

**TOWN OF EMMITSBURG
FREDERICK COUNTY, MARYLAND**



**DePAUL STREET WATERLINE REPLACEMENT
PHASES 1 & 2**

INVITATION FOR BID

PROJECT MANUAL

Issue Date: January 5, 2024



PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

JOSEPH H. CECI

LICENSE NO. 30709 EXPIRATION DATE: 7/23/224

**TOWN OF EMMITSBURG
300 A South Seton Ave.
Emmitsburg, MD 21727**

FOX Project No.: 23-31966

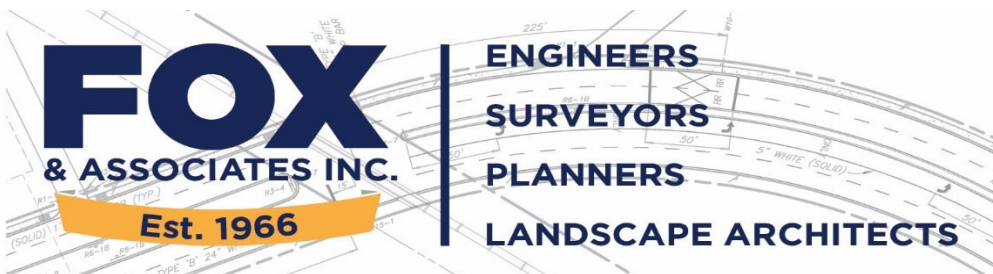
PREPARED BY:

**82 Worman's Mill Ct
Suite G**

Frederick, MD 21701

Phone: 301-695-0880

Fax: 301-293-6009



PERTINENT INFORMATION SUMMARY

Project Name:	DePaul Street Waterline Replacement Phases 1 & 2
Issue Date:	January 5, 2024
Buyer:	Town of Emmitsburg, Maryland Attn: Ms. Cathy Willets Cwillets@emmitsburgmd.gov 301-600-6300
Pre-Bid Date*:	January 11, 2024 @ 2:00 PM
Pre-Bid Location	Zoom Meeting. Time: January 11, 2024 @ 2:00 PM Eastern Time Topic: DePaul Street Waterline Pre-Bid Meeting Time: Jan 11, 2024 02:00 PM Eastern Time (US and Canada) Join Zoom Meeting https://us02web.zoom.us/j/85951624034 Meeting ID: 859 5162 4034 Passcode: 21727
Questions Due and to Whom:	Questions are due no later than 9:00 AM on February 6, 2024 , Submit questions to Cathy Willets Cwillets@emmitsburgmd.gov AND Sabrina King Skings@emmitsburgmd.gov Requests received after this time may not be considered
Bid Due**:	February 8, 2024 before 3:00 PM Topic: DePaul Street Waterline Bid Opening Time: Feb 8, 2024 03:00 PM Eastern Time (US and Canada) Join Zoom Meeting https://us02web.zoom.us/j/83485213630 Meeting ID: 834 8521 3630 Passcode: 21727

<p>Mail/Deliver Bids to the Issuing Office:</p>	<p>Town of Emmitsburg 300A South Seton Ave. Emmitsburg, MD 21727 301-600-6300</p> <p>THE TOWN ASSUMES NO LIABILITY FOR MAILED BIDS. All bids received after the opening time will be rejected and returned unopened to the bidder.</p>
<p>Bid Guaranty</p>	<p>5%</p>
<p>Performance Bond:</p> <p>Labor & Material Payment Bond:</p>	<p>100% of contract amount</p> <p>100% of contract amount</p>
<p style="text-align: center;"><i>IMPORTANT NOTICE REGARDING ADDENDA</i> <i>Addenda to solicitations often occur prior to solicitation due date. It is the potential Contractor's responsibility to visit the Town of Emmitsburg web site for updates to solicitations.</i> www.emmitsburgmd.gov</p>	

* Be advised: If Town offices have been officially closed for any reason or the opening of Town offices has been delayed or Town offices have been closed before the start of the Pre-Bid conference, the Pre-Bid Conference will be rescheduled via Addenda posted on the website the morning after the closing/delay event.

** Be advised: In the event that Town offices are closed the date that bid submissions are due or the opening of Town offices is delayed or Town offices are closed before the time of the bid opening, bids will be due and opened the next business day at the same time indicated in the Event Summary section at the front of this document.

TABLE OF CONTENTS

<u>Section</u>	<u>Pages</u>
Title Page	1
Pertinent Information Summary	2
Table of Contents	4
Invitation to Bid	5
Information to Bidders	6
Special Conditions	17
HUD Requirements and Pre-determined Wage Rates	28
Proposal	58
Bidder Certification for Work Capacity	66
Affidavit of Qualification to Bid	67
Contractor Statement of Assurances and Certifications	69
Section 3 Clause	71
Bid Bond	77
Performance Bond	79
Payment Bond	82
Non-Collusion Bidder's Affidavit	85
Contract Affidavit	87
Equal Employment Opportunity Certification	91
Emmitsburg General Contract Agreement	95
SRF State Insert BABA DW&WW-Nov 23	106
Build America, Buy America Certification	167
CDBG Information	171
Standard Conditions	191
Supplementary Conditions	259
Specifications	278

TOWN OF EMMITSBURG
300A South Seton Ave.
Emmitsburg, MD 21727

INVITATION TO BIDDERS

Sealed bids will be received by the Town of Emmitsburg (Town), Attn: Town Manager, 300A S. Seton Ave., Emmitsburg, MD 21727, for the DePaul Street Waterline Replacement Phases 1 & 2 Project. Bids will be accepted by the Town until 3:00 PM on Thursday, February 8, 2024, at which time they will be opened publicly and read aloud via the Zoom meeting platform. Interested bidders are strongly encouraged to attend the pre-bid meeting to be held on Thursday, January 11, 2024 at 2:00 PM via the Zoom meeting platform. Zoom meeting login instructions are located within the bid packet.

Bidder's scope of work includes mobilization, maintenance of traffic, construction stakeout, sediment & erosion control, the replacement of approximately 2,340 feet of 8-inch ductile iron water line, replacement of fire hydrants and copper water services, restoration of asphalt pavement and concrete sidewalks, site restoration landscaping, and other related items necessary to complete the project.

Specifications and any documents issued during the bidding phase can be obtained at the Town Office located at 300A South Seton Avenue, Emmitsburg, MD 21727, Monday through Friday between 8:00 a.m. and 4:30 p.m. or downloaded at www.emmitsburgmd.gov.

Please submit five (5) hard copies of your bid. No email submittals will be accepted. Please note on bids, **“DePaul Street Bid, Do Not Open.”**

This project is funded with federal Community Development Block Grant funds and is subject to federal labor Standards which includes Davis -Bacon wage rates and Section 3 requirements. Section 3 Business Concerns as well as minority and women owned businesses are encouraged to apply.

The project is being funded in whole or in part by the Maryland Infrastructure Financing Administration (WIFA) of the Maryland Department of the Environment (MDE) Financial Assistance Program and the U.S. Department of Housing and Urban Development, Community Development Block Grant program. All federal requirements shall apply to the contract including Davis Bacon wages. The contractor(s) shall also comply with HUD Form 4010 Federal Labor Standards. All bids shall be valid for 120 calendar days after the close of the bid period. The contractor(s) on the work shall be required to comply with Section and E.O. 11246 which prohibits discrimination in employment regarding race, creed, color, sex, or national origin. The contractor(s) shall comply with Title VI of the Civil Rights Act of 1964, Davis Bacon Act, Anti-Kickback Act, and Contract Work Hours and Safety Standards Act.

This project is subject to the Build America, Buy America Act (BABAA) requirements under Title IX of the Infrastructure Investment and Jobs Act (“IIJA”), Pub. L. 177-58. Absent an approved waiver, all iron, steel, manufactured products, and construction materials used in this project must be produced in the United States, as further outlined by the Office of Management and Budget's Memorandum M-22-11, Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure, April 18, 2022.

The Town is committed to and supportive of efforts to effectively maintain and/or increase the use of Small and Minority/Women-owned Businesses and Historically Underutilized Businesses (HUB) contract participation for construction projects, services, commodities purchases, and contract participation to offer employment, training, and contracting opportunities in accordance with Section 3 Final Rule 24 CFR 75. The Town of Emmitsburg does not discriminate based on race, color, national origin, sex, sexual orientation, religion, age and disability in employment or the provision of services

DePaul Street Waterline Replacement Phases 1 & 2
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

The Town of Emmitsburg reserves the right to accept or reject any and/or all bids and to waive any informalities or irregularities in the bidding.

BY AUTHORITY OF:
The Town of Emmitsburg, Maryland
Allen Frank Davis Jr ,Mayor

INFORMATION TO BIDDERS

1. **Construction Project:**

DePaul Street Waterline Replacement Phases 1 & 2 Project

2. **Owner:**

Town of Emmitsburg, Maryland
300 South Seton Ave.
Emmitsburg, MD 21727

(Whenever the word "Owner" is used it shall mean the Town of Emmitsburg, Maryland.)

3. **Scope of Work:**

This project entails the replacement of approximately 2,340 feet of 8-inch ductile iron water line, replacement of fire hydrants and copper water services, restoration of asphalt pavement and concrete sidewalks, mobilization, traffic control, and other related items necessary to complete the project in accordance with the Frederick County, Maryland Standard Details for Water Mains, Sanitary Sewers and Related Structures, the Maryland State Highway Specifications dated July 2023 (Latest Revision), unless directed otherwise by the Town of Emmitsburg.

4. **Length of Contract**

Two Hundred Seventy Days (270) from Notice to Proceed.

5. **FUNDING:**

This project is funded with federal Community Development Block Grant funds and is subject to federal labor Standards which includes Davis -Bacon wage rates and Section 3 requirements. Section 3 Business Concerns as well as minority and women owned businesses are encouraged to apply.

The project is being funded in whole or in part by the Maryland Infrastructure Financing Administration (WIFA) of the Maryland Department of the Environment (MDE) Financial Assistance Program.

6. **BID OPENING**

Bids shall be opened on Thursday, February 8, 2024 at 3:00 PM , **via Zoom.**

Join Zoom Meeting

<https://us02web.zoom.us/j/83485213630>

Meeting ID: 834 8521 3630

Passcode: 21727

Contact Cathy Willets Cwillets@emmitsburgmd.gov AND Sabrina King Skling@emmitsburgmd.gov for additional information.

7. BID SURETY

5% Bid Bond, Cashier's Check or Certified Check to be submitted with the Sealed Proposal.

8. CONTRACT BONDS

The successful Bidder shall submit a 100% Performance Bond and a Labor & Materials Payment Bond upon award of contract.

9. ESTIMATED START

Notice to Proceed is anticipated to be issued in March 18, 2024.

10. WAGE RATES

Pre-determined wage rates apply to this contract as specified herein.

11. Bid Documents:

- A. The Town of Emmitsburg (and website, if applicable) is the sole entity authorized to provide this bid package to interested companies or individuals.

Firms who are working from a bid package obtained from any other source may have an incomplete set of documents. The Town assumes no responsibility for any error, omission, or misinterpretation resulting from a Company's use of an incomplete bid package.

Firms who have received the bid package from a source other than the Town of Emmitsburg (and website, if applicable) are advised to contact the office to provide their company name, mailing address, telephone number, fax number, contact name and contact e-mail address. This will ensure that the company receives all bid-related communications and documents, including addenda.

- B. Each Bidder is responsible for detailed examination of jobsite, drawings, and specifications and all governing codes and ordinances to ascertain for himself/ herself actual existing conditions, facilities, circumstances, difficulties, restrictions, and requirements, which will affect the work. Each Bidder shall include all the costs involved with the work in his/her Proposal. (The act of submitting a Proposal shall be taken to mean that the Bidder has familiarized himself/herself with the project and that any inadequate examination of jobsite, Drawings, Specifications, or Codes and Regulations shall not relieve the Bidder from full performance of the work.) No additional allowances will be made because of lack of knowledge of these conditions. It is further understood and agreed that each bidder is solely responsible for all assumptions, deductions, or conclusions which they make or obtain from their examination of information made available by the Town.
- C. It is the intention of the Town of Emmitsburg to bid this project, DePaul Street Waterline Replacement Phases 1 & 2 Project, as one complete project. It is the intent that the Drawings and the Specifications are complete and all inclusive. All work shall be in accordance with the documents listed below.

DePaul Street Waterline Replacement Phases 1 & 2
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

- General Conditions EJCDC C-700 2018 Edition
 - Supplementary Conditions EJCDC C-800
 - Special Provisions of the Contract
 - Contract Technical Specifications
 - Contract Drawings
 - Maryland General Permit for Stormwater Discharge Associates with Construction Activity General, NPDES Permit Number MDRC0000, State Discharge Permit Number 20CP0000A, EFFECTIVE DATE: April 1, 2023 EXPIRATION DATE: March 31, 2028, MODIFIED: May 2, 2023 is incorporated herein by reference.
 - Frederick County, Maryland Standard Details for Water Mains, Sanitary Sewers and Related Structures are incorporated herein by reference.
 - Maryland Department of Transportation State Highway Administration, July 2023 Standard Specifications for Construction and Materials, Latest Revision, are incorporated herein by reference.
 - Maryland Department of Transportation State Highway Administration, Book of Standards - for Highway & Incidental Structures, Latest Revision, are incorporated herein by reference.
 - 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control, latest revision, are incorporated herein by reference.
 - Addenda as posted.
- D. Request for a clarification or interpretation of Bidding Documents shall be submitted in writing to the Town of Emmitsburg by email to Cathy Willets Cwillets@emmitsburgmd.gov AND Sabrina King Skling@emmitsburgmd.gov, no later than 9:00 a.m. Tuesday, February 6, 2024. Responses to requests shall be by addenda as revisions to the Bidding Documents and shall be issued in a reasonable time before the established date for receipt of bids. The Owner will not be responsible for any other clarifications or interpretations, which anyone presumes to make. Requests received after Tuesday, February 6, 2024 may not be considered.
- E. The Owner reserves the right to revise the Bidding Documents or the Bid Date by issuing Official Addenda to all Bidders during the bidding period.
- F. Bidders' Proposal shall be based on Bidding Documents as modified by Official Addenda.

12. Bid Submission:

- A. Bids shall be enclosed in one envelope which includes:
- Proposal Cover Page
 - Proposal Form
 - Bidder Certification of Work Capacity
 - Affidavit of Qualification to Bid
 - Affidavit
 - Bid Security
 - Certification by proposed prime or subcontractor regarding equal employment opportunity. (pages 68 & 69)

DePaul Street Waterline Replacement Phases 1 & 2
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

- Subcontractor listing (page 71)
- Affidavit (pages 81 & 82)
- Section 3 compliance bid form
- Maryland Community Development Block Grant Program contractor statement of assurances and certifications
- Contractor debarment request

Original documents shall be inserted into a single envelope addressed to *Town of Emmitsburg* and identified on the outside as ***“Town of Emmitsburg DePaul Street Waterline Replacement Phases 1 & 2 Project”*** with the *Bidder Name and address on the outside of the envelope.*

Bids must be made in accordance with the requirements in the bid documents.

Bidder shall submit his/her bid on the Proposal and Proposal Form provided by the Owner. The Proposal and Proposal Form shall be completely filled in, with all blanks receiving the appropriate information.

- B. Erasures or changes in the Proposal and Proposal Form shall be initialed by the Bidder. Unexplained erasures or changes may be cause for bid rejection by Owner. Omissions, deletions, alterations, qualifying conditions, items not requested, extraneous entries, or other irregularities may be cause for bid rejections.
- C. No verbal or telephone bid or modification will be considered. Failure to acknowledge receipt of all Addenda may be cause for bid rejection by Owner.
- D. The Proposal and Proposal Form shall be signed by authorized principal of firm bidding.
- E. In the event of a discrepancy between the unit prices and the extensions (product or quantity and unit price), the unit price will govern. In the case of discrepancy between prices written in words and those written in figures, the written words will govern. In the event that the unit price is not included, the unit price shall be the extended price divided by the quantity.

13. Bid Guaranty:

- A. No bid will be considered unless accompanied by a guaranty in an amount not less than 5 percent of the Aggregate Bid Amount for all items included in the Bid Schedule and made payable to **Town of Emmitsburg, Maryland**. Acceptable forms of security for bid guarantee shall be a bid bond in a form satisfactory to the Town underwritten by a surety company authorized to do business in Maryland; a bank certified check or bank cashier’s check. Such bid security shall be submitted with the understanding that it shall guarantee that the Bidder will not withdraw his/her bid for a period of one hundred twenty (120) calendar days after the closing time for the receipt of bids; that if his/her bid is accepted, he/she will enter into a formal contract with the Owner and that the required performance bond and labor & material bond will be given; and that in the event of the withdrawal of said bid within said period, or the failure to enter into said Contract and give said bonds, the Bidder shall be liable to the Owner for the full amount of the bid guarantee as representing the damage to the Owner on account of the Bidder. The bid security of unsuccessful Bidders will be returned within 30 days following the award of the Contract upon request.

14. Bid Evaluation, Award, Rejection of Individual Bids, Contract Execution:

- A. Opening of Bids will take place publicly and bids will be read aloud, following the receipt of bids and at the close of the bidding period.
- B. The Owner reserves the right to waive any informality in the bidding, and to accept any bids, or reject any or all bids, or to award the contract to the lowest responsible bidder.
- C. It is the intent of the Town to receive and evaluate responsive and responsible bids on the basis of total bid price, with a complete submission of the Proposal and supporting information described herein, or to make an award the Town determines to be in its best interest. It is the intent of the Town to award the Contract to the lowest responsive, responsible bidder based on the total bid price, provided the bid price is reasonable and it is in the interests of the Town to accept it.
- D. Any bids submitted which are not in accordance with Paragraph 5 of the Information to Bidders, BID PROPOSAL INFORMATION, and the GENERAL CONDITIONS [C700] AND/OR SUPPLEMENTAL CONDITIONS [C800] may be rejected by the Town.
- E. A bidder may be required to submit evidence that he has appropriate experience, personnel, equipment and financial resources available to undertake and perform the Contract properly and expeditiously, and any other information that may be required to indicate his ability to fulfill the Contract. These requirements may also be applicable to subcontractors proposed to perform work for the Town's project.

Items requested by the Town may include but are not limited to the following:

1. submission of at least three (3) projects of similar size, scope and complexity completed within the last five (5) years, including the completion date, owner's name, authorized representative of the owner familiar with the project, address and phone number. If the bidder performed the work for a project as a subcontractor the general contractor's name, authorized representative of the contractor familiar with the project, address and phone number shall also be provided
2. a list of subcontractors including names, addresses, contact information.
3. Contractor's most recent annual financial statements, preferably audited, including your latest balance sheet, income statement, cash flows and notes to the financial statements showing the following items:
 - Current Assets (e.g., cash, joint venture accounts, accounts receivable, notes receivable, accrued income, deposits, materials inventory and prepaid expenses);
 - Net Fixed Assets;
 - Other Assets;
 - Current Liabilities (e.g., accounts payable, notes payable, accrued expenses, provision for income taxes, advances, accrued salaries and accrued payroll taxes);
 - Other Liabilities (e.g., capital, capital stock, authorized and outstanding shares par values, earned surplus and retained earnings).
4. Resumes of principal personnel proposed for the project.

5. A list of equipment proposed for the project.

Failure to submit acceptable information that demonstrates the bidder's ability to perform the work, within three (3) days after request from the Town may result in a determination that a bidder is not a responsible contractor to perform the work anticipated solely for Town of Emmitsburg DePaul Street Waterline Replacement Phases 1 & 2 Project. Failure to submit additional information requested by the Town in a timely manner may also result in a determination that a bidder is not a responsible contractor.

- F. Subsequent to the evaluation of bids a construction contract may be awarded by the Town. The Town reserves the right to reject any or all bids and to waive any informality or deficiency in bids received, whenever such rejection or waiver is of a Bidder who has previously failed to perform properly or to complete, on time, contracts of a similar nature, or the bid of a Bidder, who after investigation, is not, in the view of the Town, in a position to perform the Contract.

The successful Bidder shall be required to execute a Construction Contract with the Owner and provide the Town with a Performance Bond and a Labor and Materials Bond in accordance with C800 Supplemental Conditions.

- G. The successful Bidder shall be required to provide to the Town the Insurance listed in the following Section.

15. **Basis of Award:** It is the intent of the Town to award the Contract to the lowest responsive, responsible bidder based on the total bid price, provided the bid price is reasonable and it is in the interests of the Town to accept it.

16. **Bid Protest:** Interested party means an actual or prospective bidder, offeror, or contractor that may be aggrieved by the solicitation or award of a contract and who files the protest. Protestor means any actual or prospective bidder, offeror, or contractor who is aggrieved in connection with the solicitation or the award of a contract and who files the protest. An interested party may protest to the award of a contract for supplies, services, or construction. The protest shall be in writing and addressed to the Purchasing Manager. Protest based upon alleged improprieties in any type of solicitation which are apparent before bid opening or closing date and time for the receipt of initial proposals shall be filed before bid opening or the closing date and time for the receipt of the bid. In all cases bid protests shall be filed not later than seven days after the basis for the protest is known or should have been known, whichever is earlier. The term "filed" means receipt on the Purchasing Department. Any protest filed after the time limit prescribed above shall not be considered.

The written protest shall include as a minimum the following:

The name and address of the protestor

Appropriate identification of the procurement, and, if a contract has been awarded its number, if known

A statement of reasons for the protest

Supporting exhibits, evidence, or documents to substantiate any claims unless not available within the filing time in which case the expected availability date shall be indicated.

The Purchasing Manager shall submit a copy of the protest to the Town Attorney upon receipt of protest. Any additional information requested of the protestor by the Purchasing Director shall be submitted within five days after receipt of notification in order to expedite consideration of the protest. Failure to comply with a request for information by the Purchasing Manager may result in a resolution of the protest without consideration of any information which is untimely filed pursuant to such

DePaul Street Waterline Replacement Phases 1 & 2
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

request. Upon written request, the Purchasing Manager, shall make available to any interested party information submitted that bears on the substance of the protest except when information is proprietary or otherwise permitted or required to be withheld by law or regulation. A decision on a protest shall be made by the Purchasing Manager in writing as expeditiously as possible after receiving all relevant information. Before issuance, the decision of the Purchasing Manager shall be reviewed by the Town Attorney.

17. **Construction stakeout** will be provided by the Contractor. Contractor shall protect and maintain all hubs and guard stakes. If hubs or stakes are damaged and if any re-stake is required, the contractor will be required to install at no additional cost to the Town.
18. **Construction Materials Testing and Inspections** will be provided by the Contractor. The Contractor shall be responsible for scheduling all necessary inspections and testing. Inspections and testing shall be required for all activities including but not limited to: grading, placement of fill, compaction, placement of asphalt, grouting of voids, etc. The Contractor is to provide a Quality Control Plan with their bid.
19. The Contractor shall ascertain the nature and location of the work and the general and local conditions which can affect the work or the cost thereof. Any failure by the Contractor to do so will not relieve him from responsibility for successfully performing the work without additional expenses. The Owner and Engineer assume no responsibility for any understanding or representations concerning conditions made by any of its officers or agents prior to the execution of this Contract, unless such understanding or representations by the Owner or Engineer are expressly stated in the Contract. The Contractor shall specifically note that the drawings do not show all existing utilities, laterals, surface features or features to be relocated. The Contractor shall be responsible for visiting the site to ascertain the extent of removal/relocation and include this in his Bid. The Town of Emmitsburg is seeking a complete utility construction project.
20. The Contractor shall provide site-specific security as he deems appropriate to protect the materials and work. Where work is conducted within a residential yard area, temporary safety fence must be erected by the Contractor.
21. Prior to the pre-construction meeting, the contractor shall submit an installation phasing plan to the Town for approval. The work shall be accomplished in multiple phases to minimize impacts to residents and to maintain adequate fire protection/access to the residents.
22. The contractor shall be responsible to determine his/her own means and methods of construction. The Engineer and/or the Town will not supervise, direct, control, or have authority over the Contractor's means and methods. The contractor shall perform the work in each phase in the sequence shown on the approved phasing plan.
23. A Wetlands and Waterways permit has been obtained by the Town of Emmitsburg. The Contractor shall not disturb any area within the stream unless specifically permitted under the Wetlands and Waterways permit. The Contractor shall not enter the stream without first notifying and subsequently receiving permission from MDE Wetlands & Waterways.
24. The Town of Emmitsburg has applied for coverage under the **MARYLAND DEPARTMENT OF THE ENVIRONMENT – GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY**. The permit includes a new section that requires that construction sites be monitored for a number of significant sediment discharge problems that, if observed, trigger a review of site conditions on a first occasion and then review of plans to see if additional controls are needed.

The permit includes requirements self-inspection and record-keeping. The permit also

incorporates a section from EPA's general permit language that states that a permittee must select, install, implement and maintain control measures at a construction site that minimize pollutants in the discharge as necessary to meet applicable water quality standards and that, in general, the stormwater controls developed, implemented, and updated consistent with the laws and regulations cited in the general permit are considered as stringent as necessary to ensure that discharges covered by this permit do not cause or contribute to an excursion above any applicable water quality standard.

The Contractor SHALL BE responsible for providing the Town of Emmitsburg with inspection reports as outlined in the permit. The inspections shall be completed on the inspection forms provided and shall, at a minimum, meet the following requirements:

The Contractor SHALL BE responsible for obtaining their own coverage under the MARYLAND DEPARTMENT OF THE ENVIRONMENT – GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY.

Monitoring and Records.

For the purposes of monitoring, a permittee must do all of the following:

1. During construction, maintain at the site the approved erosion and sediment control plan, the approved stormwater management plan, a copy of this General Permit, a copy of the NOI application and a copy of the NOI approval form.
2. During the entire period of permit coverage, for all active and inactive sites, conduct inspections of the permitted area at the following intervals:
 - a. Pre-storm event
 - b. During storm event
 - c. Post-storm event - Can be counted as weekly routine
 - d. Due to a discharge of significant amounts of sediment
 - e. Monthly for stabilized areas; list phases/lots stabilized
3. Maintain at the site written reports of all inspections conducted by the permittee. The permittee shall use the standard written report form as provided by MDE. The permittee shall complete all applicable portions of the form, and may attach additional information to the form. The permittee shall ensure that the report includes:
 - a. Project Name - Make sure the name & phase match the permit
 - b. Permittee - Make sure the name matches the permit
 - c. Permit Number - This is the assigned MDRC # given on the Permit
 - d. Date of Inspection/Start time/End time
 - e. Actual date/time of inspection
 - f. Inspector's Name
 - g. Name of the person filling out the form - Person must have a Responsible Personnel Certification
 - h. Responsible Personnel Certification #
 - i. Inspector's Contact Information
 - j. Date Earth Disturbance Began - Earth disturbance may not begin prior to receiving an approved permit

- k. Describe present phase of construction
4. Maintain pertinent data related to the NOI (including all data used to complete the NOI), self-inspection reports and inspection reports and enforcement actions issued to the permittee by the appropriate enforcement authority, including but not limited to all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, for a period of three (3) years from the date that the site is permanently stabilized as follows:
 - a. Permittees must retain the records described in described in Part III.C.8 of the General Permit for three years from the date of Notice of Termination.
 - b. Maintain all inspection reports and enforcement actions issued to the permittee from any appropriate enforcement or approval authority, including MDE, the delegated enforcement authority, or the U.S. Environmental Protection Agency.
 - c. Records of monitoring information must include:
 - i. The date, exact place, and time of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The individual(s) who performed the analyses;
 - v. The analytical techniques or methods used; and
 - vi. The results of such analyses.
 5. Ensure that samples and measurements taken for the purpose of monitoring are representative of the monitored activity.
 6. There are no exceptions to inspections, even if:
 - a. There is a Holiday break
 - b. The contractor is not present
 - c. Unexpected or planned conferences, etc.

