number.

The number of the decision superseded, if applicable.

State(s) covered.

Type of construction (building, heavy, highway, and/or residential).

County(ies) or city(ies) covered.

Description of the construction to which the wage determination applies and/or construction excluded from its application.

Record of modifications, including the initial publication date, modification numbers and dates.

In the body of each wage determination is the listing of classifications (laborers and mechanics) and accompanying basic hourly wage rates and fringe benefit rates that have been determined to be prevailing for the specified type(s) of construction in the geographic area(s) covered by the wage determination. Classification listings may also include classification groupings, fringe benefit footnotes, descriptions of the geographic areas to which subclassifications and different wage rates apply, and/or certain classification definitions. (See below for how to know the source of a rate.)

In wage determination modifications, an asterisk ("*") is used to indicate that the item marked is changed by that modification.

The wage determination appeals process is explained at the end of the wage determination. The explanation includes a description of the criteria for appeal and where to file the appeal.

The last page of each wage determination ends with "END OF DECISION" centered above the last page number for the determination. Users can refer to the page number at the bottom of that page to check back to be sure that they have all the preceding pages of the determination.

B. HOW TO FIND THE WAGE RATE FOR A PARTICULAR CLASSIFICATION AND UNDERSTAND THE BASIS FOR THE WAGE RATE:

Review the wage determination in light of the following information:

1. The body of each wage determination lists the classifications and wage rates that have been found prevailing for the cited type(s) of construction in the area covered by the wage determination.

The classifications are listed in alphabetical order of "identifiers" that indicate whether particular rates are union or non-union rates.

Many wage determinations contain only non-union wage rates, some contain only union-negotiated wage rates, and others contain both union and non-union wage rates that have been found prevailing in the area for the type of construction covered by the wage determination.

2. Above each classification (or group of classifications) listed, an alphanumeric "identifier" and date provide information about the source of the classification(s) and wage rate(s) listed for it. (SU means the rates listed under that identifier were derived from survey data and are not union rates, although the survey data on which they are based may include both union and non-union data.)

a. The identifier is SUAR0037A. SU indicates rates that are not union rates; AR = Arkansas; 0037A is a sequential number and character used in producing the wage determination. Dates before 1993 that appear with such "SU" identifiers were generated in producing the wage determinations and are not meaningful to users. However, a 1993 or later date will indicate that the classification(s) and wage rate(s) under that identifier were issued in the general wage determination on that date and reflect the results of a survey.

b. Any identifier beginning with characters other than SU is used where union classification(s) and wage rate(s) have been found prevailing.

In each such identifier, the first four letters indicate the international union (see listing, below) for the local union that negotiated the wage rates listed under that identifier. Then, there is a four-digit number that indicates the local union number. For example, the identifier is ELEV0101A. ELEV = Elevator Constructors; 0101 = the local union number (district council number where applicable); and "A" = a character used internally in processing the wage determination. The date shown is the effective date of the most current negotiated rate entered into the automated system that generates general wage determinations.

Special identifiers are necessary for two trades because the same local union number(s) is accompanied by different wage rates in different states. Bricklayers local union numbers are not unique nationwide, but are unique within each State. Similarly, Sprinkler Fitters Local Union No. 669 has negotiated different wage rates in each State within its territorial jurisdiction. Therefore, the identifiers for the Bricklayers unions are in the format "BR + state abbreviation," (referenced below as BRXX), and the identifier "SF + state abbreviation" is used for Sprinkler Fitter Local No. 669's rates.

It is common for many local unions to negotiate wage rates for more than one classification. Where this is done, all the classifications for which that union's wage rates are determined to be prevailing will appear under the identifier for that union.

For example, the same union may negotiate wage and fringe benefits for painters and glaziers. In such a case, the wage rate for the glazier, as well as that for the painter will be found under a classifier beginning with "PAIN." Similarly, users may need to look under an identifier beginning with "CARP" to find not only rates for carpenters, but also those for millwrights, piledrivermen and (marine) divers.

3. Following are the identifier codes used to reference the various craft unions. Examples of classifications for which their local unions commonly negotiate wage and fringe benefit rates are shown in parentheses.

ASBE = International Association of Heat and Frost Insulators and Asbestos Workers

BOIL = International Brotherhood of Boiler Makers, Iron Shipbuilders, Blacksmiths, Forgers and Helpers

BRXX = International Union of Bricklayers, and Allied Craftsmen

(bricklayers, cement masons, stone masons, tile, marble and terrazzo workers)

CARP = United Brotherhood of Carpenters and Joiners of America

(carpenter, millwright, piledrivermen, soft floor layers, divers)

ELEC = International Brotherhood of Electrical Workers

(electricians, communication systems installers, and other low voltage specialty workers)

ELEV = International Union of Elevator Constructors

ENGI = International Union of Operating Engineers

(operators of various types of power equipment)

IRON = International Association of Bridge, Structural and Ornamental Iron Workers

LABO = Laborers' International Union of North America

PAIN = International Brotherhood of Painters and Allied Trades

(painters, drywall finishers, glaziers, soft floor layers)

PLAS = Operative Plasterers' and Cement Masons' International Association of the United States and Canada

(cement masons, plasterers)

PLUM = United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry of the United States and Canada

(plumbers, pipefitters, steamfitters, sprinkler fitters)

ROOF = United Union of Roofers, Waterproofers and Allied Workers

SHEE = Sheet Metal Workers International Association

SU.... = As discussed above, the "SU..." identifier is for rates derived from survey data where the union rate(s) were not determined to be prevailing for the classification(s) listed. (The data reported for such a

classification and used in computing the prevailing rate may have included both union and non-union wage data.) Note that various classifications, for which non-union rates have been determined to be prevailing, may be listed in alphabetical order under this identifier, which the computer places into the wage determination in alphabetical order, as listed here.

TEAM = International Brotherhood of Teamsters

Section C

Questions and Answers on the use of Davis-Bacon

Wage Determinations

Question. How do I obtain a wage determination for a construction project to be performed at a location not covered by a published determination?

Answer. If no general wage determination is listed for a given county and type of construction, the following procedure to obtain a project wage determination should be followed.

The Federal agency funding or financially assisting the construction project requests a wage determination under the Davis-Bacon Act or any of the related prevailing wage statutes by submitting a Standard Form (SF) 308 to the following address:

U.S. Department of Labor
Employment Standards Administration
Wage and Hour Division
Branch of Construction Wage Determinations
200 Constitution Avenue, N.W., Room S-3014
Washington, D.C. 20210

In completing a SF-308, the agency must furnish:

- (1) A sufficiently detailed description of the project to indicate the type(s) of construction involved. Separate attachments, if necessary for identification of the type of project, must be furnished.
- (2) The county (or other civil subdivision) and State in which the proposed project is located. The time required for processing requests for wage determinations varies according to the facts and circumstances in each case. An agency should anticipate that such processing will take at least 30 days.

Question. The wage determination applicable to my project does not contain a class of workers which is needed to complete construction. Can other worker classification(s) and wage rate(s) be approved for use on the project?

Answer. Prior to bid opening, if the only classification that will perform work on a contract is not listed on a general wage determination for the type of construction in the area, the contracting/assisting agency may submit a SF-308 request for a project wage determination for application to that project. In order to assure special treatment of a request where this circumstance exists, a note explaining the special circumstances should be made in the project description block of the SF-308. (A similar note may be made on a SF-308 request for a project wage determination, where a general wage determination is not applicable, and all of the work on the project will be performed by a particular classification, as a means to assure that a wage rate for that classification will be issued for the project).

Example: An upcoming contract calls for repainting all the residences at a military base, and there is no painter classification in the general wage schedule issued for application to residential construction in the county where the project is located. A SF-308 may be submitted by the agency for application to that contract, and a project wage determination will be issued with a painter classification and wage rate for use prior to bid opening (or the other applicable date where certain assistance programs of the Department of Housing and Urban Development (HUD) are the basis for coverage under the Davis-Bacon and related Acts). If there is no general wage determination issued for that area and type of construction, the same procedure should be followed.

After contract award, if the contract wage determination does not contain a class of workers that is needed to complete the construction, a contractor shall submit to the contracting officer a request for the addition of the needed classification(s) of laborers or mechanics not listed in the wage determination, together with proposed wage rates and fringe benefits conformable to the wage determination.

The contracting officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. An additional classification action, even if undisputed, is not valid unless the Department of Labor has approved it. If a dispute exists, the matter must be referred to the Wage and Hour Division for resolution, together with the views of all interested parties and the recommendation of the contracting officer. Approval of the additional classification and the proposed wage rate and fringe benefits requires that the following criteria have been met:

- (1) The work to be performed by the classification requested is not performed by any 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; and
- (4) There is evidence of agreement on the classification and proposed wage rate among the parties involved, or the views of those involved -- the contractor(s), employees (if known) or their representative, and the contracting officer/agency -- are forwarded for consideration to the Wage and Hour Division; and
- (5) The request does not involve wage rates for apprentices or trainees.

All conformance notices should be responded to in writing within 30 days of receipt. These responses either approve or deny the request or inform the submitting agency that additional time will be required. Failure to receive a response does not constitute approval. If a response is not received, the Wage and Hour Division should be contacted directly. Every conformance request is analyzed to verify that the criteria for approval are met.

Any interested person requesting reconsideration of a conformance should present their request in writing accompanied by supporting data or other pertinent information to the Wage and Hour Division. The Wage and Hour Division should respond within 30 days or notify the requestor within this time frame that additional time is needed.

If reconsideration of a conformance action has been sought and denied, an appeal for review may be filed with the Administrative Review Board. (See 29 CFR 1.8 and 1.9, and 29 CFR Part 7).

Question. How do workers on a construction site know that a project is covered by the Davis-Bacon Act? How do they know the prevailing wage to which they are entitled?

Answer. The wage determination (including any additional classifications and wage rates conformed) and a Davis-Bacon poster (WH-1321) must 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. The WH-1321 poster may be obtained at no charge from offices of the Wage and Hour Division. In the absence of such posted information, any person who wants to determine if the project is covered should contact the federal agency funding or assisting the project or the Wage and Hour Division. Multi-year construction contracts that contain option provisions by which a contracting agency may unilaterally extend the term of the contract require inclusion of a current wage determination at the time the option is exercised. (In contrast, in situations where a contractor is given additional time to complete original contract commitments, the wage determination in that contract applies).

Question: Once construction has begun, are the workers' wage rates affected when the wage determination for the area in which the project is located is changed?

Answer. As a general rule, the wage determination incorporated into a bid solicitation and related contract award establishes the minimum wage rates and fringe benefits which must be paid for the entire term of the contract.

Where the proper wage determination is incorporated into a contract prior to award of the contract, wage determination modifications issued after bid opening are not applicable to the contract -- except in the case of a general wage determination in a contract that has not been awarded within 90 days after the bid opening and an extension of the 90-day limit has not been granted. (Specific requirements involving dates other than bid opening apply for projects assisted under the National Housing Act and for projects that receive housing assistance payments under section 8 of the U.S. Housing Act of 1937).

Upon his or her own initiative or at the request of an agency, the Administrator may correct any wage determination if he or she finds that the determination contains an inadvertent clerical error. For example, a wage determination contains a wage rate where there is a transposition of numbers, such as a fringe benefit of \$2.53 appears in the wage determination as \$2.35.

Also, the Administrator may issue a wage determination after contract award or after the beginning of construction if:

(a) the contracting/assisting Federal agency has failed to incorporate the applicable wage determination in a contract required to contain prevailing wage rates determined in accordance with the Davis-Bacon Act, or has used a wage determination which by its terms or the provisions of Regulations, 29 CFR Part 1, clearly does not apply to the contract, or

(b) the wrong wage determination has been incorporated in the contract because of an inaccurate description of the project or its location in the agency's SF-308 request.

Under either of these two circumstances, the agency shall either terminate and resolicit the contract with the valid wage determination, or incorporate the valid wage determination retroactive to the beginning of construction through supplemental agreement or through change order, provided that the contractor is compensated for any increases in wages resulting from such change. The method of incorporation of the valid wage determination, and adjustment in contract price, where appropriate, should be in accordance with applicable procurement law.

Question. Is it possible for more than one wage schedule to apply to specifications for a particular contract?

Answer. Construction projects are generally classified as either Building, Heavy, Highway or Residential for purposes of issuing wage determinations. Wage schedules for one or more of these construction categories may have application to construction items contained in a proposed construction project. Guidelines for the selection of proper wage schedules are set forth in All Agency Memoranda Nos. 130 (March 17, 1978) and 131 (July 14, 1978). Any questions regarding the application of these guidelines to a particular project, or any disputes regarding the application of the wage schedules issued for the various construction categories are to be referred to the Wage and Hour Division, together with relevant information, including a complete description of the project and area practice.

Question. As the contracting officer/Federal agency representative, what is my obligation when the wage determination(s) applicable to a construction project contains multiple wage schedules (for different counties and/or types of construction)?

Answer. It is the responsibility of the contracting officer/Federal agency representative to advise contractors which schedule of prevailing wages shall be applied to the various construction items in the

bid specifications. Because of the complexities in the application of multiple schedules, the contracting officer should consult with the Wage and Hour Division to resolve any questions.

Question. Can apprentices, trainees, and/or helpers work on a project covered by the Davis-Bacon or related Acts (DBRA), and what wage rates must they be paid?

Answer. Individuals who meet the following definition may be employed as apprentices on DBRA projects:

(a) A person employed and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau,
or

(b) 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 properly certified to be eligible for probationary employment as an apprentice.

Trainees employed must be persons registered 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 have been so certified by that Administration.

Information on wage rates paid to apprentices and trainees is not reflected in Davis-Bacon wage determinations. Similarly, their addition through the additional classification procedure (conformance) is neither necessary nor appropriate. On projects funded by the Federal-Aid Highway Act, apprentices and trainees certified by the Secretary of Transportation are not covered by Davis-Bacon labor standards.

The proper wage rates to be paid to apprentices and trainees are those specified by the particular programs in which they are enrolled, expressed as a percentage of the journeyman rate on the wage determination. In the event employees reported as apprentices or trainees on a covered project have not been properly registered within the meaning of the Regulations and the contract stipulations, or are utilized at the job site in excess of the ratio to journeymen permitted under the approved program, they must be paid the applicable wage rates for laborers and mechanics employed on the project performing in the classification of work they actually performed. This applies regardless of work classifications which may be listed on the submitted payrolls and regardless of their level of skill.

Helper classifications may be issued in or added to a wage determination only where the (a) the duties of the helpers are clearly defined and distinct from those of the journeyman classification and from the laborer, (b) the use of such helpers is an established prevailing practice in the area, and (c) the term "helper" is not synonymous with "trainee" in an informal training program.

Question. What wage rates must be paid to supervisory employees (foremen, superintendents, etc.) employed on a covered project?

Answer. The wage rates for bona fide supervisory employees are not regulated under the Davis-Bacon and related Acts because their duties are primarily administrative or executive in nature rather than those of laborers or mechanics. However, such employees who devote more than 20 percent of their time during a workweek to mechanic or laborer duties are laborers and mechanics for the time so spent, and must be paid at least the appropriate wage rates specified in the wage determination. Employees who are bona fide executive, administrative, or professional employees as defined under the Fair Labor Standards Act at 29 CFR Part 541 are not covered by the Davis-Bacon Act.

Question. If it is believed that the rates on a wage determination do not accurately reflect those prevailing in the area, how may the wage determination be appealed?

Answer. Any interested person requesting reconsideration of a wage determination or of a ruling regarding application of a wage determination to a specific construction project should present their request in writing accompanied by supporting data or other pertinent information to the Wage and Hour Division. The Wage and Hour Division should respond within 30 days or notify the requestor within this time frame that additional time is needed.

An "interested person" is considered to include, without limitation:

- (1) Any contractor, or an association representing a contractor, who is likely to seek or to work under a contract containing a particular wage determination, or any laborer or mechanic, or any labor organization which represents a laborer or mechanic, who is likely to be employed or to seek employment under a contract containing a particular wage determination, and,
- (2) Any Federal, State, or local agency concerned with the administration of a proposed contract or contract containing a particular wage determination issued pursuant to the Davis-Bacon Act or any of its related statutes.

If reconsideration of a wage determination has been sought and denied, an appeal for review of the wage determination or its application may be filed with the Administrative Review Board, U.S. Department of Labor, Room N-1651, 200 Constitution Avenue, N.W., Washington, D.C. 20210. Requests for review of wage determinations must be filed, and any new wage determination resulting from the appeal must be issued, before contract award or start of construction where there is no award (or under the National Housing Act, before the date of initial endorsement, or the beginning of construction, whichever occurs first; or under Section 8 of the U.S. Housing Act of 1937, before the date of the housing assistance payments agreement, or the beginning of construction, whichever occurs first).

The Wage Appeals Board (now the Administrative Review Board) was established by the Secretary of Labor in 1963 to decide, at its discretion, appeals concerning questions of fact and law related to final decisions of the Wage and Hour Division concerning:

Controversies over the payment of prevailing wage rates, overtime pay, or proper classifications;

Wage determinations issued under the Davis-Bacon and related Acts;

Debarment cases arising under 29 CFR Part 5;

Cases involving the assessment of liquidated damages under the Contract Work Hours and Safety Standards Act;

Appeal of any other final decision under 29 CFR Parts 1, 3, or 5.

The Administrative Review Board consists of three members, one of whom is designated chairman. The members are appointed by the Secretary of Labor and majority vote of the Administrative Review Board is necessary for a decision, except that a decision to hear any appeal may be made by one member. The Board can act as fully and finally as the Secretary of Labor concerning the matters within its jurisdiction. The rules prescribed in 29 CFR, Part 7, "Practice Before Wage Appeals Board", govern the proceedings of the Board.