The logbook should remain on the project site at all times

25. In accordance with the Maryland General Permit for Discharges from Stormwater Associated with Construction Activity (the 20-CP), where there are multiple operators associated with the same project, **all operators must obtain permit coverage**. An “operator” is defined as any party that has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications or the party that has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions including authorization to direct workers at a site to carry out activities required by the permit, correct violations (including repair or installation of erosion and sediment controls (E&SC)), and/or halt construction activity until violations of the permit are corrected; in most cases this is the general contractor of the project.

[END OF SECTION]

DePaul Street Waterline Replacement Phases 1 & 2
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

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SPECIAL CONDITIONS

A. BUY AMERICA, BUILD AMERICA PROVISION

The prime contractor and its subcontractors shall comply with the Build America, Buy America Act (BABAA) requirements under Title IX of the Infrastructure Investment and Jobs Act (“IIJA”), Pub. L. 177-58.

Materials used for the utility work and permanently incorporated into the project, including all materials/items supplied by the Contractor, shall comply with the Buy America preference requirements including:

- 1 All iron and steel used in the project are produced in the United States.

This means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

- 2 All manufactured products used in the project are produced in the United States.

This means the manufactured product was manufactured in the United States, and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation.

- 3 All construction materials are manufactured in the United States.

This means that all manufacturing processes for the construction material occurred in the United States. Common construction materials used in public works infrastructure projects are or consist primarily of non-ferrous metals, plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables), glass (including optic glass), lumber, and drywall.

The term 'construction materials' shall not include cement and cementitious materials, aggregates such as stone, sand, or gravel, or aggregate binding agents (including asphalt cement) or additives; or any material composed of or derived from these items.

Items that consist of two or more of the listed materials that have been combined together through a manufacturing process, and items that include at least one of the listed construction materials combined with a material that is not listed through a manufacturing process, shall be treated as manufactured products, rather than as construction materials.

The prime contractor and its subcontractors shall include the Manufacturer’s Certification for BABAA requirements with all applicable submittals. If a specific manufacturer is used in the bidding, a statement that the Manufacturer will comply with BABAA must be included with the bid submission. The contractor shall comply with BABAA

requirements, including coordination with manufacturers, distributors, and suppliers to correct deficiencies in any BABAA documentation.

Products manufactured of foreign steel or iron materials may be used, provided the cost of such products as they are delivered to the project does not exceed 0.1% of the total contract amount or \$2,500.00, whichever is greater. If a supplier or fabricator wishes to use a partial fabrication process where domestic and foreign source components are assembled at a domestic location, the “as delivered cost” of the foreign components should include any transportation, assembly and testing costs required to install them in the final product.

The installation of materials or products that are not compliant with BABAA requirements shall be considered defective work.

Contractor shall certify upon completion that all work and materials have complied with BABAA requirements.

For any change orders, Contractor shall provide BABAA documentation for any new products or materials required by the change.

By submitting an application for payment, based in whole or in part on furnishing equipment or materials, Contractor certifies that such equipment and materials, to contractor’s knowledge, are compliant with BABAA requirements.

B. PRICES SHALL BE FIXED AND FIRM FOR TERM OF CONTRACT

If the bidder is awarded a contract under this bid solicitation, the prices quoted by the bidder on the Bid Form shall remain fixed and firm during the term of this contract; provided however, that the bidder may offer incentive discounts from this fixed price to the Town at any time during the contractual term.

C. BID CLARIFICATION

Any questions or clarifications concerning this Invitation to Bid shall be submitted in writing by e-mail or facsimile to the Town of Emmitsburg fax: (301) 600-6313, Cathy Willets Cwillets@emmitsburgmd.gov AND Sabrina King Skling@emmitsburgmd.gov e-mail being the preferred method. The bid title shall be referenced on all correspondence. All questions must be received no later than 9:00 AM on February 6, 2024.

All responses to questions will be addressed in the form of an official Addendum and will be posted on the Town of Emmitsburg Web Site. NO QUESTIONS WILL BE RECEIVED VERBALLY OR AFTER SAID DEADLINE

D. PROGRESS MEETINGS

The Town will conduct monthly progress meetings on-site at a time suitable to Town, at which time the progress of the work shall be reported upon with reference to previously submitted progress schedules. Responsibility will rest with the Contractor concerning competent

representation of Subcontractors. Minutes of these meetings shall be taken by the Contractor and distributed to the Town's Project Manager, Inspector and Consulting Engineer not more than one (1) week after each meeting.

E. TIE BIDS

Please be advised that in accordance with Maryland COMAR 21.05.02.14 Tie bids are responsive bids from responsive bidders that are identical in price, terms, and conditions and which meet all the requirements and evaluation criteria set forth in the Invitation for Bids. In the event of a tie Bid, the Town will use said COMAR regulation to determine the award of the Contract/Bid.

All bids submitted shall include the completed Bid Form and all required product information and any other items as indicated on the Bid Form. Bids may be considered "Non-Responsive" if the required information is not submitted by the date and time specified.

F. NO PARTNERSHIP OR JOINT VENTURE

Nothing contained in this Contract will be deemed or construed to create a partnership or joint venture between the Town of Emmitsburg and Contractor, or to create any other relationship between the parties.

G. LOCATING & PROTECTION OF UNDERGROUND UTILITIES & SITE INVESTIGATION

It will be the responsibility of the bidder to coordinate the locating of services prior to any excavation work. The Contractor shall contact Miss Utility at 1-800-257-7777 at least 48 hours prior to commencing work. Existing utilities and sewer facilities are shown on the drawings from available data and may not represent all facilities present or may not represent facilities at their actual location. The contractor is also advised that the drawings may not represent all surface features that may exist in the area of work, such as fences, shrubs, trees, sheds, etc. The contractor shall be responsible for minimizing the disturbed area and for restoring all disturbed or destroyed features.

H. PROJECT SCHEDULE

The purpose of a progress schedule is to ensure adequate planning and execution of the work and to evaluate the progress of the work. The Contractor's progress schedule, updates, revisions and reports will be an integral part of the Town's management of the capital program. The Contractor's schedules will be used by the Town to monitor progress, plan the level of effort by its own work forces and consultants, and as a critical decision making tool. Accordingly, the Contractor shall ensure that its progress schedule submissions are both accurate and timely.

Within 10 days after notice to proceed, the Contractor shall furnish the Town a "Progress Schedule" showing the proposed order of work and indicating the time required for the completion of the work. Said progress schedule shall be used to establish major construction operations and to check on the progress of the work. The Contractor shall submit revised progress schedules as directed by the Town's representative.

If the Contractor fails to submit the progress schedule within the time prescribed, or the revised schedule within the requested time, the Town of Emmitsburg may withhold approval of progress payment estimates until such time as the Contractor submits the required progress schedules.

All costs to create and update the progress schedule shall be solely the Contractor's obligation and will be at no additional cost to the Town unless specifically provided for in other contract provisions.

If the work falls behind the progress schedule, the Contractor shall take such actions as necessary to improve its progress. If the Contractor is behind schedule any month, the Contractor shall indicate what measures it will take in the next thirty (30) days to put the work back on schedule so as to meet the contract completion date specified in the contract. In preparing the revised schedule, the Contractor shall consider increasing its work force, construction plant and equipment, the number of work shifts, etc.

I. WORKING HOURS

Unless special permission is given by the Town, all work shall be done between 7:00 A.M. and 3:30 P.M., Monday through Friday.

Work within the MSHA right-of-Way for North Seton Avenue shall comply with MSHA working hours: Monday - Thursday 9:00am - 3:00pm, Friday 9:00am - 2:00 pm.

J. UTILITIES

The existence of utilities other than those shown on the drawings is not known. If during construction operations the Contractor should encounter utilities, he shall immediately notify the Town Engineer and take all the necessary and proper steps to protect the continuance of services of such facilities.

It shall be the Contractor's responsibility to notify the following utilities or agencies for utility locates and approvals to proceed with work, at least five (5) working days prior to proceeding with an excavation or construction:

1. Miss Utility - 1-800-257-7777
2. Potomac Edison - (301) 694-4486
3. Columbia Gas Co. - 1-888-460-4332
4. Verizon Telephone Co. - (410) 393-6369
5. Comcast - (301) 668-3140
6. Town of Emmitsburg Public Works Dept. - (301) 600-6300

K. PERMITS

The Town will provide the Grading Permit for this project. All other permits shall be obtained by the Contractor in accordance with the General Provisions.

L. TOWN PROJECT MANAGER AUTHORITY:

The Town Project Manager and/or their designee shall give all orders and directions contemplated under this contract and specifications relative to the execution of the work. The Town Project

Manager shall determine the amount, quality, acceptability, and fitness of the several kinds of work and materials, which are to be paid for under this contract and shall decide all questions, which may arise in relation to said work and the construction thereof. The Town Project Manager's estimates and decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any questions shall arise between the parties hereto relative to said contract or specifications, the determination or decision of the Town Project Manager shall be a condition precedent to the right of the Contractor to receive any money or payment for work under this contract affected in any manner or to any extent by such question.

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

M. LEGAL NOTICE AND SERVICE THEREOF:

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

N. USE OF PREMISES AND REMOVAL OF DEBRIS:

The Contractor expressly undertakes at his/her own expense:

- a. To take every precaution against injuries to persons or damage to property.
- b. The CONTRACTOR shall confine all materials and their storage and the operations of the CONTRACTOR's workmen to the limits indicated by laws, ordinances, permits, directions of the ENGINEER, and as shown on the Plans. The CONTRACTOR will not unreasonably encumber the premises with such materials, but shall store them in orderly fashion, such that they will not interfere with the work under this Contract (or other contracts) or with the operation of the OWNER's facilities.
- c. The Town of Emmitsburg will not provide the Contractor with a staging / storage area within the project limits. No materials, other than that which can be used within a single work day, may be stored within the Right-of-Way. Storage shall be, so as not to interfere with pedestrian or vehicular traffic, and in accordance with Section 02040 of this document. If the Contractor so desires to obtain private property for use as a staging / storage area the Contractor shall enter into an agreement with the property owner and shall provided the Town with a copy of the written agreement. The agreement shall hold harmless the Town of Emmitsburg for any damage to the property caused by the Contractor or his subcontractors.
- d. The Contractor shall be responsible for obtaining all necessary permits, including but not limited to approval of a sediment and erosion control plan for the storage area.
- e. The Contractor shall be solely responsible for replacing or repairing damage to existing turf, buildings, structures, sidewalks, roads, parking lot surfaces, and other existing assets to a condition equal to or better than original.
- f. To frequently clean up all refuse, rubbish, scrap materials, and debris caused by his/her

operation, that the work site shall be neat and orderly at all times.

- g. To remove all surplus materials, false work, temporary structures, including foundations thereof, and debris of every nature resulting from his/her operations, and to put the site in a neat, orderly condition before final payment is made by the Town of Emmitsburg.
- h. Before final acceptance of the work and as a prerequisite to the release of the final payment the CONTRACTOR shall secure a written release from the authorities having jurisdiction over the lands (including easements) occupied by the CONTRACTOR certifying to the satisfactory restoration of all pavements, other surfaces, and utility structures removed or safeguarded for the work.

O. PUBLIC CONVENIENCE AND SAFETY:

In addition to the requirements of Section 7, GP-7.06, of the MDSHA "Standard Specifications for Construction and Materials", July 2023, add the following provisions:

- A. Dust control by sprinkling water or the use of chemicals shall be performed by the Contractor to the satisfaction of the Town Project Manager.
- B. The condition of the work at all times shall be such that sudden storms or prolonged rainfall will not cause damage to property in the vicinity of the work that could in any way be attributed to the performance of the work.
- C. If, in the opinion of the Town Project Manager, the public has been unreasonably inconvenienced to a great extent, or that certain conditions provide a threat to public safety, or that work performed by the Contractor has caused damage to property in the area of the work, which has not been remedied quickly and satisfactorily, the Town Project Manager shall have the authority to order all operations to cease until such time as such conditions are remedied to his satisfaction, and any delay caused thereby shall not be considered just cause for any extension of time in the completion of the contract. Upon refusal of the Contractor to promptly comply with corrective measures, the Town Project Manager will immediately proceed with correcting the deficiencies in the same manner as specified in the MDSHA "Standard Specifications for Construction and Materials", July 2023, Section GP-5.12.

P. PROTECTION OF WORK AND PROPERTY - EMERGENCY:

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

In the event of temporary suspension of work, or during inclement weather, or whenever the Town Project Manager shall direct, the Contractor and his subcontractors will cause to protect carefully his/her and their work and materials against damage or injury from the weather. If, in the opinion of the Town Project Manager, any work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or any of his/her subcontractors to so

protect his/her work, such materials shall be removed and replaced at the expense of the Contractor.

In case of an emergency, which threatens loss or injury of property and/or safety of life, the Contractor will be allowed to act without previous instruction from the Town Project Manager in a diligent manner. He/she shall notify the Town Project Manager immediately thereafter. Any claim or compensation by the Contractor due to such extra work shall be promptly submitted to the Town Project Manager for approval.

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

The amount of reimbursement claimed by the Contractor on account of an emergency action shall be determined in the manner provided in paragraph 38 of the GENERAL CONDITIONS.

Q. COST OVERRUNS:

The Contractor and the Inspector shall continually monitor unit price items that could result in appreciable overruns. The Contractor shall immediately notify the Town Project Manager as soon as it appears as though an overrun may result. The Contractor will estimate the final extent of the extra costs and the necessary authorizations for same and submit to the Town Project Manager for authorization. This authorization will require at least seven (7) calendar days to obtain. In the interim, the Town Project Manager shall be the sole judge as to whether or not the plan quantities can be exceeded.

There will be instances where overruns are unavoidable and the work on the project will be jeopardized if construction is stopped until the needed authorization is obtained. The instances are considered to be the exception, not the rule. However, in the event of such occurrences, the Town Project Manager will personally authorize the work verbally and again in writing within forty-eight (48) hours of such verbal approval. All verbal approvals given by the Town Project Manager are to be entered in the appropriate records of the inspector and are to be initialed by the Contractor's superintendent.

It shall be the responsibility of the Contractor to acquaint his/her employees, subcontractors, and other representatives with this policy, and any costs incurred by the Contractor on quantity overruns without the prior approval of the Town Project Manager and/or the Mayor and Board of Commissioners of the Town of Emmitsburg shall be at the risk of the Contractor.

R. EXTRA WORK:

Without invalidating the contract, the Owner may order extra work of the kind bid upon or make changes by altering, adding to or deducting from the work, the contract sum being adjusted accordingly, and consent of the Surety being first obtained where necessary or desirable. All the work of the kind bid upon shall be paid for at the price stipulated in the proposal, and no claims for any extra work or materials shall be allowed unless the work is ordered in writing by the Owner or its Town Project Manager, acting officially for the Owner, and the price is stated in the order.

Charges or credits for the work covered by the approved change shall be determined by one or

more, or a combination of the following:

A. Unit bid prices previously approved.

B. An agreed lump sum.

C. The actual cost of:

1. Labor, including foreman;
2. Materials entering permanently into the work;
3. The ownership or rental cost of construction plant and equipment during the time of use on the extra work;
4. Power and consumable supplies for the operation of power equipment;
5. Insurance;
6. Social security and old age unemployment contributions

To the cost under (b) and (c) above, there shall be added a fixed fee to be agreed upon but not to exceed fifteen percent (15%) of the estimated cost of the work. The fee shall be compensation to cover the cost of supervision, overhead, bond, profit, and any other general expenses. When work is performed under the terms of (c) above, the Contractor shall furnish satisfactory bills, payrolls, and vouchers covering all items of cost and, when requested by the Owner, give the Owner access to accounts relating thereto.

S. SUSPENSION OF WORK DUE TO LITIGATION:

Should the Owner be prevented or enjoined from proceeding with work or from authorizing its prosecution, by reason of any litigation, the Contractor shall not be entitled to make or assert claim for damage due to the delay. Time for completion of the work will be extended to such reasonable time as determined by the Owner in writing.

T. CORRECTION OF WORK:

All work and materials (whether incorporated in the work or not), all processes of manufacture, and all methods of construction shall be subject to the inspection of the Town Project Manager, who shall be the final judge of the quality of the work, materials, processes of manufacture, and methods of construction for the purposes for which they are used.

Any defective work, whether the result of poor workmanship, use of defective materials, damage through carelessness or any other cause found to exist shall be removed and replaced by work and materials which shall conform to the specifications or shall be remedied otherwise in an acceptable manner authorized by the Town Project Manager.

Upon failure on the part of the Contractor to comply promptly with any order of the Town Project Manager, made under the provisions of these General Provisions, the Town Project Manager shall have the authority to cause defective work to be remedied or removed and replaced, unauthorized work to be removed, and to deduct the cost from any monies due or to become due the Contractor under this contract.

U. PAYMENT TO THE CONTRACTOR:

The Owner shall make a progress payment to the Contractor on the basis of a duly certified and

approved estimate of the work performed during the proceeding calendar month under the contract. To insure proper performance of the contract, the Owner shall retain five percent (5%) of the amount of east estimate until final completion and acceptance of all work covered by the contract, unless otherwise stated.

In preparing estimates, the materials delivered on the site and preparatory work done may be taken into consideration in accordance with the MDSHA Terms and "Standard Specifications for Construction and Materials", July 2023 section TC-7.02.

All material and work covered by partial payments made shall hereupon become the sole property of the Owner, but this provision shall not be construed as relieving the Contractor from the sole responsibility for (A) the care and protection of materials, (B) repair to previously approved and paid for work that has been subsequently damaged, or restoration of any, (C) as a waiver of the right of the Owner to require fulfillment of all the terms of the contract.

The Contractor agrees that he/she will indemnify and save the Owner harmless from all claims growing out of the lawful demands of: subcontractors, laborers, workmen, mechanics, material, men, furnishers of machinery (and equipment, power tools, and all supplies), including commissary, incurred in the performance of this contract. The Contractor shall, at the Owner's request, furnish satisfactory evidence that all obligations of the nature hereinabove designated have been paid, discharged, or

waived. If the Contractor fails to do so, then the Owner may, after having given written notice to the said Contractor, pay unpaid bills, of which the Owner has written notice, by withholding from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged. Payment to the Contractor shall then be resumed, in accordance with the terms of this contract, but in no event shall the provisions of this sentence be construed to impose any obligations upon the Owner to either the Contractor or his/her Surety.

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

V. ACCEPTANCE OF FINAL PAYMENT AS RELEASE:

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

W. GENERAL GUARANTY:

Neither the final payment, nor any provision on the contract documents, nor partial, or entire occupancy of the premises by the Owner shall constitute an acceptance of work not done in accordance with the contract documents, or relieve the Contractor of liability in respect to any express warranties or responsibilities for faulty materials or workmanship. The Contractor shall remedy any defects in the work and pay for any damage to other work resulting therefrom,

which shall appear within a period of one year from the date of final acceptance of work unless a shorter period is specified. The Owner will give notice of observed defects within 30 days of the one-year anniversary of final acceptance.

X. RIGHT OF THE OWNER TO TERMINATE CONTRACT:

In the event that any of the provisions of this contract are violated by the Contractor, or by any of his/her subcontractors, the Owner may serve written notice upon the Contractor and the Surety of its intention to terminate the contract. Such notices shall contain the reason(s) for such intention to terminate the contract, and unless within ten (10) days after the serving of such notice upon the Contractor, such violations or delay shall cease and satisfactory arrangements or correction be made, the contract shall, upon the expiration of said ten (10) days cease and terminate.

In the event of any such termination, the Owner shall immediately serve notice thereof upon the Surety and Contractor, and the Surety shall have the right to take over and perform the contract; provided, however, that the Surety does not commence performance thereof within ten (10) days from the date of the mailing of such Surety of Notice of Termination, the Owner may take over the work and prosecute the same to completion by contract or by force account at the expense of the Contractor. The Contractor and his/her Surety shall be liable to the Owner for any excess cost occasioned by the Owner thereby, and in such event the Owner may take possession of and utilize in completing the work, such materials, appliances, equipment, and plans as may be on the site of the work and necessary therefore.

Y. DRAWINGS AND SPECIFICATIONS FURNISHED TO CONTRACTOR:

The Town will furnish free of charge to the successful Contractor four (4) hard copies of the contract documents and one (1) digital copy of the construction plans for the project. Any additional copies requested shall be at the expense of the Contractor.

Z. AS BUILT REQUIREMENTS:

The Contractor shall submit complete redlined "as-builts" on the project's contract drawings prior to the issuance of the final payment by the Town. Emphasis shall be placed on actual locations and elevations of hidden items not readily obtained by subsequent field surveys. As-built information shall be furnished to the Town in digital AutoCAD format and hard copy drawings.

AA. RELEASE OF LIENS:

The Contractor shall submit to the Town a complete "Release of Liens" from all subcontractors and the general Contractor prior to the issuance of final payment by the Town.

BB. OPERATIONS AND MAINTENANCE MANUAL:

The general Contractor shall submit to the Town two complete sets of any "Operations and Maintenance" manuals for all equipment provided in the project by the Contractor.

CC. FINAL WALK THRU AND INSPECTION:

The final walk thru inspection shall be performed by all parties involved at the project completion. The Contractor shall inform the Town Project Manager, in writing, the substantial completion date of the project. The Contractor will be notified by the Town Project Manager within ten (10) working days of any incomplete and/or defective work. The Contractor shall immediately take such measures as necessary to remedy such deficiencies and shall notify the Town Project Manager at completion. A second inspection shall be performed as required.

DD. SOLID WASTE DISPOSAL

1. Any solid waste including construction, demolition and land clearing debris, generated from the subject project, must be properly disposed of at a permitted solid waste acceptance facility, or recycled if possible. Contact the Solid Waste Program at (410) 537-3315 for additional information regarding solid waste activities and contact the Resource Management Program at (410) 537-3314 for additional information regarding recycling activities.
2. The Resource Management Program should be contacted directly at (410) 537-3314 by those facilities which generate or propose to generate or handle hazardous wastes to ensure these activities are being conducted in compliance with applicable State and federal laws and regulations. The Program should also be contacted prior to construction activities to ensure that the treatment, storage or disposal of hazardous wastes and low-level radioactive wastes at the facility will be conducted in compliance with applicable State and federal laws and regulations

[END OF SECTION]

**HUD REQUIREMENTS
AND
PRE-DETERMINED WAGE RATES**

**DAVIS-BACON ACT
STIPULATIONS**

1. The contractor/subcontractor shall pay all mechanics and laborers employed directly on the site of the work, unconditionally and at least once a week, and without subsequent deduction or rebate on any account, the full amounts accrued at time of payment, computed at wage rates not less than those stated in the advertised specifications, regardless of any contractual relationship which may be alleged to exist between the contractor or subcontractor and the laborers and mechanics;
2. The contractor will post the scale of wages to be paid in a prominent and easily accessible place at the site of the work; and
3. The Town may withhold from the contractor so much of accrued payments as the Town Project Manager considers necessary to pay to laborers and mechanics employed by the contractor or any subcontractor on the work the difference between the rates of wages required by the contract to be paid laborers and mechanics on the work and the rates of wages received by the laborers and mechanics and not refunded to the contractors or their agents.
4. Discharge of obligation – The obligation of a contractor or subcontractor to make payment in accordance with the prevailing wage determination of the Secretary of Labor, may be discharged by making payments in cash, by making contributions described in Section 3141(2)(B)(i) of the Davis Bacon Act, Title 40 by assuming an enforceable commitment to bear the costs of a plan or program referred to in Section 3141(2)(B)(ii) of the Davis Bacon Act, Title 40, or by any combination of payment, contribution and assumption, where the aggregate of the payments, contributions and costs is not less than the basic hourly rate of pay plus the amount referred to in Section 3141(2)(B).
5. Overtime Pay – In determining the overtime pay to which a laborer or mechanic is entitled under any federal law, the regular or basic hourly rate of pay (or other alternative rate on which premium rate of overtime compensation is computed) of the laborer or mechanic is deemed to be the rate computed under Section 3141(2)(A) of the Davis Bacon Act, Title 40, except that where the amounts of payments, contributions or costs incurred with respect to the laborer or mechanic exceeds the applicable prevailing wage, the regular or basic hourly rate of pay (or other alternative rate) is the amount of payments, contributions or costs actually incurred with respect to the laborer or mechanic minus the greater of the amount of contributions or costs of the types described in Section 3141(2)(B) of this title actually incurred with respect to the laborer or mechanic or the amount determined under Section 3141(2)(B) but not actually paid.

A. 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.

1. Minimum wages and fringe benefits

- i. All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), 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 basic hourly 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. As provided in 29 CFR 5.5(d) and (e), the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(v) of these contract clauses; 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 must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) 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 classifications and wage rates conformed under 29 CFR 5.5(a)(1)(iii)) and the 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 by the workers.

ii. Frequently recurring classifications

- A.** In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to 29 CFR 5.5(a)(1)(iii), provided that:
1. The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;
 2. The classification is used in the area by the construction industry; and
 3. The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.
- B.** The Administrator will establish wage rates for such classifications in accordance with 29 CFR 5.5(a)(1)(iii)(A)(3). Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

iii. Conformance

- A.** The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be

classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate 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 used 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. The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.
- C. If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- D. In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- E. The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under 29 CFR 5.5 (a)(1)(iii)(C) and (D). The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to 29 CFR 5.5 (a)(1)(iii)(C) or (D) must 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.

iv. Fringe benefits not expressed as an hourly rate

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 may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

v. Unfunded plans

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, in accordance with the criteria set forth in 29 CFR 5.28, 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.

- vi. Interest** In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding

i. Withholding requirements

The U. S. Department of Housing and Urban Development may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in 29 CFR 5.5(a) for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in 29 CFR 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work (or otherwise working in construction or development of the project under a development statute) all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in 29 CFR 5.5(a)(3)(iv), HUD may on its own initiative and after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, 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.

ii. Priority to withheld funds

The Department has priority to funds withheld or to be withheld in accordance with 29 CFR 5.5(a)(2)(i) or (b)(3)(i), or both, over claims to those funds by:

- A. A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- B. A contracting agency for its procurement costs;
- C. A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- D. A contractor's assignee(s);
- E. A contractor's successor(s); or
- F. A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901-3907.

3. Records and certified payrolls

i. Basic record requirements

A. Length of record retention. All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

B. Information required Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; 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 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

C. Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(v) 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 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must 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.

D. Additional records relating to apprenticeship Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

ii. Certified payroll requirements

A. Frequency and method of submission The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to HUD if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the certified payrolls to the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records, for transmission to HUD. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system

B. Information required The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i)(B), except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (*e.g.*, the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the sponsoring government agency (or the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records).

C. Statement of Compliance Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

1. That the certified payroll for the payroll period contains the information required to be provided under 29 CFR 5.5(a)(3)(ii), the appropriate information and basic records are being maintained under 29 CFR 5.5 (a)(3)(i), and such information and records are correct and complete;
2. That each laborer or mechanic (including each helper and apprentice) working 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; and

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(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.
 - D. **Use of Optional Form WH-347** The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the “Statement of Compliance” required by 29 CFR 5.5(a)(3)(ii)(C).
 - E. **Signature** The signature by the contractor, subcontractor, or the contractor’s or subcontractor’s agent must be an original handwritten signature or a legally valid electronic signature.
 - F. **Falsification** The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.
 - G. **Length of certified payroll retention** The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
- iii. **Contracts, subcontracts, and related documents** The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
 - iv **Required disclosures and access**
 - A. **Required record disclosures and access to workers** The contractor or subcontractor must make the records required under 29 CFR 5.5(a)(3)(i)–(iii), and any other documents that HUD or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by 29 CFR 5.1, available for inspection, copying, or transcription by authorized representatives of HUD or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.
 - B. **Sanctions for non-compliance with records and worker access requirements** If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, 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, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to 29 CFR 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.
 - C. **Required information disclosures** Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to HUD if the agency is a party to

the contract, or to the Wage and Hour Division of the Department of Labor. If the Federal agency is not such a party to the contract, the contractor, subcontractor, or both, must, upon request, provide the full Social Security number and last known address, telephone number, and email address of each covered worker to the applicant, sponsor, owner, or other entity, as the case may be, that maintains such records, for transmission to HUD, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. **Apprentices and equal employment opportunity**

i. **Apprentices**

- A. **Rate of pay** Apprentices will be permitted to work at less than the predetermined rate for the work they perform 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 (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- B. **Fringe benefits** Apprentices must 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, fringe benefits must be paid in accordance with that determination.
- C. **Apprenticeship ratio** The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to 29 CFR 5.5(a)(4)(i)(D). Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in 29 CFR 5.5(a)(4)(i)(A), must 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 this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.
- D. **Reciprocity of ratios and wage rates** Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

- ii **Equal employment opportunity** The use of apprentices and journeyworkers under this part must 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 must insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (11), along with the applicable wage determination(s) and such other clauses or contract modifications as the U.S. Department of Housing and Urban Development may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate.

7 Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8 Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9 Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

i. By entering into this contract, the contractor certifies that neither it nor 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 40 U.S.C. 3144(b) or 29 CFR 5.12(a).

ii. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or 29 CFR 5.12(a).

iii. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

11 Anti-retaliation It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

i. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, or 29 CFR parts 1, 3, or 5;

ii. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, or 29 CFR parts 1, 3, or 5;

iii. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, or 29 CFR parts 1, 3, or 5; or

iv. Informing any other person about their rights under the DBA, Related Acts, or 29 CFR parts 1, 3, or 5.

B. Contract Work Hours and Safety Standards Act (CWHSSA)

The Agency Head must cause or require the contracting officer to insert the following clauses set forth in 29 CFR 5.5(b)(1), (2), (3), (4), and (5) in full, or (for contracts covered by the Federal Acquisition Regulation) by reference, in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses must

be inserted in addition to the clauses required by 29 CFR 5.5(a) or 4.6. As used in this paragraph, the terms “laborers and mechanics” include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in 29 CFR 5.5(b)(1) the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. 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 watchpersons and guards, employed in violation of the clause set forth in 29 CFR 5.5(b)(1), in the sum of \$31 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in 29 CFR 5.5(b)(1).

3. Withholding for unpaid wages and liquidated damages

i. Withholding process The U.S Department of Housing and Urban Development or the recipient of Federal assistance may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in 29 CFR 5.5(b) on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in 29 CFR 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

ii Priority to withheld funds The Department has priority to funds withheld or to be withheld in accordance with 29 CFR 5.5(a)(2)(i) or (b)(3)(i), or both, over claims to those funds by:

A. A contractor’s surety(ies), including without limitation performance bond sureties and payment bond sureties;

B. A contracting agency for its procurement costs;

C. A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor’s bankruptcy estate;

D. A contractor’s assignee(s);

E. A contractor’s successor(s); or

F. A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901-3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in 29 CFR 5.5(b)(1) through (5) and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in 29 CFR 5.5(b)(1) through (5). In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss,

due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

- 5 Anti-retaliation** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:
- i. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in 29 CFR part 5;
 - ii. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or 29 CFR part 5;
 - iii. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or 29 CFR part 5; or
 - iv. Informing any other person about their rights under CWHSSA or 29 CFR part 5.
- C. CWHSSA required records clause** In addition to the clauses contained in 29 CFR 5.5(b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other laws referenced by 29 CFR 5.1, the Agency Head must cause or require the contracting officer to insert a clause requiring that the contractor or subcontractor must maintain regular payrolls and other basic records during the course of the work and must preserve them for a period of 3 years after all the work on the prime contract is completed for all laborers and mechanics, including guards and watchpersons, working on the contract. Such records must contain the name; last known address, telephone number, and email address; and social security number of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid; daily and weekly number of hours actually worked; deductions made and actual wages paid. Further, the Agency Head must cause or require the contracting officer to insert in any such contract a clause providing that the records to be maintained under this paragraph must be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the (write the name of agency) and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview workers during working hours on the job.
- D. Incorporation of contract clauses and wage determinations by reference** Although agencies are required to insert the contract clauses set forth in this section, along with appropriate wage determinations, in full into covered contracts, and contractors and subcontractors are required to insert them in any lower-tier subcontracts, the incorporation by reference of the required contract clauses and appropriate wage determinations will be given the same force and effect as if they were inserted in full text.
- E. Incorporation by operation of law** The contract clauses set forth in this section (or their equivalent under the Federal Acquisition Regulation), along with the correct wage determinations, will be considered to be a part of every prime contract required by the applicable statutes referenced by 29 CFR 5.1 to include such clauses, and will be effective by operation of law, whether or not they are included or incorporated by reference into such contract, unless the Administrator grants a variance, tolerance, or exemption from the application of this paragraph. Where the clauses and applicable wage determinations are effective by operation of law under this paragraph, the prime contractor must be compensated for any resulting increase in wages in accordance with applicable law.

F. HEALTH AND SAFETY

The provisions of this paragraph (F) are applicable 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 or her 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 29 CFR Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96), 40 U.S.C. § 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 subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

§60-1.4 Equal opportunity clause.

(a) *Government contracts.* Except as otherwise provided, each contracting agency shall include the following equal opportunity clause contained in section 202 of the order in each of its Government contracts (and modifications thereof if not included in the original contract):

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

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- (3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- (4) The contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (7) In the event of the contractor's non-compliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in

DePaul Street Waterline Replacement Phases 1 & 2
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(8) The contractor will include the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: *Provided*, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

(b) *Federally assisted construction contracts.* (1) Except as otherwise provided, each administering agency shall require the inclusion of the following language as a condition of any grant, contract, loan, insurance, or guarantee involving federally assisted construction which is not exempt from the requirements of the equal opportunity clause:

The applicant hereby agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60, which is paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to a grant, contract, loan, insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the following equal opportunity clause:

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

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding,

DePaul Street Waterline Replacement Phases 1 & 2
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

(4) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(8) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

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

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

The applicant further agrees that it will refrain from entering into any contract or contract modification

DePaul Street Waterline Replacement Phases 1 & 2
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

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

(2) [Reserved]

(c) *Subcontracts.* Each nonexempt prime contractor or subcontractor shall include the equal opportunity clause in each of its nonexempt subcontracts.

(d) *Inclusion of the equal opportunity clause by reference.* The equal opportunity clause may be included by reference in all Government contracts and subcontracts, including Government bills of lading, transportation requests, contracts for deposit of Government funds, and contracts for issuing and paying U.S. savings bonds and notes, and such other contracts and subcontracts as the Director of OFCCP may designate.

(e) *Incorporation by operation of the order.* By operation of the order, the equal opportunity clause shall be considered to be a part of every contract and subcontract required by the order and the regulations in this part to include such a clause whether or not it is physically incorporated in such contracts and whether or not the contract between the agency and the contractor is written.

(f) *Adaptation of language.* Such necessary changes in language may be made in the equal opportunity clause as shall be appropriate to identify properly the parties and their undertakings.

[80 FR 54975, Sept. 11, 2015]

United States Department of Labor

Office of Federal Contract Compliance Programs

Executive Order 11246, As Amended

Executive Order 11246 — Equal Employment Opportunity

SOURCE: The provisions of Executive Order 11246 of Sept. 24, 1965, appear at 30 FR 12319, 12935, 3 CFR, 1964–1965 Comp., p.339, unless otherwise noted.

Under and by virtue of the authority vested in me as President of the United States by the Constitution and statutes of the United States, it is ordered as follows:

Part I — Nondiscrimination in Government Employment

[Part I superseded by EO 11478 of Aug. 8, 1969, 34 FR 12985, 3 CFR, 1966–1970 Comp., p. 803]

Part II - Nondiscrimination in Employment by Government Contractors and Subcontractors

Subpart A – Duties of the Secretary of Labor

SEC. 201

The Secretary of Labor shall be responsible for the administration and enforcement of Parts II and III of this Order. The Secretary shall adopt such rules and regulations and issue such orders as are deemed necessary and appropriate to achieve the purposes of Parts II and III of this Order.

[Sec. 201 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

Subpart B – Contractors’ Agreements

SEC. 202

Except in contracts exempted in accordance with Section 204 of this Order, all Government contracting agencies shall include in every Government contract hereafter entered into the following provisions:

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

1. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.
2. The contractor will, in all solicitations or advancements 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, sexual orientation, gender identity, or national origin.
3. The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee’s essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an

DePaul Street Waterline Replacement Phases 1 & 2
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
5. The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
6. The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
7. In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
8. The contractor will include the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States. [Sec. 202 amended by EO 11375 of Oct. 13, 1967, 32 FR 14303, 3 CFR, 1966-1970 Comp., p. 684, EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230, EO 13665 of April 8, 2014, 79 FR 20749, EO 13672 of July 21, 2014, 79 FR 42971]

SEC. 203

- a. Each contractor having a contract containing the provisions prescribed in Section 202 shall file, and shall cause each of his subcontractors to file, Compliance Reports with the contracting agency or the Secretary of Labor as may be directed. Compliance Reports shall be filed within such times and shall contain such information as to the practices, policies, programs, and employment policies, programs, and employment statistics of the contractor and each subcontractor, and shall be in such form, as the Secretary of Labor may prescribe.
- b. Bidders or prospective contractors or subcontractors may be required to state whether they have participated in any previous contract subject to the provisions of this Order, or any preceding similar Executive order, and in that event to submit, on behalf of themselves and their proposed subcontractors, Compliance Reports prior to or as an initial part of their bid or negotiation of a contract.
- c. Whenever the contractor or subcontractor has a collective bargaining agreement or other contract or understanding with a labor union or an agency referring workers or providing or supervising apprenticeship or training for such workers, the Compliance Report shall include such information as to such labor union's or agency's practices and policies affecting compliance as the Secretary of Labor may prescribe: Provided, that to the extent such information is within the exclusive possession of a labor union or an agency referring workers or providing or supervising apprenticeship or training and such labor union or agency shall refuse to furnish such information to the contractor, the contractor shall so certify to the Secretary of Labor as part of its Compliance Report and shall set forth what efforts he has made to obtain such information.
- d. The Secretary of Labor may direct that any bidder or prospective contractor or subcontractor shall submit, as part of his Compliance Report, a statement in writing, signed by an authorized officer or agent on behalf of

DePaul Street Waterline Replacement Phases 1 & 2
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

any labor union or any agency referring workers or providing or supervising apprenticeship or other training, with which the bidder or prospective contractor deals, with supporting information, to the effect that the signer's practices and policies do not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, or national origin, and that the signer either will affirmatively cooperate in the implementation of the policy and provisions of this Order or that it consents and agrees that recruitment, employment, and the terms and conditions of employment under the proposed contract shall be in accordance with the purposes and provisions of the order. In the event that the union, or the agency shall refuse to execute such a statement, the Compliance Report shall so certify and set forth what efforts have been made to secure such a statement and such additional factual material as the Secretary of Labor may require.

[Sec. 203 amended by EO 11375 of Oct. 13, 1967, 32 FR 14303, 3 CFR, 1966–1970 Comp., p. 684; EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230, EO 13672 of July 21, 2104, 79 FR 42971]

SEC. 204

- a. The Secretary of Labor may, when the Secretary deems that special circumstances in the national interest so require, exempt a contracting agency from the requirement of including any or all of the provisions of Section 202 of this **Order** in any specific contract, subcontract, or purchase **order**.
- b. The Secretary of Labor may, by rule or regulation, exempt certain classes of contracts, subcontracts, or purchase orders (1) whenever work is to be or has been performed outside the United States and no recruitment of workers within the limits of the United States is involved; (2) for standard commercial supplies or raw materials; (3) involving less than specified amounts of money or specified numbers of workers; or (4) to the extent that they involve subcontracts below a specified tier.
- c. Section 202 of this **Order** shall not apply to a Government contractor or subcontractor that is a religious corporation, association, educational institution, or society, with respect to the employment of individuals of a particular religion to perform work connected with the carrying on by such corporation, association, educational institution, or society of its activities. Such contractors and subcontractors are not exempted or excused from complying with the other requirements contained in this **Order**.
- d. The Secretary of Labor may also provide, by rule, regulation, or order, for the exemption of facilities of a contractor that are in all respects separate and distinct from activities of the contractor related to the performance of the contract: provided, that such an exemption will not interfere with or impede the effectuation of the purposes of this **Order**: and provided further, that in the absence of such an exemption all facilities shall be covered by the provisions of this **Order**.

[Sec. 204 amended by EO 13279 of Dec. 16, 2002, 67 FR 77141, 3 CFR, 2002 Comp., p. 77141 – 77144]

Subpart C – Powers and Duties of the Secretary of Labor and the Contracting Agencies

SEC. 205

The Secretary of Labor shall be responsible for securing compliance by all Government contractors and subcontractors with this Order and any implementing rules or regulations. All contracting agencies shall comply with the terms of this Order and any implementing rules, regulations, or orders of the Secretary of Labor. Contracting agencies shall cooperate with the Secretary of Labor and shall furnish such information and assistance as the Secretary may require.

[Sec. 205 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 206

- a. The Secretary of Labor may investigate the employment practices of any Government contractor or subcontractor to determine whether or not the contractual provisions specified in Section 202 of this Order have been violated. Such investigation shall be conducted in accordance with the procedures established by the Secretary of Labor.
- b. The Secretary of Labor may receive and investigate complaints by employees or prospective employees of a Government contractor or subcontractor which allege discrimination contrary to the contractual provisions specified in Section 202 of this Order.

[Sec. 206 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 207

The Secretary of Labor shall use his/her best efforts, directly and through interested Federal, State, and local agencies, contractors, and all other available instrumentalities to cause any labor union engaged in work under Government contracts or any agency referring workers or providing or supervising apprenticeship or training for or in the course of such work to cooperate in the implementation of the purposes of this Order. The Secretary of Labor shall, in appropriate cases, notify the Equal Employment Opportunity Commission, the Department of Justice, or other appropriate Federal agencies whenever it has reason to believe that the practices of any such labor organization or agency violate Title VI or Title VII of the Civil Rights Act of 1964 or other provision of Federal law.

[Sec. 207 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 208

- a. The Secretary of Labor, or any agency, officer, or employee in the executive branch of the Government designated by rule, regulation, or order of the Secretary, may hold such hearings, public or private, as the Secretary may deem advisable for compliance, enforcement, or educational purposes.
- b. The Secretary of Labor may hold, or cause to be held, hearings in accordance with Subsection of this Section prior to imposing, ordering, or recommending the imposition of penalties and sanctions under this Order. No order for debarment of any contractor from further Government contracts under Section 209(6) shall be made without affording the contractor an opportunity for a hearing.

Subpart D – Sanctions and Penalties

SEC. 209

In accordance with such rules, regulations, or orders as the Secretary of Labor may issue or adopt, the Secretary may:

1. Publish, or cause to be published, the names of contractors or unions which it has concluded have complied or have failed to comply with the provisions of this Order or of the rules, regulations, and orders of the Secretary of Labor.
2. Recommend to the Department of Justice that, in cases in which there is substantial or material violation or the threat of substantial or material violation of the contractual provisions set forth in Section 202 of this Order, appropriate proceedings be brought to enforce those provisions, including the enjoining, within the limitations of applicable law, of organizations, individuals, or groups who prevent directly or indirectly, or seek to prevent directly or indirectly, compliance with the provisions of this Order.
3. Recommend to the Equal Employment Opportunity Commission or the Department of Justice that appropriate proceedings be instituted under Title VII of the Civil Rights Act of 1964.
4. Recommend to the Department of Justice that criminal proceedings be brought for the furnishing of false information to any contracting agency or to the Secretary of Labor as the case may be.
5. After consulting with the contracting agency, direct the contracting agency to cancel, terminate, suspend, or cause to be cancelled, terminated, or suspended, any contract, or any portion or portions thereof, for failure of the contractor or subcontractor to comply with equal employment opportunity provisions of the contract. Contracts may be cancelled, terminated, or suspended absolutely or continuance of contracts may be conditioned upon a program for future compliance approved by the Secretary of Labor.
6. Provide that any contracting agency shall refrain from entering into further contracts, or extensions or other modifications of existing contracts, with any noncomplying contractor, until such contractor has satisfied the Secretary of Labor that such contractor has established and will carry out personnel and employment policies in compliance with the provisions of this Order.

(b) Pursuant to rules and regulations prescribed by the Secretary of Labor, the Secretary shall make reasonable efforts, within a reasonable time limitation, to secure compliance with the contract provisions of this Order by methods of conference, conciliation, mediation, and persuasion before proceedings shall be instituted under subsection (a)(2) of this Section, or before a contract shall be cancelled or terminated in whole or in part under subsection (a)(5) of this

Section.

[Sec. 209 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 210

Whenever the Secretary of Labor makes a determination under Section 209, the Secretary shall promptly notify the appropriate agency. The agency shall take the action directed by the Secretary and shall report the results of the action it has taken to the Secretary of Labor within such time as the Secretary shall specify. If the contracting agency fails to take the action directed within thirty days, the Secretary may take the action directly.

[Sec. 210 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 211

If the Secretary shall so direct, contracting agencies shall not enter into contracts with any bidder or prospective contractor unless the bidder or prospective contractor has satisfactorily complied with the provisions of this Order or submits a program for compliance acceptable to the Secretary of Labor.

[Sec. 211 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 212

When a contract has been cancelled or terminated under Section 209(a)(5) or a contractor has been debarred from further Government contracts under Section 209(a)(6) of this Order, because of noncompliance with the contract provisions specified in Section 202 of this Order, the Secretary of Labor shall promptly notify the Comptroller General of the United States.

[Sec. 212 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

Subpart E – Certificates of Merit

SEC. 213

The Secretary of Labor may provide for issuance of a United States Government Certificate of Merit to employers or labor unions, or other agencies which are or may hereafter be engaged in work under Government contracts, if the Secretary is satisfied that the personnel and employment practices of the employer, or that the personnel, training, apprenticeship, membership, grievance and representation, upgrading, and other practices and policies of the labor union or other agency conform to the purposes and provisions of this Order.

SEC. 214

Any Certificate of Merit may at any time be suspended or revoked by the Secretary of Labor if the holder thereof, in the judgment of the Secretary, has failed to comply with the provisions of this Order.

SEC. 215

The Secretary of Labor may provide for the exemption of any employer, labor union, or other agency from any reporting requirements imposed under or pursuant to this Order if such employer, labor union, or other agency has been awarded a Certificate of Merit which has not been suspended or revoked.

Part III – Nondiscrimination Provisions in Federally Assisted Construction Contracts

SEC. 301

Each executive department and agency, which administers a program involving Federal financial assistance shall require as a condition for the approval of any grant, contract, loan, insurance, or guarantee thereunder, which may

DePaul Street Waterline Replacement Phases 1 & 2
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

involve a construction contract, that the applicant for Federal assistance undertake and agree to incorporate, or cause to be incorporated, into all construction contracts paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to such grant, contract, loan, insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the provisions prescribed for Government contracts by Section 202 of this Order or such modification thereof, preserving in substance the contractor's obligations thereunder, as may be approved by the Secretary of Labor, together with such additional provisions as the Secretary deems appropriate to establish and protect the interest of the United States in the enforcement of those obligations. Each such applicant shall also undertake and agree (1) to assist and cooperate actively with the Secretary of Labor in obtaining the compliance of contractors and subcontractors with those contract provisions and with the rules, regulations and relevant orders of the Secretary, (2) to obtain and to furnish to the Secretary of Labor such information as the Secretary may require for the supervision of such compliance, (3) to carry out sanctions and penalties for violation of such obligations imposed upon contractors and subcontractors by the Secretary of Labor pursuant to Part II, Subpart D, of this Order, and (4) to refrain from entering into any contract subject to this Order, or extension or other modification of such a contract with a contractor debarred from Government contracts under Part II, Subpart D, of this Order.

[Sec. 301 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 302

- a. "Construction contract" as used in this Order means any contract for the construction, rehabilitation, alteration, conversion, extension, or repair of buildings, highways, or other improvements to real property.
- b. The provisions of Part II of this Order shall apply to such construction contracts, and for purposes of such application the administering department or agency shall be considered the contracting agency referred to therein.
- c. The term "applicant" as used in this Order means an applicant for Federal assistance or, as determined by agency regulation, other program participant, with respect to whom an application for any grant, contract, loan, insurance, or guarantee is not finally acted upon prior to the effective date of this Part, and it includes such an applicant after he/she becomes a recipient of such Federal assistance.

SEC. 303

- a. The Secretary of Labor shall be responsible for obtaining the compliance of such applicants with their undertakings under this Order. Each administering department and agency is directed to cooperate with the Secretary of Labor and to furnish the Secretary such information and assistance as the Secretary may require in the performance of the Secretary's functions under this Order.
- b. In the event an applicant fails and refuses to comply with the applicant's undertakings pursuant to this Order, the Secretary of Labor may, after consulting with the administering department or agency, take any or all of the following actions: (1) direct any administering department or agency to cancel, terminate, or suspend in whole or in part the agreement, contract or other arrangement with such applicant with respect to which the failure or refusal occurred; (2) direct any administering department or agency to refrain from extending any further assistance to the applicant under the program with respect to which the failure or refusal occurred until satisfactory assurance of future compliance has been received by the Secretary of Labor from such applicant; and (3) refer the case to the Department of Justice or the Equal Employment Opportunity Commission for appropriate law enforcement or other proceedings.
- c. In no case shall action be taken with respect to an applicant pursuant to clause (1) or (2) of subsection (b) without notice and opportunity for hearing.

[Sec. 303 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 304

Any executive department or agency which imposes by rule, regulation, or order requirements of nondiscrimination in employment, other than requirements imposed pursuant to this Order, may delegate to the Secretary of Labor by agreement such responsibilities with respect to compliance standards, reports, and procedures as would tend to bring

the administration of such requirements into conformity with the administration of requirements imposed under this Order: Provided, That actions to effect compliance by recipients of Federal financial assistance with requirements imposed pursuant to Title VI of the Civil Rights Act of 1964 shall be taken in conformity with the procedures and limitations prescribed in Section 602 thereof and the regulations of the administering department or agency issued thereunder.

Part IV – Miscellaneous

SEC. 401

The Secretary of Labor may delegate to any officer, agency, or employee in the Executive branch of the Government, any function or duty of the Secretary under Parts II and III of this Order.

[Sec. 401 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 402

The Secretary of Labor shall provide administrative support for the execution of the program known as the “Plans for Progress.”

SEC. 403

- a. Executive Orders Nos. 10590 (January 19, 1955), 10722 (August 5, 1957), 10925 (March 6, 1961), 11114 (June 22, 1963), and 11162 (July 28, 1964), are hereby superseded and the President’s Committee on Equal Employment Opportunity established by Executive Order No. 10925 is hereby abolished. All records and property in the custody of the Committee shall be transferred to the Office of Personnel Management and the Secretary of Labor, as appropriate.
- b. Nothing in this Order shall be deemed to relieve any person of any obligation assumed or imposed under or pursuant to any Executive Order superseded by this Order. All rules, regulations, orders, instructions, designations, and other directives issued by the President’s Committee on Equal Employment Opportunity and those issued by the heads of various departments or agencies under or pursuant to any of the Executive orders superseded by this Order, shall, to the extent that they are not inconsistent with this Order, remain in full force and effect unless and until revoked or superseded by appropriate authority. References in such directives to provisions of the superseded orders shall be deemed to be references to the comparable provisions of this Order.

[Sec. 403 amended by EO 12107 of Dec. 28, 1978, 44 FR 1055, 3 CFR, 1978 Comp., p. 264]

SEC. 404

The General Services Administration shall take appropriate action to revise the standard Government contract forms to accord with the provisions of this Order and of the rules and regulations of the Secretary of Labor.

SEC. 405

This Order shall become effective thirty days after the date of this Order.

"General Decision Number: MD20230017 10/27/2023

Superseded General Decision Number: MD20220017

State: Maryland

Construction Type: Heavy

County: Frederick County in Maryland.

HEAVY CONSTRUCTION PROJECTS (including sewer/water construction).

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).

<p>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:</p>	<ul style="list-style-type: none"> . Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least \$16.20 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 2023.
<p>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:</p>	<ul style="list-style-type: none"> . Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least \$12.15 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 2023.