Applicability The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance. **A. 1. (i) Minimum Wages.** All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section I(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) 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)** Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor 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 HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where Office of Labor Relations appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.) **(c)** In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.) **(d)** The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, 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. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.) **2. Withholding.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee 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. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts. **3. (i) Payrolls and basic records.** Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section I (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 I(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. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.) **(ii) (a)** The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee 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 HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i). 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. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.) **(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 29 CFR 5.5 (a)(3)(i) 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 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 subparagraph A.3.(ii)(b). (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 subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee 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, HUD or its designee 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 program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the

Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the 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 29 CFR Part 5 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 will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 of this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, 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 this paragraph. **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 HUD or its designee, the U.S. Department of Labor, or the employees or their representatives. **10. (i) Certification of Eligibility.** 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) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24. **(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) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24. **(iii)** The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1010, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utters or publishes any statement knowing the same to be false..... shall be fined not more than \$5,000 or imprisoned not more than two years, or both." **11. Complaints, Proceedings, or Testimony by Employees.** No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer. **B. Contract Work Hours and Safety Standards Act.** The provisions of this paragraph B are applicable only where the amount of the prime contract exceeds \$100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards. **(1) Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek. **(2) Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages.

Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, 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 40 hours without payment of the overtime wages required by the clause set forth in sub paragraph (1) of this paragraph. **(3) Withholding for unpaid wages and liquidated damages.** HUD or its designee 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 contract, 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 subparagraph (2) of this paragraph. **(4) Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph 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 subparagraphs (1) through (4) of this paragraph. **C. Health and Safety.** The provisions of this paragraph C are applicable only where the amount of the prime contract exceeds \$100,000. **(1)** No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation. **(2)** The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, 40 USC 3701 et seq. **(3)** The Contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The Contractor shall take such action with respect to any subcontract as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

SUPPLEMENTARY GENERAL TERMS AND CONDITIONS

1. Lead-Based Paint Hazard

The contractor is hereby specifically made aware of the HUD lead-based paint regulations, 24 CFR, Part 35, which are applicable to the construction or rehabilitation of residential structures. To the extent that the subject matter of this contract involves residential structures, the contractor will comply with the lead-based paint regulations.

2. Compliance With Air and Water Acts

The contract is subject to the requirements of the Clean Air Act, as amended, 42 USC 1857 et seq., the Federal Water Pollution Control Act, as amended, 32 USC 1251 et seq., and the regulations of the Environmental Protection Agency (EPA) with respect thereto, at 40 CFR Part 15, as amended from time to time.

The contractor and any of its subcontractors for work funded under the contract which is in excess of \$100,000 agree to the following agreements:

(a) A stipulation by the contractor or subcontractors that any facility to be utilized in the performance of any non-exempt contract or subcontract is not listed on the List of Violating Facilities issued by the EPA pursuant to 40 CFR 15.20.

(b) Agreement by the contractor to comply with all the requirements of Section 114 of the Clean Air Act, as amended, (42 USC 1857c-8) and Section 308 of the Federal Water Pollution Control Act; as amended, (33 USC 1318) relating to inspection, monitoring, entry, reports and information, as well as all other requirements specified in said Section 114 and Section 308, and all regulations and guidelines issued thereunder.

(c) A stipulation that as a condition for the award of the contract prompt notice will be given of any notification received from the Director, Office of Federal Activities, EPA, indicating that a facility utilized or to be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

(d) Agreement by the contractor that he will include or cause to be included the criteria and requirements in paragraph (a) through (d) of this Section in every non-exempt subcontract and requiring that the contractor will take such action as the Government may direct as a means of enforcing such provision.

In no event shall any amount of the assistance provided under this contract be utilized with respect to a facility which has given rise to a conviction under Section 113(c)(1) of the Clean Air Act or Section 309(c) of the Federal Water Pollution Control Act.

3. Interest of Members, Officers, or Employees of Public Body, Member of Local Governing Body, or Other Public Officials

No member, officer, or employee of the Public Body, or its designees or agents, no member of the governing body of the locality in which the program is situated, and no other public official of such locality or localities who exercises any functions or responsibilities with respect to the program during his tenure or for one (1) year thereafter, shall have any interest, direct or indirect, in any contract or subcontract, or the proceeds thereof, for work to be performed in connection with the program assisted under the contract.

4. Prohibition Against Payments of Bonus or Commission

The assistance provided under the contract shall not be used in the payment of any bonus or commission for the purpose of obtaining HUD approval of the application for such assistance, or HUD approval of applications for additional assistance, or any other approval or concurrence of HUD required under this contract, Title I of the Housing and Community Development Act of 1974 or HUD regulations with respect thereto; Provided, however, that reasonable fees or bona-fide technical consultant managerial or other such services, other than actual solicitation, are not hereby prohibited if otherwise eligible as program costs.

5. Energy Conservation Provisions

The contractor must recognize mandatory standards and policies relating to energy efficiency contained in the Cost Effective Energy Conservation Measures.

6. Section 109 of the Housing and Community Development Act of 1974

No person in the United States shall on the grounds of race, color, national origin, or sex be excluded from participation in, be denied the benefits, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under this Title.

7. Executive Order 11625 – Minority Business Enterprise

(a) It is the policy of the City to take positive steps to maximize the utilization of minority business enterprises in all contract activity administered by the City.

(b) The contractor will utilize his best efforts to carry out this policy in the award of his subcontracts to the fullest extent consistent with the efficient performance of this contract.

As used in the contract, the term "minority business enterprise" means a business, at least fifty percent (50%) of which is owned by minority group members, or in the case of publicly owned businesses, at least fifty-one percent (51%) of the stock is owned by minority group members. For the purpose of this definition, minority groups are members of Blacks, Hispanics, Asians, Native Americans, Alaskans, or Pacific Islanders.

8. Executive Order 12138 – Women's Business Enterprise

(a) It is the policy of the City to take positive steps to maximize the utilization of women business enterprises in all contracts administered by the City.

(b) The contractor will utilize his best efforts to carry out this policy in the award of his subcontracts to the fullest extent consistent with the efficient performance of this contract.

As used in the contract, the term "women business enterprise" means a business, that is at least fifty-one percent (51%) owned by a woman or women who also control and operate it. "Control" in this context means exercising the power to make policy decisions. "Operate" in this context means being actively involved in the day-to-day management.

9. Age Discrimination Act of 1975

No person in the United States shall, on the basis of age be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

10. Section 504 Handicapped (if \$2,500 or over)

Affirmative Action for Handicapped Workers:

(a) The contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant for employment is qualified. The contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices such as the following: Employment upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

(b) The contractor agrees to comply with rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

(c) In the event of the contractor's non-compliance with the requirements of this clause, actions for non-compliance may be taken in accordance with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

(d) The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, provided by or through the contracting officer. Such notices shall state the contractor's obligation under the law to take affirmative action to employ and advance in employment qualified handicapped employees and applicants for employment, and the rights of applicants and employees.

(e) The contractor will notify each labor union or representative or workers with which it has a collective bargaining agreement or other contract understanding, that the contractor is bound by the terms of Section 503 of the Rehabilitation Act of 1973, and is committed to take affirmative action to employ and advance in employment physically and mentally handicapped individuals.

(f) The contractor will include the provisions of this clause in every subcontract or purchase order of \$2,500 or more unless exempted by rules, regulations, or orders of the Secretary issued pursuant to Section 503 of the Act, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the Director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for non-compliance.

SECTION 3 REQUIREMENTS

**SECTION 3 CLAUSE AND CERTIFICATION FOR COMPLIANCE FOR TRAINING, EMPLOYMENT
AND CONTRACTING OPPORTUNITIES FOR BUSINESS AND LOW INCOME PERSONS**
(contracts over \$100,000)

A. The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, (12 U.S.C. of 1701u) (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low and very low income persons, particularly persons who are recipients of HUD assistance for housing.

B. The parties to this contract agree to comply with HUD's regulations in 24 CFR Part 135, which implement section 3. As evidenced by their execution of the contract, the parties certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.

C. The contractor agrees to send to each labor organization or representative of worker with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or worker's representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

D. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135 (if subcontract is over \$100,000), and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.

E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 135.

F. Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contacts.

G. The following forms: Contractor's Certification of Compliance with Section 3, Workforce Needs Table (Attachment I) and Utilization of Section 3 Business Concerns (Attachment II) must be completed and submitted to the Bureau of Development and Inspections **PRIOR** to executing the contract in order to determine compliance with Section 3 requirements. The Bureau will determine the acceptability of the submission.

COMPANY

By: _____
AUTHORIZED SIGNATURE

Title: _____

Date: _____

ATTACHMENT I

WORKFORCE NEEDS TABLE

TOTAL # OF LOW INCOME CITY RESIDENTS TO BE HIRED *

<u>TOTAL #</u> <u>OF</u> <u>SKILLED</u> <u>WORKERS</u> <u>OCCUPATION</u> <u>CATEGORY +</u>	<u>TOTAL #</u> <u>OF</u> <u>TRAINEES</u> <u>ON</u> <u>PAYROLL</u>	<u>TOTAL #</u> <u>OF</u> <u>SKILLED</u> <u>WORKERS</u> <u>ON</u> <u>PAYROLL</u>	<u>TOTAL #</u> <u>OF</u> <u>TRAINEES</u> <u>TO BE</u> <u>HIRED</u>	<u>TO BE</u> <u>HIRED</u>	<u>SKILLED</u> <u>WORKERS</u>	<u>TRAINEES</u>

TOTALS:

- * The numerical goal for hires is 20% of the aggregate number of new hires.
- + These classifications should relate to the classifications found in the wage rate determination.

EMPLOYMENT AND TRAINEE CERTIFICATION

- A. The Company hereby certifies that the above table represents the approximate number of employee and trainee positions required in the execution of this contract and which are not presently filled by regular and permanent employees and also represents the number of low income City residents that the company proposes to make good faith efforts to employ.
- B. The Company certifies that it will make a good faith effort to employ the number of lower income employees and trainees stated above utilizing: [1] such community based organizations and service agencies as the Spanish Speaking Council of Reading and Berks County, Berks Employment and Training Office, Berks Community Action Program, Reading Housing Authority Tenant Councils, and any others that may assist in meeting the goals; and [2] on-site company employment posters.
- C. The Company certifies that the trainees to be utilized on the project in no event is less than the number of trainees determined by the Secretary of Labor for each construction occupation.

COMPANY

DATE: _____

BY: _____
(Authorized Signature)

ATTACHMENT II

UTILIZATION OF SECTION 3 PROJECT BUSINESSES

The Company shall require the services of companies engaged in the business of:

PROPOSED SUPPLIERS AND SUBCONTRACTORS	ESTIMATED \$ AMOUNT	SECTION 3 (YES OR NO)*

* The numerical goal for committing to award to Section 3 business concerns is at least 10% of the total dollar amount of all Section 3 covered contracts for building trades work arising in connection with housing rehabilitation, housing construction, and other public construction; and, at least 3% of the total dollar amount of all other Section 3 covered contracts.

NOTE: A Section 3 business concern is defined as business: [1] that is 51% or more owned by Section 3 residents; or [2] whose permanent, full-time employees include persons, at least 30% of whom are currently Section 3 residents, or within three years of the date of first employment with the business concern were Section 3 residents; or [3] that provide evidence of a commitment to subcontract in excess of 25% of the dollar award of a subcontract to be awarded to business concerns that meet the qualifications set forth in number 10 and 20 of this definition. The Company certifies that it will make a good faith effort to utilize business concerns located in the City of Reading to the greatest extent feasible for Contract No. _____ in contracting for work to be performed in connection with the completion of the contract.

COMPANY _____
DATE: _____ BY: _____
(Authorized Signature)

GENERAL PROVISIONS

GENERAL PROVISIONS

G.1 SUB-HEADINGS. The paragraph headings are inserted in these provisions and the following specifications for convenience only and shall not be considered as interpreting or limiting the application of paragraphs.

G.2 DEFINITIONS. The following terms and expressions used in this contract and specifications shall be understood as follows:

The expression "The City" shall mean the City of Reading, Pennsylvania, the party of the first part to this contract.

The word "Engineer" shall mean the Engineer, Architect, or other official in direct charge of the work for the City or his authorized representative as designated by the applicable Director.

The word "Inspector" shall mean an inspector of the City assigned to the inspection of materials, structures and workmanship under this contract.

The word "Contractor" shall mean the party of the second part to this contract, whether a corporation, partnership, or individual.

The word "Specifications" shall mean the specifications describing the work, the drawings, and the general provisions.

The word "Drawings/Plans" shall mean the general drawings, plans, maps, diagrams or illustrations accompanying these specifications, and such supplementary drawings as may be furnished from time to time.

The term "Materials" as used herein includes, in addition, to materials incorporated in the project used or to be used in the operation thereof, equipment and other materials used and/or consumed in the performance of the work.

Wherever in the specifications the words "to be," "to be done," "if," "as," "directed," "required," "permitted," "ordered," "instructed," "designated," "considered necessary," or words of like import are used, it shall be understood that the direction, requirement, permission, order, instruction, designation or decision of the Engineer is intended, and similarly the words "approved," "acceptable," "satisfactory," or words of like import, shall mean approved by, acceptable or satisfactory to, the applicable Director or the Engineer, unless the context show that another meaning is plainly intended.

G.3 SPECIFICATIONS AND DRAWINGS. The specifications and drawings are intended to cover all of the work that is known to be required to effect a complete installation. They are intended to be mutually explanatory of each other, but should any discrepancy or inconsistency appear or any misunderstanding arise as to the import of anything contained in either the specifications or the drawings, the interpretation of the doubtful portions will be made by the Engineer, whose decision shall, in all cases, be final and binding on the Contractor. Any materials or workmanship obviously necessary to satisfactory completion shall be furnished and installed whether or not specifically shown or mentioned. Any corrections of errors or omissions in the specifications or drawings, or both, may be made by the Engineer when such correction is necessary for the proper fulfillment of their intention as determined by him/her. Figures shall have preference over scale in reading dimensions. Copies of the specifications and drawings shall be kept constantly at the work. Any supplementary or detail drawings which may be made by the Engineer subsequent to the date of this contract, relating to the work herein contemplated, as showing more particularly the details of the work to be done, or specifications and the drawings furnished by the Contractor and approved by the Engineer, are, and are to be held to be, controlling parts of this contract insofar as they do not conflict with other provisions of the contract.

If the Contractor, in the course of the work, finds any discrepancy between the plans and the physical conditions of the locality, or any errors or omissions in the plans or in the layout as given by the points and instructions furnished by the Engineer, it shall be his duty to inform the Engineer, in writing, and the Engineer shall promptly verify the same. Any work done after such discovery, until authorized, will be done at the Contractor's risk.

G.4 ENGINEER TO DECIDE. All work under this contract shall be done in a manner acceptable to the Engineer, who shall determine the amount, quality, acceptability and fitness of the several kinds of work and material which are to be paid for hereunder, and shall decide all questions which may arise as to measurements of quantities and the fulfillment of the conditions of this contract on the part of the Contractor.

G.5 WORK TO BE DONE IN ACCORDANCE WITH SPECIFICATIONS AND DRAWINGS. The work at all stages of its completion must conform with the specifications and drawings and with the lines and grades and other instructions of the Engineer, as given from time to time during the progress of the work. In no case will any work in excess of the requirements of the drawings as interpreted by the Engineer be paid for unless authorized in writing by the Engineer.

G.6 RIGHT TO MAKE CHANGES IS RESERVED. The City reserves the right to make alterations in the location, lines, grade, plan, form dimensions, numbers or materials of the work herein contemplated, either before or after the commencement of construction. If such alterations diminish the amount of work to be done, they shall not form the basis for a claim for damage or for loss of anticipated profits from the work which may be dispensed with; if they increase the amount of work, such increase shall be paid for according to the quantity of work actually done and at prices stipulated for such work under this contract. All work actually done under a unit price (where applicable) contract, whether more or less than the quantity estimated or specified, shall be paid for by the determined units, on the basis of the bid per unit in the proposal.

G.7 EXTENSION OF TIME. If the Contractor is delayed at any time in the progress of the work by any act or neglect of the City, or by City employees, or by any other contractor employed by the City, or by changes ordered in the work, or by strikes, lockouts, fire, unusual delay in transportation, unavoidable casualties or any causes beyond the Contractor's control, or by any cause which the Engineer shall decide to justify the delay, then the time of completion shall be extended for such reasonable time as the Engineer may decide subject to the approval of the applicable Director.

No such extension shall be made for delay due to rejection of defective materials or workmanship or for any delay occurring more than seven (7) days before claim therefore is made in writing to the Engineer. In the case of a continuing cause of delay, only one claim is necessary.

If no schedule or agreement stating dates upon which drawings shall be furnished is made, then no claim for delay shall be allowed because of any delay in the furnishing of drawings to the Contractor.

G.8 ADEQUATE PLANT AND METHODS. The Contractor shall furnish such construction plant and use such methods and appliances as will secure a satisfactory quality of work and a rate of progress which will insure the completion of the work within the time specified. Before starting the installation of the construction plant, the Contractor shall submit to the Engineer, for approval, a plan showing the general arrangement of the plant to be installed and the proposed facilities for storage of materials and equipment. If at any time the plant or any portion of it shall appear to the Engineer to be, or likely to become, inadequate, incomplete, faulty or unsafe, the Contractor shall promptly obey the orders of the Engineer to supplement or to remove or replace the same; but the failure of the Engineer to issue such orders shall not relieve the Contractor of his responsibility for the efficiency, adequacy and safe operation of the plant.

He shall cover and protect his work from damage, and all injury to the same, before completion of the contract.

He shall be financially responsible for all damage to the party of the first part or its property, to other contractors, to the neighboring premises, or to any private or personal property, for any cause whatsoever, during the period of the contract.

G.9 WORKERS. The Contractor shall employ only competent and skillful employees to do the work, and whenever the Engineer shall notify the Contractor, in writing, that any person on the work is, in his/her opinion, incompetent, unfaithful or disorderly, uses threatening or abusive language to any official having supervision of the work, or is in any other way unsatisfactory, such person shall be discharged from the work and shall not again be employed on it except with the consent of the Engineer.

Neither party shall employ or hire any employee of the other party without the latter's consent.

G.10 WAGES. All employees directly employed on this work shall be paid wages which shall in no event be less than the minimum hourly wage rates for skilled, semi-skilled, and unskilled labor prescribed by the Commonwealth of PA Prevailing Wage Act, P.L. 987 as may be amended, if applicable.

G.11 PENALTY FOR FAILURE TO LIVE UP TO MINIMUM WAGE CONTRACT. A penalty shall be exacted from the Contractor in an amount equal to twice the difference between the minimum wage contained in the prescribed wage rates, and the wage actually paid to each laborer or mechanic for each day during which he has been employed at a wage less than that prescribed.