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 <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/06/2023
1	04/07/2023

2	05/05/2023
3	05/26/2023
4	06/02/2023
5	06/16/2023
6	06/23/2023
7	07/28/2023
8	10/27/2023

CARP0197-009 05/01/2023

	Rates	Fringes
CARPENTER (Includes Form Work)...	\$ 33.21	13.87

 ELEC0024-002 05/28/2023

	Rates	Fringes
ELECTRICIAN.....	\$ 44.75	5.25%+17.20

 ENGI0037-022 04/01/2023

	Rates	Fringes
OPERATOR: Bulldozer.....	\$ 32.20	12.85+a
OPERATOR: Crane.....	\$ 35.70	12.85+a+b
OPERATOR: Drill.....	\$ 32.20	12.85+a
OPERATOR: Excavator 120,000 lbs. and Under.....	\$ 32.20	12.85+a
Long and Ultra High Reach Excavators; Excavators Over 120,000 lbs.....	\$ 32.20	12.85+a
Mini-Excavators.....	\$ 32.20	12.85+a
OPERATOR: Mechanic.....	\$ 33.20	12.85+a
OPERATOR: Piledriver.....	\$ 32.20	12.85+a+b

a. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

b. On long boom cranes, including jibs, and on pile driving machines with leads, the operator shall receive the following additional pay: 130' to 169' (\$0.40 per hour); 170' to 209' (\$0.60 per hour); 210' to 249' (\$0.80 per hour); 250' to 299' (\$1.00 per hour); 300' and over (\$1.25 per hour)

 IRON0005-019 05/01/2023

	Rates	Fringes
IRONWORKER, REINFORCING.....	\$ 30.70	23.33

 LAB00616-011 05/01/2023

	Rates	Fringes
LABORER: Mason Tender - Cement/Concrete.....	\$ 23.06	22.10

 PAIN0051-020 06/01/2022

	Rates	Fringes
PAINTER: Steel.....	\$ 41.68	13.97

 * PLAS0891-006 02/01/2023

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 30.00	12.99

 TEAM0570-001 06/01/2023

	Rates	Fringes
TRUCK DRIVER: Dump Truck.....	\$ 31.65	10.15+a+b+c
TRUCK DRIVER: Lowboy Truck.....	\$ 33.98	10.15+a+b+c

a. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day After Thanksgiving and Christmas Day.

b. VACATION: Employees with 1 year of service - 11 days paid vacation; 2 years of service-12 days; 3 years of service - 13 days

c. HEALTH AND WELFARE: \$968 per month

 * SUMD2010-070 07/08/2010

	Rates	Fringes
IRONWORKER, STRUCTURAL.....	\$ 24.00	10.16
LABORER: Common or General.....	\$ 10.55 **	1.73
LABORER: Flagger.....	\$ 15.71 **	8.58
LABORER: Grade Checker.....	\$ 14.62 **	3.08
LABORER: Landscape.....	\$ 17.72	8.58
LABORER: Mason Tender - Brick...	\$ 15.93 **	7.83
LABORER: Pipelayer.....	\$ 12.00 **	3.16
OPERATOR: Backhoe.....	\$ 19.63	4.50
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 16.41	5.15
OPERATOR: Gradall.....	\$ 20.50	8.89
OPERATOR: Grader/Blade.....	\$ 19.00	5.00
OPERATOR: Loader.....	\$ 18.65	5.02
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....	\$ 17.53	9.07
OPERATOR: Roller.....	\$ 16.50	5.34
OPERATOR: Trackhoe.....	\$ 18.99	7.32
PAINTER: Brush, Roller and Spray.....	\$ 24.32	6.91
PIPEFITTER.....	\$ 21.25	5.31

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

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** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$16.20) or 13658 (\$12.15). Please see the Note at the top of the wage determination for more information.

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 DECISION

"

DEPAUL STREET WATERLINE REPLACEMENT PHASES 1 & 2
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

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PROPOSAL

DEPAUL STREET WATERLINE REPLACEMENT PHASES 1 & 2
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

DEPAUL STREET WATERLINE REPLACEMENT PROJECT PHASES 1 & 2

PROPOSAL COVER PAGE

PROPOSAL ON DEPAUL STREET WATERLINE REPLACEMENT PHASES 1 & 2 PROJECT

OWNER: Town of Emmitsburg, Maryland

Made this _____ day of _____ 20____.

By: _____

Business Address: _____

The Bidder declares that the only person, firm or corporation or persons, firms or corporations, that has or have any interest in this proposal, or in the contract or contracts proposed to be taken, is or are the undersigned; that this proposal is made without any connection or collusion with any person, firm or corporation making a proposal for the same work; that the attached Information to Bidders, Contract, and the Contract Documents therein referred to, have been carefully examined and are understood; that as careful and examination has been made as is necessary to become informed as to the character and extent of the work to contract with the Owner in the form of contract hereto attached, to do the required work in the manner set forth in the Contract Documents.

The unit prices and lump sum prices on the attached and signed proposal forms are to be included and cover the furnishing of all materials and labor requisite and proper and the providing of all necessary machinery, tools, apparatus and means for performing the work and the doing of all the above mentioned work, in the manner set forth, described and shown in the Contract Documents, within prescribed time. If this proposal shall be accepted by the Owner and the undersigned shall refuse or neglect, within 10 calendar days after receiving the contract for execution, to execute the same and to give the stipulated bonds, then said Owner may at its option, determine that the Bidder has abandoned the contract and thereupon the proposal and the acceptance thereof shall be forfeited to and become the property of said Owner.

Note: The Bidder or Bidders must sign below, and the address for each must be given. In the case of firms, the firm's name must be signed and subscribed to by at least one member. In the case of corporation, the corporate name must be signed by some authorized officer or agent thereof, who shall also subscribe his name and office. If practicable, the seal of the corporation shall be affixed.

DEPAUL STREET WATERLINE REPLACEMENT PHASES 1 & 2
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

Enclosed herewith find certified cashier's or treasurer's check or bid bond in the amount of _____ Dollars (\$_____) made payable to "Town of Emmitsburg, Maryland." This certified cashier's or treasurer's check or bid bond is a Proposal Guarantee (which is understood will be forfeited in the event the Form or Contract is not executed, if awarded to the undersigned), and is based on the aggregate amount of the bid submitted.

(For Execution by Individuals, Partnerships or Corporations)

FOR INDIVIDUALS AND PARTNERSHIPS:

_____(SEAL)

WITNESS:

BY: _____(SEAL)

_____(SEAL)

FOR CORPORATIONS:

_____(SEAL)

NAME: _____(SEAL)

BY: _____(SEAL)

PRESIDENT

ATTEST:

SECRETARY

The Proposal Form shall be filled out in ink. The Proposal, if submitted by an individual, shall be signed by an individual; if submitted by a partnership, shall be signed by such member or members of the partnership as have authority to bind the partnership; if submitted by a corporation the same shall be signed by an officer and attested by the Secretary or an Assistant Secretary. If not signed by an officer, as aforesaid, there must be attached a copy of that portion of the By-Laws, or a copy of a Board Resolution, duly certified by the Secretary, showing the authority of the person so signing on behalf of the corporation.

In lieu thereof, the corporation may file such evidence with the Owner, duly certified by the Secretary, together with a list of the names of those officers having authority to execute documents on behalf of the corporation, duly certified by the Secretary, which listing shall remain in full force and effect until such time as the Owner is advised in writing to the contrary. In any case where a Proposal is signed by an Attorney-in-fact the same must be accompanied by a copy of the appointing document, duly certified.

DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

The name and addresses of all members of a firm or the names, addresses and titles of every officer of a corporation, as the case may be, must be given here by the member of the firm, or by the officer or agent of the corporation who signs the proposal.

Bidder hereby agrees to commence work under this Contract within ten days after service of a written "Notice to Proceed" from the Owner and to complete the work fully within **270 calendar days from Notice to Proceed**. It is the intent of the Town to assess liquidated damages in accordance with Article 15 of the General Conditions for each calendar day the Contractor is delinquent in completing the Work in the Contract.

Bidder acknowledges receipt of the following addenda:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Having carefully examined the Contract Documents for the work hereinbefore named, and in conformity with the Contract Documents, I/We hereby certify that I/we am/are the only person or persons interested in this proposal as principals, that it is made without collusion with any person, firm or corporation; that an opportunity for examination has been made of the Contract Documents, and of the site of the work, and propose to furnish all necessary machinery, plant, equipment, tools, labor and other means of construction, and furnish all materials specified, in the manner and at the times prescribed, and perform all work as follows:

DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

Town of Emmitsburg DePaul Street Waterline Replacement Project Phases 1 & 2

PROPOSAL FORM

Date: _____

NAME OF FIRM: _____

ADDRESS: _____

PHONE: _____

FAX: _____

CONTACT NAME: _____

EMAIL: _____

Part A: Phase 1 Base Bid Items

Item No.	Quantity	Description	Unit	Unit Price	Total Price
1001	1	Mobilization (Maximum 10% of Total For Base Bid Items)	LS		
1002	1	Maintenance of Traffic - Includes All Personnel, Construction Signs - Complete including installation and removal	LS		
1003	1	Geotechnical Inspection and Testing	LS		
1004	1	Construction Stakeout	LS		
1005	1	Provide, Install & Maintain Sediment & Erosion Control Devices	LS		
1006	2,049	Furnish and Install 8" Class 52 Ductile Iron Pipe includes all valves, bends, fittings, connection to existing lines, pressure testing, chlorination, trench & backfill	LF		
1007	5	Furnish and Install New 6" MJ Fire Hydrant includes all appurtenances, trench & backfill	EA		
1008	21	Furnish and Install 3/4" Copper Type 'K' Water Service with New Curb Stop includes all appurtenances, trench & backfill. Long Side	EA		
1009	23	Furnish and Install 3/4" Copper Type 'K' Water Service with New Curb Stop includes all appurtenances, trench & backfill. Short Side	EA		

DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

1010	1	Provide Install and Maintain temporary above-ground water system.	LS		
1011	1	Cap Existing 6" Watermain includes all appurtenances, trench & backfill	EA		
1012	440	Restoration of Concrete Curb & Gutter	LF		
1013	760	Restoration of Concrete Sidewalk	SF		
1014	25	Restoration of Asphalt Driveway Aprons.	SY		
1015	1,800	Full Depth Asphalt Trench Repair. Includes 12" CR6 or GAB Base, 4" HMA Base Course 19.0mm Superpave PG64-22 and 2" Asphalt Surface HMA Surface Course 12.5mm Superpave PG64-22	SY		
1016	20	24" White Waterborne Paint Stop Bar	LF		
1017	425	4" White Waterborne Paint Pavement Marking	LF		
1018	77	12" White Waterborne Paint Crosswalk	LF		
1019	3	Remove and Reset existing Street Sign	EA		
1020	1	Site Restoration landscaping - Includes topsoil, seed & straw	LS		
1021	200	Cold Patch for Maintenance of Traffic	TON		
TOTAL FOR PHASE 1 BASE BID ITEMS					

DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

Part B: Phase 2 Base Bid Items

Item No.	Quantity	Description	Unit	Unit Price	Total Price
2001	1	Mobilization (Maximum 10% of Total For Base Bid Items)	LS		
2002	1	Geotechnical Inspection and Testing	LS		
2003	1	Construction Stakeout	LS		
2004	1	Provide, Install & Maintain Sediment & Erosion Control Devices	LS		
2005	400	Furnish and Install 8" Class 52 Ductile Iron Pipe includes all valves, bends, fittings, connection to existing lines, pressure testing, chlorination, trench & backfill	LF		
2006	1	Provide Install and Maintain temporary above-ground water system.	LS		
2007	1	Site Restoration landscaping - Includes topsoil, seed & straw	LS		
2008	20	24" ALCMP includes trench & backfill	LF		
TOTAL FOR PHASE 2 BASE BID ITEMS					

Part C: Contingent Unit Price Items

Item No.	Quantity	Description	Unit	Unit Cost	Extension
3001	100	Excavation Below Subgrade for Unsuitable Soil	CY		
3002	100	Backfill with select material	CY		
3003	20	Additional Test Pits	CY		
3004	100	Furnishing and Placing Crusher Run (CR-6)	TON		
3005	100	Furnish, Install and Maintain 8" Filter Log	LF		
TOTAL FOR CONTINGENT ITEMS					

DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

TOTAL BID PRICE:

(Total Phase 1 & Phase 2 Base Bid Items + Total Contingent Bid Items)

\$ _____

TOTAL BID PRICE IN WRITTING:

(Total Phase 1 & Phase 2 Base Bid Items + Total Contingent Bid Items)

(Written in Words)

Note: Quantities for Contingent Unit Price Items represent quantities above and beyond that required by the Contract Documents and shall be performed only at the express written authorization of the Engineer.

Any mathematical errors will be corrected. In the case of a discrepancy between unit prices bid and extended totals, unit prices will govern. In the case of a discrepancy between the correct sum of individual bid items and the (incorrectly) calculated sum, the correct sum of individual bid items will govern.

We shall complete the Work within 270 calendar days from Notice to Proceed.

IT IS THE INTENT OF THE TOWN TO ASSESS LIQUIDATED DAMAGES IN THE AMOUNT OF \$ 300.00 PER DAY IN ACCORDANCE WITH ARTICLE 15 OF THE C700 GENERAL CONDITIONS.

Basis of Award: It is the intent of the Town to award the Contract to the lowest responsive, responsible bidder based on the total bid price, provided the bid price is reasonable and it is in the interests of the Town to accept it.

Bidder is familiar with all laws and regulations that may affect cost, progress, and performance of the work, including BABAA requirements.

Date: _____

Bidder: _____

Signature: _____

DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

BIDDER CERTIFICATION OF WORK CAPACITY

This certifies that the undersigned guarantees all of the work performed under this Contract to be done in accordance with the Contract Documents in a good workmanlike manner and to renew or repair any work which may be rejected due to defective workmanship or materials, prior to final completion and acceptance of the work. Also, we have the equipment, labor supervision, and financial capacity to perform this Contract either with our organization or with subcontractors.

BIDDER: _____

BY: _____
SIGNATURE

TITLE: _____

Sworn to before me this _____ day of _____, 20_____

My commission expires _____.

NOTARY PUBLIC

DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

AFFIDAVIT OF QUALIFICATION TO BID

I hereby affirm that:

1. I am the _____ and duly authorized representative of the firm _____
NAME OF CORPORATION
of whose address is _____
and that I possess the legal authority to make this affidavit on behalf of myself and the firm for which I am acting.
2. Except as described in Paragraph 3 below, neither I nor the above firm, nor to the best of my knowledge, any of its officers, directors, or partners, or any of its employees directly involved in obtaining Contracts with the State, any unit of the State, or any local governmental entity in the State (including a county, bi- county, or multi-county governmental entity) have been convicted of, or have pleaded nolo contendere to, a charge or have during the course of an official investigation or other proceeding admitted, in writing or under oath, acts or omissions which constitute bribery, attempted bribery, or conspiracy to bribe under the provisions of Article 27 of the Annotated Code of Maryland or under the laws of any State or the Federal Government. (Conduct prior to July 1, 1977 is not required to be reported).
3. _____
(State "None" or, as appropriate, list any conviction, plea, or admission described in Paragraph 2 above, with the date; court, official or administrative body, the individuals involved and their position with the firm; and the sentence of disposition, if any.)

I acknowledge that this affidavit is to be furnished to the Owner and, where appropriate, to the Board of Public Works and the Attorney General under Maryland State Finance and Procurement Code Annotated, Sections 16-2001 through 16-208. I acknowledge that, if the representations set forth in this affidavit are not true and correct, the Owner may terminate any Contract awarded and take any other appropriate action. I further acknowledge that I am executing this affidavit in compliance with Maryland State Finance and Procurement Code Annotated, Sections 16-201 through 16-208, which provides that certain persons who have been convicted or have admitted to bribery, attempted bribery, or conspiracy to bribe, may be disqualified, either by operation of law or after a hearing, from entering into Contracts with the State or any of its agencies or subdivisions.

DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

I do solemnly declare and affirm under the penalties of perjury and upon personal knowledge that the contents of this affidavit are true and correct.

BIDDER: _____

By: _____

SIGNATURE

Title: _____

Sworn to before me this _____ day of _____, 20____ My commission
expires _____.

NOTARY PUBLIC

DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

Maryland Community Development Block Grant Program
Contractor Statement of Assurances and Certifications

The contractor hereby assures and certifies that he/she will comply with the following requirements in the event that this bid is accepted. The contractor:

1. has reviewed the Federal Labor Standards Provisions, **Form HUD-4010**, and agrees to abide by all of the requirements, as they apply to the contract at hand;
2. will take reasonable steps to comply with the Section 3 provisions as they relate to hiring new workers and/or businesses for all contracts in excess of \$100,000 - 24 CFR § 135.32;
3. assures that if the contract exceeds \$10,000, reasonable steps will be taken to comply with the Equal Employment Opportunity provisions;
4. has not been declared ineligible from receiving Federal contracts during the past three years;
5. will comply with the Immigration Reform and Control Act of 1986 (IRCA) stipulating that the only persons who can be employed under the contract are persons that may legally work in the United States. The contractor is responsible for verifying the eligibility of all workers to be employed in the United States;
6. has no personal or business relationship with any employee, officer or elected official of the CDBG grant recipient, subrecipient or developer organization, which has the potential to result in a conflict of interest. Such relationships include marriage, domestic partnership or business or professional relationship with an employee, agent, consultant, officer, elected or appointed officer.
7. has not used federal funds to influence, or attempt to influence an officer or employee of any agency, Member of Congress, an officer or employee of Congress or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement;
8. will provide access to the grantee, the State of Maryland, HUD, the subrecipient, developer, the Controller General of the U.S. , or their duly authorized representative any books, documents, papers, or records for the purpose of audit or examination;

Contractor Statement of Assurances and Certifications

DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

9. will comply with all environmental standards, orders, or requirements under Clean Air Act, Clean Water Act, EO 11738, and EPA regulations for contracts, subcontracts and subcontracts greater than \$100,000;
10. will comply with all other reporting requirements and regulations as provided in the contract; and
11. will require compliance with these assurances and certifications of any subcontractor procured under this contract.

Contractor Name

Contractor Signature

Date

Subcontractor Name

Subcontractor Signature

Date

Section 3 Clause

ALL CONSTRUCTION CONTRACTS SHALL INCLUDE THE FOLLOWING CLAUSE

A. The work to be performed under this contract is subject to Section 3 of the Housing and Urban Development Act of 1968, as amended, (12 U.S.C. 1701u) (“Section 3”). The purpose of Section 3 is to ensure, to the greatest extent feasible, that employment and other economic opportunities are made available to low and very low income persons as a result of projects funded through specific programs of the U.S. Department of Housing and Urban Development (HUD). The applicable regulations are found at 24 CFR Part 75 (the Section 3 Regulations). The terms “Section 3 Workers,” “Section 3 Business Concerns,” and “YouthBuild Programs” as used herein have the meanings specified in the Section 3 Regulations. Section 3 Project refers to the project that is the subject of this contract, and “Section 3 Clause” refers to this Section 3 Clause.

B. The parties to this contract agree to comply with the Section 3 regulations and with the requirements of the Maryland Department of Housing and Community Development (DHCD) (the “DHCD Requirements” and, together with the Section 3 Regulations, the “Section 3 Requirements”) and certify that they are under no contractual or other impediment that would prevent them from complying with the Section 3 Requirements.

C. The contractor agrees, to the greatest extent feasible, and consistent with existing Federal, state and local laws and regulations, to provide employment and training opportunities (for any vacant positions) to Section 3 Workers, in the following priority where feasible: to low and very low income persons in the service area or neighborhood of the Section 3 Project, and to participants in YouthBuild Programs.

D. The contractor agrees, to the greatest extent feasible, and consistent with existing Federal, state and local laws and regulations, to award contracts and subcontracts to business concerns that provide economic opportunities to Section 3 Workers, in the following priority where feasible: to Section 3 Business Concerns that provide economic opportunities to Section 3 Workers residing in the service area or neighborhood of the Section 3 Project, and to YouthBuild Programs.

E. The contractor agrees to include this Section 3 Clause in every subcontract subject to Section 3 and agrees to take appropriate action upon a finding that the subcontractor is in violation of the Section 3 Requirements. 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 Section 3 Requirements.

F. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers’ 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 and shall set forth the following: (1) a minimum number and job titles to hire; (2) availability of apprenticeship

and training positions; (3) the qualifications for each; (4) the name and location of the person(s) taking applications for each of the positions; and (5) the anticipated date the work shall begin.

G. The contractor agrees to obtain Section 3 Worker certification forms from (1) all existing employees that will or may work on the project; and (2) from persons hired to work on the project.

H. The contractor agrees to notify Section 3 Businesses Concerns about the availability of new contracting opportunities created as a result of the Section 3 Project.

I. The contractor agrees to provide a written narrative regarding all efforts to comply with Section 3.

J. The contractor agrees to maintain records documenting employees who qualified as Section 3 Workers that were hired to work on previous Section 3 projects that were retained by the contractor for subsequent Section 3 projects.

K. The contractor agrees to notify subcontractors that are associated with the Section 3 Projects about the Section 3 Requirements and include this Section 3 Clause in its entirety in every awarded subcontract.

L. The contractor agrees to impose sanctions upon any subcontractor that has violated the requirements of this Section 3 Clause in accordance with DHCD's policies and procedures.

M. The contractor agrees to comply with all monitoring, reporting, recordkeeping, and other procedures specified by DHCD.

N. Non-compliance with the Section 3 Requirements may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD funded projects and contracts.

O. The Section 3 Regulations are hereby incorporated into this Section 3 Clause, and to the extent there is any conflict between this Section 3 Clause and the Section 3 Regulations, the Section 3 Regulations shall control.

_____	_____	_____
Contractor Name	Contractor Signature	Date

_____	_____	_____
Subcontractor Name	Subcontractor Signature	Date

_____	_____	_____
Subcontractor Name	Subcontractor Signature	Date

_____	_____	_____
Subcontractor Name	Subcontractor Signature	Date

Add page for additional subcontractors

MARYLAND DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

**SECTION 3 HIRING/LABOR HOUR ESTIMATE FORM
BID SOLICITATION/SOLE SOURCE SOLICITATION**

This project includes funding from the U.S. Department of Housing and Urban Development and would require compliance with Section 3 regulations and requirements. This form must be submitted with bids.

Project: _____

Contractor: _____

Estimated days for all construction activities: _____

Estimated number of hours for all construction activities*: _____

At this time, do you anticipate needing to hire new employees during the course of this project**:
___ YES ___ NO If YES, how many: _____

Form Completed By:

Name: _____

Signature: _____

Date: _____

*For submission as a General Contractor, please include work to be completed by Subcontractors.

**For submission as a General Contractor, please include any anticipated new hires by Subcontractors.

MARYLAND DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

SECTION 3 WORKER CERTIFICATION FORM

This project includes funding from the U.S. Department of Housing and Urban Development and requires compliance with Section 3 regulations and requirements. The requested information will remain confidential and viewed only by your employer, authorized representatives of the project, the State of Maryland and the U.S. Department of Housing and Urban Development.

Employee Name: _____

Street Address: _____ (No PO Box)
_____ County: _____

Date of Hire: _____

What was the total amount of income earned by you during the past 12 months? Only count your income and not any income or financial assistance for other members of your household.

I affirm that the above statement is true, complete and correct to the best of my knowledge and belief.

Signature: _____

Date: _____

Contractor/Subcontractor: _____

The employer's representative must certify that the identified income for and existing employee is what was paid in the previous year or is the salary to be provided to a new hire.

Name: _____

Signature: _____

Date: _____

For Administrative Use Only:

Income Limits used: County _____ Year _____

Is the person: _____ Low Income _____ Very Low Income

Does the person qualify as a Section 3 Worker? ___ YES ___ NO

Does the person qualify as a Targeted Section 3 Worker? ___ YES ___ NO

Does the person work for a certified Section 3 Business Concern? ___ YES ___ NO

Does the person reside within a one-mile radius of the Section 3 project? ___ YES ___ NO

Does the person reside in the Section 3 service area? ___ YES ___ NO

Reviewed by: _____ Date: _____

This person is certified as a Section 3 Worker for a five year period through _____.

DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

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DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

BID BOND

TOWN OF EMMITSBURG, MARYLAND

DePAUL STREET WATERLINE REPLACEMENT PHASES 1 & 2

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

_____ As Principal and _____ as
Surety are hereby held and firmly bound unto the Town of Emmitsburg, Maryland as Owner in the full and
just sum of
_____ Dollars (\$ _____) for the payment of which, well and
truly be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors
and assigns. Signed this _____ day of 20_.

The conditions of the above obligation is such that whereas the Principal has submitted the Owner a
certain Bid, attached hereto and hereby made a part hereof, to enter into a contract in writing for the
construction of the DePaul Street Waterline Replacement Phases 1 & 2.

NOW, THEREFORE,

- (a) If said Bid shall be rejected, or in the alternate,
- (b) If said Bid shall be accepted and the Principal shall execute and deliver a Contract Agreement in
the form attached hereto, properly completed in accordance with said Bid and shall furnish a
bond for his faithful performance of the Contract, and for the payment of all persons performing
labor or furnishing materials in connection therewith, and shall in all other respects perform the
agreement created by the acceptance of said Bid.

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly
understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed
the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its
bond shall be in no way impaired or affected by an extension of the time within which the Owner may accept
such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals,
and such of them as are corporations have caused their corporate seals to be hereto affixed and these
presents to be signed by their proper officers, the day and year first set forth above.

DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

INDIVIDUAL PRINCIPAL

Business Name: _____
Address: _____

In Presence of Witness:

as to: _____
PRINCIPAL

CO-PARTNERSHIP PRINCIPAL

Co-Partnership Name: _____
Address: _____

In Presence of Witness:
_____ as to
_____ as to
_____ as to
_____ as to

PRINCIPAL

PRINCIPAL

PRINCIPAL

PRINCIPAL

CORPORATE PRINCIPAL

Attest:

TREASURER

SECRETARY

Corporation Name: _____
Address: _____

By: _____

Title: _____
(Affix Corporate Seal)

SURETY

Attest:

Surety Name: _____
Address: _____

By: _____

Title: _____
(Affix Corporate Seal)

PERFORMANCE BOND
TOWN OF EMMITSBURG, MARYLAND

DePAUL STREET WATERLINE REPLACEMENT PHASES 1 & 2

Date of Contract _____

PRINCIPAL (Insert Contractor's name, business address, zip code)

SURETY (Insert Surety name, business address, zip code)

This Surety is a corporation of the State of _____ and authorized to do business in the State of Maryland.

OBLIGEE is the TOWN OF EMMITSBURG, MARYLAND by and through the DEPARTMENT OF PLANNING AND ZONING.

Penal Sum of Bond (Express in words and in figures)

Bond Number _____ Date Bond Executed _____

KNOW ALL MEN BY THESE PRESENTS, That we, the Principal named above and Surety named above, are held and firmly bound unto the Obligee named above in the Penal Sum of this Performance Bond stated above, for the payment of which Penal Sum we bind ourselves, our heirs, executors, administrators, personal representatives, successors, and assigns, jointly and severally, firmly by these presents. However, where Surety is composed of corporations acting as co-sureties, we the co-sureties, bind ourselves, our successors and assigns, in such Penal Sum jointly and severally as well as severally only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each co-surety binds itself, jointly and severally with the Principal, for the payment of such sum as appears above its name below, but if no limit of liability is indicated, the limit of such liability shall be the full amount of the Penal Sum.

WHEREAS, Principal has entered into or will enter into a contract with the Town of Emmitsburg by and through the Department of Planning and Zoning acting for the Town of Emmitsburg, which contract is described and dated as shown above, and incorporated herein by reference. The contract and all items incorporated into the contract, together with any and all changes, extensions of time, alterations, modifications, or additions to the contract or to the work to be performed thereunder or to the Plans, Specifications, and Special Provisions, or any of them, or to any other items incorporated into the contract shall hereinafter be referred as the "Contract."

WHEREAS, it is one of the conditions precedent to the final award of the Contract that these presents be executed.