G.12 INSPECTORS TO REPORT VIOLATIONS. Every person assigned as an Inspector of the work to be performed under this contract, in order to aid in enforcing the fulfillment of the minimum wage requirements thereof, shall, upon observation or investigation, report to the applicable Director, all violations of minimum wage stipulations, together with the name of each laborer or mechanic who has been paid a wage less than that prescribed, and the day or days of such violation.

G.13 PENALTIES TO BE WITHHELD FROM MONEYS DUE THE CONTRACTOR.

All minimum wage violation penalties shall be withheld and deducted for the use of the City from any moneys due the Contractor by the City; provided, that if the Contractor subsequently pays to all laborers and mechanics the balance of the amounts stipulated as minimum wages, the City shall pay to the Contractor the amounts so withheld.

G.14 CONTRACTOR'S RESPONSIBILITY FOR EMPLOYEES. The Contractor hereby assumes all responsibility for himself/herself, his/her agents and employees growing out of connection with the execution of the work called for by this contract, for the violation of, City ordinances and the laws governing contract work in the Commonwealth of Pennsylvania. The Contractor further agrees to hold the City of Reading harmless from all responsibility for employees on this work under the Workmen's Compensation Act of the Commonwealth of Pennsylvania, and to carry insurance on his/her employees, as provided thereby.

G.15 CONTRACTOR REPRESENTED ON THE WORK. The Contractor shall give personal attention constantly to the faithful prosecution of the work and shall be present, either in person or by a competent superintendent, on the site of the work, continuously during its progress. Such representative shall have authority to receive and to act without delay upon all instructions of the Engineer or assistants in the prosecution of the work in conformity with the contract.

Insofar as it is practicable, all orders given by the Engineer to the Contractor shall be in writing. In those cases where orders are given orally they shall be confirmed in writing. Orders or directions, written or oral, from the Engineer, delivered to the Contractor's office shall be considered as delivered to the Contractor.

G.16 REPRESENTATIVE MUST BE PRESENT. In case the Engineer or a representative may at any time have occasion to give directions regarding the work for the reason that the same is not, in the Engineer's opinion, being carried out in accordance with the provisions of this contract, and should there be no responsible representative of the Contractor on the ground empowered to receive such instructions, the Engineer or a representative shall order that particular portion of the work to be stopped until such representative of the Contractor appears and receives instructions. It is hereby agreed that suspensions of the work for such cause shall not entitle the Contractor to claims for damage of any kind, nor to an extension of the time in which to complete the work to be done under this contract.

G.17 LEGAL ADDRESS OF CONTRACTOR. The address given in the bid or proposal upon which this contract is based is hereby designated as the legal address where all notices, letters and other communications to the Contractor shall be mailed or delivered prior to the beginning of the work provided for in this contract. The delivery at the above-named place, or depositing in a post-paid wrapper directed to the above place, in any post office box regularly maintained by the post office, of any notice, letter or other communication to the Contractor, shall be deemed sufficient service thereof upon the Contractor and the date of said service shall be the date of such delivery or mailing.

G.18 CHANGE IN ADDRESS. Such address may be changed at any time by an instrument in writing executed and acknowledged by the Contractor and delivered to the City. Nothing herein contained shall be deemed to preclude or render inoperative the service of any notice, letter or other communication upon the Contractor personally.

G.19 LAWS, ORDINANCES AND REGULATIONS. The Contractor shall be fully informed as to all laws, ordinances and regulations in any manner affecting those engaged or employed in the work, or the materials used in the work, or in any way affecting the conduct of the work, and of all orders and decrees of bodies or tribunals having any jurisdiction over the same, if any discrepancy or inconsistency shall be discovered in this contract, specifications or drawings, in relation to any such law, ordinance, population, order or decree, the contractor shall immediately report the same in writing to the Engineer. At all times the Contractor shall observe and comply with all laws, ordinances, regulations, orders and decrees which may be in effect during the progress of this contract; and shall indemnify and save harmless the City and its officers and employees against any claim or liability arising from the violation of any legal requirement in the prosecution of this contract.

G.20 INDEMNIFICATION OF CITY. In case any action at law, proceeding in eminent domain, or suit in equity may or shall be brought against the party of the first part, or any of its offices or agents, for or on account of the failure, omission or neglect of the Contractor or the subcontractors, his/her or their employees or agents, to do and perform any of the covenants acts, matters, or things by this contract undertaken to be done or performed by the Contractor or subcontractors, his/her or their employees or agents, or for any injury or damage caused by the negligence of the Contractor or subcontractors, his/her or their employees or agents, or for damage or injury for which the Contractor undertakes responsibility under the provisions of this contract, the Contractor shall immediately assume and take charge of the defense to such actions, proceedings or suits in like manner and to all intents and purposes, as if said actions, proceedings or suits had been brought directly against the Contractor; and the Contractor shall also indemnify and save harmless the party of the first part, its officers and agents, of and from all loss, cost or damage whatever arising out of such actions, proceedings or suits as may or shall be brought as aforesaid.

G.21 SUITS AND CLAIMS. The Contractor agrees to indemnify and save harmless the City of Reading, the applicable Director, the Engineer, and their assistants, from all suits or actions of every name and description, either in law or in equity, including proceedings in eminent domain for the recovery of consequential damages, or for or on account of use of patented appliance, brought against them or either of them, or for any damage or injuries received or sustained by any party or parties, person or persons, natural or artificial, either in the performance or as a result of the work under this agreement, regardless of whether such suits, actions or proceedings brought are based or grounded upon negligence of the Contractor, the subcontractors, or his/her or their agents, servants or employees. The Contractor further agrees that all or as much of the monies due under this agreement as shall be or may be considered necessary by the applicable Director, shall or may be retained, without any liability of the City to the Contractor, for interest thereon because of the retention thereof, until all such suits, proceedings or claims have been settled or terminated, and satisfactory evidence to that effect furnished to the applicable Director, provided however, that no such monies shall be retained by the City after six (6) years following the completion and acceptance of the work under the contract, excepting for or on account of claims filed or suits or proceedings begun before the expiration of the applicable statute of limitations.

G.22 RESPONSIBILITY FOR INJURY. The Contractor shall assume all responsibility for loss, damage or injury to persons or property arising out of the nature of the work, from the actions of the elements, or from any unforeseen or unusual difficulties over which the City has no control, in addition to and without limiting the Contractor's liability under the other provisions of the contract.

G.23 CONTRACTOR'S CLAIMS FOR DAMAGE. If the Contractor claims compensation for any damage alleged to have been sustained by reason of any act or omission on the part of the City or any of its agents, he shall, within one (1) week after the sustaining of such damage, make a written statement to the Engineer of the nature of the damage sustained, and shall, on or before the fifteenth (15th) day of the month succeeding that in which any such damage shall have been sustained, file with the Engineer an itemized statement of the details and amounts of such damage, and unless such statement shall be made as so required, the claim for compensation shall be forfeited and invalid, and the Contractor shall not be entitled to payment on account of any such damage.

G.24 LINES AND GRADES. All lines and grades will be given by the Engineer, but the Contractor shall provide such material and give such assistance therefore as may be required by the Engineer, and the marks so given shall be carefully preserved. The Contractor shall keep the Engineer informed, a reasonable time in advance, of the time and places a which he/she intends to work, in order that lines and grades may be furnished and necessary measurements for record and payment made with the minimum inconvenience to the Engineer or delay to the Contractor. No claim for extra payment will be allowed for the cost to the Contractor of any material, work or delay occasioned by giving lines and grades, or making necessary measurements or inspections, as all such cost shall be considered to have been included in the price bid for the work.

G.25 INSPECTION. The Engineer will appoint such person or persons as may be deemed necessary to inspect properly the materials furnished and the work done under this contract, and to see that the same correspond strictly with these specifications. Such materials and workmanship shall always be subject to the approval of the Engineer, but no inspection, approval or acceptance of any part of the work herein contracted for or of the materials used therein, nor any payment on account thereof, shall prevent the rejection of said work or materials at any time thereafter during the existence of this contract, should said work or materials be found to be defective, or not in accordance with the requirements of the contract.

The Contractor shall permit, or secure permission for the Engineer or a duly authorized Inspector or representative to enter any manufactory, shop or other place where any material for, or part of the work is being prepared, manufactured or constructed, at any time when such work is in progress. The Contractor shall furnish and prepare, or cause to be furnished or prepared, without charge, all such assistance, appliances, samples of materials and test specimens as may be ordered by the Engineer or such Inspector or representative for the purpose of making official tests and investigations. The Engineer shall be notified of the time and place of preparation, manufacture or construction of any material for, or part of

the work which he/she may wish to inspect before delivery at the site of the work. Such notification shall be give a sufficient time in advance of the beginning of the work on such material or part to allow arrangements to be made for inspection and testing.

G.26 NIGHT WORK. No night work, except for the inspection of lighting, requiring the presence of the Engineer or Inspector will be permitted except in case of emergency, and then only with the written consent of the Engineer and to such an extent as may be judged necessary.

G.27 SUNDAY WORK. No Sunday work will be permitted, except in case of great emergency, and then only with the written consent of the Engineer, and to such extent as is absolutely necessary.

G.28 NO WORK IN BAD WEATHER. No work shall be done under this contract when, in the opinion of the Engineer, the weather is unsuitable for good and careful work to be performed. No concrete work shall be done on days on which the temperature falls below 25 degrees Fahrenheit. Should the severity of the weather continue such that the work cannot be prosecuted successfully, the Contractor, upon order of the Engineer, shall cease all such work until directed to resume the same. In the latter case, suitable extension of time shall be allowed to compensate for time actually lost as provided for in Article G.7.

G.29. NOT TO SUBLET OR ASSIGN. The Contractor shall give personal attention constantly to the faithful prosecution of the work and shall not assign, transfer, convey, sublet or otherwise dispose of this contract, or his/her title, right or interest in or to the same or any part thereof, nor shall the Contractor assign, by power of attorney or otherwise, any of the monies due or to become due, nor issue any order or orders or drafts on the Controller or Treasurer of the City of Reading for any monies due or to become due under this contract, unless by and with the consent of the City first duly had and obtained by resolution entered upon the minutes of said City.

G.30 RIGHT OF PROPERTY IN MATERIALS. Nothing in this contract shall be considered as vesting in the Contractor any right of property in materials used, after they shall have been attached to or incorporated in the work, nor in materials which have been estimated for partial payment, but all such materials, upon being so attached, incorporated or estimated, shall become the property of the City.

G.31 DEFECTIVE MATERIALS AND WORKMANSHIP. No materials of any kind shall be used until they have been examined and approved by the Engineer, who shall have full power to condemn any work and materials not in accordance with the specifications, and to require the Contractor to remove any work or materials so condemned. Inspections of the work shall not relieve the Contractor from any of his/her obligations to fulfill the contract as herein described, and defective work shall be made good, and unsuitable materials may be rejected, notwithstanding that such work or materials may have been previously overlooked by the Engineer and accepted or estimated for payment if the work or any part thereof shall be found defective at any time before the final acceptance of the whole work, the Contractor shall immediately make good such defect in a manner satisfactory to the Engineer, and if any material brought upon the ground for use in the work shall be condemned by the Engineer as unsuitable or not in conformity with the drawings or specifications, the Contractor shall forthwith remove such materials from the vicinity of the work. If the Contractor shall fail to remove or replace any defective or damaged materials or work after reasonable notice, the Engineer may cause such material or work to be removed or replaced, and the expense thereof shall be borne by the Contractor.

G.32 RESPONSIBILITY FOR WORK. The Contractor shall be held responsible for any or all materials or work to the full amount of all payments made thereon, and shall be required to make good, at his/her own cost, any injury or damage which said materials or work may have sustained from any source or cause whatever before its final acceptance.

G.33 CONDITIONS UNDER WHICH CITY MAY COMPLETE WORK. If the work to be done under this contract shall be neglected or abandoned, or the contract or any claim thereunder shall be assigned by the Contractor otherwise than as herein specified, or if at any time the Engineer shall be of the opinion, and shall so certify in writing to the City's representative, that the rate of progress is insufficient or that the work, or any part thereof, is unnecessarily or unreasonably delayed, or that the Contractor is violating any of the provisions of this contract or carelessly executing any portion of the work, the City may notify the Contractor and surety in writing to fulfill the conditions of the Contract; and should the Contractor or the surety fail to comply with said notice within ten (10) days, the City may notify the Contractor and the surety to discontinue all work, or any part thereof; and thereupon the Contractor and the surety shall discontinue said work, or said part thereof as the City may designate; and the City may thereupon, by contract or otherwise, as it may determine, complete the work or such part thereof, and charge the expenses thereof to the Contractor or the surety; and may take possession of and use therein such materials, animals, machinery, equipment, implements and tools of every description as may be found upon the work. The expense so incurred shall be deducted and paid by the City out of any monies then due or to become due the Contractor under this contract; or any part thereof; and in case such expense is less than the sum which would have been payable under this contract if the same had been completed by the Contractor, the Contractor shall be entitled to receive the difference, and in case such expense shall exceed the latter sum, the Contractor or the surety shall pay the amount of such excess to the party of the first part.

G.34 ALL PARTS OF WORK COVERED. The Contractor further agrees that the following clauses relative to the construction of the work shall apply to each and all of the separate parts of the work, as though specially mentioned under the different headings in the specifications:

Delivery of Materials - The Contractor shall be entirely responsible for delivery of all materials to the site of the work, making the arrangements therefore.

Engineer Shall Measure - No work shall be covered over or filled in until it shall have been inspected by the Engineer.

Materials Properly Stored - The materials to be used in construction shall be protected from deterioration and damage, and shall be so disposed of as not to endanger the work and in such manner that full access may be had at all times to all work under construction or completed.

Surplus Materials Removed - All parts of the work shall be kept in as neat and orderly condition as circumstances will permit and upon completion of the work, all surplus materials, earth, sand, rubbish and refuse of every kind, and all tools, machinery, equipment and other materials belonging to the Contractor shall be removed from the construction works and adjoining premises so as to leave everything in an acceptable condition, within a week after receipt of final certificate.

G.35 ESTIMATED QUANTITIES APPROXIMATE. In unit price contracts, the quantities of the various classes of work to be done and materials to be furnished under this contract, as estimated by the Engineer and listed in Specifications, attached hereto, are approximate and only for the purpose of comparing, on a uniform basis, the bids offered for the work under this contract; and neither the City nor the Council nor any member of the Council of the City of Reading is to be held responsible if any of the said estimated quantities shall be found to be not even approximately correct in the construction of the work; and the Contractor shall make no claim for damages on anticipated profits or loss of profit, because of a difference between the quantities of the various items of work actually done or materials actually furnished and the estimated quantities stated in the Specifications, or because of the entire omission of any of the quantities or items stated in the Specifications.

G.36 EXTRA WORK. The Contractor shall do any work not herein otherwise provided for which, in the opinion of the Engineer, is necessary for the proper completion of the work, but not such work will be allowed or paid for except on a written order of the Engineer, and there shall be no claim for extra work or materials or for damage sustained except under this Article. The extra work order issued by the Engineer shall specify the basis of payment for the extra work. Any extra work or changes in the work involving changes in the plans and/or specifications shall be approved by the applicable Director, prior to the execution of the work.

G.37 MONTHLY ESTIMATES. Current payments for work done under this contract will be made as follows: on invoices submitted by the Contractor and approved by the Engineer or Architect. Ten percent (10%) of each General Contractor invoice request shall be retained by the City on this contract until it is completed up to City codes and contract specifications and approved by a City Official or person representing a City Official Architect or Engineer.

It is further agreed and understood that inclusion of any portion of the work in the monthly estimate shall not be construed as final approval or acceptance of the same.

G.38 CONTRACTOR SHALL PREPARE FOR FINAL INSPECTION. Upon the completion of the work the Contractor shall tear down and remove all temporary buildings and structures built by the Contractor, remove and thoroughly clear away all debris, forms and surplus materials and leave the site of the work in a neat and satisfactory condition, and shall notify the Engineer when the work is ready for final inspection.

G.39 WORK TO BE PROPERLY PERFORMED. It is expressly understood that acceptance of work and materials during construction will not imply final acceptance of the work, if the final inspection shall disclose faulty workmanship or materials; and all work of whatever kind that, during its progress and before it is finally accepted, may become damaged from any cause, shall be repaired in a manner satisfactory to the Engineer or, if necessary, shall be broken up and removed and replaced with good and satisfactory work by the Contractor at his own expense. All work of every description shall be the best of its respective kind; and everything not particularly specified herein shall be done and finished in the best manner, and as is usual in first-class work of the several kinds.

Failure or neglect on the part of the Engineer, or any authorized agents to condemn or reject any bad or inferior work or materials shall not be construed to imply an acceptance of such work or materials, if such bad or inferior materials or work becomes evident at any time prior to the final acceptance of the work and the release of the Contractor by the Council of the City of Reading; nor shall it be construed as barring the City of Reading at any subsequent time from the recovery for damages of such sum of money as may be needed to build a new all portions of the work in which fraud was practiced or improper materials hidden, whenever found.

G.40 ACCEPTANCE AND FINAL PAYMENT. Upon receipt of written notice that the work is ready for final inspection and acceptance, the Engineer or Architect shall promptly make such inspection, and when he/she finds the work acceptable under the contract fully performed he/she shall promptly issue a final certificate, over his/her own signature, stating that the work provided for in this contract has been completed and is accepted under the terms and conditions thereof, and the entire balance found to be due the Contractor, including the retained percentage, shall be paid to the Contractor within (30) days after the execution of said final certificate.

G.41 WAIVER. Neither acceptance by the City, or any of its officers or employees, nor any order, measurement or certificate by the Engineer, nor any order by the City Council for payment of money, nor any payment for, nor any extension of time, nor any possession taken by the City or its officers or employees, shall operate as a waiver of any portion of this contract or of any power herein reserved to the City, or of any right to damage herein provided; nor shall any waiver of any breach of this contract be held to be a waiver of any other or subsequent breach. All remedies provided in this contract shall be taken and construed as cumulative; that is, in addition to each and every other remedy herein provided.