PERFORMANCE BOND (continued)

NOW, THEREFORE, during the original term of said Contract, during any extensions thereto that may be granted by the Department of Planning and Zoning, and during the guarantee and warranty period required under the Contract, unless otherwise stated therein, this Performance Bond shall remain in full force and effect unless and until the following terms and conditions are met:

1. Principal shall well and truly perform the Contract; and
2. Principal and Surety shall comply with the terms and conditions in this Performance Bond.

Whenever Principal shall be declared by the Town of Emmitsburg to be in default under the Contract, the Surety may, within 15 days after notice of default from the Town of Emmitsburg, notify the Town of Emmitsburg of its election to either promptly proceed to remedy the default or promptly proceed to complete the contract in accordance with and subject to its terms and conditions. In the event the Surety does not elect to exercise either of the above stated options, then the Town of Emmitsburg thereupon shall have the remaining Contract work completed, Surety to remain liable hereunder for all expenses of completion up to but not exceeding the penal sum stated above.

The Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of this Contract or to the work to be performed thereunder or the Specifications accompanying the same shall in any way affect its obligation on this Performance Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the Specifications.

This Performance Bond shall be governed by and construed in accordance with the laws of the State of Maryland and any reference herein to Principal or Surety in the singular shall include all entities in the plural who or which are signatories under the Principal or Surety heading below.

IN WITNESS WHEREOF, Principal and Surety have set their hands and seals to this Performance Bond. If any individual is a signatory under the Principal heading below, then each such individual has signed below on his or her own behalf, has set forth below the name of the firm, if any, in whose name he or she is doing business, and has set forth below his or her title as a sole proprietor. If any partnership or joint venture is a signatory under the Principal heading below, then all members of each such partnership or joint venture, and each member has set forth below his or her title as a general partner, limited partner, or member of joint venture, whichever is applicable. If any corporation is a signatory under the Principal or Surety heading below, then each such corporation has caused the following: the corporation's name to be set forth below, a duly authorized representative to sign below and set forth below his or her title as a representative of the corporation. If any individual acts as a witness to any signature below, then each such individual has signed below and has set forth below his or her title as a witness. All of the above has been done as of the Date of Bond shown above.

In Presence of:

_____ As to _____ (SEAL)
Witness Individual Principal

PERFORMANCE BOND (continued)

In Presence of:

_____ as to _____ (SEAL)
Witness Co-Partnership Principal (Name of Co-Partnership)

_____ as to By: _____ (SEAL)

_____ as to By: _____ (SEAL)

_____ as to By: _____ (SEAL)

Corporate Principal (Name of Corporation)

Attest:

AFFIX CORPORATE SEAL

_____ as to By: _____
Corporate Secretary President

.....

Surety

Business Address of Surety

AFFIX CORPORATE SEAL

Attest By: _____ (SEAL)

_____ Title: _____
Signature

Local Bonding Agent's Name: _____

Local Bonding Agent's Business Address: _____

Bonding Agent's Phone Number: _____

PAYMENT BOND
TOWN OF EMMITSBURG, MARYLAND
DePAUL STREET WATERLINE REPLACEMENT PHASES 1 & 2

Date of Contract _____

PRINCIPAL (Insert Contractor's name, business address, zip code)

SURETY (Insert Surety name, business address, zip code)

This Surety is a corporation of the State of _____ and authorized to do business in the State of Maryland.

OBLIGEE is the TOWN OF EMMITSBURG, MARYLAND by and through the DEPARTMENT OF PLANNING AND ZONING.

Penal Sum of Bond (Express in words and in figures)

Bond Number _____ Date Bond Executed _____

KNOW ALL MEN BY THESE PRESENTS, That we, the Principal named above and Surety named above, being authorized to do business in Maryland, and having business address as shown above, are held and firmly bound unto the Obligee named above, for the use and benefit of claimants as hereinafter defined, in the Penal Sum of this Payment Bond stated above, for the payment of which Penal Sum we bind ourselves, our heirs, executors, administrators, personal representatives, successors, and assigns, jointly and severally, firmly by these co-sureties, bind ourselves, our successors and assigns, in such Penal Sum jointly and severally as well as severally only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each co-surety binds itself, jointly and severally with the Principal, for the payment of such sum as appears above its name below, but if no limit of liability is indicated, the limit of such liability shall be the full amount of the Penal Sum.

WHEREAS, Principal has entered into or will enter into a contract with the Town of Emmitsburg by and through the Department of Planning and Zoning acting for the Town of Emmitsburg, which contract is described and dated as shown above, and incorporated herein by reference. The contract and all items incorporated into the contract, together with any and all changes, extensions of time, alterations, modifications, or additions to the contract or to the work to be performed thereunder or to the Plans, Specifications, and Special Provisions, or any of them, or to any other items incorporated into the contract shall hereinafter be referred as the "Contract".

WHEREAS, it is one of the conditions precedent to the final award of the Contract that these presents be executed.

PAYMENT BOND (continued)

2 of 3

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

1. A claimant is defined to be any and all of those persons supplying labor and materials (including lessors of the equipment to the extent of the fair market value thereof) to the Principal or its subcontractors and subcontractors in the prosecution of the work provided for in the Contract, entitled to the protection provided by Section 9-113 of the Real Property Article of the Annotated Code of Maryland, as from time to time amended.
2. The above named Principal and Surety hereby jointly and severally agree with the Obligee that every claimant as herein defined, who has not been in full may, pursuant to and when in compliance with the provisions of the aforesaid Section 9-113, sue on this Bond for the use of such claimant, prosecute the suit to final judgement for such sum or sums as may be justly due claimant and have execution thereon. The Obligee shall not be liable for the payment of any costs or expenses of any such suit.

The Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the Specifications accompanying the same shall in any way affect its obligation on this Payment Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the Specifications.

This Payment Bond shall be governed by and construed in accordance with the laws of the State of Maryland and any reference herein to Principal or Surety in the singular shall include all entities in the plural who or which are signatories under the Principal or Surety heading below.

IN WITNESS WHEREOF, Principal and Surety have set their hands and seals to this Payment Bond. If any individual is a signatory under the Principal heading below, then each such individual has signed below on his or her own behalf, has set forth below the name of the firm, if any, in whose name he or she is doing business, and has set forth below his or her title as a sole proprietor. If any partnership or joint venture is a signatory under the Principal heading below, then all members of each such partnership or joint venture, and each member has set forth below his or her title as a general partner, limited partner, or member of joint venture, whichever is applicable. If any corporation is a signatory under the Principal or Surety heading below, then each such corporation has caused the following: the corporation's name to be set forth below, a duly authorized representative of the corporation to affix below the corporation's seal and to attach hereto a notarized corporate resolution of power of attorney authorizing such action, and each such duly authorized representative to sign below and set forth below his or her title as a representative of the corporation. If any individual acts as a witness to any signature below, then each such individual has signed below and has set forth his or her title as a witness. All of the above has been done as of the Date of Bond shown above.

PAYMENT BOND (continued)

3 of 3

In Presence of:

DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

Witness As to _____ (SEAL)
Individual Principal

In Presence of:

_____ as to _____ (SEAL)
Witness Co-Partnership Principal (Name of Co-Partnership)

_____ as to By: _____ (SEAL)

_____ as to By: _____ (SEAL)

_____ as to By: _____ (SEAL)

.....

Corporate Principal (Name of Corporation)

Attest: AFFIX CORPORATE SEAL

_____ as to By: _____
Corporate Secretary President

.....

Surety

Business Address of Surety

AFFIX CORPORATE SEAL

Attest By: _____ (SEAL)

_____ Title: _____
Signature

Local Bonding Agent's Name: _____

Local Bonding Agent's Business Address: _____

Bonding Agent's Phone Number: _____

BIDDER'S AFFIDAVIT

DePAUL STREET WATERLINE REPLACEMENT PHASES 1 & 2

1. AUTHORIZED REPRESENTATIVE:

I HEREBY DECLARE AND AFFIRM that I am the _____
(TITLE)

and duly authorized representative of the firm of _____
(NAME OF FIRM)

whose address is _____ and that I
am duly authorized on behalf of said firm to make this Affidavit.

2. BRIBERY:

I FURTHER DECLARE AND AFFIRM that neither I, nor, to the best of my knowledge, information and belief, the above firm, nor any Officer, Director or Partner of the above firm, nor any employee of the above firm directly involved in obtaining contracts with the State of Maryland, or any County or other subdivision of the State of Maryland, has been convicted* of bribery, or conspiracy to bribe under the laws of any State or the Federal Government, except as herein expressly stated (if any):

3. NON-COLLUSION:

In connection with the firm's price proposal for the above captioned contract, as submitted to THE TOWN OF EMMITSBURG, MARYLAND, I HEREBY DECLARE AND AFFIRM, to the best of my knowledge, information and belief that:

- a) Said proposal has been independently prepared without collusion by any Officer, Director, Partner, Employee or other representative of this firm, with any other proposer, or with any competitor; that
- b) No attempt has been or hereafter, will be made by any Officer, Director, Partner, Employee or other Representative of this firm to induce any other person, firm, or entity to submit or not submit a proposal; that
- c) Any unit or total price in this proposal has not been knowingly disclosed and will not be knowingly disclosed prior to its official opening, directly or indirectly, to any other bidder or to any competitor, and, that
- d) I have fully informed myself regarding the accuracy of the statements contained herein.

**As used herein the word "convicted" includes an accepted plea of nolo contendere.*

DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

I acknowledge that this Affidavit is to be furnished to the Town of Emmitsburg and may be distributed to Boards, Commissions, Administrations, Department Agencies of the Town of Emmitsburg, of the State of Maryland, and other States and the Federal Government. I further acknowledge that this Affidavit is subject to applicable laws of the State of Maryland, both criminal and civil, and this Affidavit is to be attached to and become a part of the contract when and if awarded and executed.

I FURTHER HEREBY DECLARE AND AFFIRM, that I and the firm I herein represent, acknowledge and agree that if any misrepresentation is herein made, the Town of Emmitsburg, Maryland, Frederick County, in their discretion shall have the right to reject this proposal or terminate the contract, without liability, (as the case may be).

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THE FOREGOING DOCUMENT ARE TRUE AND CORRECT.

(DATE) BY: _____ (AFFIANT)

(PRINTED OR TYPED NAME)

(TITLE)

FOR: _____
(COMPANY)

STATE OF _____ COUNTY OF _____

On this _____ day of _____, 20____, before me _____, the above signed Officer, personally appeared known to me to be the person described in the foregoing Affidavit and acknowledged that he (she) executed the same in the capacity therein stated and for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

Notary Public

My commission expires _____ (Notary Seal)

CONTRACT AFFIDAVIT

1 of 4

DePAUL STREET WATERLINE REPLACEMENT PHASES 1 & 2

(This document must be executed by the successful Bidder)

In connection with the above-captioned Contract:

1. AUTHORIZED REPRESENTATIVE:

I HEREBY DECLARE AND AFFIRM that I am the _____ and
(Title)

the duly authorized Representative of _____
whose address

_____.

2. CORPORATE REGISTRATION:

(Applicable to corporations only)

I FURTHER DECLARE AND AFFIRM that the firm named above is a domestic { } foreign { }
corporation registered in accordance with the Corporations and Associations Article, Annotated
Code of Maryland, and that it is in good standing and has filed all its annual reports together with its
filing fees with the Maryland State Department of Assessments and Taxation, **AND THAT THE NAME
AND ADDRESS OF ITS RESIDENT AGENT FILED WITH THE MARYLAND DEPARTMENT OF
ASSESSMENTS AND TAXATION IS:**

(NAME)

(ADDRESS)

3. CONTINGENT FEES:

I FURTHER DECLARE AND AFFIRM that neither I, nor to the best of my knowledge, information and
belief, the above firm, nor any of its other representatives I herein represent have:

- a) Employed, retained or otherwise engaged for a commission, percentage, brokerage, contingent fee,
or other consideration, any person, partnership, corporation, or other entity, other than a bona fide
employee or agent working solely for me or the above firm to solicit or secure this Contract;

CONTRACT AFFIDAVIT (contd)

2 of 4

- b) Agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any person, partnership, corporation, or other entity, in connection with carrying out this contract; or,
- c) Paid, or agreed to pay, to any person, partnership, corporation, or other entity, other than a bona fide employee or agent working solely for me or the above firm, any fee, contribution, donation, or consideration of any kind for, or in connection with, procuring or carrying out this Contract, except as here expressly stated (if any):

4. BRIBERY:

I FURTHER DECLARE AND AFFIRM that neither I, nor, to the best of my knowledge, information and belief, the above firm, nor any Officer, Director or Partner of the above firm, nor any employee of the above firm directly involved in obtaining contracts with the Town of Emmitsburg or any county or other subdivision of the State of Maryland, has been convicted* of bribery, attempted bribery or conspiracy to bribe, nor has engaged in conduct, or by any acts or omissions, made admissions in writing or under oath during the course of an official investigation or other proceedings, since July 1, 1977, which would constitute an offense or offenses of bribery, attempted bribery, or conspiracy to bribe under the laws of any state or the Federal Government; except as herein expressly stated (if any):

**As used herein the word "convicted" includes an accepted plea of nolo contendere.*

5. TRUTH IN NEGOTIATION:

(Applicable to consultant contracts)

I FURTHER DECLARE AND AFFIRM that I am aware of, that the above firm will comply with and that this contract is subject to the provisions of Section 2-311 (a) and (b) of the Transportation Article of the Annotated Code of Maryland (Chapter 13 of the Laws of Maryland 1977) which require that any contract for architectural or engineering services costing over \$25,000 not be awarded unless the firm first executes a truth-in-negotiation certificate. It is understood that the terms and provisions hereof shall likewise apply to any future legislative change made thereto. I further declare and affirm that wage rates and other factual unit costs supporting the compensation in the Contract are accurate, complete and current as of the time of contracting. Furthermore, I, on behalf of the above firm, acknowledge and agree that the original price of this contract any additions to this contract will be adjusted to exclude any significant sums if the Town of Emmitsburg determines that the price was increased due to inaccurate, incomplete or non-current wage rates or other actual unit costs; said adjustments to be made within one year after the end of the contract.

CONTRACT AFFIDAVIT (contd)

3 of 4

6. TRUTH IN NEGOTIATION:

(Applicable to construction contracts)

I FURTHER CERTIFY that I am aware of, that the above firm will comply with and that this Contract is subject to the provisions of Paragraph 3 of Section 7 of Article 78A of the Annotated Code of Maryland (Chapter 451 of the Laws of Maryland 1978) which requires that a negotiated or change order contract for construction in excess of \$10,000 may not be awarded unless the contractor first executes a truth in negotiation certificate. It is agreed that the terms hereof shall likewise apply to any future legislative changes made thereto.

I FURTHER DECLARE AND AFFIRM that wage rates and other factual unit costs supporting the compensation in this contract are accurate, complete and current as of the time of contracting. Furthermore, I on behalf of the above firm, acknowledge and agree that the original price of this Contract and any additions to this Contract will be adjusted to exclude any significant sums if the Town of Emmitsburg determines that the price was increased due to inaccurate, incomplete or non-current wage rates or other actual unit costs; said adjustments to be made within one year after the end of the contract.

7. MANDATORY DISCLOSURE OF OWNERSHIP:

I FURTHER DECLARE AND AFFIRM that I am aware of and that the above firm will comply with the provisions of Section 89A of Article 40 of the Annotated Code of Maryland (Chapter 902 of the Laws of Maryland 1977) which requires that every business that enters into contracts, leases, or other agreements with the State of Maryland or its agencies during a calendar year under which the business is to receive in the aggregate \$100,00 or more, shall within 30 days of the time when the aggregate value of these contracts, leases, or other agreements reaches \$100,00, file with the Maryland Secretary of State certain specified information to include disclosure of beneficial ownership of the business.

I ACKNOWLEDGE that this Affidavit is to be furnished to the Town of Emmitsburg and may be distributed to Boards, Commissions, Administrations, Departments, and Agencies of (1) the Town, (2) Counties or other subdivisions of the Town, (3) other States, (4) and Federal Government. I further acknowledge that this Affidavit is subject to applicable laws of the United States and the State of Maryland, both criminal and civil, and that nothing in this Affidavit or the Contract shall be construed to supersede, amend, modify or waive, on behalf or remedy conferred by the Constitution and the laws of Maryland in respect to any misrepresentation by the above firm in respect to (1) this Affidavit, (2) the Contract, and (3) other affidavits comprising part of the proposal documents associated with the contract.

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THE FOREGOING DOCUMENT ARE TRUE AND CORRECT, AND THAT I AM AUTHORIZED, ON BEHALF OF THE ABOVE FIRM, TO MAKE THIS AFFIDAVIT.

CONTRACT AFFIDAVIT (contd)

(DATE)

Name _____

Title _____

State of _____

County of _____

On this ____ day of _____, 20__, before me, _____, the above signed Officer, personally appeared, known to me to be the person described in the foregoing Affidavit and acknowledged that he (she) executed the same in the capacity therein stated and for the purposes therein contained.

In Witness Whereof, I hereunto set my hand and official seal.

(Notary Public)

My commission expires _____ (Notary Seal)

**CERTIFICATION BY PROPOSED PRIME OR SUBCONTRACTOR
REGARDING EQUAL EMPLOYMENT OPPORTUNITY**

Name of Prime Contractor _____ **Project Number** _____

CONTRACTOR'S EMPLOYER IDENTIFICATION NUMBER: _____

INSTRUCTIONS

This certification is required pursuant to Executive Order 11246, Part II, Section 203 (b), 30 F.R. 12319-25. Any bidder or prospective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicated that the prime or subcontractor has not filed a compliance report due under applicable instruction, such contractor shall be required to submit a compliance report.

CONTRACTOR'S CERTIFICATION

Contractor's Name:

Address:

1. Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause.
Yes No

2. Compliance Reports were required to be filed in connection with such contract or subcontract.
Yes No

If yes, state what reports were filed and with what agency.

3. Bidder has filed all compliance reports due under applicable instructions, including SF-100.
Yes No

4. If answer to Item 3 is NO, please explain in detail on reverse side of this certification.

DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

Certification – The information above is true and complete to the best of my knowledge and belief. (A willfully false statement is punishable by law - U.S. Code, Title 18, Section 1001).

Name and title of signer:

Signature

Date

DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

BIDDER CERTIFICATION OF WORK CAPACITY

DePaul Street Waterline Replacement Phases 1 & 2

We have the equipment, labor, supervision, and financial capacity to perform this Contract either with our organization or with subcontractors, as provided in Section 8, GP-8.01 and TC-5.03 of the Maryland State Highway Standard Specifications for Construction and Materials, dated July, 2020.

We shall supply such additional information as may be required in accordance with Section 3, GP-2.07 of the Specifications.

BY:

CONTRACTOR

Sworn before me this ____ day of _____, 20__.

My commission expires _____.

Notary Public

TOWN OF EMMITSBURG

GENERAL CONTRACTOR AGREEMENT

THIS AGREEMENT made this ___ day of _____, 20___ by and between _____ (the “Contractor”) and the TOWN OF EMMITSBURG, MARYLAND, a municipal corporation (the “Town”).

WITNESSETH, that the Contractor and the Town for the considerations stated herein agree as follows:

ARTICLE 1. Contract Components

This Agreement includes the following component parts, all of which are as fully a part of this contract as if herein set out verbatim, or if not attached, as if hereto attached:

1. Exhibit A – Request for Proposal Bid Packet
2. Exhibit B - Company Proposal
3. Exhibit C – Payment and Performance Bonds
4. Payment Schedule

All modifications to this contract shall be in writing and signed both by the Town and the Contractor and shall be incorporated in and become part of the contract.

In the event of a conflict between the Agreement and any of the above listed components, the terms of this Agreement shall be controlling.

ARTICLE 2. Scope of Work

The Contractor shall perform all of the work described in the Scope of Work attached hereto, as it pertains to work to be performed on the _____ project located in Emmitsburg, Maryland. The Contractor shall also attend all scheduled meetings and complete any reports required by the specifications set forth in the Scope of Work. In the event of a conflict between this Agreement and the Scope of Work, the terms of this Agreement shall be controlling.

The Project site will be ready and accessible for Contractor’s work. Contractor shall have a foreman or supervisor on site at all times during which work is performed.

ARTICLE 3. Time of Completion

The work to be performed under this contract shall start on or about _____ and shall conform to the contract schedule outline in the Scope of Work. Completion of punch list

items and final walk through shall occur before _____. Failure to timely complete the work as set forth herein may result in the assessment of delay damages in the amount of \$_____ per day which shall be deducted from the contract price. Contractor will notify the Town at least 72 hours before initial mobilization. Time is of the essence.

ARTICLE 4. The Contract Price

The Town shall pay to the Contractor for the actual quantities supplied and labor to be performed under the contract the bid price of _____ dollars and ____ cents, (\$_____) subject to additions and deductions provided herein.

The foregoing bid price is not to be construed to be a lump sum contract price. The quantities of the unit price items as stated in the Contractor's proposal are approximate only, and it is understood and agreed that payment will be made only on the actual quantities of work completed in place measured on the basis defined in the Scope of Work.

The foregoing bid price is binding upon the Contractor, unless modification is made in writing and signed by the Town. Any request for change orders shall be responded to within two business days. Either party may request a change order. The Contractor is expected to fully inform itself as to the conditions, requirements and specifications before submitting bids. Failure to do so will be the Contractor's own risk and the Contractor may not secure relief on the plea of error in either omission or commission. In case of error in extension of prices in the bid, the unit price shall govern.

ARTICLE 5. Relationship of Parties

This contract creates an independent contractor relationship. The Contractor is not an agent or an employee of the Town, for any purpose. The Contractor shall provide its services under this Agreement at its own direction and control and in the manner deemed most advisable in its professional judgment. Both parties are free to contract with other parties for similar services. The Contractor will use his own tools and equipment normally used in the trade in performing the work hereunder.

ARTICLE 6. Quality of Work

The Contractor warrants that all materials furnished by Contractor incorporated into the project shall be new and that Contractor warrants that it has the expertise and know-how to perform the work described herein including knowledge of waterline construction. The Contractor warrants that all work shall be completed in a workman-like manner, according to industry standards, and in compliance with all building codes and other applicable laws.

The Contractor warrants all work shall be reasonably free of any defect and within the customary tolerance of the industry. If defects are found, the Contractor shall repair or replace any of the alleged defective work at its costs. This warranty will remain in effect for a period of one year from the date of completion.

Contractor, upon notice from Manager, covenants and agrees to promptly remove, replace and correct any work that fails to conform to the requirements of this Contract and shall remedy all defects due to faulty or improper workmanship which appear within a period of 1 year from Contractor's completion of the work. Contractor transfers and assigns to Manager by the terms of this Agreement all material manufacturers' warranties.

ARTICLE 7. Licensing

Contractor represents and warrants that it is a corporation or entity in good standing and licensed to do business in the State of Maryland and that the person signing this Agreement has the authority to do so. To the extent required by law, all work shall be performed by individuals duly licensed and authorized by law to perform said work and the Contractor is responsible for obtaining any such license. The Town will obtain any licenses or permits required by state and local law that relate specifically to the project itself.

The Contractor represents and warrants that all individuals performing any work pursuant to this Agreement are United States citizens or have the appropriate work permits required by law.

ARTICLE 8. Subcontractors

The Contract may hire subcontractors identified in the Bid Documents, or upon receiving written approval from the Town. The Contractor shall fully pay said subcontractors and in all instances remain responsible for the proper completion of this contract. The Contractor shall also insure that said subcontractors are United States citizens or have appropriate work permits required by law, licensed to do business in Maryland and duly licensed by law to perform the work for which they are hired, and have insurance in the amounts required herein. No subcontractor may perform work unless the subcontractor was identified in the bid documents or is consented to by the Town.

ARTICLE 9. Insurance

The Contractor represents and warrants it is adequately insured for property damage and for injury to its employees and others incurring loss or injury as a result of the acts of the Contractor and its employees. The Contractor agrees, before commencing any work or services under this Agreement, to provide the Town with a certificate of insurance showing comprehensive general liability and automobile insurance coverage and additional insured endorsements naming the Town and any other additional parties required as additional insured thereunder. Additional insured coverage shall apply as primary insurance with respect to any other insurance afforded to Town. The coverage available to the Town, as additional insured, shall not be less than \$1,000,000 for each occurrence, and \$1,000,000 Personal and Advertising Injury limits. Such insurance shall cover liability arising from premises, operations, independent contractors, product-completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort of liability of another assumed in a business contract). There shall be no endorsement or modification of the commercial general liability form arising from pollution, explosion, collapse, underground property damage or work performed by

subcontractors. All coverage shall be placed with an insurance company duly admitted in the State of Maryland and shall be reasonably acceptable to the Town. All Contractor insurance carriers must maintain an AM Best rating of "A-" or better. Coverage shall be afforded to the additional insured whether or not a claim is in litigation.

The insurance coverage shall be sufficient type, scope, and duration to ensure coverage for the Town for liability related to any manifestation date within the applicable statutes of limitations and/or repose which pertain to any work performed on behalf of the Town in relation to the Agreement.

Each certificate of insurance shall provide that the insurer must give the additional insureds at least 30 days prior written notice of cancellation and termination of the contractor's coverage thereunder. Not less than two weeks prior to the expiration, cancellation, or termination of any such policy, the Contractor shall supply the Town with a new and replacement certificate of insurance and additional insured endorsements as proof of renewal of said original policy. Said new and replacement endorsements shall be similarly endorsed in favor of the Town as set forth above.

Additionally, and prior to commencement of work, the Contractor shall provide the Town with a certificate of insurance showing liability insurance coverage for the Contractor and any employees, agents, or subcontractors of the Contractor for Workers' Compensation and Employer's Liability Insurance. In the event these policies are terminated, certificates of insurance showing replacement coverage shall be provided to the Town. Workers' Compensation coverage shall be no less than as required by statute. Employers liability coverage shall be no less than \$500,000 trauma each accident, \$500,000 disease each employee, and \$500,000 disease each policy.

ARTICLE 10. Payment

The Town will within thirty (30) days of receipt of an approved partial/final payment estimate and release of lien (including releases from any subcontractors) make payment to the Contractor. The Town shall remit payment to Contractor in accord with the payment schedule attached as Exhibit A. Payment shall not be an admission or approval by the Town that the work is satisfactory.

The Contractor is liable for payment of all federal, state or local taxes related to payments made under this contract. Payments by the Town to the Contractor shall not be subject to withholding and other applicable taxes. The Contractor agrees that it is responsible for the payment of estimated taxes, employment taxes, or any other taxes or insurance due by reasons of receipt of payment pursuant to this Agreement.

ARTICLE 11. Payment and Performance Bonds

Town shall check one of the following:

- At the time this Agreement is signed, Contractor shall at its expense furnish to Town performance and payment bonds, in the forms attached to this Agreement in the amount provided for below.
- At the time this Agreement is signed, Contractor shall at its expense furnish to Town performance and payment bonds, in the forms attached to this Agreement, and from a surety as described below, in the amount provided for below.
- No bond required. Article 11 is not applicable when this box is checked.
- An irrevocable letter of credit shall be posted in the amount of \$ _____.