G.42 ACCEPTANCE OF FINAL CERTIFICATE. The acceptance by the Contractor of payment of the final estimate shall be conclusive evidence of acceptance and approval of estimates, accounting and deductions, and of full payment by the City for all work, labor, materials and services done or furnished hereunder, and of full satisfaction, discharge, release and waiver of all claims and demand of; or on behalf of the Contractor against the City, arising out of this agreement and the execution thereof. It is hereby further agreed that the Contractor shall not be entitled to demand or receive payment except in the manner set forth in this contract; and the Contractor further agrees that the final payment of the amount due under this contract and payment of the bills rendered for work done and materials furnished in accordance with any alterations of the same, shall release the City of Reading from any and all claims and liabilities on account of the work performed and materials furnished under said contract, or any alteration thereof.

G.43 MAINTENANCE AFTER COMPLETION. The Performance Bond shall remain in force for one (1) year from the date of completion and acceptance of the work under this contract, as security against any and all damage which may result from defects of materials or workmanship which may become apparent prior to the expiration of the one-year maintenance period. During this period the Contractor shall, promptly upon notification from the Engineer, repair all breaks and failures due to defects of material or workmanship at his own expense. If the Engineer shall deem it necessary and shall so direct, such repairs shall be made within twenty-four (24) hours after service of notice. If the Contractor unnecessarily delays making repairs ordered, or if delay would cause serious loss or damage, the City may undertake to have such repairs made or defects repaired without previous notice, and the expense of such repairs shall be borne by the Contractor or the surety. The Contractor shall be responsible for any damage resulting to any person or property from any violation of the guarantee and from unnecessary delays in making repairs.

G.44 PRICES. The City agrees to pay, and the Contractor agrees to receive, the price specified in the proposal submitted, as full compensation for furnishing all the materials called for, and for all labor and use of all machinery, equipment and tools necessary for executing the work contemplated in this contract; for all royalties, for patents and patented materials, appliances and processes; also for all loss or damage arising out of the nature of the work, or from the action of the elements, or from any unforeseen reasons, obstructions or difficulties which may be encountered in the prosecution of the work, for all risks of every description connected with the work, and for all expenses incurred by or in consequence of the suspension or discontinuance of said work as herein specified, and for well and faithfully completing the work, and the whole thereof, according to the specifications and drawings and the requirements of the Engineer under them.

G.45 NO EXTRA COMPENSATION. The Contractor further agrees not to ask, demand, sue for, or recover for any extra compensation, for any materials furnished or work done under this contract, beyond the amounts payable for the several classes of work or kinds of materials herein enumerated, which shall be actually performed and furnished at the prices therefore herein agreed upon and fixed.

G.46 CONTRACTOR TO TAKE OUT ALL PERMITS. The Contractor shall take out all necessary permits required by agencies of the City of Reading and/or all other governmental agencies; shall give all notices required by law or ordinances; shall pay all fees and charges incident to the due and lawful prosecution of the work covered by the contract, and shall comply with all laws and regulations relating to buildings and public highways. All permits shall be at his expense.

G.47 NO CLAIM FOR EXTRA WORK. No claim for extra work or material shall be allowed to the Contractor, unless before the performance of all such extra work the applicable Director shall have first authorized the same in writing, and the price or prices to be paid therefore shall first have been agreed upon in writing between the Director and the Contractor, and the same shall have been done or furnished under a written order from the Director given before the performance of such extra work or the furnishing of such extra materials. All claims for extra work or materials in any month shall be made to the Director in writing before the fifteenth (15th) day of the following month, and failing to make such claim within the time required, the right of the Contractor to extra pay for such extra work or materials shall be deemed to have been waived and forfeited.

G.48 WORK TO BE DONE TO THE SATISFACTION OF THE CITY ENGINEER. All the work under this contract shall be done to the satisfaction of the City Engineer, who shall in all cases determine the amount, quality, acceptability and fitness of the several amounts of work and materials which are to be paid for hereunder and shall decide all questions which may arise as to the measurement of quantities in the fulfillment of this contract on the part of the Contractor, and shall determine all questions respecting the true construction or meaning of the plans and specifications, and the determination and decision thereon shall be final and conclusive; and such determination and decision, in case any question shall arise, shall be a condition precedent to the right of the Contractor to receive any money hereunder.

G.49 ENGINEER TO INSPECT AND REJECT. The Engineer shall inspect the materials furnished and the work done, and see that the same strictly correspond to the specifications, and he shall at all times have free access to the works, storehouse and yard of the Contractor, and shall be privileged to take such samples therefrom as he may deem necessary; and if the work, or any material brought on the grounds for the use of the work, or selected for the same, shall be condemned by the Engineer, as unsuitable or not in conformity with the specifications, the Contractor shall forthwith remove such materials from the work.

Before issuance of the final certificate the Contractor shall furnish evidence satisfactory to the Engineer that all payrolls, materials, bills and other indebtedness connected with the work have been paid.

It is understood and agreed by the parties hereto that the final estimate of the Engineer shall be evidence of the amount of work performed by the Contractor under and by virtue of this agreement, and shall be taken as the full measure of the compensation to be received by the Contractor. The aforesaid estimate shall be based upon the contract price for the furnishing of all the different materials and labor, and the performance of all the work mentioned in this contract, including the specifications, and where there may be any ambiguity therein, the Engineer's instructions shall be considered explanatory and the decision shall be final.

No inspection, approval or acceptance of any of the work herein contracted for, or of the materials used herein, or any payment on account thereof shall prevent the party of the first part from objecting to the acceptance of said work or materials at any time during the existence of this contract. Neither the inspection of the applicable Director, or Division Head, or the City Engineer or any of their employees nor any order, measurement or certificate by the City Engineer nor any order by the Director for the payment of money, nor any payment for, or acceptance of, the whole or any part of the work, by the Director of the Division of Planning, nor any extension of time, nor any possession taken by the Director or his employees, shall operate as a waiver of any provision of this contract, or any power herein reserved to the party of the first part, or of any right to damage herein provided; nor shall any waiver of any breach of this contract be held to be a waiver of any other subsequent breach.

Any remedy provided in this contract shall be taken and construed as cumulative; that is, in addition to each and every other remedy herein provided; and in addition to all other suits, actions or legal proceedings the party of the first part shall be entitled to as of right.

G.50 CONTRACTOR NOT TO DISCOMMODE PRIVATE COMPANIES. The Contractor shall afford while the work is underway, the necessary facilities to any and all companies owning railway tracks, pipes, subway ducts, or other surface, sub-surface or super-surface construction on the line of the work, in the preservation of the same from injury, all without charge therefore the expense to the City.

G.51 EXAMINATIONS. At any time before or after completion of the work, should the City Engineer require it, the Contractor shall make such openings, and to such extent, through such part or parts of the work, as the City Engineer may direct, and shall restore the work so distributed to the satisfaction of the City Engineer; and should the work, in the opinion of the City Engineer, whose decision shall be final and conclusive therein, be found faulty in any respect, the whole of the expense incurred thereby shall be defrayed by the Contractor, according to and upon the prices herein set forth, but if otherwise, by the City.

SUPPLEMENTARY GENERAL TERMS & CONDITIONS

SUPPLEMENTARY GENERAL CONDITIONS

PENNSYLVANIA HUMAN RELATIONS ACT CONDITIONS

GENERAL

The CONTRACTOR shall conform to the provisions of Act No. 222 (October 27, 1955) and as amended and supplemented, known as the "Pennsylvania Human Relations Act", and in accordance with the provisions of the Regulations of the Pennsylvania Human Relations Commission, as adopted March 8, 1974, 4 Pa.B. 409, amended March 7, 1975, 5 Pa. B. 434, 16 Pa. Code Chapter 49.

NON-DISCRIMINATION PROVISION

During the term of this CONTRACT, the CONTRACTOR shall agree to the following provisions

(a) The CONTRACTOR shall not discriminate against any employee, applicant for employment, independent contractor or any other person because of race, color, religious creed, ancestry, national origin, age or sex.

The CONTRACTOR shall take affirmative action to ensure that applicants are employed, and that employees or agents are treated during employment, without regard to their race, color, religious creed, ancestry, national origin, age or sex. Such affirmative action shall include, but is not limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training.

The CONTRACTOR shall post in conspicuous places, available to employees, agents, applicants for employment and other persons, a notice, to be provided by the OWNER, setting forth the provisions of this nondiscrimination clause.

(b) The CONTRACTOR shall in advertisements or requests for employment, placed by it or on its behalf, state that all qualified applicants will receive consideration for employment without regard to race, color, religious creed, ancestry, national origin, age or sex.

(c) The CONTRACTOR shall send each labor union or workers' representative or understanding, a notice advising said labor union or workers' representative of its commitment to this nondiscrimination clause. Similar notice shall be sent to every other source of recruitment regularly utilized by the CONTRACTOR.

SUPPLEMENTARY GENERAL PROVISIONS

1. Contract Work Hours and Safety Standards Act Provisions

The Contractor, if the contract is in excess of \$2,000, and any of his subcontractors, shall comply with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 USC 327- 330) as supplemented by Department of Labor Regulations contained in 29 CFR Part 5.

Under Section 103 of the Act, the Contractor and any of his subcontractors, shall be required to compute the wages of every mechanic and laborer on the basis of a standard work day of eight hours and a standard work week of forty hours. Work in excess of the standard work day or week is permissible, provided the worker is compensated at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of eight hours in any calendar day or forty hours in any work week. Section 5 of the Federal Labor Standards Provisions, for the Community Development Block Grant Program, dated 9/75, and appearing elsewhere in this Contract, sets forth in detail the Section 103 requirements.

Section 107 of the Act provides that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous to his health and safety, as determined under construction, safe and health standards promulgated by the Secretary of Labor. These requirements do not apply to the purchase of supplies or materials or articles ordinarily available on the open market.

2. Lead-Based Paint Hazard

The Contractor is hereby specifically made aware of the HUD lead-based paint regulations, 24 CFR, Part 35, which are applicable to the construction or rehabilitation of residential structures. To the extent that the subject matter of this Contract involves residential structures, the Contractor will comply with the lead-based paint regulations.

3. Compliance with Air and Water Acts

This Agreement is subject to the requirements of the Clean Air Act, as amended, 42 USC 1857 et seq., the Federal Water Pollution Control Act, as amended, 32 USC 1251 et seq., and the regulations of the Environmental Protection Agency with respect thereto, at 40 CFR Part 15, as amended from time to time.

The Contractor and any of its subcontractors for work funded under this Agreement which is in excess of \$100,000 agree to the following requirements:

- (1) A stipulation by the Contractor or subcontractors that any facility to be utilized in the performance of any non-exempt contract or subcontract is not listed on the List of Violating Facilities issued by the Environmental Protection Agency (EPA) pursuant to 40 CFR 15.20.
- (2) Agreement by the Contractor to comply with all the requirements of Section 114 of the Clean Air Act, as amended, (42 USC 1857c-8) and Section 308 of the Federal Water Pollution Control Act; as amended, (33 USC 1318) relating to inspection, monitoring, entry, reports and information, as well as all other requirements specified in said Section 114 and Section 308, and all regulations and guidelines issued thereunder.
- (3) A stipulation that as a condition for the award of the Contract prompt notice will be given of any notification received from the Director, Office of Federal Activities, EPA, indicating that a facility utilized or to be utilized for the Contract is under consideration to be listed on the EPA List of Violating Facilities.
- (4) Agreement by the Contractor that he will include or cause to be included the criteria and requirements in paragraph (1) through (4) of this Section in every non-exempt subcontract and requiring

that the Contractor will take such action as the Government may direct as a means of enforcing such provision.

In no event shall any amount of the assistance provided under this Agreement be utilized with respect to a facility which has given rise to a conviction under Section 113(c)(1) of the Clean Air Act or Section 309(c) of the Federal Water Pollution Control Act.

4. Interest of Members, Officers, or Employees of Public Body, Member of Local Governing Body, or Other Public Officials

No member, officer, or employee of the Public Body, or its designees or agents, no member of the governing body of the locality in which the program is situated, and no other public official of such locality or localities who exercises any functions or responsibilities with respect to the program during his tenure or for one year thereafter, shall have any interest, direct or indirect, in any contract or subcontract, or the proceeds thereof, for work to be performed in connection with the program assisted under the Agreement.

5. Prohibition Against Payments of Bonus or Commission

The assistance provided under this Agreement shall not be used in the payment of any bonus or commission for the purpose of obtaining HUD approval of the application for such assistance, or HUD approval of applications for additional assistance, or any other approval or concurrence of HUD required under this Agreement, Title I of the Housing and Community Development Act of 1974 or HUD regulations with respect thereto; Provided, however, that reasonable fees or bona-fide technical consultant managerial or other such services, other than actual solicitation, are not hereby prohibited if otherwise eligible as program costs.

SUPPLEMENTAL GENERAL CONDITIONS

FEDERAL AND STATE STATUTES

This Section is a listing of Federal and State statutes, rules, and regulations dealing with the prevention of environmental pollution and the preservation of public natural resources that could effect the project. The **CONTRACTOR** shall be responsible for compliance with all applicable statutes, rules and regulations, including, but not limited to the following.

PENNSYLVANIA STATUTES AND REGULATIONS

The Clean Streams Law, Act of June 22, 1937, P.L. 1987, as amended 35 P.S. 691 et seq. and Chapters 73, 91, 92, 93, 97, 101, and 104 of Department of Environmental Resources regulations promulgated thereunder.

Pennsylvania Sewage Facilities Act, Act of January 24, 1966, P.L. 1535, Subsection 1 (35 P.S., Subsection 750.1) and Chapters 71 and 73 of Department of Environmental Resources regulations promulgated thereunder.

Air Pollution Control Act, Act of January 8, 1960, P.L. 2119, as amended, October 26, 1972, 35 P.S. Subsection 4001 et seq. and Chapters 121, 123, 127, 129, 131, 135, 137, 139, and 141 of Department of Environmental Resources regulations promulgated thereunder.

Surface Mining Conservation and Reclamation Act, Act of May 31, 1945, P.L. 1193, as amended, 52 P.S. 1396.1 et seq. and Chapter 77 of Department of Environmental Resources regulations promulgated thereunder,

Bituminous Coal Open Pit Mining Conservation Act, Act of May 31, 1945, P.L. 1198, 52 P.S. 1396.1 et seq.

Pennsylvania Solid Waste Management Act, Act of July 31, 1968, P.L. (No. 241), 35 P.S. 6001 et seq. and Chapter 75 of the Department of Environmental Resources regulations promulgated thereunder.

Dams and Encroachments Act, Act of June 25, 1913, P.L. 555, Subsection 4, as amended, 32 P.S. 684; Water Power and Water Supply Act, Act of June 14, 1923, P.L. 704, Subsection 7, 32 P.S. 597; Section 1920-A of the Administrative Code, 71 P.S. 510-520 and Chapter 105 of the Department of Environmental Resources regulations promulgated under all three Acts.

Water Well Drillers License Act, Act of Way 29, 1956, P.L. 1840 Subsection 12, 32 P.S. 645.12, and Chapter 107 of the Department of Environmental Resources regulations promulgated thereunder.

Waterworks Act, Act of April 22, 1905, P.L. 260, as amended, 35 P.S. 711 et seq., and Sections 1918-A, 1920-A of the Administrative Code 71 P.S. Subsection 510-20 and Chapter 109 of the Department of Environmental Resources regulations promulgated under both Acts.

Sections 1917-A and 1920-A of the Administrative Code, 71 P.S. 510-17 and 510-20 and Chapters 179, 191, 201, 203, 241, and 243 of the Departmental Regulations issued thereunder.

Atomic Energy Act, Act of January 28, 1966, P.L. 152s, Subsection 301 (73 P.S. 1301) and Chapters 221, 227, 229, 231, 233, and 235 of the Department's Regulations issued thereunder.

Act of November 18, 1968, P.L. (No. 322), Subsection 4, (63 P.S. 1004) and Chapters 301, 303, and 305 of the Department's regulations promulgated thereunder,

The State-Pennsylvania Environmental Bill of Rights, Article 1, section 27 of Pennsylvania Constitution.

Land Acquisition Act, Act of June 22, 1964, P.L. 131, 72 P.S. 3946.1 et seq.

Act authorizing Commonwealth to acquire open space, Act of January 19, 1968, P.L. 992, 3 P.S. 5001 et seq.

Land and Water Conservation and Reclamation Act, Act of January 19, 1963, P.L. 996, 32 P.S. 5101 et seq.

Land Recycling and Environmental Remediation Standards Act of May 19, 1995, P.L. 4, No. 2, as amended, 35 P.S. 6062.301 et seq.

Act authorizing covenants with land owners for open space, Act of January 13, 1966, P.L. 1292, 16 P.S. 11941 et seq.

Coal Land Improvement Act, Act of July 19, 1965, P.L. 216, 52 P.S. 30.101 et seq.

Soil Conservation Law Act, Act of May 15, 1945, P.L. 547, 3 P.S. 849 et seq.

Susquehanna River Basin Compact, Act of July 17, 1968, P.L. 32 P.S. 820.1 et seq.

Wheeling Creek Watershed Protection and Flood Prevention Commission Act of August 2, 1967, P.L. 189, 32 P.S. 819.1 et seq.

Disaster Relief Act, Act of July 6, 1961, P.L. 515, 71 P.S. 1689.101 et seq.

Brandywine River Valley Compact, Act of September 9, 1959, P.L. 848, 32 P.S.

Great Lakes Basin Compact, Act of March 22, 1956, P.L. 1333, 32 P.S. 817.1-817

An Act protecting water supply sources, Act of January 18, 1952, P.L. 2148 35 P.S. 731, 732

Stream Clearance Act of June 5, 1947, P.L. 420, 32 P.S. 659

Ohio River Valley Sanitation Compact, Act of April 2, 1945, P.L. 103, 32 P.S., 816.1 et seq.
Potomac River Valley Compact, Act of May 29, 1945, P.L. 1134 32 P.S. 741 et seq.

Act of June 4, 1945, P.L. 1383, 32 P.S. 751.1 et seq.

Uniform Interstate Air Pollution Agreements Act, Act of February 17, 1972

Act limiting the amount of noise produced by motor vehicles, providing noise testing and fixing penalties, Act of January 26, 1972

Act regulating vehicle emission systems, Act of June 16, 1972

Act creating a weather modification board, Act of 449, January 19, 1968, P.L. 1024, 3 P.S. 1101 et seq.