The Contractor shall furnish a payment bond, in an amount at least equal to the total Contract Price as security for the faithful payment to all persons supplying labor and material in the prosecution of the work provided for in this Agreement. This bond shall remain in effect until 60 days after the date when final payment becomes due, except as provided otherwise by Laws or Regulations or by the Contract Documents.

The Contractor shall furnish a performance bond, in an amount at least equal to the total Contract Price as security for the faithful performance of all the Contractor's obligations under the Agreement. This bond shall remain in effect until 60 days after the date when final payment becomes due, except as provided otherwise by Laws or Regulations or by the Contract Documents.

The bond shall be in the form prescribed by the Contract Components except as provided otherwise by Laws or Regulations. All Bonds signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed each bond.

If a surety is required on the bond, the surety must be named in the list of "companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch U.S. Department of the Treasury. If the surety on any bond furnished by the Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of this section, the Contractor shall promptly notify the Town and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of this section.

ARTICLE 12. Record Management

The Contractor will provide and maintain written documentation of all work performed by the Contractor on this project. The Contractor shall maintain such records for a period of five (5)

years from the date of their creation. The Contractor shall furnish a copy to the Town upon completion of the Project and before receipt of final payment.

ARTICLE 13. Indemnification

To the fullest extent permitted by law, the Contractor shall indemnify, defend (at the Contractor's sole expense) and hold harmless the Town, their representatives, designees, officers, employees, agents and assigns (the "Indemnified Parties") from and against any and all claims for bodily injury, death or damage to property, demands, damages, actions, causes of action, suits losses, judgments, obligations and any liabilities, costs and expenses (including but not limited to investigative and repair costs, attorney's fees and costs, and consultants' fees and costs) ("Claims") which arise or are in any way connected with the work performed, materials furnished, or services provided under this contract by the Contractor, or its employees, agents or subcontractors.

ARTICLE 14. Town Property

Immediately upon termination of this Agreement, for whatever reason, the Contractor shall return to the Town any written or printed matter of every nature, personal property, and equipment or materials of the Town that may have been accumulated by the Contractor during the term thereof.

ARTICLE 15. Repair

Any damage to Town's property by Contractor or its agents shall promptly be repaired and restored to its condition prior to the damage.

ARTICLE 16. Notice of Delay

The Contractor will promptly notify the Town of any conditions which should cause a delay in the work schedule. Failure to provide Notice to the Town will preclude any contract extension. The Town may issue stop work orders Any period during which work is stopped by the Town shall result in an extension of time for completion equal to the duration of the stoppage.

ARTICLE 17. Termination of Agreement by the Town

This Agreement may be cancelled, and the Contractor's engagement terminated by the Town **without prior notice** for the following reasons:

- a) The Contractor fails to perform its duties under the contract, or otherwise fails to comply with the terms and provisions hereof.
- b) The public conduct of the Contractor is such as to adversely affect public confidence in the Town.
- c) The Contractor files for bankruptcy protection.
- d) The Contractor or its officers or employees are convicted of committing a felony, or committing a misdemeanor involving moral turpitude.

- e) The Contractor fails to maintain a license.
- f) The Contractor or its employees conduct themselves in an unprofessional, unethical or fraudulent manner.

ARTICLE 18. Voluntary Termination for Convenience

Upon two (2) business days' Notice to Contractor, the Town shall have the right at any time, and for any or no reason, including for convenience, to terminate this Subcontract and require the Subcontractor to cease work thereon. The Subcontractor, in such event, shall be entitled to payment only as provided herein. Contractor shall be paid for work completed and materials delivered up to the time of termination. The notice periods shall commence to run on the day following the mailing of the respective notices of termination or on the date following personal delivery, as the case may be. Termination of this agreement pursuant to notice shall not preclude termination subsequent thereto without notice in accordance with Article 17 above, in which case the provisions hereof shall no longer be applicable.

ARTICLE 19. Compliance

Contractor shall comply with all wage and hour laws and shall not discriminate based on sex, religion, disability, gender orientation or any bases prohibited by Maryland or Federal laws.

ARTICLE 20. Appointment of Additional Independent Contractors

The Town shall be free to contract with other persons to provide work on this project.

ARTICLE 21. Benefits and Burdens

The terms and provisions of this agreement shall inure to the benefit of and be binding upon the parties hereto. This agreement shall not be assignable by the Contractor.

ARTICLE 22. Waiver of Breach

The waiver by the Town of a breach of any provision of this agreement by the Contractor shall not operate or be construed as a waiver of any subsequent breach by the Contractor. No waiver shall be valid unless in writing and signed by and authorized representative of the Town.

ARTICLE 23. Governing Law

This Agreement shall be governed in all respects, whether as to validity, construction, capacity, performance or otherwise, by the laws of the State of Maryland. The paragraph headings used in this Agreement are included solely for convenience and shall not affect or be used in connection with, the interpretation of this Agreement. In the event of any dispute relating to this agreement or the work performed hereunder, the Contractor consents to jurisdiction and venue in Frederick County, Maryland, and agrees to waive any right to trial by jury.

ARTICLE 24. Disputes

In the event of a dispute regarding the terms of the contract or performance under the contract, the Contractor and the Town will attempt to resolve the dispute through friendly consultation. It is agreed that the only parties to a dispute shall be the Contractor and the Town, unless the Contractor and Town agree to allow additional parties.

If the dispute is not resolved within a reasonable period then the parties agree to engage in mediation with an agreed upon mediator. If the parties cannot agree on the mediator, then each party will choose a mediator and these mediators will act as each party's representative to choose the mediator.

ARTICLE 25. Legal Fees

In the event of any dispute hereunder, other than one in which the Contractor is obligated to indemnify the Town pursuant to Article 13, both the Contractor and the Town agree that the losing party shall pay the prevailing party's reasonable attorney's fees and expenses incurred in litigation. In the event a party prevails only partially on its claims, only those fees and expenses associated with the successfully prosecuted claim may be recovered and they will be offset by the fees and expenses incurred by the opposing party defending against the unsuccessful claim.

ARTICLE 26. Severability

In the event that any provision of this agreement violates any rule of law or is otherwise unenforceable, only such invalid provision and not this entire agreement shall be considered void, and all of the other provisions hereof shall remain in full force and effect. In construing this agreement, only the least possible modification shall be made in deleting or striking invalid provisions. Invalidity shall be considered on a word-by-word basis, and only those words giving rise to invalidity shall be stricken.

ARTICLE 27. Build America, Buy America Act

This agreement is for services related to a project that is subject to the Build America, Buy America Act (BABAA) requirements under Title IX of the Infrastructure Investment and Jobs Act ("IIJA"), Pub. L. 117-58. Absent an approved waiver, all iron, steel, manufactured products, and construction materials used in this project must be produced in the United States, as further outlined by the Office of Management and Budget's Memorandum M-22-11, Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure, April 18, 2022. Bidder is familiar with all laws and regulations that may affect cost, progress, and performance of the work, including BABAA requirements.

DePAUL STREET WATERLINE REPLACEMENT PHASES 1 & 2
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

IN WITNESS WHEREOF, the parties hereto set their hands and seals unto this Agreement, which is executed as of the day and year first above mentioned.

Signed this _____ day of _____, 20_____.

WITNESS:

COMPANY

By: _____
Name & Title

ATTEST:

MAYOR, TOWN OF EMMITSBURG

By: _____
Cathy Willets, Town Manager

By: _____
Allen Frank Davis Jr., Mayor

Reviewed for Technical Sufficiency:

Reviewed for Legal Sufficiency:

By: _____
Cathy Willets, Town Manager

By: _____
Leslie A. Powell, Town Counsel

Reviewed for Financial Sufficiency:

By: _____
Sabrina King, Town Clerk

1. AFFIDAVIT

(Must be completed and signed BY AN AUTHORIZED SIGNATORY, and submitted with the proposal.)

Contractor: _____

Address: _____

Telephone: _____ Proposal No.: _____

I, _____, the undersigned, _____ of the above name
(Print Signer's Name) (Print Office Held)

Contractor do declare and affirm this _____ day of _____, 20____ that I hold the
(Month) (Year)

aforementioned office in the above named Contractor and I affirm the following:

AFFIDAVIT I: The Contractor, Agent and/or employees, have not in any way colluded with anyone for and on behalf of the Contractor or themselves, to obtain information that would give the Contractor an unfair advantage over others, nor have they colluded with anyone for and on behalf of the Contractor, or themselves, to gain any favoritism in the award of the contract herein.

AFFIDAVIT II: No officer or employee of Town of Emmitsburg, whether elected or appointed, has in any manner whatsoever, any interest in or has received prior hereto or will receive subsequent hereto any benefit, monetary or material, or consideration from the profits or emoluments of this contract, job, work or service for the Town, and that no officer or employee has accepted or received or will receive in the future a service or thing of value, directly or indirectly, upon more favorable terms than those granted to the public generally, nor has any such officer or employee of the Town received or will receive, directly or indirectly, any part of any fee, commission or other compensation paid or payable to the Town in connection with this contract, job, work, or service for the Town, excepting, however, the receipt of dividends on corporation stock.

AFFIDAVIT III: Neither I, nor the Contractor, nor any officer, director, or partners, or any of its employees who are directly involved in obtaining contracts with Town of Emmitsburg have been convicted of bribery, attempted bribery, or conspiracy to bribe under the laws of any state, or of the federal government for acts of omissions committed after July 1, 1977.

AFFIDAVIT IV: Neither I, nor the Contractor, nor any of our agents, partners, or employees who are directly involved in obtaining contracts with Town of Emmitsburg have been convicted within the past 12 months of discrimination against any employee or applicant for employment, nor have we engaged in unlawful employment practices as set forth in Section 16 of Article 49B of the Annotated Code of Maryland or, of Sections 712 and 704 of Title VII of the Civil Rights Act of 1964.

DePAUL STREET WATERLINE REPLACEMENT PHASES 1 & 2
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

AFFIDAVIT V: Neither I, nor the Contractor, nor any of our officers, directors, trustees or partners who are directly involved in obtaining contracts with Town of Emmitsburg is a member of the Town Council or the Mayor for Town of Emmitsburg, Maryland, nor are we qualified relatives (spouse, parent, child) of said elected officials, nor are we a business entity in which a qualified relative of said elected officials has a direct financial interest.

AFFIDAVIT VI: The Contractor, Agent and/or employees working on its behalf, declare that they, in accordance with the Maryland Campaign Finance Reform Act of 2013, have not provided any campaign financing greater than \$200,000, OR having done so, they have filed the appropriate campaign finance-related disclosures with the State Board of Elections and that a copy of the certification is attached to their submission in response to this solicitation. Should the Contractor fail to provide the necessary documentation, the Town will notify the State. The necessary documentation may be located: http://www.elections.state.md.us/campaign_finance/disclosure_of_contributions.html

I do solemnly declare and affirm under the penalties of perjury that the contents of the foregoing affidavits are true and correct to the best of my knowledge, information and belief.

DATE: _____

SIGNATURE OF SIGNATORY

EMAIL: _____

PRINTED NAME OF SIGNATORY

**REQUIREMENTS AND CONTRACT PROVISIONS FOR THE TREATMENT WORKS PROJECTS
FINANCED THROUGH THE MARYLAND WATER QUALITY REVOLVING LOAN FUND
AND THE MARYLAND DRINKING WATER REVOLVING LOAN FUND
DEPARTMENT OF THE ENVIRONMENT
STATE OF MARYLAND**

The project or segment thereof to be constructed in accordance with these contract documents is subject to the following requirements. In the event of conflict with other requirements of the contract documents, the following requirements control unless the requirement is a minimum requirement. Nothing in this document shall be construed to prohibit the owner from requiring additional assurances, guarantees, indemnities, or other contractual requirements from any other party to this agreement.

- I. **ASSURANCES FOR COMPLIANCE WITH THE FOLLOWING FEDERAL AND STATE LAWS AND REGULATIONS:**
 1. **NON-DISCRIMINATION IN EMPLOYMENT**
 2. **DEBARMENT**
 3. **ANTI-KICKBACK**
 4. **CONTRACT WORK HOURS AND SAFETY STANDARDS.**
 5. **COMPLIANCE WITH CFR 40 247– 254 (RCRA - SECTION 6002)**
 6. **COMPLIANCE WITH PREVAILING FEDERAL WAGE RATES UNDER THE DAVIS-BACON AND RELATED ACTS IN ACCORDANCE TO SECTION VI OF THIS DOCUMENT**
 7. **MARYLAND ANTIDegradation IMPLEMENTATION PROCEDURES**
 8. **COMPLIANCE WITH BUILD AMERICA, BUY AMERICA (BABA) ACT**
 9. **PROHIBITION ON CERTAIN TELECOMMUNICATION AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT (2 CFR 200.216)**
- II. **DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION**
 - **GUIDANCE DOCUMENTS AND FORMS**
(Performance of the good faith steps are required, regardless of goal achievement. All information is to be submitted to the owner, prior to the owner's award of the contract, UNLESS OTHERWISE DIRECTED BY THE OWNER).
- III. **PRESIDENTIAL DOCUMENTS**
 - **ATTACHMENT II**
EXECUTIVE ORDER 13202 of February 17, 2001
EXECUTIVE ORDER 13208 of April 8, 2001
- IV. **SEVERABILITY**
- V. **PROJECT SIGNS**
- VI. **FEDERAL WAGE RATE REQUIREMENTS UNDER THE DAVIS-BACON AND RELATED ACTS**

I. ASSURANCES

The contractor is required to comply with the Federal laws and regulations in regard to non-discrimination in employment, debarment, anti-kickback, contract work hours and safety standards, and prevailing Federal wage rates under the Davis-Bacon and related acts as delineated below.

1. Non-discrimination in Employment:

The contractor is required to comply with Executive Order 11246 of September 24, 1965 entitled “Equal Employment Opportunity” as amended by Executive Order 11375 of October 13, 1967.

The contract for the work under this proposal will obligate the prime contractor and its subcontractors not to discriminate in employment practices.

The contractor shall not maintain or provide for his/her employees the facilities, which are segregated on a basis of race, creed, color, or national origin, whether such facilities are segregated by directive or on a de facto basis.

The contractor must, if requested, submit a compliance report concerning their employment practices and policies in order to maintain his/her eligibility to receive the award of the contract.

The contractor must be prepared to comply in all respects with the Contract Provisions regarding non-discrimination, as stipulated under the Labor Standards.

2. Debarment:

Under Executive Order 12549, an individual or organization debarred from participation in Federal assistance or benefit programs may not receive any assistance award under a Federal program, or a sub-agreement thereunder for \$25,000 or more.

Therefore, the bidder as an individual or as an organization, presently debarred, suspended, proposed for debarment, will be declared ineligible to participate in bidding the proposed contract as a prospective recipient of financial assistance from the Maryland Department of the Environment.

The contractor shall not enter into any sub-contract with any individual, firm or organization debarred from Government contracts pursuant to Executive Order 11246.

3. Anti-kickback:

The contractor and/or its sub-contractors shall comply with the Copeland “Anti-Kickback” Act (18 U.S.C. 874). Any evident illicit kickback practice in any shapes or forms will cause termination of the contract.

4. Contract Work Hours and Safety Standards:

The contractor and/or its sub-contractors shall comply with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330).

5. Compliance with 40 CFR: 247– 254 (RCRA - Section 6002):

The contractor shall comply with the guidelines contained in 40 CFR 247– 254 (Section 6002 of the Resource Conservation and Recovery Act).

State and local recipients and sub-recipients of grants, loans, cooperative agreements or other instruments funded by appropriated Federal funds shall give preference in procurement programs to the purchase of recycled products pursuant to the EPA guidelines.

6. Compliance with Prevailing Federal Wage Rates under the Davis-Bacon and Related Acts in accordance to Section VI of this document.

All laborers and mechanics employed by contractors and sub-contractors on projects funded directly by or assisted in whole or in part by and through the Federal Government programs including the State Revolving Loan fund shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code. With respect to the labor standards

specified in this section, the Secretary of Labor shall have the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (64 Stat. 1267; 5 U.S.C.App.) and section 3145 of title 40, United States Code. Most recent Federal prevailing wages can be obtained from: <https://sam.gov/content/wage-determinations>

The prevailing wage determination category that should be used for this project is Heavy Construction (including water and sewer). This determination is based on the Federal Department of Labor Wage and Hour Division classification.

7. Maryland Antidegradation Implementation Procedures:

The Clean Water Act requires three components to water quality standards that set goals for and protect each States' waters. The three components are: (1) designated uses that set goals for each water body (e.g., recreational use), (2) criteria that set the minimum conditions to support the use (e.g., bacterial concentrations below certain concentrations) and (3) an antidegradation policy that maintains high quality waters so they are not allowed to degrade to meet only the minimum standards. The designated uses and criteria set the minimum standards for Tier I.

Maryland's antidegradation policy has been promulgated in three regulations: COMAR 26.08.02.04 sets out the policy itself, COMAR 26.08.02.04-1, provides for identification and implementation of Tier II (high quality waters) of the antidegradation policy, and COMAR 26.08.02.04-2 that describes Tier III (Outstanding National Resource Waters or ONRW), the highest quality waters. No Tier III waters have been designated at this time. Any capital funding project occurring within Tier II catchment areas, which are areas that drain to Maryland's high quality designated Tier II stream segments, must undergo Antidegradation Review.

To determine if your project is located within Tier II catchment area, please contact Ms. Angel Valdez of MDE Environmental Standards and Assessment Program, at (410) 537-3606, or at angel.valdez@maryland.gov.

Please be aware that projects subject to an Antidegradation or Tier II review must adequately address comments that arise during the review before funding can be granted.

How Tier II Stream Segments are Designated

- Currently high quality stream segments are designated for the characteristic of biology using Maryland Biological Stream Survey (or comparable) data
- Streams are recorded in Table O (COMAR 26.08.02.04-1) and the pending list of streams awaiting promulgation or corrections is maintained on the MDE website.

The Basic Antidegradation Review Process

Many of the projects funded by the Water Infrastructure Financing Administration (WIFA) at MDE result in a net improvement to water quality. As a result, the antidegradation review process for WIFA generally involves making sure that any land disturbance activities associated with the project includes additional controls. Any other antidegradation reviews specific to project discharges (e.g. end-of-pipe) will be addressed separately through the permitting process.

To help expedite the review process the following list of practices has been provided. These practices include "accelerated stabilization, redundant controls, increased riparian buffers, passive or active chemical treatment, or a reduction in the size of the grading unit" as stated in the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control to address Tier II issues. All practices implemented should be evident in plans. When using the list below to aide in planning keep in mind that application and site specifics will ultimately determine each recommendation's applicability. Also realize that this list is not exhaustive and additional practices may be identified as specific plans become available.

- Initial Considerations: including limiting vegetative disturbances, phasing and/or sequencing, accelerated stabilization, minimum weekly inspections, and timing of in-stream work to low flow periods or clear weather forecasts

- **Expanded Riparian Buffers (for new structures/expansions only):** from 100 to 230 feet, depending upon slope and soil composition, on all intermittent and perennial streams within project footprint to help further address direct hydrologic impacts to surface waters. See Table 1 for more details.

Table 1

Adjusted Average Optimal Buffer Width Key for HQ Waters (minimum width 100 feet)				
Slopes (%)				
Hydrologic Soil Group	0-5%	5-15%	15-25%	>25%
Ab	100	130	160	190
C	120	150	180	210
D	140	170	200	230

- **Streamside Management Zones (buffer areas for utility projects):** where disturbance and work cannot be avoided, utilize minimally disturbing & selective vegetative clearing methods, restorative planting (not seeding) for major near-stream clearings totaling 1 acre or more, no mulch placement within the streamside management zones, if possible allow small shrub growth
- **Enhanced Buffer Management:** including sheetflow of discharge beyond the minimum 100 foot vegetative buffer or implementing redundant mechanisms in dewatering exercises such as devices in manifold, use of chemical filtration aides, combining two practices such as filter bags with vegetated buffers and silt fencing. Also incorporation of super silt fencing or an equivalent practice when working near streams.
- **Enhanced Temporary Access Waterways Crossings:** including utilizing horizontal directional drilling/jack and bore for all major stream crossings or sensitive crossings, including a frac-out plan; preferential use of partial diversions (where possible); and utilization of temporary access bridges over fords.
- **Special Concern- pH and Water Quality:** For all activities related to in-stream grout placement, either in bags or as fill:
 1. To prevent impacts to in-stream pH, such operations should occur “in-the-dry”.
 2. An emergency treatment plan should be in place to address accidental material releases.
 3. Cure time allotted should reflect chemically stable grout material and should also represent the most conservative time in the expected cure range.
 4. The water quality standard numeric criteria for pH must be met in the ‘first flush’ before diversion is removed.
- **Stormwater Management:** follow the current guidelines within the Maryland Stormwater Design Manual (2009 Revised), including ESD to the MEP or other non-structural practices

8. COMPLIANCE WITH BUILD AMERICA, BUY AMERICA (BABA) ACT

None of the funds made available by a State water pollution control revolving fund as authorized by title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.) or made available by a drinking water treatment revolving loan fund as authorized by section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j-12) shall be used for a project for the construction, alteration, maintenance, or repair of a public drinking water system or water quality unless all of the *iron, steel, manufactured products, and construction materials* used in the project are produced in the United States (Build America, Buy America (BABA) Act, P.L. 117-58, Secs 70911 - 70917).

The Act requires the following Buy America preference:

- (1) All iron and steel used in the project are produced in the United States. This means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
- (2) All manufactured products used in the project are produced in the United States. This means the manufactured product was manufactured in the United States, and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation.
- (3) All construction materials are manufactured in the United States. This means that all manufacturing processes for the construction material occurred in the United States. The “construction materials” include an article, material, or supply other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives that is or consists primarily of:
 - non-ferrous metals;
 - plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
 - glass (including optic glass);
 - lumber; or
 - drywall.

To provide clarity to item, product, and material manufacturers and processors, we note that items that consist of two or more of the listed materials that have been combined together through a manufacturing process, and items that include at least one of the listed materials combined with a material that is not listed through a manufacturing process, should be treated as manufactured products, rather than as construction materials. For example, a plastic framed sliding window should be treated as a manufactured product while plate glass should be treated as a construction material.

Certification Process:

The final manufacturer that delivers the iron, steel, manufactured products, or construction materials to worksite, vendor, or contractor, may provide a certification asserting that all manufacturing processes occurred in the US. The certification should include the name of the manufacturer, the location of the manufacturing facility where the product or process took place (not its headquarters), a description of the product or item being delivered, and a signature by a responsible party.

Additional documentation such as Step Certification may be needed if the certification is lacking important information. A Step Certification is a process under which each handler (supplier, fabricator, manufacturer, processor, etc) of the iron, steel, manufactured products, and construction materials certifies that their step in the process was domestically performed. Each time a step in the manufacturing process takes place, the manufacturer delivers its work along with a certification of its origin.

Waiver:

A request for waiver may be submitted to MDE. Pursuant to Section 70914(c) of the BABA Act, a waiver may be considered under one of the following categories:

1. Applying the domestic content procurement preference would be inconsistent with the public interest (a “public interest waiver”);
2. Types of iron, steel, manufactured products, or construction materials are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality (a “nonavailability waiver”); or

3. Inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25 percent (an “unreasonable cost waiver”).

MDE may agree with the waiver request and submit it to the Administrator of the Environmental Protection Agency for final approval. Alternatively, MDE may, in its sole discretion, reject the waiver request and elect not to fund the project.

De Minimis Nationwide Waiver:

A De Minimis Nationwide Waiver was issued by EPA, on October 21, 2022, waiving Build America, Buy America requirements for products used in and incorporated into a project that cumulatively comprise no more than five percent of the total project cost.

To be covered under this waiver, the grant/loan recipient must, in consultation with the contractor, take the following actions:

1. Retain relevant documentation (i.e. invoices) as to those items being covered under this waiver in their project files.
 2. Summarize in reports to MDE the types and/or categories of items to which this waiver is applied, including the cost of each category/type. The report must also include the total cost of items covered by the waiver (including installation cost), the total project cost, and the percentage of covered items calculated by cost.
 3. Upon the receipt of the report, MDE, within 30 calendar day of receipt, will accept and file the report, request additional information, or advise the grant/loan recipient that the items cannot be covered under this waiver and a project specific waiver is needed.
 4. If no comments are received by MDE within 30 calendar days, the grant/loan recipient would not need to take any further action, unless more items need to be covered, at which time cumulative summary would need to be submitted to MDE.
9. Borrower agrees to comply with 2 CFR 200.216, which requires that EPA recipients and subrecipients, including borrowers under EPA funded revolving loan fund programs, are prohibited from obligating or expending loan or grant funds to procure or obtain; extend or renew a contract to procure or obtain; or enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

Within seven (7) days of the bid opening, the apparent low bidder shall sign the form of “Assurances for Compliance with Federal Laws and Regulations” pertaining to non-discrimination in employment, debarment, anti-kickback, contract work hours and safety, compliance with prevailing Federal wage rates under the Davis-Bacon and related acts, and Maryland Antidegradation Implementation Procedures, and use of American iron and steel. The form is appended herewith in Section I.

ASSURANCES FOR COMPLIANCE WITH FEDERAL LAWS AND REGULATIONS
FOR WATER QUALITY-TREATMENT WORKS AND DRINKING WATER PROJECT

Project Name: _____ **Contract No. (if applicable):** _____

The contractor is required to comply with the following Federal laws and regulations:

1. Non-discrimination in Employment in accordance with Executive Order 11246 of September 24, 1965 entitled “Equal Employment Opportunity” as amended by Executive Order 11375 of October 13, 1967.
2. Debarment in accordance with the Executive Order 12549 and Executive Order 11246.
3. Anti-kickback in accordance with the Copeland “Anti-Kickback” Act (18 U.S.C. 874).
4. Contract Work Hours and Safety Standards in accordance with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330).
5. Compliance with Guidelines Contained in 40 CFR 247-254 (RCRA - Section 6002).
6. The prevailing Federal wage rates as determined by the U.S. Department of Labor under the Davis-Bacon and related acts. The prevailing wage determination category that should be used for this project is Heavy Construction (including water and sewer). Available at: <https://sam.gov/content/wage-determinations>

General Decision Number: _____ **Date:** _____

7. Maryland Antidegradation Implementation Procedures as promulgated in three regulations: COMAR 26.08.02.04 sets out the policy itself, COMAR 26.08.02.04-1, provides for identification and implementation of Tier II (high quality waters) of the antidegradation policy, and COMAR 26.08.02.04-2 that describes Tier III (Outstanding National Resource Waters or ONRW), the highest quality waters. No Tier III waters have been designated at this time.
8. Use of the iron, steel, manufactured products, and construction materials produced in the United States (Build America, Buy America (BABA) Act, P.L. 117-58, Secs 70911 - 70917).
9. 2 CFR 200.216, which requires that EPA recipients and subrecipients, including borrowers under EPA funded revolving loan fund programs, are prohibited from obligating or expending loan or grant funds to procure or obtain; extend or renew a contract to procure or obtain; or enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

I do solemnly declare and affirm that I am obligated to comply with the above Federal laws and regulations. It is understood that non-compliance with any one of the above Federal laws and regulations will be sufficient reason to cause termination of the contract.