Hazardous Substances: Transportation Act, 1966 of (November 9, 1966), 75 P.S., 2101 et seq., P.L. 657

Vehicle Code, Act of (April 29, 1959), 75 P.S. 101 et seq., P.L. 58, as amended.

State Highway Law, Act of (June 1, 1945), 36 P.S. 670-101 et seq., P.L. 1242, as amended.

Outdoor Advertising Control Act of 1971, Act of (December 15, 1971), 32 P.S. 2718.101 et seq.

Regulating snowmobiles, providing registration and fees, and providing penalties, Act of (August 12, 1971)

Providing for roadside landscaping and scenic development, Act of (September 27, 1966), 36 P.S. 670-413.1, P.L. 94

Act restricting the establishment and maintenance of junkyards along highways, Act of (July 28, 1966), 36 P.S. 2719.1 et seq., P.L. 91

Camp Regulation Act, Act of (November 10, 1959), 35 P.S. 3001 et seq., P.L. 14

The Fish Law of 1925, Act of May 2, 1925, P.L. 448, as amended, 30 P.S. 1 et seq.

Act creating the "Pennsylvania Historical and Museum Commission", Act of June 6, 1945, P.S. 61, 62, 70, 104, 142, 158, 716, P.L. 1398

Relating to wildlife land management and research, Act of (June 24, 1939), 34 P.S. 1311.944, P.L. 239

Penal Code, Act of (June 24, 1939) 18 P.S. 4101 et seq., P.L. 872, as amended

Workmen's Compensation Act, Act of (June 21, 1939), 77 P.S. 1 et seq., P.L. 15

Occupational Disease Act, Act of (June 21, 1939), 77 P.S. 1201 et seq., P.L. 5

The Game Law, Act of (June 3, 1937), 34 P.S. 1311.1 et seq., P.L. 1225

Uniform Standards Code for Mobile Homes, Act 69, May 11, 1972

Industrial Housing Act, Act 70, May 11, 1972

Pennsylvania Meat and Poultry Hygiene Law of 1968, Act of July 9, 1968, P.L. 31 P.S. 438.1 et seq.

Housing Agency Law, P.L. 1688 (1959), 35 P.S. 1680, 101 et seq.

Pennsylvania Pesticide Act of 1957, Act of (1957), 63 P.S. 390-9, P.L. 248

Local Health Administration Law, Act of (August 24, 1951) 16 P.S. 1201 et seq. P.L. 1305

Housing and Redevelopment Assistant Law, Act of (May 20, 1949) 35 P.S. 166l et seq., P.L. 1633

Housing and Redevelopment Assistance Law, Act of (May 20, 1949) 72 P.S. 5860 612; 5860 701, 5860 703; P.L. 579

Pennsylvania Plant Pest Act of 1937, Act of (April 21, 1937) 3 P.S. 214-1 et seq., P.L. 318

General Safety Law, Act of (May 18, 1937), 43 P.S. 25-1 et seq., P.L. 654

Explosives Law, Act of (July 1, 1937), 73 P.S. 151 et seq., P.L. 2681

Milk Sanitation Law, Act of (1935), 31 P.S. 645 to 660g

Industrial Park Loans, Act of (August 31, 1971) Authorizing the Department of Community Affairs to develop and administer an Urban Technical Assistance Program, Act of (March 21, 1970), 71 P.S. 1049 101 et seq., P.L. 195

Development Act, Act of (May 6, 1968), 73 P.S. 361 et seq.

Urban Redevelopment Law, Act of (November 16, 1967), 35 P.S., 1704. 1 et seq., P.L. 498

Industrial Development Assistance Law, Act of (May 31, 1956), 73 P.S. 351 et seq., P.L. 1911

Industrial Development Authority Law, Act of (May 17, 1957), 73 P.S. 301 et seq., P.L. 1609

Commerce Law, Act of (May 10, 1939), 71 P.S. 1709-1 et seq., P.L. 111

Act 484 (August 23, 1961) bringing clay mines within the scope (Subsidence Insurance) of the Act, Act of (July 1, 1971)

Refuse Disposal Control Act, Act of (September 24, 1968), 52 P.S. 3051 et seq.

Bituminous Mine Subsidence and Land Conservation Act, Act of (April 27, 1966), 52 P.S. 1406.1 et seq., P.L. 31

Interstate Mining Compact, Act of (May 5, 1966), 52 P.S., 3251 et seq., P.L. 40

Pennsylvania Anthracite Coal Mine Act, Act of (November 10, 1965), 52 P.S., 70-101 et seq., P.L. 721 providing funds to alleviate pollution of streams from abandoned coal mines, Act of (December 15, 1965), 35 P.S. 760.1, P.L. 1075

Coal Mine Subsidence Insurance Fund, Act of (August 23, 1961), as amended, 51 P.S. 3201 et seq., P.L. 1068

Oil and Gas Conservation Law, Act of (July 25, 1961), 58 P.S. 401 et seq., P.L. 825

Laws relating to bituminous coal mines, Act of (July 17, 1961), 52 P.S. 701-101 et seq., P.L. 659

Relating to Subsidence Safety, Anthracite Coal, Act of (Sept. 20, 1961), 52 P.S. 672.1 et seq., P.L. 1538

Relating to Mining in Safety Zones, Act of (December 22, 1959), 52 P.S. 3101 et seq., P.L. 1994

Providing for anthracite mine drainage, Act of (July 7, 1955), 52 P.S. 687 et seq., P.S. 258

Coal Mine Sealing Act of 1947, Act of (June 30, 1947), 52 P.S. 28.1 et seq.

FEDERAL STATUTES & REGULATIONS

Airport and Airway Development Act of 1970, 49 U.S.C. 1701, 1703, 1717-1222.

Anadromous Fish Conservation Act, 16 U.S.C. 7579-757f.

Appalachian Regional Development Act of 1965, 40 App. U.S.C., Subsection 1,2, 202, 205, 206, 212.

Atomic Energy Act of 1954 42 U.S.C., Sec. 2011

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42 U.S.C, 1857 et seq. 40 C.F.R. Parts 30, 51
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1857h-2 45 C.F.R. Part 54
1858 et seq. 40 C.F.R. Part 30

Consolidated Farmers Home Administration Act of 1961

7 U.S.C. 1921 7 C.F.R. Part 1800
1922; 7 C.F.R. Part 15, 1821
1923 7 C.F.R. Part 15, 1821
1924 7 C.F.R. Part 15, 1821
1925 7 C.F.R. Part 1821
1926 7 C.F.R. Part 15
1942 7 C.F.R. Part 15 1961-1967 7 C.F.R. Part 1832

Delaware River Basin Compact 75 Stat. 688 Enacted 1961

Department of Transportation Act, 29 U.S.C. 213 (a) (5), 40 U.S.C. 201, 206; 49 U.S.C. 1653

Dingell-Johnson Sport Fish Restoration Act, 23 U.S.C. 204; 23 C.F.R. Part 15

Endangered Species Conservation of 1969, 16 U.S.C., 668aa-668cc-5

Environmental Protection Agency Regulations, 40 C.F.R. Part 15

Federal Aid Highway Act of 1968, 49 U.S.C. 1653, 23 U.S.C. 131, 138, 205, 319;

23 U.S.C. 131 23 C.F.R. Parts 20, 21, 22
205 36 C.F.R. Parts 212

National Historic Preservation Act of 1966

16 U.S.C.

Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C.

135, 135a, 135b-k
7 U.S.C. 136b 10 C.F.R. Part 164 7 C.F.R. Part 760
135d 40 C.F.R. Part 162, 164

Federal Power Act

16 R.S.C. 803; 18 C.F.R. Parts 4-8, 11-12, 131;
16 R.S.C. 828

Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et. seq. 201, 302, 303, 304, 306, 307, 308, 310, 311, 312, 316, 318, 401, 402, 403, 404, 405

Federal Water Project Recreation Act,

16 U.S.C. 460L-5, 460L-72 to 460L-21
16 U.S.C. 460L-5 36 C.F.R. Part 251

Fish and Game Sanctuary Act, 16 U.S.C. 694-694b

Fish Restoration and Management Project Act, 16 U.S.C. 777-777k, 777a, 777c, 777c-777g, 16 U.S.C. 777 43 C.F.R. Part 17

Fish and Wildlife Act of 1956, 16 U.S.C. 742a-742j

16 U.S.C. 742c 50 C.F.R. Part 250
742c 50 C.F.R. Part 255
260-264
266-279

Fish and Wildlife Coordination Act, 16 U.S.C. 661-666c

Fisherman's Protective Act of 1967, 22 U.S.C. 1971-1976

Flood Control Act of 1944, 33 U.S.C. 701, 708, 16 U.S.C. 1001, 1002, 4601, also see: River & Harbor Act of 1962 and Flood Control Act of 1962; 33 U.S.C. 426e, 596 and River & Harbors Flood Control Act of 1965, 42 U.S.C., 1962d-4 16 U.S.C. 460d 32 C.F.R. Part 300 36 C.F.R. Parts 311-326, 16 U.S.C. 1001, 1002, 7 C.F.R. Parts 15, 600

Game and Wildlife Act, 16 U.S.C. 715d-1, 715d-2, 715e, 715e-1,

715k-1, 715s, 718b-818e; 18 U.S.C. 42, 44, 2054, 3112;
16 U.S.C. 715s 43 C.F.R. Part 17
50 C.F.R. Parts 28, 34
18 U.S.C. 42 19 C.F.R. Part 12
50 C.F.R. Part 13

Highway Beautification Act of 1965, 23 U.S.C. 131,

23 C.F.R. Parts 20, 21 @ 22

Land and Water Conservation Fund Act of 1965, 16 U.S.C. 460L-4 to 460L-11

Migratory Bird Conservation Act, 16 U.S.C. 715-715r, 715g, 715c, 715i-715k,
16 U.S.C. 715i 36 C.F.R. Part 322
43 C.F.R. Parts 5, 4250
50 C.F.R. Parts 25-33, 60

Migratory Bird Treaty Act, 16 U.S.C. 703-708, 709a, 710, 668aa, 668b, 668d-1
60 U.S.C. 668aa, 50 C.F.R. Part 17
668bb 50 C.F.R. Parts 70, 71, 31, 35
668cc-1 50 C.F.R. Part 17

Multiple-Use Sustained Yield Act of 1966, 16 U.S.C. 475, 528, 531
16 U.S.C. 475 36 C.F.R. Part 221
528-531 36 C.F.R. Part 212, 221, 251-261

Federal Noise Control Act of 1972, 42 USCA Section 1858

National Emission Standards Act, 42 U.S.C. 1857f-1 to 1857f-7

National Environmental Policy Act of 1969, 42 U.S.C. 4311, 4331-4335, 4341-434
42 U.S.C. 4321 et. seq. 40 C.F.R. Part 30
45 C.F.R. Part 640
4332 10 C.F.R. Part 50
14 C.F.R. Part 1204

National Trails System Act, 16 U.S.C. 1241-1249,
36 C.F.R. Part 251

National Wildlife Refuge System Administration Act of 1966,
16 U.S.C. 668dd, 668ee
16 U.S.C. 668dd 50 C.F.R. Part 32

Oil Pollution Act of 1961, 33 U.S.C. 1001-1015
33 U.S.C. 1007 46 C.F.R. Parts 2, 35, 78, 93, 97,
167, 196
1008-1011 32 C.F.R. 151

Recreational Use of Conservation Areas Act, 16 U.S.C. 450K, 50 C.F.R.
Parts 25-29, 31-33, 70-71

Refuse Act of 1899, 33 U.S.C. 401, 403-4, 406-9, 411-415

Resource Recovery Act of 1970, 42 U.S.C. 3251-3254f, 3256-3259

River and Harbor Act of 1958, 33 U.S.C. 610

Soil Conservation and Domestic Allotment Act
16 U.S.C. 590-a-590-g, 590i, -590o
16 U.S.C. 590a-7 C.F.R. Part 15;
16 U.S.C. 5909 7 C.F.R. Parts 701-706, 708, 780

Solid Waste Disposal Act,
42 U.S.C. 3251-3259, 40 C.F.R. Part 30

Water Bank Act, 16 U.S.C. 1301-1311

Watershed Protection and Flood Prevention Act,
16 U.S.C. 1001-1008, 1006a, 1006b
16 U.S.C. 1001-1007 7 C.F.R. Part 600
1006a 7 C.F.R. Part 1800, 1861

Wetlands Acquisition Act, 16 U.S.C. 715K-3 to 715K-5

Wilderness Act, 16 U.S.C. 1131-1136;

36 C.F.R. Parts 251-261,
43 C.F.R. Part 19
50 C.F.R. Part 35

Wildlife Restoration Act, 16 U.S.C. 669-669b, 669c-669i
16 U.S.C. 669 43 C.F.R. Part 17
669i 50 C.F.R. Part 30

Wild and Scenic Rivers Act, 16 U.S.C. 1271-1287

TECHNICAL SPECIFICATIONS

SECTION 011000 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Project information.
2. Work covered by Contract Documents.
3. Access to site.
4. Coordination with occupants.
5. Work restrictions.
6. Specification and drawing conventions.

1.2 PROJECT INFORMATION

A. Project Identification: City Park Site Improvements Project.

1. Project Location: City of Reading, Pennsylvania

B. Owner: City of Reading, Pennsylvania.

1. Owner's Representative: Jessica Didow, 815 Washington St.
Reading, PA 19601, 610-655-6076.

C. Project Consultant: Civil & Environmental Consultants, Inc.; 370 E. Maple Ave; Suite 304; Langhorne, PA 19047.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of the Project is defined by the Contract Documents and consists of the following:

The Site Work consists of the following: removal of trees laying on ground and unhealthy standing trees, pruning large trees, understory clearing and grubbing; provision of earthwork, porous asphalt paving walkways, segmental block piers, landscaping; installation of owner furnished modular play and swing structures, benches, and safety surface mulch; and all incidental related work.

B. Type of Contract.

1. Project will be constructed under a single prime contract.

1.4 CONTRACT COMPLETION

- A. **Work commences upon notice to proceed issued by the City of Reading. The contractor shall order the play/spray equipment within one (1) month of notice to proceed. All work shall be fully completed within 120 calendar days from receipt of equipment.**

1.5 ACCESS TO SITE

- A. General: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section.
- B. Use of Site: Limit use of Project site to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1. Limits: Confine construction operations to the Limit of Disturbance Line unless 72 hours notice is given to the Owner and approved by the Owner to occupy areas outside of the Limit of Disturbance Line.
 - 2. Driveways, Walkways and Entrances: Keep driveways parking areas, loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

1.6 COORDINATION WITH OCCUPANTS

- A. Partial Owner Occupancy: Owner will occupy the premises during entire construction period, with the exception of areas under construction. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits unless otherwise indicated.
 - 1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.
 - 2. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.
- B. Owner Limited Occupancy of Completed Areas of Construction: Owner reserves the right to occupy and to place and install equipment in completed portions of the Work, prior to Substantial Completion of the Work, provided such occupancy does not interfere with completion of the Work. Such placement of equipment and limited occupancy shall not constitute acceptance of the total Work.
 - 1. Landscape Architect will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied prior to Owner acceptance of the completed Work.

2. Obtain a Certificate of Occupancy from authorities having jurisdiction before limited Owner occupancy.
3. On occupancy, Owner will assume responsibility for maintenance and custodial service for occupied portions of Work.

1.7 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
 1. Comply with limitations on use of public streets and other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work to normal business working hours of 8 a.m. to 4 p.m., Monday through Friday, except as otherwise indicated.
- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
 1. Notify Owner not less than two days in advance of proposed utility interruptions.
 2. Obtain Owner's written permission before proceeding with utility interruptions.
- D. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.
 1. Notify Owner not less than two days in advance of proposed disruptive operations.
 2. Obtain Owner's written permission before proceeding with disruptive operations.
- E. Controlled Substances: Use of controlled substances on the Project site is not permitted.

1.8 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- C. Drawing Coordination: Requirements for materials and products identified on the Drawings are described in detail in the Specifications. One or more of the following are used on the Drawings to identify materials and products:

1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
2. Abbreviations: Materials and products are identified by abbreviations published as part of the U.S. National CAD Standard and scheduled on Drawings.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SECTION 033000 - CAST-IN-PLACE CONCRETE

PART 4 - GENERAL

4.1 SUMMARY

- A. Section includes cast-in-place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes.
- B. Related Sections:
 1. Division 31 Section "Earth Moving" for drainage fill under slabs-on-grade.

4.2 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Design Mixtures: For each concrete mixture.
- C. Formwork Shop Drawings: Prepared by or under the supervision of a qualified professional engineer detailing fabrication, assembly, and support of formwork.
- D. Material certificates.
- E. Material test reports.
- F. Floor surface flatness and levelness measurements.

4.3 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.

1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities."
- B. Testing Agency Qualifications: An independent agency, acceptable to authorities having jurisdiction, qualified according to ASTM C 1077 and ASTM E 329 for testing indicated.
- C. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:
 1. ACI 301, "Specifications for Structural Concrete," Sections 1 through 5.
 2. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."
- D. Concrete Testing Service: Engage a qualified independent testing agency to perform material evaluation tests and to design concrete mixtures.

PART 5 - PRODUCTS

5.1 FORM-FACING MATERIALS

- A. Smooth-Formed Finished Concrete: Form-facing panels that will provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.
- B. Rough-Formed Finished Concrete: Plywood, lumber, metal, or another approved material. Provide lumber dressed on at least two edges and one side for tight fit.

5.2 CONCRETE MATERIALS

- A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source, throughout Project:
 1. Portland Cement: ASTM C 150, Type I, gray.
- B. Normal-Weight Aggregates: ASTM C 33, graded.
 1. Maximum Coarse-Aggregate Size: 1 inch nominal.
 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- C. Water: ASTM C 94/C 94M and potable.

5.3 ADMIXTURES

- A. Air-Entraining Admixture: ASTM C 260.
- B. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and that will not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.

1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
2. Retarding Admixture: ASTM C 494/C 494M, Type B.
3. Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.
4. High-Range, Water-Reducing Admixture: ASTM C 494/C 494M, Type F.
5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type G.
6. Plasticizing and Retarding Admixture: ASTM C 1017/C 1017M, Type II.