Contractor

Signed by: _____
Authorized Officer

Date

Name (Print)

Title (Print)

II. Maryland Department of the Environment
Maryland Water Quality & Drinking Water Revolving Loan Fund Programs
Disadvantaged Business Enterprise Program (DBE)
Guidance for Prime (Construction & A/E) Contractors

The Maryland Water Quality and Drinking Water Revolving Loan Fund Programs (RLF) receive federal funds from the U.S. Environmental Protection Agency (EPA). The funds are used to provide low interest rate loans to finance water quality and drinking water capital projects. As a condition of federal grant awards, EPA regulations require that loan recipients and sub-recipients (i.e., prime contractors and subcontractors) make a good-faith effort to award a fair share of work to DBEs who are small business enterprises (SBE's), minority business enterprises (MBE's) and women's business enterprises (WBE's). A/E service consultants who receive loan funds are also considered as prime contractors and must comply with DBE requirements. Additionally, EPA's DBE rule requires loan recipients and sub-recipients to adhere to the terms and conditions in Appendix A attached hereto.

To ensure compliance with EPA DBE requirements, the MWQFA has developed guidance for both Loan Recipients and Prime Contractors (sub-recipients) to undertake certain good faith efforts to provide opportunities for DBE firms to participate in contracts. EPA regulations require evidence of the demonstration of the six good faith efforts in trying to achieve the DBE participation goals. MDE's negotiated DBE participation goals with EPA have been approved as of February 6, 2019. The goals below are not a quota and apply to DBE participation only.

<i>Procurement Category</i>	<i>MBE Goal (%)</i>	<i>WBE Goal (%)</i>
Construction	22	16
Equipment	23	11
Services	25	18
Supplies	23	11

Good Faith Efforts: The following good faith efforts apply to the procurement categories involving EPA financial assistance funds (See Appendix B: EPA Good Faith Efforts):

- Step 1:** Ensure DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities by placing qualified DBEs on solicitation lists whenever they are potential sources.
- Step 2:** Establishing delivery schedules, where the requirement permits to encourage participation by DBEs. The prime contractor should allow a 30-day minimum advertising period for bidding.
- Step 3:** Dividing total requirements, when economically feasible, into small tasks or quantities, to permit maximum participation of DBEs.
- Step 4:** Encourage contracting with a consortium of DBEs, when a contract is too large for one of these firms to handle individually.
- Step 5:** Using the services and assistance of the Maryland Department of Transportation (MDOT), the United States Small Business Administration (SBA) and the Minority Business Development Agency (MBDA) of the U.S. Department of Commerce (See Appendix C).
- Step 6:** Require each sub-contractor, if subcontracts are to be let, to take the steps 1- 5.

Please submit all information to:

DBE Coordinator, MWIFA

1800 Washington Blvd., Baltimore MD 21230

Phone: 410-537-3146, FAX: 410-537-3968

<https://mde.maryland.gov/programs/water/WQFA/Pages/mwbe.aspx>

Disadvantaged Business Enterprise Program (DBE)

Guidance for Prime (Construction & A/E) Contractors

Demonstration of the Six Good Faith Efforts. See **Appendices A & B** for additional bidding instructions and contract administrative provisions.

A: Prime contractors are required to undertake good faith efforts. Steps 1 & 5 can be attained by developing a bidders list of qualified DBE firms that can bid as sub-contractors. The prime contractors should advertise in minority, local and regional newspapers and obtain a bidders list from the loan recipient to supplement their list. The bidders list used during sub-contractor solicitation must be available throughout the project's construction period.

In developing bidders list of qualified DBE firms for participation as sub-contractors in construction, equipment, services, and supplies, the prime contractors should contact and gather information from different resources (See **Appendix C**) such as:

- Loan Recipient
- U.S. Small Business Administration (US-SBA)
- Minority Business Development Agency (MBDA) of the US Department of Commerce
- Maryland Department of Transportation (MDOT)

The DBE bidders lists may be classified with Standard Industrial Classification (SIC) or NAICS codes, should be updated periodically, and should be made available to sub-contractors to solicit additional sub-contractors, if necessary. **The prime contractor is required to keep the bidders list throughout the project's construction period.**

B: Prime contractors are also required to undertake good faith efforts. Steps 2, 3, & 4, can be utilized during the project planning, design and/or pre-bidding phase, to assure that qualified DBE firms have procurement opportunities in construction, equipment, services, and supplies.

To provide procurement opportunities to DBE firms, the Prime Contractor should undertake the following:

- Conduct pre-bid meetings to inform potential bidders/contractors about DBE requirements and provide guidance in undertaking the required good faith efforts.
- Use the bidders list developed in Item A (above) to solicit DBE firms as sub contractors.
- Invite DBE firms, where appropriate, to meetings, conferences, etc., to inform them of procurement opportunities and develop, where possible, reasonable contract and delivery schedules that encourage and facilitate participation by DBEs.
- Determine if a project can be broken down into smaller components/contracts to allow opportunity for DBE firms to bid as sub-contractors.
- For projects broken down into smaller components (e.g., painting, roofing, excavation, pipe laying, etc.) ensure that the delivery schedules are reasonable.
- Encourage DBE firms, where appropriate, to apply as a consortium, or as part of a consortium of DBEs, when a contract is too large for one of these firms to handle individually.

MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard, Suite 515 Baltimore MD 21230-1718

410-537-3119, 1-800-633-6101 https://mde.maryland.gov/programs/water/WQFA/Pages/mission_statement.aspx

Disadvantaged Business Enterprise (DBE) Good Faith Efforts Checklist

To be Completed by Loan Recipient

Project Name:

Procurement Category: Check box for all M/WBE procurement categories being reported under the above referenced project.

Construction Equipment Services Supplies

For each procurement action, please answer the following questions

A: Develop Bidders List of DBE firms

- | | | | |
|----|--|------------------------------|-----------------------------|
| A1 | Did you develop a Bidders List of DBE firms? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| A2 | Did you advertise via eMMA, minority, local/regional papers or Dodge Report? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| A3 | Did you send invitation for bids to DBE trade associations? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| A4 | Did you contact US-SBA/MBDA/MDOT? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| A5 | Did you provide Prime Contractors with Bidders List | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| A6 | Did you provide MDE with Bidders List? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

B: Smaller work components and delivery schedules

- | | | | |
|----|---|------------------------------|-----------------------------|
| B1 | Did DBE firms have opportunities to bid as prime contractors? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| B2 | Did you break down the project, where economically feasible, into smaller components? | | |
| | o For DBE firms to bid as prime contractor | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| | o For DBE firms to bid as sub-contractors | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| B3 | Do project components have reasonable delivery schedules? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| B4 | Did you allow a reasonable time for DBEs to bid (e.g., min. of 30 days)? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| B5 | Did you encourage DBEs to bid as a consortium due to project size? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

C: Require prime contractor to Undertake Good Faith Efforts

- | | | | |
|----|--|------------------------------|-----------------------------|
| C1 | Did you include the “MDE Insert” in the bidding documents? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| C2 | Did you require the prime contractors to apply the good faith efforts? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| C3 | Is DBE a “responsiveness” criteria in bid documents? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

D: Solicitation Summary of DBE firms (Use Attachment 1 for each prime contract)

- | | | | |
|----|--|------------------------------|-----------------------------|
| D1 | Did you use the Bidders List to solicit prime contractors? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| D2 | Did DBE firms bid as prime contractors? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| D3 | Did you select any DBE firms as prime contractor? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| D4 | Is the prime contractor using any subcontractors? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

Loan recipient must also complete Attachment 1 and have prime contractor list each DBE subcontractor on WIFA 6100 Form. In addition, WIFA 6100 Form must be submitted with bid proposal after completion by prime contractor.

Supporting Documentation

In support of the actions taken in items A, B, C and D (above), all borrowers and prime contractors must attach this checklist along with supporting documentation for “Yes” answers and an explanation for “No” answers. Examples of supporting documentation include: (i) Bidders List of DBE firms; (ii) list of sub-contract work elements possible under the prime contract; (iii) proof of contact with DBE firms as potential prime contractors (copies of invitations for bids/RFP, contact letters, faxes and telephone call sheets, etc.; (iv) copies of all procurement advertisements; and (v) list of all prime contractors that submitted bids/RFP.

Loan Recipient’s Name and Title

Loan Recipient Official’s Signature/ Date

Contact Phone # _____

Attachment 1

MARYLAND DEPARTMENT OF THE ENVIRONMENT
SOLICITATION OF FIRMS
Loan Recipient must complete one form for each prime (construction & A/E) contract

Project Name: [text box]

Total Contract Amount (Prime Construction Contractor): \$ [text box]

Please answer the following questions for each prime contract

Procurement Category: Check only one procurement category for each prime contract being reported under the above referenced project. Construction [checkbox] Equipment [checkbox] Services [checkbox] Supplies [checkbox]

Summary of Prime Contractors Solicited

- 1 Number of firms solicited (attach list/documentation): [line]
2 Number of firms that responded (attach documentation): [line]
3 Number of DBE firms that responded (attach documentation): [line]

Details of Selected Firm

4 Name of Firm: [text box]

5 Address: [text box]

6 Contact Person (Name and Phone): [text box]

7 Total amount of Contract \$ [text box]

8 Is the firm a Minority Business Enterprise? (MBE) Yes [checkbox] No [checkbox]

9 Is the firm a Women Business Enterprise? (WBE) Yes [checkbox] No [checkbox]

10 If the response to question 8 or 9 is Yes, please complete the following:

- o M/WBE Certification Number: [line]
o Certification Date: [line]
o Expiration Date (if applicable): [line]
o Certifying Agency: [line]

Please submit all information to:
DBE Coordinator, MWIFA
1800 Washington Blvd., Baltimore MD 21230
Phone: 410-537-3146, FAX: 410-537-3968

MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard Suite 515 Baltimore MD 21230-1718

410 537 3119 1-800-633-6101

<https://mde.maryland.gov/programs/water/WQFA/Pages/mwbe.aspx>

**Disadvantaged Business Enterprise (DBE) Good Faith Efforts Checklist
To be completed by Prime (Construction & A/E) Contractor**

Project Name:

Procurement Category: Check box for all M/WBE procurement categories being reported under the above referenced project. **Construction** **Equipment** **Services** **Supplies**

For each procurement action, please answer the following questions

A: Develop Bidders List of DBE firms

- A1 Did you develop a Bidders List of DBE firms? Yes No
- A2 Did you advertise via eMMA, minority, local/regional papers or Dodge Report? Yes No
- A3 Did you send invitation for bids to DBE trade associations? Yes No
- A4 Did you contact US-SBA/MBDA/MDOT? Yes No
- A5 Did you receive Bidders List from Loan Recipient? Yes No
- A6 Did you provide MDE with Bidders List? Yes No

B: Smaller work components and delivery schedules

- B1 Did DBE firms have opportunities to bid as subcontractors? Yes No
- B2 Did you break down the project, where economically feasible, into smaller components for DBE firms to bid as subcontractors? Yes No
- B3 Do project components have reasonable delivery schedules? Yes No
- B4 Did you allow a reasonable time for DBEs to bid? Yes No
- B5 Did you encourage DBEs to bid as a consortium due to project size? Yes No

C: Solicitation Summary of DBE firms (Prime Contractor must fill WIFA 6100 Form)

- C1 Did you use the Bidders List to solicit subcontractors? Yes No
- C2 Did DBE firms bid as subcontractors (provide list, work type, & price)? Yes No
- C3 Did you select any DBE firms as subcontractor? Yes No
- C4 Is the subcontractor using any additional subcontractors? Yes No

Prime contractor must provide to loan recipient: (1) list of ALL subcontractors (DBE and non-DBE) with type of work and estimated dollar amounts; (2) completed WIFA 6100 Form.

Supporting Documentation

In support of the actions taken in items A, B, and C, (above), all prime contractors must attach this checklist along with supporting documentation for “Yes” answers and an explanation for “No” answers. Examples of supporting documentation include: (i) Bidders List of DBE firms; (ii) list of sub-contract work elements possible under the prime contract; (iii) proof of contact with DBE firms as potential sub contractors (copies of invitations for bids/RFP, contact letters, faxes and telephone call sheets, etc.; (iv) copies of all procurement advertisements; and, (v) list of all sub contractors that submitted bids/RFP.

Prime Contractor’s Name and Title

Prime Contractor Official’s Signature/ Date

Contact Phone # _____

**Maryland Department of the Environment -- Water Infrastructure Financing Administration
Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Utilization Form
(MDE WIFA 6100 Form)**

This form is intended to capture the prime contractor’s actual and/or anticipated use of identified certified DBE¹ subcontractors² and the estimated dollar amount of each subcontract. An EPA Financial Assistance Agreement Recipient must require its prime contractors to complete this form and include it in the bid or proposal package. Prime contractors should also maintain a copy of this form on file.

PRIME CONTRACTOR NAME	PROJECT NAME
CONTACT NAME	CONTACT PHONE
ADDRESS	

Please list all DBE subcontractors you plan to utilize on this project. Use additional sheets as necessary.

SUBCONTRACTOR NAME	COMPANY ADDRESS	EST. DOLLAR AMOUNT TO BE SUBCONTRACTED	CURRENTLY DBE CERTIFIED? YES/NO

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware that in the event of the replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302(c).

PRIME CONTRACTOR SIGNATURE	TITLE
PRINT FULL NAME	DATE

¹ A DBE is a Disadvantaged, Minority or Woman Business Enterprise that has been certified by any entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205.

² Subcontractor is defined as a company, firm, joint venture or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

APPENDIX A: EPA DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

EPA's Disadvantaged Business Enterprise Program rule applies to contract procurement actions funded in part by EPA assistance agreements awarded after May 27, 2008. The rule is found at Federal regulation Title 40, Part 33. Specific responsibilities are highlighted below.

Loan Recipient Responsibilities:

- Include MDE's DBE guidance in each contract with a primary contractor, *MDE, October 2008*.
- Employ the six Good Faith Efforts during prime contractor procurement (§ 33.301).
- Require prime contractor to comply with the following prime contractor requirements of Title 40 Part 33:
 - a) To employ the six Good Faith Efforts steps in paragraphs (a) through (e) of § 33.301 if the prime contractor awards subcontracts (§ 33.301(f)).
 - b) To pay its subcontractor for satisfactory performance no more than 30 days from the prime contractor's receipt of payment from the recipient (§ 33.302(a)).
 - c) To notify recipient in writing by its prime contractor prior to any termination of a DBE subcontractor for convenience by the prime contractor (§ 33.302(b)).
 - d) To employ the six good faith efforts described in § 33.301 if soliciting a replacement subcontractor after a DBE subcontractor fails to complete work under the subcontract for any reason. (§ 33.302(c)).
 - e) To employ the six good faith efforts described in § 33.301 even if the prime contractor has achieved its fair share objectives under subpart D of Part 33. (§33.302(d)).
 - f) Provide grant recipient DBE participation achievements with bid proposal
- Maintain records documenting its compliance with the requirements of Title 40 Part 33, including BIDDERS LIST and documentation of its, and its prime contractors', good faith efforts (§ 33.501(a)).

Prime Contractor Responsibilities:

- Employ the six Good Faith Efforts steps in paragraphs (a) through (e) of § 33.301 if the prime contractor awards subcontracts (§ 33.301(f)).
- Pay subcontractors for satisfactory performance no more than 30 days from the prime contractor's receipt of payment from the recipient (§ 33.302(a)).
- Notify the recipient in writing prior to prime contractor termination of a DBE subcontractor for convenience (§ 33.302(b)).
- Employ the six good faith efforts described in § 33.301 if soliciting a replacement subcontractor after a DBE subcontractor fails to complete work under the subcontract for any reason. (§ 33.302(c)).

- Employ the six good faith efforts described in § 33.301 even if the prime contractor has achieved its fair share objectives under subpart D of Part 33. (§33.302(d)).
- Provide loan recipient DBE participation achievements with bid proposal: (1) list of ALL subcontractors (DBE and non-DBE) with type of work and estimated dollar amounts; (2) completed WIFA 6100 Form.
- Maintain records documenting its compliance with the requirements of Title 40 Part 33, including BIDDERS LIST documentation of its, and its prime contractors', good faith efforts (§ 33.501(a)).

APPENDIX B: TITLE 40 PART 33 SUBPART C—GOOD FAITH EFFORTS**§ 33.102 When do the requirements of this part apply?**

The requirements of this part apply to procurement under EPA financial assistance agreements performed entirely within the United States, whether by a loan recipient or its prime contractor, for construction, equipment, services, and supplies.

§ 33.106 What assurances must EPA financial assistance recipients obtain from their contractors?

The recipient must ensure that each procurement contract it awards contains the term and condition specified in Appendix A to this part concerning compliance with the requirements of this part.

§ 33.206 Is there a list of certified MBEs and WBEs?

EPA OSDBU will maintain a list of certified MBEs and WBEs on EPA OSDBU's Home Page on the Internet. Any interested person may also obtain a copy of the list from EPA OSDBU. The Maryland Department of Transportation will also have a bidders list.

§ 33.301 What does this subpart require?

A recipient, including one exempted from applying the fair share objective requirements by § 33.411, is required to make the following good faith efforts whenever procuring construction, equipment, services and supplies under an EPA financial assistance agreement, even if it has achieved its fair share objectives under subpart D of this part:

- (a) Ensure DBEs are made aware of contracting opportunities fully practicable through outreach and recruitment activities. For Indian Tribal, State and Local and Government recipients, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.
- (b) Make information on forthcoming opportunities available to DBEs, arrange periods for contracts, and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
- (c) Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. For Indian Tribal, State and local Government recipients, this will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.
- (d) Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.
- (e) Use the services and assistance of the SBA and the Minority Business Development Agency of the Department of Commerce.
- (f) If the prime contractor awards subcontracts, require the prime contractor to take the steps in paragraphs (a) through (e) of this section.

§ 33.302 Are there any additional contract administration requirements?

- (a) Loan recipient must require its prime contractor to pay its subcontractor for satisfactory performance no more than 30 days from the prime contractor's receipt of payment from the recipient.
- (b) Its prime contractor must notify loan recipient in writing prior to any termination of a DBE subcontractor for convenience by the prime contractor.
- (c) If a DBE subcontractor fails to complete work under the subcontract for any reason, the recipient must require the prime contractor to employ the six good faith efforts described in § 33.301 if soliciting a replacement subcontractor.
- (d) A recipient must require its prime contractor to employ the six good faith efforts described in § 33.301 even if the prime contractor has achieved its fair share objectives under subpart D of this part.
- (e) A recipient must ensure that each procurement contract it awards contains the term and condition specified in the Appendix A concerning compliance with the requirements of this part. A recipient must also ensure that this term and condition is included in each procurement contract awarded by an entity receiving an identified loan under a financial assistance agreement to capitalize a revolving loan fund.

§ 33.410 Can a recipient be penalized for failing to meet its fair share objectives?

A recipient cannot be penalized, or treated by EPA as being in noncompliance with this subpart, solely because its MBE or WBE participation does not meet its applicable fair share objective. However, EPA may take remedial action under § 33.105 for a recipient's failure to comply with other provisions of this part, including, but not limited to, the good faith efforts requirements described in subpart C of this part.

Source: Federal Requirements and Contract Provisions for Special Appropriation Act Projects, US Environmental Protection Agency, Region III, June 2008

**APPENDIX C: RESOURCE LISTING AND CONTACT INFORMATION
FOR UTILIZATION OF MINORITY AND WOMEN’S BUSINESS ENTERPRISES**

Resource Listing	Contact	Website if applicable
<p>State of Maryland Governor’s Office of Minority Affairs The mission of the Governor's Office of Minority Affairs (GOMA) is facilitating minority business enterprise activities through coordinating and promoting government programs aimed at strengthening and preserving the state’s minority and women owned businesses.</p>	<p>Governor's Office of Minority Affairs Suite 1502 6 Saint Paul Street Baltimore MD 21202 767-8232 1-(877) 558-0998 f-(410) 333-7568 info@mdminoritybusiness.com</p>	<p>http://www.oma.state.md.us/</p>
<p>eMARYLAND MARKETPLACE ADVANTAGE The official online procurement tool for the state of Maryland.</p>	<p>Website</p>	<p>https://emma.maryland.gov/page.aspx/en/usr/login?ReturnUrl=%2fpage.aspx%2fen%2fbuy%2fhomepage</p>
<p>U.S. Small Business Administration (SBA) In addition to the national office, the SBA has local district and regional offices to assist small businesses in contracting with the public and private sector.</p>	<p>Website</p>	<p>www.sba.gov/category/navigation-structure/contracting/working-with-government</p>
<p>CCR/Pro-Net is an extensive database that combines the SBA’s Pro-Net database and the DOD’s Central Contractor Registration database of small businesses.</p>	<p>CCR Assistance Center 888-227-2423 269-961-5757 DSN: 661-5757</p>	<p>www.ccr.gov/ Select “Dynamic Small Business</p>
<p>U. S. Small Business Administration (SBA) - MD. District Office</p>	<p>City Crescent Bld. 6th Floor 10 South Howard St. Baltimore MD 21201 Phone: 410 962-6195</p>	<p>www.sba.gov/tools/local-assistance/districtoffices</p>
<p>Minority Business Development Administration (MBDA): The MBDA is an agency within the U.S. Dept. of Commerce, created to foster the development and growth of minority businesses in the U.S. and coordinates resources in the public and private sectors to help MBE’s. Recipients and bidders should contact the centers and provide notices of contracting opportunities. Also, see the Phoenix database, which matches minority companies with business opportunities.</p>	<p>1401 Constitution Ave NW Washington, D.C. 20230 Email: support@mbda.gov 1.888.324.1551</p>	<p>www.mbda.gov/</p>
<p>Standard Industrial Classification Codes (SIC) or North American Industry Classification System (NAICS) codes visit the website.</p>	<p>Website</p>	<p>www.sba.gov/content/north-american-industry-classification-system-codes-and-small-business-size-standards</p>

<p>Maryland Department of Transportation (MDOT) and the Minority/Disadvantaged Business Enterprise (MDOT – MBE/DBE). Loan recipients and bidders may locate qualified M/WBE’s through the MBE/WBE Directory.</p>	<p>Office Address 7201 Corporate Drive Hanover, MD 21076</p> <p>Or</p> <p>Mailing Address: P.O. Box 548 Hanover, MD 21076</p>	<p>www.mdot.maryland.gov/Office%20of%20Minority%20Business%20Enterprise/HomePage.html</p> <p>http://mbe.mdot.state.md.us/directory/ Click on “Proceed to Directory. Select any combination of the fields to identify M/WBE’s for the specific project opportunities.</p>
<p>U.S. EPA Office of Small, Disadvantaged Business Utilization (OSDBU) – OSDBU’s mission includes “fostering opportunities for partnerships, contracts, subagreements, and grants for small and socioeconomically disadvantaged concerns”. One of the resources to assist prime contractors is a listing of small and disadvantaged businesses (a vendor profile system) registered with OSDBU.</p>	<p>US.EPA Office of Small Programs 1200 Pennsylvania Avenue NW Mail Code 1230T Washington, D.C. 20460</p>	<p>http://cfpub.epa.gov/sbyps/ http://www.epa.gov/osdbu/ Select “search the OSDBU Registry” Click on the search criteria of interest (ethnicity, size, SIC, etc.)</p>
<p>National Black Chamber of Commerce</p>	<p>1350 Connecticut Ave. N.W. Suite 405 Washington D.C. 20036 Phone: 202 466-6888 Fax: 202 466-4918</p>	<p>www.nationalbcc.org</p> <p>Email: info@nationalbcc.org</p>
<p>Virginia Hispanic Chamber of Commerce (Northern Va.)</p>	<p>8300 Boone Blvd., 4TH Floor Vienna, VA 22182 Phone: 804.378.4099 Fax: 703 893-1269</p>	<p>www.vahcc.com</p>
<p>U.S. Hispanic Chamber of Commerce</p>	<p>2175 K Street NW Suite 100 Washington, D.C. 20037</p>	<p>www.usfcc.com</p>
<p>National Association of Minority Contractors (NAMC)</p>	<p>666 11 Street N.W. Suite 520 Washington D.C. 20001 Phone: 202 347-8250</p>	<p>www.namcnational.org/</p>
<p>Maryland/Washington Minority Contractors (MWMCA)</p>	<p>1107 North Point Blvd, Suite 227 Baltimore, MD 21224 410.282.6101 410.282.6102 –fax</p>	<p>www.mwmca.org</p>
<p>National Association of Women’s Business Owners (NAWBO) – National</p>	<p>1760 Old Meadow Rd. Ste 500 McLean VA 22102 Phone: 800.556.NAWBO 703.506.3268 703.506.3266-fax</p>	<p>www.nawbo.org</p>

NAWBO Baltimore Regional Chapter	4404 Silverbrook Lane, Suite E-204 Owings Mills MD 21117 Phone: 410 876-0502 410.654.9734-fax	www.nawbomaryland.org Email: info@nawbomaryland.org
NAWBO Delaware Chapter	P.O. Box 4657 Greenville Station Greenville, DE 19807-4657 Phone: 302 355.9945	www.nawbodelaware.org Email: info@nawbodelaware.org
MD/DC Minority Supplier Development Council (MSDC)	10770 Columbia Pike Lower Level, Suite L100 Silver Spring MD 20901 Phone: 301 592-6710 Fax: 301 592-6704	http://mddccouncil.org/
National Minority Supplier Development Council, Inc. (NMSDC)	1040 Avenue of the Americas, 2 nd Floor New York, New York 10018 Phone: 212 944-2430 212.719.9611-fax	www.nmsdcus.org/
UIDA Business Services is a Native American Procurement and Technical Assistance Center-maintains a comprehensive database of Native American owned firms	86 South Cobb Drive, MZ:0510 Marietta, GA 30063-0510 Phone, 770 494-0431 770.494.1236-fax or <u>Northeast Region</u> 2340 Dulles Corner Blvd Mail Stop: 1n01 Herndon, VA 20171 Phone: 703.561.3120 703.561.3124-fax	
Diversity Business (A multi-cultural online resource)	200 Pequot Avenue Southport, CT 06890 Phone 203.255.8966 203.255.8501-fax	www.diversitybusiness.com/
National Association of Women in Construction	327 S. Adams Street Fort Worth, TX 76104 Phone: 1-800-552-3506 Phone: 817.877.5551 817.877.0324-fax	www.nawic.org/

III. PRESIDENTIAL DOCUMENTS

PRESIDENTIAL EXECUTIVE ORDER 13202 OF FEBRUARY 17, 2001 and PRESIDENTIAL EXECUTIVE ORDER 13208 OF APRIL 8, 2001 are appended as Attachment II.

IV SEVERABILITY

In the event any provision of the within and foregoing Requirement, including any attachment thereto, shall be held illegal, invalid, unconstitutional or unenforceable by any court of competent jurisdiction, such holding shall not invalidate, render unenforceable or otherwise affect any other provision hereof.