5.4 VAPOR RETARDERS

- A. Sheet Vapor Retarder: ASTM E 1745, Class A. Include manufacturer's recommended adhesive or pressure-sensitive tape.
- B. Sheet Vapor Retarder: Polyethylene sheet, ASTM D 4397, not less than 10 mils thick.

5.5 CURING MATERIALS

- A. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.
- B. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. when dry.
- C. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- D. Water: Potable.
- E. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, dissipating.
- F. Clear, Waterborne, Membrane-Forming Curing and Sealing Compound: ASTM C 1315, Type 1, Class A.

5.6 RELATED MATERIALS

- A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1752, cork or self-expanding cork.

5.7 CONCRETE MIXTURES

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301.
- B. Cementitious Materials: Use fly ash, pozzolan, ground granulated blast-furnace slag, and silica fume as needed to reduce the total amount of portland cement, which would otherwise be used, by not less than 40 percent.
- C. Admixtures: Use admixtures according to manufacturer's written instructions.

1. Use water-reducing or plasticizing admixture in concrete, as required, for placement and workability.
2. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
3. Use water-reducing admixture in pumped concrete, concrete for heavy-use industrial slabs and parking structure slabs, concrete required to be watertight, and concrete with a water-cementitious materials ratio below 0.50.

D. Proportion normal-weight concrete mixture as follows:

1. Minimum Compressive Strength: 4000 psi at 28 days.
2. Maximum Water-Cementitious Materials Ratio: 0.45 .
3. Slump Limit: 4 inches , plus or minus 1 inch.
4. Air Content: 5.5 percent, plus or minus 1.5 percent at point of delivery for 1-1/2-inch nominal maximum aggregate size.
5. Air Content: 6 percent, plus or minus 1.5 percent at point of delivery for 1-inch nominal maximum aggregate size.
6. Air Content: Do not allow air content of trowel-finished floors to exceed 3 percent.

5.8 CONCRETE MIXING

A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M and ASTM C 1116/C 1116M, and furnish batch ticket information.

1. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.

PART 6 - EXECUTION

6.1 FORMWORK

- A. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.
- B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.
- C. Chamfer exterior corners and edges of permanently exposed concrete.

6.2 EMBEDDED ITEMS

- A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.

6.3 VAPOR RETARDERS

- A. Sheet Vapor Retarders: Place, protect, and repair sheet vapor retarder according to ASTM E 1643 and manufacturer's written instructions.
 - 1. Lap joints 6 inches and seal with manufacturer's recommended tape.

6.4 JOINTS

- A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.
- B. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.
- C. Isolation Joints in Slabs-on-Grade: After removing formwork, install joint-filler strips at slab junctions with vertical surfaces, such as column pedestals, foundation walls, grade beams, and other locations, as indicated.
- D. Waterstops: Install in construction joints and at other joints indicated according to manufacturer's written instructions.

6.5 CONCRETE PLACEMENT

- A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.
- B. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation.
 - 1. Consolidate placed concrete with mechanical vibrating equipment according to ACI 301.
- C. Cold-Weather Placement: Comply with ACI 306.1.
- D. Hot-Weather Placement: Comply with ACI 301.

6.6 FINISHING FORMED SURFACES

- A. Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defects repaired and patched. Remove fins and other projections that exceed specified limits on formed-surface irregularities.
 - 1. Apply to concrete surfaces not exposed to public view.
- B. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and

defects. Remove fins and other projections that exceed specified limits on formed-surface irregularities.

1. Apply to concrete surfaces exposed to public view.

- C. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces unless otherwise indicated.

6.7 FINISHING SLABS

- A. General: Comply with ACI 302.1R recommendations for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.

6.8 CONCRETE PROTECTING AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 for hot-weather protection during curing.

- B. Evaporation Retarder: Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.

- C. Cure concrete according to ACI 308.1, by one or a combination of the following methods:

1. Moisture Curing: Keep surfaces continuously moist for not less than seven days.

2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.

3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.

- a. Removal: After curing period has elapsed, remove curing compound without damaging concrete surfaces by method recommended by curing compound manufacturer.

4. Curing and Sealing Compound: Apply uniformly to floors and slabs indicated in a continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Repeat process 24 hours later and apply a second coat. Maintain continuity of coating and repair damage during curing period.

6.9 CONCRETE SURFACE REPAIRS

- A. Defective Concrete: Repair and patch defective areas when approved by Architect. Remove and replace concrete that cannot be repaired and patched to Landscape Architect's approval.

6.10 FIELD QUALITY CONTROL

- A. Testing and Inspecting: Contractor will engage a qualified testing and inspecting agency to perform field tests and inspections and prepare test reports.

END OF SECTION 033000

SECTION 101423 - PANEL SIGNAGE

PART 7 - GENERAL

7.1 SUMMARY

- A. Section Includes:
 - 1. Panel signs.

7.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For panel signs.
 - 1. Include fabrication and installation details and attachments to other work.
 - 2. Show sign mounting heights, locations of supplementary supports to be provided by other installers, and accessories.
 - 3. Show message list, typestyles, graphic elements, and layout for each sign at least half size.
- C. Samples: For each exposed product and for each color and texture specified.

7.3 INFORMATIONAL SUBMITTALS

- A. Sample warranty.

7.4 CLOSEOUT SUBMITTALS

- A. Maintenance data.

7.5 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of signs that fail in materials or workmanship within specified warranty period.
 - 1. Warranty Period: Five years from date of Substantial Completion.

PART 8 - PRODUCTS

8.1 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Signs and supporting elements shall withstand the effects of gravity and other loads within limits and under conditions indicated.
- B. Thermal Movements: For exterior signs, allow for thermal movements from ambient and surface temperature changes.
 - 1. Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.
- C. Accessibility Standard: Comply with applicable provisions in the USDOJ's "2010 ADA Standards for Accessible Design", the ABA standards of the Federal agency having jurisdiction, and ICC A117.1.

8.2 PANEL SIGNS

- A. Panel Sign: Sign with smooth, uniform surfaces; with message and characters having uniform faces, and precisely formed lines and profiles; and as follows:
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
 - a. [ACE Sign Systems, Inc.](#)
 - b. [Advance Corporation.](#)
 - c. [Allen Industries Architectural Signage.](#)
 - d. [APCO Graphics, Inc.](#)
 - e. [Best Sign Systems, Inc.](#)
 - f. [Bunting Graphics, Inc.](#)
 - g. [Fossil Industries, Inc.](#)
 - h. [Nelson-Harkins Industries.](#)
 - i. [Seton Identification Products.](#)
 - j. [Vista System.](#)
 - 2. Solid-Sheet Sign: Aluminum sheet with finish specified in "Surface Finish and Applied Graphics" Subparagraph and as follows:
 - a. Surface-Applied, Flat Graphics: Applied vinyl film.

3. Laminated Aluminum-Sheet Sign: Aluminum sheet laminated to both sides of acrylic core sheet.
 - a. Surface-Applied, Flat Graphics: Applied vinyl film.
4. Sign-Panel Perimeter: Finish edges smooth.
 - a. Edge Condition: As indicated on Drawings.
 - b. Corner Condition in Elevation: Rounded to radius indicated.
5. Mounting: As indicated on Drawings.

8.3 ACCESSORIES

- A. Fasteners and Anchors: Manufacturer's standard as required for secure anchorage of signs, noncorrosive and compatible with each material joined, and complying with the following unless otherwise indicated:
 1. Use concealed fasteners and anchors unless indicated to be exposed.
 2. For exterior exposure, furnish stainless-steel devices unless otherwise indicated.
 3. Exposed Metal-Fastener Components, General:
 - a. Fabricated from same basic metal and finish of fastened metal unless otherwise indicated.
- B. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D 1187/D 1187M.

PART 9 - EXECUTION

9.1 INSTALLATION

- A. General: Install signs using mounting methods indicated and according to manufacturer's written instructions.
 1. Install signs level, plumb, true to line, and at locations and heights indicated, with sign surfaces free of distortion and other defects in appearance.
 2. Install signs so they do not protrude or obstruct according to the accessibility standard.
 3. Before installation, verify that sign surfaces are clean and free of materials or debris that would impair installation.
- B. Mounting Methods:
 1. Through Fasteners: Drill holes in substrate using predrilled holes in sign as template. Place sign in position and flush to surface. Install through fasteners and tighten.
- C. Remove temporary protective coverings and strippable films as signs are installed.

END OF SECTION 101423

SECTION 312000 - EARTH MOVING

PART 10 - GENERAL

10.1 SUMMARY

A. Section Includes:

1. Excavating and filling for rough grading the Site.
2. Preparing subgrades for slabs-on-grade, walks, pavements, turf and grasses and plants.
3. Excavating and backfilling for buildings and structures.
4. Drainage course for concrete slabs-on-grade.
5. Subbase course for concrete walks and pavements.
6. Subbase course and base course for asphalt paving.
7. Excavating and backfilling trenches for utilities and pits for buried utility structures.

10.2 DEFINITIONS

A. Backfill: Soil material used to fill an excavation.

1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
2. Final Backfill: Backfill placed over initial backfill to fill a trench.

B. Base Course: Aggregate layer placed between the subbase course and hot-mix asphalt paving.

C. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.

D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.

E. Drainage Course: Aggregate layer supporting the slab-on-grade that also minimizes upward capillary flow of pore water.

F. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.

1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Architect. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
2. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Architect. Unauthorized excavation, as well as remedial work directed by Architect, shall be without additional compensation.

- G. Fill: Soil materials used to raise existing grades.
- H. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
- I. Subbase Course: Aggregate layer placed between the subgrade and base course for hot-mix asphalt pavement, or aggregate layer placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.
- J. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.
- K. Utilities: On-site underground pipes, conduits, ducts, and cables as well as underground services within buildings.

10.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct preexcavation conference at Project site.

10.4 INFORMATIONAL SUBMITTALS

- A. Material test reports.

10.5 FIELD CONDITIONS

- A. Utility Locator Service: Notify utility locator service for area where Project is located before beginning earth-moving operations.
- B. Do not commence earth-moving operations until plant-protection measures are in place.

PART 11 - PRODUCTS

11.1 SOIL MATERIALS

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: Soil Classification Groups GW, GP, GM, SW, SP, and SM according to ASTM D 2487, or a combination of these groups; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
- C. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D 2487, or a combination of these groups.

1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.
- D. Subbase Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940/D 2940M; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- E. Base Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 294/D 2940M 0; with at least 95 percent passing a 1-1/2-inch sieve and not more than 8 percent passing a No. 200 sieve.
- F. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940/D 2940M; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- G. Bedding Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940/D 2940M; except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve.
- H. Drainage Course: Narrowly graded mixture of crushed stone, or crushed or uncrushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch sieve and zero to 5 percent passing a No. 8 sieve.

11.2 ACCESSORIES

- A. Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility; colored to comply with local practice or requirements of authorities having jurisdiction.
- B. Detectable Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, a minimum of 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility, with metallic core encased in a protective jacket for corrosion protection, detectable by metal detector when tape is buried up to 30 inches deep; colored to comply with local practice or requirements of authorities having jurisdiction.

PART 12 - EXECUTION

12.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth-moving operations.
- B. Protect and maintain erosion and sedimentation controls during earth-moving operations.

- C. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

12.2 EXCAVATION, GENERAL

- A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.
 - 1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.

12.3 EXCAVATION FOR STRUCTURES

- A. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1 inch. If applicable, extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.
 - 1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.
 - 2. Pile Foundations: Stop excavations 6 to 12 inches above bottom of pile cap before piles are placed. After piles have been driven, remove loose and displaced material. Excavate to final grade, leaving solid base to receive concrete pile caps.
 - 3. Excavation for Underground Tanks, Basins, and Mechanical or Electrical Utility Structures: Excavate to elevations and dimensions indicated within a tolerance of plus or minus 1 inch. Do not disturb bottom of excavations intended as bearing surfaces.
- B. Excavations at Edges of Tree- and Plant-Protection Zones:
 - 1. Excavate by hand or with an air spade to indicated lines, cross sections, elevations, and subgrades. If excavating by hand, use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.

12.4 EXCAVATION FOR WALKS AND PAVEMENTS

- A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

12.5 EXCAVATION FOR UTILITY TRENCHES

- A. Excavate trenches to indicated gradients, lines, depths, and elevations.

- B. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit unless otherwise indicated.
 - 1. Clearance: As indicated.
- C. Trench Bottoms: Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove projecting stones and sharp objects along trench subgrade.
 - 1. Excavate trenches 6 inches deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.
- D. Trenches in Tree- and Plant-Protection Zones:
 - 1. Hand-excavate to indicated lines, cross sections, elevations, and subgrades. Use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.
 - 2. Do not cut main lateral roots or taproots; cut only smaller roots that interfere with installation of utilities.

12.6 SUBGRADE INSPECTION

- A. Proof-roll subgrade below the building slabs and pavements with a pneumatic-tired dump truck to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.
- B. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Architect, without additional compensation.

12.7 UNAUTHORIZED EXCAVATION

- A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of 2500 psi, may be used when approved by Architect.
 - 1. Fill unauthorized excavations under other construction, pipe, or conduit as directed by Architect.

12.8 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

12.9 UTILITY TRENCH BACKFILL

- A. Place backfill on subgrades free of mud, frost, snow, or ice.
- B. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.
- C. Trenches under Footings: Backfill trenches excavated under footings and within 18 inches of bottom of footings with satisfactory soil; fill with concrete to elevation of bottom of footings. Concrete is specified in Section 033000 "Cast-in-Place Concrete."
- D. Trenches under Roadways: Provide 4-inch- thick, concrete-base slab support for piping or conduit less than 30 inches below surface of roadways. After installing and testing, completely encase piping or conduit in a minimum of 6 inches of concrete before backfilling or placing roadway subbase course. Concrete is specified in Section 033000 "Cast-in-Place Concrete."
- E. Initial Backfill: Place and compact initial backfill of subbase material, free of particles larger than 1 inch in any dimension, to a height of 12 inches over the pipe or conduit.
 - 1. Carefully compact initial backfill under pipe haunches and compact evenly up on both sides and along the full length of piping or conduit to avoid damage or displacement of piping or conduit. Coordinate backfilling with utilities testing.
- F. Final Backfill: Place and compact final backfill of satisfactory soil to final subgrade elevation.
- G. Warning Tape: Install warning tape directly above utilities, 12 inches below finished grade, except 6 inches below subgrade under pavements and slabs.

12.10 SOIL FILL

- A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.
- B. Place and compact fill material in layers to required elevations as follows:
 - 1. Under grass and planted areas, use satisfactory soil material.
 - 2. Under walks and pavements, use satisfactory soil material.
 - 3. Under steps and ramps, use engineered fill.
 - 4. Under building slabs, use engineered fill.
 - 5. Under footings and foundations, use engineered fill.

12.11 SOIL MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.
 - 1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.

2. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

12.12 COMPACTION OF SOIL BACKFILLS AND FILLS

- A. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill soil materials evenly on all sides of structures to required elevations and uniformly along the full length of each structure.
- C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D 698:
 1. Under structures, building slabs, steps, and pavements, scarify and recompact top 12 inches of existing subgrade and each layer of backfill or fill soil material at 95 percent.
 2. Under walkways, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 95 percent.
 3. Under turf or unpaved areas, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 85 percent.
 4. For utility trenches, compact each layer of initial and final backfill soil material at 95 percent.

12.13 GRADING

- A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
- B. Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to elevations required to achieve indicated finish elevations, within the following subgrade tolerances:
 1. Turf or Unpaved Areas: Plus or minus 1 inch.
 2. Walks: Plus or minus 1 inch.
 3. Pavements: Plus or minus 1/2 inch.
- C. Grading inside Building Lines: Finish subgrade to a tolerance of 1/2 inch when tested with a 10-foot straightedge.

12.14 SUBBASE AND BASE COURSES UNDER PAVEMENTS AND WALKS

- A. Place subbase course and base course on subgrades free of mud, frost, snow, or ice.
- B. On prepared subgrade, place subbase course and base course under pavements and walks as follows:

1. Shape subbase course and base course to required crown elevations and cross-slope grades.
2. Place subbase course and base course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
3. Compact subbase course and base course at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 698.

12.15 DRAINAGE COURSE UNDER CONCRETE SLABS-ON-GRADE

- A. Place drainage course on subgrades free of mud, frost, snow, or ice.
- B. On prepared subgrade, place and compact drainage course under cast-in-place concrete slabs-on-grade as follows:
 1. Place drainage course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
 2. Compact each layer of drainage course to required cross sections and thicknesses to not less than 95 percent of maximum dry unit weight according to ASTM D 698.

12.16 FIELD QUALITY CONTROL

- A. Special Inspections: Owner will engage a qualified special inspector to perform inspections:
- B. Testing Agency: Owner will engage a qualified geotechnical engineering testing agency to perform tests and inspections.
- C. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.
- D. Footing Subgrade: At footing subgrades, at least one test of each soil stratum will be performed to verify design bearing capacities. Subsequent verification and approval of other footing subgrades may be based on a visual comparison of subgrade with tested subgrade when approved by Architect.
- E. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.

12.17 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.

- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
 - 1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

12.18 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.

END OF SECTION 312000

SECTION 321313 - CONCRETE PAVING

PART 13 - GENERAL

13.1 SUMMARY

- A. Section Includes Concrete Paving, including the Following:
 - 1. Curbs and gutters.
 - 2. Walks.

13.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each type of product, ingredient, or admixture requiring color selection.
- C. Design Mixtures: For each concrete paving mixture. Include alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.

13.3 QUALITY ASSURANCE

- A. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.

1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities" (Quality Control Manual - Section 3, "Plant Certification Checklist").

13.4 PRECONSTRUCTION TESTING

- A. Preconstruction Testing Service: Engage a qualified independent testing agency to perform preconstruction testing on concrete paving mixtures.

PART 14 - PRODUCTS

14.1 CONCRETE, GENERAL

- A. ACI Publications: Comply with ACI 301 unless otherwise indicated.

14.2 STEEL REINFORCEMENT

- A. Plain-Steel Welded-Wire Reinforcement: ASTM A 1064/A 1064M, fabricated from as-drawn steel wire into flat sheets.
- B. Deformed-Steel Welded-Wire Reinforcement: ASTM A 1064/A 1064M, flat sheet.
- C. Reinforcing Bars: ASTM A 615/A 615M, Grade 60; deformed.
- D. Joint Dowel Bars: ASTM A 615/A 615M, Grade 60 plain-steel bars; zinc coated (galvanized) after fabrication according to ASTM A 767/A 767M, Class I coating. Cut bars true to length with ends square and free of burrs.
- E. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars, welded-wire reinforcement, and dowels in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire, plastic, or precast concrete of greater compressive strength than concrete specified.

14.3 CONCRETE MATERIALS

- A. Cementitious Materials: Use the following cementitious materials, of same type, brand, and source throughout Project:
 1. Portland Cement: ASTM C 150/C 150M, gray portland cement Type I.
 2. Fly Ash: ASTM C 618, Class C or Class F.
 3. Slag Cement: ASTM C 989/C 989M, Grade 100 or 120.
 4. Blended Hydraulic Cement: ASTM C 595/C 595M, Type IL, Portland-limestone cement.
- B. Normal-Weight Aggregates: ASTM C 33/C 33M, Class 4S, uniformly graded. Provide aggregates from a single source.
- C. Air-Entraining Admixture: ASTM C 260/C 260M.

- D. Chemical Admixtures: Admixtures certified by manufacturer to be compatible with other admixtures and to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material.
- E. Water: Potable and complying with ASTM C 94/C 94M.

14.4 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 3, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. dry.
- B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- C. Water: Potable.
- D. Evaporation Retarder: Waterborne, monomolecular, film forming, manufactured for application to fresh concrete.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
 - a. ChemMasters, Inc.
 - b. L&M Construction Chemicals, Inc.
 - c. Sika Corporation.
- E. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, dissipating.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
 - a. Anti-Hydro International, Inc.
 - b. ChemMasters, Inc.
 - c. L&M Construction Chemicals, Inc.
 - d. SpecChem, LLC.
 - e. Vexcon Chemicals Inc.
- F. White, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 2, Class B, dissipating.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
 - a. Anti-Hydro International, Inc.
 - b. ChemMasters, Inc.
 - c. L&M Construction Chemicals, Inc.
 - d. SpecChem, LLC.
 - e. Vexcon Chemicals Inc.

14.5 RELATED MATERIALS

- A. Joint Fillers: ASTM D 1751, asphalt-saturated cellulosic fiber in preformed strips.

14.6 CONCRETE MIXTURES

- A. Prepare design mixtures, proportioned according to ACI 301, for each type and strength of normal-weight concrete, and as determined by either laboratory trial mixtures or field experience.
- B. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:
 - 1. Fly Ash or Pozzolan: 25 percent.
 - 2. Slag Cement: 50 percent.
 - 3. Combined Fly Ash or Pozzolan, and Slag Cement: 50 percent, with fly ash or pozzolan not exceeding 25 percent.
- C. Add air-entraining admixture at manufacturer's prescribed rate to result in normal-weight concrete at point of placement having an air content as follows:
 - 1. Air Content: 6 percent plus or minus 1-1/2 percent.
- D. Chemical Admixtures: Use admixtures according to manufacturer's written instructions.
- E. Concrete Mixtures: Normal-weight concrete.
 - 1. Compressive Strength (28 Days): 4000 psi.
 - 2. Maximum W/C Ratio at Point of Placement: 0.45.
 - 3. Slump Limit: 4 inches, plus or minus 1 inch.

14.7 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M. Furnish batch certificates for each batch discharged and used in the Work.

PART 15 - EXECUTION

15.1 EXAMINATION

- A. Proof-roll prepared subbase surface below concrete paving to identify soft pockets and areas of excess yielding.

15.2 PREPARATION

- A. Remove loose material from compacted subbase surface immediately before placing concrete.

15.3 EDGE FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.

- B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

15.4 STEEL REINFORCEMENT INSTALLATION

- A. Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.

15.5 JOINTS

- A. General: Form construction, isolation, and contraction joints and tool edges true to line, with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline unless otherwise indicated.
- B. Construction Joints: Set construction joints at side and end terminations of paving and at locations where paving operations are stopped for more than one-half hour unless paving terminates at isolation joints.
- C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, other fixed objects, and where indicated.
- D. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness, to match jointing of existing adjacent concrete paving:
- E. Edging: After initial floating, tool edges of paving, gutters, curbs, and joints in concrete with an edging tool to a 3/8-inch radius. Repeat tooling of edges after applying surface finishes. Eliminate edging-tool marks on concrete surfaces.

15.6 CONCRETE PLACEMENT

- A. Moisten subbase to provide a uniform dampened condition at time concrete is placed. Do not place concrete around manholes or other structures until they are at required finish elevation and alignment.
- B. Comply with ACI 301 requirements for measuring, mixing, transporting, and placing concrete.
- C. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.
- D. Screed paving surface with a straightedge and strike off.
- E. Commence initial floating using bull floats or darbies to impart an open-textured and uniform surface plane before excess moisture or bleedwater appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.

15.7 FLOAT FINISHING

- A. General: Do not add water to concrete surfaces during finishing operations.
- B. Float Finish: Begin the second floating operation when bleedwater sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots and fill low spots. Refloat surface immediately to uniform granular texture.
 - 1. Medium-to-Coarse-Textured Broom Finish: Provide a coarse finish by striating float-finished concrete surface 1/16 to 1/8 inch deep with a stiff-bristled broom, perpendicular to line of traffic.

15.8 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
- B. Comply with ACI 306.1 for cold-weather protection.
- C. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete but before float finishing.
- D. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.
- E. Curing Methods: Cure concrete by moisture curing, moisture-retaining-cover curing, curing compound or a combination of these.

15.9 PAVING TOLERANCES

- A. Comply with tolerances in ACI 117 and as follows:
 - 1. Elevation: 3/4 inch.
 - 2. Thickness: Plus 3/8 inch, minus 1/4 inch.
 - 3. Surface: Gap below 10-feet- long; unlevelled straightedge not to exceed 1/2 inch.
 - 4. Joint Spacing: 3 inches.
 - 5. Contraction Joint Depth: Plus 1/4 inch, no minus.
 - 6. Joint Width: Plus 1/8 inch, no minus.

15.10 REPAIR AND PROTECTION

- A. Remove and replace concrete paving that is broken, damaged, or defective or that does not comply with requirements in this Section. Remove work in complete sections from joint to joint unless otherwise approved by Architect.

- B. Protect concrete paving from damage. Exclude traffic from paving for at least 14 days after placement. When construction traffic is permitted, maintain paving as clean as possible by removing surface stains and spillage of materials as they occur.
- C. Maintain concrete paving free of stains, discoloration, dirt, and other foreign material. Sweep paving not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION

SECTION 321816.13 - PLAYGROUND PROTECTIVE SURFACING

PART 16 - GENERAL

16.1 SUMMARY

- A. This Section includes the following:
 - 1. Non-loose fill playground surface system.

16.2 REFERENCES

- A. American Society for Testing and Materials:
 - 1. D412: Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers-Tension.
 - 2. D624: Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers
 - 3. D2859: Standard Test Method for Flammability of Finished Textile Floor Covering Materials.
 - 4. F1292: Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment
 - 5. F1487: Standard Consumer Safety Performance Specification for Playground Equipment for Public Use.
 - 6. F1951: Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.
- B. U. S. Consumer Product Safety Commission Publications:
 - 1. No. 325: Public Playground Safety Handbook.
- C. Americans with Disabilities Act Guidelines.
- D. U.S. Architectural & Transportation Barriers Compliance Board:
 - 1. ADA Accessibility Guidelines for Buildings and Facilities (ADAAG).

16.3 DEFINITIONS

- A. ADAAG: ADA Accessibility Guidelines for Buildings and Facilities.
- B. ADAG: Americans with Disabilities Act Guidelines.
- C. ASTM: American Society for Testing and Materials.
- D. CPSC: U. S. Consumer Product Safety Commission.
- E. EPDM: Ethylene Propylene Diene Monomer.
- F. IPEMA: International Play Equipment Manufacturers Association.
- G. SBR: Styrene-Butadiene Rubber.

16.4 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide a 2-layer rubber-urethane playground surfacing system which has been designed, manufactured and installed to meet the following criteria:
 - 1. Shock Attenuation (ASTM F1292):
 - a. Gmax: Less than 200.
 - b. Head Injury Criteria: Less than 1000.
 - 2. Flammability (ASTM D2859): Pass.
 - 3. Tensile Strength (ASTM D412): 60 psi (413 kPa).
 - 4. Tear Resistance (ASTM D624): 140%.
 - 5. Water Permeability: 0.4 gal/sy/second.
 - 6. Accessibility: Comply with requirements of ASTM F1951.

16.5 SUBMITTALS

- A. Product Data:
 - 1. Non-Loose Fill Playground Surface System.
 - 2. Cushion Base.
 - 3. Top-Layer Wearing Surface.
 - 4. Binder.
 - 5. Primer/Adhesive.
- B. Shop Drawings:
 - 1. Show materials, cross sections, and drainage.
 - 2. Show penetration details.
 - 3. Show edge terminations.
- C. Coordination Drawings: Drawn to scale and coordinating installation of playground surface systems with playground equipment. Show playground equipment locations.

1. Show Critical Height of playground surfacing systems as defined in CPSC No. 325.
2. Show equipment use zones and fall heights as defined in ASTM F 1487.

D. Samples: For non-loose fill playground surface.

E. Installer certificates: Employee qualifications.

F. Manufacturer certificates: International Play Equipment Manufacturers Association member.

G. Product certificates:

1. CPSC No. 325 compliance.
2. ASTM F 1292 compliance.
3. ASTM F 1487 compliance.
4. ADAG compliance.
5. ADAAG compliance.

H. Product test reports:

1. ASTM F 1292 compliance.
2. Gmax.
3. Head Injury Criteria.
4. Flammability.
5. Tensile Strength.
6. Water Permeability.

I. Maintenance data: Non-loose fill playground surface system.

J. Warranty documents: Non-loose fill playground surface system.

16.6 QUALITY ASSURANCE

A. Installer Qualifications: Engage an installer who employs workers for this Project trained and approved by manufacturer to install manufacturer's products.

B. Standards and Guidelines: Provide playground surface systems complying with applicable provisions of the following, unless more stringent provisions are indicated:

1. CPSC No. 325, "Handbook for Public Playground Safety"; ASTM F 1292; and ASTM F 1487.
2. Americans with Disabilities Act Guidelines (ADAG).
3. U.S. Architectural & Transportation Barriers Compliance Board's "ADA Accessibility Guidelines for Buildings and Facilities (ADAAG)."

C. Certification: Select manufacturer that is a member of the International Play Equipment Manufacturers Association (IPEMA).

16.7 DELIVERY, STORAGE & HANDLING

- A. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- B. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at a minimum temperature of 40 degrees F (4 degrees C) and a maximum temperature of 90 degrees F (32 degrees C).

16.8 PROJECT/SITE CONDITIONS

- A. Environmental Requirements: Install surfacing system when minimum ambient temperature is 40 degrees F (1 degree C) and maximum ambient temperature is 90 degrees F (32 degrees C). Do not install in steady or heavy rain.

16.9 WARRANTY

- A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.
 - 1. Warranty Period: 10 years from date of completion of work.

PART 17 - PRODUCTS

17.1 PLAYGROUND SURFACE SYSTEMS, GENERAL

- A. Accessibility: Provide playground surface systems as follows:
 - 1. Determined to be accessible when tested according to ASTM F 1292.
 - 2. Designed to comply with requirements for an accessible route as recommended by ASTM F 1487 and U.S. Architectural & Transportation Barriers Compliance Board's "ADA Accessibility Guidelines for Buildings and Facilities (ADAAG)."

17.2 NON-LOOSE FILL PLAYGROUND SURFACE SYSTEMS

- A. Surface Systems, General:
 - 1. Designed to drain water freely when installed according to manufacturer's written instructions.
 - 2. Complying with requirements in ASTM F 1292.
- B. Seamless Surface: Site-applied formulation of rubber particles in polyurethane binder, forming a water-permeable, UV-light-stable, impact-attenuating, system with layered construction.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Child Safe Products, Inc.
 - b. Kompan, Inc.
 - c. No Fault Industries, Inc.
 - d. OTS Manufacturing.
 - e. Safe Guard Surfacing, Corp.
 - f. SpectraTurf, Inc.
 - g. SurfaceAmerica, Inc.
 - h. Vitricon Inc.
2. Cushion Base: Formulation of SBR particles and polyurethane.
 - a. Fabrication: Site mixed and applied.
3. Top-Layer Wearing Surface: EPDM rubber particles and polyurethane.
4. Binder: Weather resistant, UV stabilized, flexible, non-hardening, 100 percent solids polyurethane complying with requirements of authorities having jurisdiction for nontoxic and low VOC content.
5. Critical Height: 9 feet for coordination with fall heights not exceeding Critical Height.
6. Primer/Adhesive: Manufacturer's standard primer and weather-resistant, moisture-cured polyurethane adhesive suitable for substrate and use indicated.
7. Colors: As selected from manufacturer's full range.

PART 18 - EXECUTION

18.1 INSTALLATION, GENERAL

- A. Compacted Aggregate Subbase: Verify that substrates are satisfactory for non-loose fill playground surface system installation.
 1. Subbase: Verify that substrates are dry, free from surface defects, and free of dust, dirt, loose particles, grease, oil, and other contaminants incompatible with playground surface system.
 2. Proceed with installation only after unsatisfactory conditions have been corrected.
- B. Prepare substrates to receive surfacing products according to playground surface system manufacturer's written instructions. Verify that substrates are sound without high spots, ridges, holes, and depressions.

18.2 INSTALLATION OF NON-LOOSE FILL PLAYGROUND SURFACE SYSTEMS

- A. Seamless Surface: Provide uniform, monolithic wearing surface and impact-attenuating system of total thickness indicated. Prevent contamination during application and curing processes.
 1. Substrate Primer: Apply over prepared substrate.
 2. Cushion-Base Course: Spread evenly over primed substrate to form a level layer of uniform density and consistency, applied in one continuous operation, with a minimum of cold joints. Allow base course to cure for sufficient time so that indentations are not left in the base course from applicator foot traffic or equipment.

3. Intercoat Primer: Over cured base course, apply primer for maximum adherence of base course to surface course.
4. Surface Course: Spread evenly over primed base course to form a level layer of uniform density and consistency, applied in one continuous operation, and, except where color changes, with no cold joints. Finish surface to produce manufacturer's standard wearing-surface texture.
5. Edge Treatment: As indicated on Drawings. Fully adhere edges to substrate with full coverage of substrate. Maintain fully cushioned thickness.

B. Protecting: Prevent traffic over system for not less than 48 hours after installation.

C. Cleaning: During installation of adhesively applied products, immediately remove visible adhesive from surfaces. Use cleaner recommended by playground surface system manufacturer.

18.3 PROTECTION

- A. Protect the installed playground surface from damage resulting from subsequent construction activity on the site.

END OF SECTION 321816.13

SECTION 329113 - SOIL PREPARATION

PART 19 - GENERAL

19.1 SUMMARY

- A. Section includes planting soils specified by composition of the mixes.
- B. Related Requirements:
 1. Section 311000 "Site Clearing" for topsoil stripping and stockpiling.

19.2 DEFINITIONS

- A. Duff Layer: A surface layer of soil, typical of forested areas, that is composed of mostly decayed leaves, twigs, and detritus.
- B. Imported Soil: Soil that is transported to Project site for use.
- C. Manufactured Soil: Soil produced by blending soils, sand, stabilized organic soil amendments, and other materials to produce planting soil.

- D. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified as specified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth.
- E. Subgrade: Surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.
- F. Subsoil: Soil beneath the level of subgrade; soil beneath the topsoil layers of a naturally occurring soil profile, typified by less than 1 percent organic matter and few soil organisms.
- G. Surface Soil: Soil that is present at the top layer of the existing soil profile. In undisturbed areas, surface soil is typically called "topsoil"; but in disturbed areas such as urban environments, the surface soil can be subsoil.
- H. USCC: U.S. Composting Council.

19.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each bulk-supplied material in sealed containers labeled with content, source, and date obtained; providing an accurate representation of composition, color, and texture.

19.4 INFORMATIONAL SUBMITTALS

- A. Field quality-control reports.

19.5 QUALITY ASSURANCE

- A. Testing Agency Qualifications: An independent, state-operated, or university-operated laboratory; experienced in soil science, soil testing, and plant nutrition; with the experience and capability to conduct the testing indicated; and that specializes in types of tests to be performed.

PART 20 - PRODUCTS

20.1 MATERIALS

- A. Regional Materials: Imported soil, manufactured planting soil and soil amendments and fertilizers shall be manufactured within 500 miles of Project site from materials that have been extracted, harvested, or recovered, as well as manufactured, within 500 miles of Project site.

20.2 PLANTING SOILS SPECIFIED BY COMPOSITION

- A. Planting-Soil Type: Imported, naturally formed soil from off-site sources and consisting of loam soil according to USDA textures; and modified to produce viable planting soil.

1. Sources: Take imported, unamended soil from sources that are naturally well-drained sites where topsoil occurs at least 4 inches deep, not from agricultural land, bogs, or marshes; and that do not contain undesirable organisms; disease-causing plant pathogens; or obnoxious weeds and invasive plants including, but not limited to, quackgrass, Johnsongrass, poison ivy, nutsedge, nimblewill, Canada thistle, bindweed, bentgrass, wild garlic, ground ivy, perennial sorrel, and brome grass.
2. Additional Properties of Imported Soil before Amending: Soil reaction of pH 6 to 7 and minimum of 4 percent organic-matter content, friable, and with sufficient structure to give good tilth and aeration.
3. Unacceptable Properties: Clean soil of the following:
 - a. Unacceptable Materials: Concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials that are harmful to plant growth.
 - b. Large Materials: Stones, clods, roots, clay lumps, and pockets of coarse sand exceeding 2 inches in any dimension.
4. Amended Soil Composition: Blend imported, unamended soil with the following soil amendments and fertilizers in the following quantities to produce planting soil:
 - a. Ratio of Loose Compost to Soil: 1:4 by volume.
 - b. Weight of Lime: 6 lbs. per 1000 sq. ft.
 - c. Weight of Commercial Fertilizer: 6 lbs. per 1000 sq. ft.

20.3 INORGANIC SOIL AMENDMENTS

- A. Lime: ASTM C 602, agricultural liming material containing a minimum of 80 percent calcium carbonate equivalent and as follows:
 1. Class: O, with a minimum of 95 percent passing through a No. 8 sieve and a minimum of 55 percent passing through a No. 60 sieve.
 2. Form: Provide lime in form of ground dolomitic limestone.
- B. Sulfur: Granular, biodegradable, and containing a minimum of 90 percent elemental sulfur, with a minimum of 99 percent passing through a No. 6 sieve and a maximum of 10 percent passing through a No. 40 sieve.
- C. Iron Sulfate: Granulated ferrous sulfate containing a minimum of 20 percent iron and 10 percent sulfur.
- D. Perlite: Horticultural perlite, soil amendment grade.
- E. Agricultural Gypsum: Minimum 90 percent calcium sulfate, finely ground with 90 percent passing through a No. 50 sieve.
- F. Sand: Clean, washed, natural or manufactured, free of toxic materials, and according to ASTM C 33/C 33M.

20.4 ORGANIC SOIL AMENDMENTS

- A. Manure: Well-rotted, unbleached, stable or cattle manure containing not more than 25 percent by volume of straw, sawdust, or other bedding materials; free of toxic substances, stones, sticks, soil, weed seed, debris, and material harmful to plant growth.

20.5 FERTILIZERS

- A. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:
 - 1. Composition: 1 lb/1000 sq. ft. of actual nitrogen, 4 percent phosphorous, and 2 percent potassium, by weight.
- B. Slow-Release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:
 - 1. Composition: 20 percent nitrogen, 10 percent phosphorous, and 10 percent potassium, by weight.

PART 21 - EXECUTION

21.1 GENERAL

- A. Place planting soil and fertilizers according to requirements in other Specification Sections.
- B. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in planting soil.

21.2 PREPARATION OF UNAMENDED, ON-SITE SOIL BEFORE AMENDING

- A. Excavation: Excavate soil from designated area(s) to a depth of 6 inches and stockpile until amended.
- B. Unacceptable Materials: Clean soil of concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials that are harmful to plant growth.
- C. Unsuitable Materials: Clean soil to contain a maximum of 8 percent by dry weight of stones, roots, plants, sod, clay lumps, and pockets of coarse sand.
- D. Screening: Pass unamended soil through a 2-inch sieve to remove large materials.

21.3 PLACING AND MIXING PLANTING SOIL OVER EXPOSED SUBGRADE

- A. General: Apply and mix unamended soil with amendments on-site to produce required planting soil. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.
- B. Mixing: Spread unamended soil to total depth of 6 inches, but not less than required to meet finish grades after mixing with amendments and natural settlement. Do not spread if soil or subgrade is frozen, muddy, or excessively wet.

1. Amendments: Apply soil amendments and fertilizer, if required, evenly on surface, and thoroughly blend them with unamended soil to produce planting soil.
 - a. Mix fertilizer with planting soil no more than seven days before planting.
 2. Lifts: Apply and mix unamended soil and amendments in lifts not exceeding 8 inches in loose depth for material compacted by compaction equipment, and not more than 6 inches in loose depth for material compacted by hand-operated tampers.
- C. Compaction: Compact each blended lift of planting soil to 75 to 82 percent of maximum Standard Proctor density according to ASTM D 698 and tested in-place.
- D. Finish Grading: Grade planting soil to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

21.4 BLENDING PLANTING SOIL IN PLACE

- A. General: Mix amendments with in-place, unamended soil to produce required planting soil. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.
- B. Preparation: Till unamended, existing soil in planting areas to a minimum depth of 6 inches. Remove stones larger than 1-1/2 inches in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.
- C. Mixing: Apply soil amendments, except compost, and fertilizer, if required, evenly on surface, and thoroughly blend them into full depth of unamended, in-place soil to produce planting soil.
 1. Mix lime and sulfur with dry soil before mixing fertilizer.
 2. Mix fertilizer with planting soil no more than seven days before planting.
- D. Compaction: Compact blended planting soil to 85 percent of maximum Standard Proctor density according to ASTM D 698.
- E. Finish Grading: Grade planting soil to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

21.5 APPLYING COMPOST TO SURFACE OF PLANTING SOIL

- A. Application: Apply 4 inches of compost to surface of in-place planting soil. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.
- B. Finish Grading: Grade surface to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

21.6 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- B. Soil will be considered defective if it does not pass tests and inspections.
- C. Prepare test and inspection reports.

- D. Label each sample and test report with the date, location keyed to a site plan or other location system, visible conditions when and where sample was taken, and sampling depth.

21.7 PROTECTION AND CLEANING

- A. Protect areas of in-place soil from additional compaction, disturbance, and contamination. Prohibit the following practices within these areas except as required to perform planting operations:
 - 1. Storage of construction materials, debris, or excavated material.
 - 2. Parking vehicles or equipment.
 - 3. Vehicle traffic.
 - 4. Foot traffic.
 - 5. Erection of sheds or structures.
 - 6. Impoundment of water.
 - 7. Excavation or other digging unless otherwise indicated.
- B. Remove surplus soil and waste material including excess subsoil, unsuitable materials, trash, and debris and legally dispose of them off Owner's property unless otherwise indicated.
 - 1. Dispose of excess subsoil and unsuitable materials on-site where directed by Owner.

END OF SECTION 329113

SECTION 311000 - SITE CLEARING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Protecting existing vegetation to remain.
 - 2. Removing existing vegetation.
 - 3. Clearing and grubbing.
 - 4. Stripping and stockpiling topsoil.
 - 5. Removing above- and below-grade site improvements.
 - 6. Disconnecting, capping, or sealing site utilities.
 - 7. Temporary erosion and sedimentation control.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 MATERIAL OWNERSHIP

- A. Except for materials indicated to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

1.4 FIELD CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed trafficways if required by Owner or authorities having jurisdiction.
- B. Salvageable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises where indicated.
- C. Utility Locator Service: Notify utility locator service for area where Project is located before site clearing.
- D. Do not commence site clearing operations until temporary erosion- and sedimentation-control and plant-protection measures are in place.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Satisfactory Soil Material: Requirements for satisfactory soil material are specified in Section 312000 "Earth Moving."
 - 1. Obtain approved borrow soil material off-site when satisfactory soil material is not available on-site.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Verify that trees, shrubs, and other vegetation to remain or to be relocated have been flagged and that protection zones have been identified and enclosed.
- C. Protect existing site improvements to remain from damage during construction.
 - 1. Restore damaged improvements to their original condition, as acceptable to Owner.

3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- A. Provide temporary erosion- and sedimentation-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to erosion- and sedimentation-control Drawings and requirements of authorities having jurisdiction.
- B. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.
- C. Inspect, maintain, and repair erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
- D. Remove erosion and sedimentation controls, and restore and stabilize areas disturbed during removal.

3.3 TREE AND PLANT PROTECTION

- A. Protect trees and plants remaining on-site according to requirements on the Soil Erosion and Sediment Control drawings.
- B. Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations according to requirements in Section 329200 "Turf and Grasses" and Section 329300 "Plants."

3.4 EXISTING UTILITIES

- A. Locate, identify, disconnect, and seal or cap utilities indicated to be removed or abandoned in place.
 - 1. Arrange with utility companies to shut off indicated utilities.
- B. Interrupting Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others, unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 - 1. Notify Architect not less than two days in advance of proposed utility interruptions.
 - 2. Do not proceed with utility interruptions without Architect's written permission.

3.5 CLEARING AND GRUBBING

- A. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.
 - 1. Grind down stumps and remove roots larger than 3 inches in diameter, obstructions, and debris to a depth of 18 inches below exposed subgrade.
 - 2. Use only hand methods or air spade for grubbing within protection zones.

- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.
 - 1. Place fill material in horizontal layers not exceeding a loose depth of 8 inches, and compact each layer to a density equal to adjacent original ground.

3.6 TOPSOIL STRIPPING

- A. Remove sod and grass before stripping topsoil.
- B. Strip topsoil to depth of 6 inches in a manner to prevent intermingling with underlying subsoil or other waste materials.
- C. Stockpile topsoil away from edge of excavations without intermixing with subsoil or other materials. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust and erosion by water.

3.7 SITE IMPROVEMENTS

- A. Remove existing above- and below-grade improvements as indicated and necessary to facilitate new construction.

3.8 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.
- B. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials, and transport them to recycling facilities. Do not interfere with other Project work.

END OF SECTION 311000

SECTION 129300 - SITE FURNISHINGS

PART 4 - GENERAL

4.1 SUMMARY

- A. This Section includes the following:
 - 1. Seating.
 - 2. Trash receptacles.

4.2 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Samples: For each exposed finish.
- C. Material Certificates: For site furnishings, signed by manufacturers.
- D. Maintenance Data.

PART 5 - PRODUCTS

5.1 MATERIALS

- A. Steel and Iron: Free of surface blemishes.
- B. Stainless Steel: Free of surface blemishes.
- C. Plastic: Color impregnated, color and UV-light stabilized, and mold resistant.
- D. Anchors, Fasteners, Fittings, and Hardware: Stainless steel; commercial quality, tamperproof, vandal and theft resistant.
- E. Nonshrink, Nonmetallic Grout: Premixed, factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107; recommended in writing by manufacturer, for exterior applications.
- F. Erosion-Resistant Anchoring Cement: Factory-packaged, nonshrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with potable water at Project site to create pourable anchoring, patching, and grouting compound; resistant to erosion from water exposure without needing protection by a sealer or waterproof coating; recommended in writing by manufacturer, for exterior applications.

5.2 SEATING

- A. Basis-of-Design Product: Subject to compliance with requirements, provide Country Casual; Windermere, 6' long or a comparable product by one of the following:
 - 1. Canterbury International.
 - 2. Sitecraft.
 - 3. Smith & Hawken.
 - 4. Victor Stanley, Inc.
- B. Frame: Teak.
- C. Seat:
 - 1. Material:

- a. Wood: Teak; formed into evenly spaced parallel slats.
 - 2. Arms: Two, one at each end.
 - a. Arm Material: Match frame.
- D. Table Top:
 - 1. Material:
 - a. Wood: Teak; formed into planks.
 - 2. Surface Shape: Shape indicated.
- E. Wood Finish: Factory-applied stain and transparent finish.
 - 1. Stain: Manufacturer's standard.

5.3 BICYCLE RACKS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide the product indicated on Drawings or a comparable product by one of the following:
 - 1. Canterbury International.
 - 2. Columbia Cascade Company.
 - 3. Cora Bike Rack.
 - 4. Creative Pipe, Inc.
 - 5. DuMor Inc.
 - 6. Huntco Supply, LLC.
 - 7. Landscape Forms.
- B. Bicycle Rack Construction:
 - 1. Frame: Galvanized steel with powder coated finish.
 - a. Tubing OD: Not less than 2-3/8 inches.
 - 2. Style: As indicated.
 - a. Capacity: Designed to accommodate no fewer than two bicycles.
 - 3. Security: Designed to lock wheel and frame.
 - 4. Installation Method: Cast in concrete.

5.4 TRASH RECEPTACLES

- A. Basis-of-Design Product: Subject to compliance with requirements, provide DuMor Inc.; model 157-32 with FTO lid or a comparable product by one of the following:
 - 1. Keystone Ridge Designs, Inc.
 - 2. L. A. Steelcraft.

3. Sitecraft.
 4. Smith & Hawken.
 5. Victor Stanley, Inc.
- B. Steel Facing Surrounds: Evenly patterned, parallel round steel rods, bars, or tubular shapes.
- C. Support Frames: Steel; welded.
- D. Trash Receptacles:
1. Receptacle Shape and Form: As indicated; with opening for depositing trash in lid or top.
 2. Lids and Tops: Steel secured by cable or chain, hinged, swiveled, or permanently secured.
 3. Inner Container: Rigid plastic container with drain holes; designed to be removable and reusable.
 4. Capacity: Not less than 32 gal..
- E. Steel Finish: Galvanized and color coated.
1. Color: Black.

5.5 FABRICATION

- A. Metal Components: Form to required shapes and sizes with true, consistent curves, lines, and angles. Separate metals from dissimilar materials to prevent electrolytic action.
- B. Welded Connections: At exposed connections, finish surfaces smooth and blended so no roughness or unevenness shows after finishing and welded surface matches contours of adjoining surfaces.
- C. Pipes and Tubes: Form simple and compound curves by bending members in jigs to produce uniform curvature for each repetitive configuration required; maintain cylindrical cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of handrail and railing components.
- D. Preservative-Treated Wood Components: Complete fabrication of treated items before treatment if possible. If cut after treatment, apply field treatment complying with AWWPA M4 to cut surfaces.
- E. Exposed Surfaces: Polished, sanded, or otherwise finished; all surfaces smooth, free of burrs, barbs, splinters, and sharpness; all edges and ends rolled, rounded, or capped.
- F. Factory Assembly: Assemble components in the factory to greatest extent possible to minimize field assembly. Clearly mark units for assembly in the field.

PART 6 - EXECUTION

6.1 INSTALLATION, GENERAL

- A. Comply with manufacturer's written installation instructions unless more stringent requirements are indicated. Complete field assembly of site furnishings where required.
- B. Post Setting: Set cast-in support posts in concrete footing plumb or at correct angle and aligned and at correct height and spacing.

END OF SECTION

SECTION 129300 - SITE FURNISHINGS

PART 7 - GENERAL

7.1 SUMMARY

- A. This Section includes the following:
 - 1. Seating.
 - 2. Trash receptacles.

7.2 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Samples: For each exposed finish.
- C. Material Certificates: For site furnishings, signed by manufacturers.
- D. Maintenance Data.

PART 8 - PRODUCTS

8.1 MATERIALS

- A. Steel and Iron: Free of surface blemishes.
- B. Stainless Steel: Free of surface blemishes.
- C. Plastic: Color impregnated, color and UV-light stabilized, and mold resistant.
- D. Anchors, Fasteners, Fittings, and Hardware: Stainless steel; commercial quality, tamperproof, vandal and theft resistant.

- E. Nonshrink, Nonmetallic Grout: Premixed, factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107; recommended in writing by manufacturer, for exterior applications.
- F. Erosion-Resistant Anchoring Cement: Factory-packaged, nonshrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with potable water at Project site to create pourable anchoring, patching, and grouting compound; resistant to erosion from water exposure without needing protection by a sealer or waterproof coating; recommended in writing by manufacturer, for exterior applications.

8.2 SEATING

- A. Basis-of-Design Product: Subject to compliance with requirements, provide Country Casual; Windermere, 6' long or a comparable product by one of the following:
 - 1. Canterbury International.
 - 2. Sitecraft.
 - 3. Smith & Hawken.
 - 4. Victor Stanley, Inc.
- B. Frame: Teak.
- C. Seat:
 - 1. Material:
 - a. Wood: Teak; formed into evenly spaced parallel slats.
 - 2. Arms: Two, one at each end.
 - a. Arm Material: Match frame.
- D. Table Top:
 - 1. Material:
 - a. Wood: Teak; formed into planks.
 - 2. Surface Shape: Shape indicated.
- E. Wood Finish: Factory-applied stain and transparent finish.
 - 1. Stain: Manufacturer's standard.

8.3 BICYCLE RACKS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide the product indicated on Drawings or a comparable product by one of the following:
 - 1. Canterbury International.
 - 2. Columbia Cascade Company.
 - 3. Cora Bike Rack.

4. Creative Pipe, Inc.
5. DuMor Inc.
6. Huntco Supply, LLC.
7. Landscape Forms.

B. Bicycle Rack Construction:

1. Frame: Galvanized steel with powder coated finish.
 - a. Tubing OD: Not less than 2-3/8 inches.
2. Style: As indicated.
 - a. Capacity: Designed to accommodate no fewer than two bicycles.
3. Security: Designed to lock wheel and frame.
4. Installation Method: Cast in concrete.

8.4 TRASH RECEPTACLES

A. Basis-of-Design Product: Subject to compliance with requirements, provide DuMor Inc.; model 157-32 with FTO lid or a comparable product by one of the following:

1. Keystone Ridge Designs, Inc.
2. L. A. Steelcraft.
3. Sitecraft.
4. Smith & Hawken.
5. Victor Stanley, Inc.

B. Steel Facing Surrounds: Evenly patterned, parallel round steel rods, bars, or tubular shapes.

C. Support Frames: Steel; welded.

D. Trash Receptacles:

1. Receptacle Shape and Form: As indicated; with opening for depositing trash in lid or top.
2. Lids and Tops: Steel secured by cable or chain, hinged, swiveled, or permanently secured.
3. Inner Container: Rigid plastic container with drain holes; designed to be removable and reusable.
4. Capacity: Not less than 32 gal..

E. Steel Finish: Galvanized and color coated.

1. Color: Black.

8.5 FABRICATION

A. Metal Components: Form to required shapes and sizes with true, consistent curves, lines, and angles. Separate metals from dissimilar materials to prevent electrolytic action.

- B. Welded Connections: At exposed connections, finish surfaces smooth and blended so no roughness or unevenness shows after finishing and welded surface matches contours of adjoining surfaces.
- C. Pipes and Tubes: Form simple and compound curves by bending members in jigs to produce uniform curvature for each repetitive configuration required; maintain cylindrical cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of handrail and railing components.
- D. Preservative-Treated Wood Components: Complete fabrication of treated items before treatment if possible. If cut after treatment, apply field treatment complying with AWWPA M4 to cut surfaces.
- E. Exposed Surfaces: Polished, sanded, or otherwise finished; all surfaces smooth, free of burrs, barbs, splinters, and sharpness; all edges and ends rolled, rounded, or capped.
- F. Factory Assembly: Assemble components in the factory to greatest extent possible to minimize field assembly. Clearly mark units for assembly in the field.

PART 9 - EXECUTION

9.1 INSTALLATION, GENERAL

- A. Comply with manufacturer's written installation instructions unless more stringent requirements are indicated. Complete field assembly of site furnishings where required.
- B. Post Setting: Set cast-in support posts in concrete footing plumb or at correct angle and aligned and at correct height and spacing.

END OF SECTION