V. PROJECT SIGNS

- 1. The prime contractor shall provide and erect a construction site sign as described below at a prominent location at each construction site.**
- 2. For projects funded in whole or in part by the Bipartisan Infrastructure Law (BIL), the prime contractor shall provide and erect an additional construction site sign at a prominent location at each construction site using the Investing in America Signage guidelines at <https://www.epa.gov/invest/investing-america-signage>.**

The owner shall approve the site for the signs' erection. The signs shall be prepared in accordance with detailed instructions provided by Maryland Department of the Environment (MDE).

It shall be the responsibility of the contractor to protect and maintain the signs in good condition throughout the life of the project.

Attachment II

Presidential Documents**Executive Order 13202 of February 17, 2001****Preservation of Open Competition and Government Neutrality Towards Government Contractors' Labor Relations on Federal and Federally Funded Construction Projects**

By the authority vested in me as President by the Constitution and laws of the United States of America, including the Federal Property and Administrative Services Act, 40 U.S.C. 471 *et seq.*, and in order to (1) promote and ensure open competition on Federal and federally funded or assisted construction projects; (2) maintain Government neutrality towards Government contractors' labor relations on Federal and federally funded or assisted construction projects; (3) reduce construction costs to the Federal Government and to the taxpayers; (4) expand job opportunities, especially for small and disadvantaged businesses; and (5) prevent discrimination against Government contractors or their employees based upon labor affiliation or lack thereof; thereby promoting the economical, nondiscriminatory, and efficient administration and completion of Federal and federally funded or assisted construction projects, it is hereby ordered that:

Section 1. To the extent permitted by law, any executive agency awarding any construction contract after the date of this order, or obligating funds pursuant to such a contract, shall ensure that neither the awarding Government authority nor any construction manager acting on behalf of the Government shall, in its bid specifications, project agreements, or other controlling documents:

(a) Require or prohibit bidders, offerors, contractors, or subcontractors to enter into or adhere to agreements with one or more labor organizations, on the same or other related construction project(s); or

(b) Otherwise discriminate against bidders, offerors, contractors, or subcontractors for becoming or refusing to become or remain signatories or otherwise to adhere to agreements with one or more labor organizations, on the same or other related construction project(s).

(c) Nothing in this section shall prohibit contractors or subcontractors from voluntarily entering into agreements described in subsection (a).

Sec. 2. Contracts awarded before the date of this order, and subcontracts awarded pursuant to such contracts, whenever awarded, shall not be governed by this order.

Sec. 3. To the extent permitted by law, any executive agency issuing grants, providing financial assistance, or entering into cooperative agreements for construction projects, shall ensure that neither the bid specifications, project agreements, nor other controlling documents for construction contracts awarded after the date of this order by recipients of grants or financial assistance or by parties to cooperative agreements, nor those of any construction manager acting on their behalf, shall contain any of the requirements or prohibitions set forth in section 1(a) or (b) of this order.

Sec. 4. In the event that an awarding authority, a recipient of grants or financial assistance, a party to a cooperative agreement, or a construction manager acting on behalf of the foregoing, performs in a manner contrary to the provisions of sections 1 or 3 of this order, the executive agency awarding the contract, grant, or assistance shall take such action, consistent with law and regulation, as the agency determines may be appropriate.

Sec. 5. (a) The head of an executive agency may exempt a particular project, contract, subcontract, grant, or cooperative agreement from the requirements of any or all of the provisions of sections 1 and 3 of this order, if the agency head finds that special circumstances require an exemption in order to avert an imminent threat to public health or safety or to serve the national security.

(b) A finding of "special circumstances" under section 5(a) may not be based on the possibility or presence of a labor dispute concerning the use of contractors or subcontractors who are nonsignatories to, or otherwise do not adhere to, agreements with one or more labor organizations, or concerning employees on the project who are not members of or affiliated with a labor organization.

Sec. 6. (a) The term "construction contract" as used in this order means any contract for the construction, rehabilitation, alteration, conversion, extension, or repair of buildings, highways, or other improvements to real property.

(b) The term "executive agency" as used in this order shall have the same meaning it has in 5 U.S.C. 105, excluding the General Accounting Office.

(c) The term "labor organization" as used in this order shall have the same meaning it has in 42 U.S.C. 2000e(d).

Sec. 7. With respect to Federal contracts, within 60 days of the issuance of this order, the Federal Acquisition Regulatory Council shall take whatever action is required to amend the Federal Acquisition Regulation in order to implement the provisions of this order.

Sec. 8. As it relates to project agreements, Executive Order 12836 of February 1, 1993, which, among other things, revoked Executive Order 12818 of October 23, 1992, is revoked.

Sec. 9. The Presidential Memorandum of June 5, 1997, entitled "Use of Project Labor Agreements for Federal Construction Projects" (the "Memorandum"), is also revoked.

Sec. 10. The heads of executive departments and agencies shall revoke expeditiously any orders, rules, regulations, guidelines, or policies implementing or enforcing the Memorandum or Executive Order 12836 of February 1, 1993, as it relates to project agreements, to the extent consistent with law.

Sec. 11. This order is intended only to improve the internal management of the executive branch and is not intended to, nor does it, create any right to administrative or judicial review, or any right, whether substantive or procedural, enforceable by any party against the United States, its agencies or instrumentalities, its officers or employees, or any other person.



THE WHITE HOUSE,
February 17, 2001

Federal Register

Vol. 66, No. 70

Wednesday, April 11, 2001

Presidential Documents**Title 3—****Executive Order 13208 of April 8, 2001****The President****Amendment to Executive Order 13202, Preservation of Open Competition and Government Neutrality Towards Government Contractors' Labor Relations on Federal and Federally Funded Construction Projects**

By the authority vested in me as President by the Constitution and the laws of the United States of America, including the Federal Property and Administrative Services Act, 40 U.S.C. 471 *et seq.*, and in order to (1) promote and ensure open competition on Federal and federally funded or assisted construction projects; (2) maintain Government neutrality towards Government contractors' labor relations on Federal and federally funded or assisted construction projects; (3) reduce construction costs to the Federal Government and to the tax payers; (4) expand job opportunities, especially for small and disadvantaged businesses; (5) prevent discrimination against Government contractors or their employees based upon labor affiliation or lack thereof; and (6) prevent the inefficiency that may result from the disruption of a previously established contractual relationship in particular cases; thereby promoting the economical, nondiscriminatory, and efficient administration and completion of Federal and federally funded or assisted construction projects, it is hereby ordered that Executive Order 13202 of February 17, 2001, is amended by adding to section 5 of that order the following new subsection:

- (c) The head of an executive agency, upon application of an awarding authority, a recipient of grants or financial assistance, a party to a cooperative agreement, or a construction manager acting on behalf of the foregoing, may exempt a particular project from the requirements of any or all of the provisions of sections 1 and 3 of this order, if the agency head finds: (i) that the awarding authority, recipient of grants or financial assistance, party to a cooperative agreement, or construction manager acting on behalf of the foregoing had issued or was a party to, as of the date of this order, bid specifications, project agreements, agreements with one or more labor organizations, or other controlling documents with respect to that particular project, which contained any of the requirements or prohibitions set forth in sections 1(a) or (b) of this order; and (ii) that one or more construction contracts subject to such requirements or prohibitions had been awarded as of the date of this order.



THE WHITE HOUSE,
April 6, 2001.

[FR Doc. 01-9088
Filed 4-10-01; 8:45 am]
Billing code 3195-01-P

**THE CONSTRUCTION SITE SIGN FOR PROJECTS FINANCIALLY
SUPPORTED BY STATE REVOLVING LOAN FUNDS
AND OTHER FUND SOURCES**

White Background

Light Blue Scroll

Black Letters

PROJECT TITLE
Project Type (by MDE)

**A PROJECT FINANCIALLY SUPPORTED BY THE
STATE OF MARYLAND AND
U.S. ENVIRONMENTAL PROTECTION AGENCY**

**UNDER THE DIRECTION
OF THE
MARYLAND DEPARTMENT
OF THE ENVIRONMENT**

**APPROVED BY THE
MARYLAND BOARD
OF PUBLIC WORKS**

Westley W.O. Moore, Governor
Brooke E. Lierman, Comptroller
Dereck E. Davis, Treasurer



Total Project Cost: _____
State Loan: _____
State Grant: _____
Federal Funds: _____
Other Funds: _____
Local Funds: _____



4'

8'

Project Type:

Insert the selected item under the project title:

- ___ Green Infrastructure Project - Constructing environmentally beneficial “green” infrastructure
- ___ Wetlands - Creating wetlands to improve water quality and create wildlife habitat
- ___ Stream restoration - Restoring streams to improve water quality and create wildlife habitat
- ___ Living shorelines - Turning shorelines into living habitats to improve water quality and to reduce erosion and flooding
- ___ Septic connections - Connecting homes to public sewer to eliminate failing septic systems, improve water quality, and protect public health
- ___ Drinking water extension - Connecting homes to public water supply to improve drinking water quality
- ___ Stormwater project - Reducing stormwater runoff to improve water quality, protect public health, and reduce flooding
- ___ CSOs, Sewer project - Preventing sewer overflows to improve water quality and protect public health
- ___ ENR - Reducing pollution to improve Maryland waterways and the Chesapeake Bay and to protect public health

Investing in America Signage - Bipartisan Infrastructure Law

Use guidelines at <https://www.epa.gov/invest/investing-america-signage>

VI. FEDERAL WAGE RATE REQUIREMENTS UNDER THE DAVIS-BACON AND RELATED ACTS

Prevailing Wage Requirements for CWSRF Capitalization Grants

The recipient agrees to include in all agreements to provide assistance for the construction of treatment works carried out in whole or in part with such assistance made available by a State water pollution control revolving fund as authorized by Title VI of the Federal Water Pollution Control Act, also known as the CWA, (33 U.S.C. 1381 et seq.), or with such assistance made available under section 205(m) of that Act (33 U.S.C. 1285(m)), or both, a term and condition requiring compliance with the requirements of section 513 of that Act (33 U.S.C. 1372) in all procurement contracts and sub-grants, and require that loan recipients, procurement contractors and sub-grantees include such a term and condition in subcontracts and other lower tiered transactions. All contracts and subcontracts for the construction of treatment works carried out in whole or in part with assistance made available as stated herein shall insert in full in any contract in excess of \$2,000 the contract clauses as attached hereto entitled "Wage Rate Requirements Under the Clean Water Act, Section 513." This term and condition applies to all agreements to provide assistance under the authorities referenced herein, whether in the form of a loan, bond purchase, grant, or any other vehicle to provide financing for a project, where such agreements are executed on or after October 30, 2009.

Preamble

With respect to the CWSRF program, EPA provides capitalization grants to each State which in turn provides sub grants or loans to eligible entities within the State. Typically, the sub recipients are municipal or other local governmental entities that manage the funds. For these types of recipients, the provisions set forth under Roman numeral I, below, shall apply. Although EPA and the State remain responsible for ensuring sub recipients' compliance with the wage rate requirements set forth herein, those sub recipients shall have the primary responsibility to maintain payroll records as described in Section I-3(ii)(A), below and for compliance as described in Section I-5.

Occasionally, the sub recipient may be a private for profit or not for profit entity. For these types of recipients, the provisions set forth in Roman Numeral II, below, shall apply. Although EPA and the State remain responsible for ensuring sub recipients' compliance with the wage rate requirements set forth herein, those sub recipients shall have the primary responsibility to maintain payroll records as described in Section II-3(ii)(A), below and for compliance as described in Section II-5.

ATTACHMENT 1

I. Requirements Under Title VI of the Clean Water Act (CWA) For Sub recipients That Are Governmental

Entities:

The following terms and conditions specify how recipients will assist EPA in meeting its Davis-Bacon (DB) responsibilities when DB applies to EPA awards of financial assistance under Title VI of the CWA, with respect to State recipients and sub recipients that are governmental entities. If a sub recipient has questions regarding when DB applies, obtaining the correct DB wage determinations, DB provisions, or compliance monitoring, it may contact the State recipient. If a state recipient needs guidance, the recipient may contact EPA's Office of Grants and Debarment for guidance at EPA_Grants_Info@epa.gov. The recipient or sub recipient may also obtain additional guidance from the U.S. Department of Labor's (DOL) website at <http://www.dol.gov/whd/>.

1. Applicability of the DB prevailing wage requirements.

Under Title VI of the CWA, DB prevailing wage requirements apply to the construction, alteration, and repair of treatment works carried out in whole or in part with assistance made available by a State water pollution

control revolving fund. If a sub recipient encounters a unique situation at a site that presents uncertainties regarding DB applicability, the sub recipient must discuss the situation with the recipient State before authorizing work on that site.

2. Obtaining Wage Determinations.

(a) Sub recipients shall obtain the wage determination for the locality in which a covered activity subject to DB will take place prior to issuing requests for bids, proposals, quotes or other methods for soliciting contracts (solicitation) for activities subject to DB. These wage determinations shall be incorporated into solicitations and any subsequent contracts. Prime contracts must contain a provision requiring that subcontractors follow the wage determination incorporated into the prime contract.

- (i) While the solicitation remains open, the sub recipient shall monitor <https://sam.gov> weekly to ensure that the wage determination contained in the solicitation remains current. The sub recipients shall amend the solicitation if DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the sub recipients may request a finding from the State recipient that there is not a reasonable time to notify interested contractors of the modification of the wage determination. The State recipient will provide a report of its findings to the sub recipient.
- (ii) If the sub recipient does not award the contract within 90 days of the closure of the solicitation, any modifications or supersedes DOL makes to the wage determination contained in the solicitation shall be effective unless the State recipient, at the request of the sub recipient, obtains an extension of the 90-day period from DOL pursuant to 29 CFR 1.6(c)(3)(iv). The sub recipient shall monitor <https://sam.gov> on a weekly basis if it does not award the contract within 90 days of closure of the solicitation to ensure that wage determinations contained in the solicitation remain current.

(b) If the sub recipient carries out activity subject to DB by issuing a task order, work assignment or similar instrument to an existing contractor (ordering instrument) rather than by publishing a solicitation, the sub recipient shall insert the appropriate DOL wage determination from <https://sam.gov> into the ordering instrument.

(c) Sub recipients shall review all subcontracts subject to DB entered into by prime contractors to verify that the prime contractor has required its subcontractors to include the applicable wage determinations.

(d) As provided in 29 CFR 1.6(f), DOL may issue a revised wage determination applicable to a sub recipient's contract after the award of a contract or the issuance of an ordering instrument if DOL determines that the sub recipient has failed to incorporate a wage determination or has used a wage determination that clearly does not apply to the contract or ordering instrument. If this occurs, the sub recipient shall either terminate the contract or ordering instrument and issue a revised solicitation or ordering instrument or incorporate DOL's wage determination retroactive to the beginning of the contract or ordering instrument by change order. The sub recipient's contractor must be compensated for any increases in wages resulting from the use of DOL's revised wage determination.

3. Contract and Subcontract provisions.

(a) The Recipient shall insure that the sub recipient(s) shall insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a treatment work under the CWSRF - financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to

make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in § 5.1 or Title VI of the Clean Water Act, the following clauses:

(1) Minimum wages.

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the DB Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the DB 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. Sub recipients may obtain wage determinations from DOL's website, <https://sam.gov/>.

(ii)(A) The sub recipient(s), on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The State award official shall approve a request for an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the sub recipient(s) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the sub recipient (s) to the State award official. The State award official will transmit a completed conformance request form (SF-1444 or similar) and supporting materials to WHD-CBACONFORMANCE_INCOMING@dol.gov and to the EPA DB Regional Coordinator concurrently. The DOL Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the State award official or will notify the State award official within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the sub recipient(s) do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the sub recipient (s) to the State award official. The State award official will transmit a completed conformance request form (SF-1444 or similar), which indicates the State award official's disagreement and supporting materials to WHD-CBACONFORMANCE_INCOMING@dol.gov and to the EPA DB Regional Coordinator concurrently. The DOL Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the DB Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding. The sub recipient(s), shall upon written request of the EPA Award Official or an authorized representative of DOL, 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 DB prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the EPA may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the DB Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the DB Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and

certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the sub recipient, that is, the entity that receives the sub-grant or loan from the State capitalization grant recipient. Such documentation shall be available on request of the State recipient or EPA. As to each payroll copy received, the sub recipient shall provide written confirmation in a form satisfactory to the State indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the most recent payroll copies for the specified week. The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on the weekly payrolls. Instead, the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <http://www.dol.gov/whd/forms/wh347instr.htm> or its successor site.

The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker and shall provide them upon request to the sub recipient(s) for transmission to the State or EPA if requested by EPA, the State, the contractor, or the Wage and Hour Division of the DOL for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sub recipient(s).

(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 provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the State, EPA or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the EPA or State 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 DOL, 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 DOL, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program,

the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with DB and Related Act requirements. All rulings and interpretations of the DB 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 DOL 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 sub recipient(s), State, EPA, DOL, or the employees or their representatives.

(10) Certification of eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the DB Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the DB Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

4. Contract Provision for Contracts in Excess of \$100,000.

(a) Contract Work Hours and Safety Standards Act. The sub recipient shall insert the following clauses set forth in paragraphs (a)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Item 3, above or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (a)(1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (a)(1) of this section, in the sum of \$29 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (a)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The sub recipient, upon written request of the EPA Award Official or an authorized representative of the DOL, shall withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (a)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (a)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a)(1) through (4) of this section.

(b) In addition to the clauses contained in Item 3, above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29 CFR 5.1, the Sub recipient shall insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Sub recipient shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the EPA and the DOL, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

5. Compliance Verification

(a) The sub recipient shall periodically interview a sufficient number of employees entitled to DB prevailing wages (covered employees) to verify that contractors or subcontractors are paying the appropriate wage rates. As provided in 29 CFR 5.6(a)(3), all interviews must be conducted in confidence. The sub recipient must use Standard Form 1445 (SF 1445) or equivalent documentation to memorialize the interviews. Copies of the SF 1445 are available from EPA on request.

(b) The sub recipient shall establish and follow an interview schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. Sub recipients must conduct more frequent interviews if the initial interviews or other information indicated that there is a risk that the contractor or subcontractor is not complying with DB. Sub recipients shall immediately conduct interviews in response to an alleged violation of the prevailing wage requirements. All interviews shall be conducted in confidence.

(c) The sub recipient shall periodically conduct spot checks of a representative sample of weekly payroll data to verify that contractors or subcontractors are paying the appropriate wage rates. The sub recipient shall establish and follow a spot check schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, if practicable, the sub recipient should spot check payroll data within two weeks of each contractor or subcontractor's submission of its initial payroll data and two weeks prior to the completion date the contract or subcontract. Sub recipients must conduct more frequent spot checks if the initial spot check or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB. In addition, during the examinations the sub recipient shall verify evidence of fringe benefit plans and payments there under by contractors and subcontractors who claim credit for fringe benefit contributions.

(d) The sub recipient shall periodically review contractor's and subcontractor's use of apprentices and trainees to verify registration and certification with respect to apprenticeship and training programs approved by either the U.S DOL or a state, as appropriate, and that contractors and subcontractors are not using disproportionate numbers of, laborers, trainees and apprentices. These reviews shall be conducted in accordance with the schedules for spot checks and interviews described in Item 5(b) and (c) above.

(e) Sub recipients must immediately report potential violations of the DB prevailing wage requirements to the EPA DB contact listed above and to the appropriate DOL Wage and Hour District Office listed at <https://www.dol.gov/agencies/whd/contact/local-offices>.

II. Requirements Under Title VI of the CWA - For Sub recipients That Are Not Governmental Entities:

The following terms and conditions specify how recipients will assist EPA in meeting its DB responsibilities when DB applies to EPA awards of financial assistance under Title VI of the CWA with respect to sub recipients that are not governmental entities. If a sub recipient has questions regarding when DB applies, obtaining the correct DB wage determinations, DB provisions, or compliance monitoring, it may contact the State recipient for guidance. If a state recipient needs guidance, the recipient may contact EPA's Office of Grants and Debarment for guidance at EPA_Grants_Info@epa.gov. The recipient or sub recipient may also obtain additional guidance from DOL's website at <http://www.dol.gov/whd/>.

Under these terms and conditions, the sub recipient must submit its proposed DB wage determinations to the State recipient for approval prior to including the wage determination in any solicitation, contract task orders, work assignments, or similar instruments to existing contractors.

1. Applicability of the Davis- Bacon (DB) prevailing wage requirements.

Under Title VI of the CWA, DB prevailing wage requirements apply to the construction, alteration, and repair of treatment works carried out in whole or in part with assistance made available by a State water pollution control revolving fund. If a sub recipient encounters a unique situation at a site that presents uncertainties regarding DB applicability, the sub recipient must discuss the situation with the recipient State before authorizing work on that site.

2. Obtaining Wage Determinations.

(a) Sub recipients must obtain proposed wage determinations for specific localities at <https://sam.gov/>. After the sub recipient obtains its proposed wage determination, it must submit the wage determination to Ms. Bambi Turner, bambi.turner1@maryland.gov, (410) 537-3146, for approval prior to inserting the wage determination into a solicitation, contract or issuing task orders, work assignments or similar instruments to existing contractors (ordering instruments unless subsequently directed otherwise by the State recipient Award Official.)

(b) Sub recipients shall obtain the wage determination for the locality in which a covered activity subject to DB will take place prior to issuing requests for bids, proposals, quotes or other methods for soliciting contracts (solicitation) for activities subject to DB. These wage determinations shall be incorporated into solicitations and any subsequent contracts. Prime contracts must contain a provision requiring that subcontractors follow the wage determination incorporated into the prime contract.

- i) While the solicitation remains open, the sub recipient shall monitor <https://sam.gov/> on a weekly basis to ensure that the wage determination contained in the solicitation remains current. The sub recipients shall amend the solicitation if DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the sub recipients may request a finding from the State recipient that there is not a reasonable time to notify interested contractors of the modification of the wage determination. The State recipient will provide a report of its findings to the sub recipient.
- ii) If the sub recipient does not award the contract within 90 days of the closure of the solicitation, any modifications or supersedes DOL makes to the wage determination contained in the solicitation shall be effective unless the State recipient, at the request of the sub recipient, obtains an extension of the 90-day period from DOL pursuant to 29 CFR 1.6(c)(3)(iv). The sub recipient shall monitor <https://sam.gov/> on a weekly basis if it does not award the contract within 90 days of closure of the solicitation to ensure that wage determinations contained in the solicitation remain current.

(c) If the sub recipient carries out activity subject to DB by issuing a task order, work assignment or similar instrument to an existing contractor (ordering instrument) rather than by publishing a solicitation, the sub recipient shall insert the appropriate DOL wage determination from <https://sam.gov/> into the ordering instrument.

(d) Sub recipients shall review all subcontracts subject to DB entered into by prime contractors to verify that the prime contractor has required its subcontractors to include the applicable wage determinations.

(e) As provided in 29 CFR 1.6(f), DOL may issue a revised wage determination applicable to a sub recipient's contract after the award of a contract or the issuance of an ordering instrument if DOL determines that the sub recipient has failed to incorporate a wage determination or has used a wage determination that clearly does not apply to the contract or ordering instrument. If this occurs, the sub recipient shall either terminate the contract or ordering instrument and issue a revised solicitation or ordering instrument or incorporate DOL's wage determination retroactive to the beginning of the contract or ordering instrument by change order. The sub recipient's contractor must be compensated for any increases in wages resulting from the use of DOL's revised wage determination.

3. Contract and Subcontract provisions.

- (a) The Recipient shall insure that the sub recipient(s) shall insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a treatment work under the CWSRF - or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in § 5.1 or Title VI of the CWA, the following clauses:

(1) Minimum wages.

- (i) All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and

not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the DB Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the DB 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.

Sub recipients may obtain wage determinations from the DOL's website, <https://sam.gov/>.

(ii)(A) The sub recipient(s), on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The State award official shall approve a request for an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the sub recipient(s) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the sub recipient(s) to the State award official. The State award official will transmit a completed conformance request form (SF-1444 or similar) and supporting materials to WHD-CBACONFORMANCE_INCOMING@dol.gov and to the EPA DB Regional Coordinator concurrently. The DOL Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the State award official or will notify the State award official within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the sub recipient(s) do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the sub recipient (s) to the State award official. The State award official will transmit a completed conformance request form (SF-1444 or similar), which

indicates the State award official's disagreement and supporting materials to WHD-CBACONFIRMANCE_INCOMING@dol.gov and to the EPA DB Regional Coordinator concurrently. The DOL Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the DB Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding. The sub recipient(s) shall upon written request of the EPA Award Official or an authorized representative of the DOL, 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 DB prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the EPA may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the DB Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the DB Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the sub recipient, that is, the entity that receives the sub-grant or loan from the State capitalization

grant recipient. Such documentation shall be available on request of the State recipient or EPA. As to each payroll copy received, the sub recipient shall provide written confirmation in a form satisfactory to the State indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the most recent payroll copies for the specified week. The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on the weekly payrolls. Instead, the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <http://www.dol.gov/whd/forms/wh347instr.htm> or its successor site.

The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker and shall provide them upon request to the sub recipient(s) for transmission to the State or EPA if requested by EPA, the State, the contractor, or the Wage and Hour Division of the DOL for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sub recipient(s).

(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 provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the State, EPA or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the EPA or State 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 DOL, 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 subcontractors 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 DOL, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended

and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with DB and Related Act requirements. All rulings and interpretations of the DB 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 DOL 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 Sub recipient(s), State, EPA, DOL, or the employees or their representatives.

(10) Certification of eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the DB Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the DB Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

4. Contract Provision for Contracts in Excess of \$100,000.

(a) Contract Work Hours and Safety Standards Act. The sub recipient shall insert the following clauses set forth in paragraphs (a)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Item 3, above or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for

liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$29 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The sub recipient shall upon the request of the EPA Award Official or an authorized representative of the DOL, withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (a)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (a)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a)(1) through (4) of this section.

(c) In addition to the clauses contained in Item 3, above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29 CFR 5.1, the Sub recipient shall insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Sub recipient shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the EPA and the DOL, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

5. Compliance Verification

(a) The sub recipient shall periodically interview a sufficient number of employees entitled to DB prevailing wages (covered employees) to verify that contractors or subcontractors are paying the appropriate wage rates. As provided in 29 CFR 5.6(a)(3), all interviews must be conducted in confidence. The sub recipient must use Standard Form 1445 (SF 1445) or equivalent documentation to memorialize the interviews. Copies of the SF 1445 are available from EPA on request.

(b) The sub recipient shall establish and follow an interview schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. Sub recipients must conduct more frequent interviews if the initial interviews or other information indicated that there is a risk that the contractor or subcontractor is not complying with DB. Sub recipients shall immediately conduct interviews in response to an alleged violation of the prevailing wage requirements. All interviews shall be conducted in confidence.

(c). The sub recipient shall periodically conduct spot checks of a representative sample of weekly payroll data to verify that contractors or subcontractors are paying the appropriate wage rates. The sub recipient shall establish and follow a spot check schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, if practicable the sub recipient should spot check payroll data within two weeks of each contractor or subcontractor's submission

of its initial payroll data and two weeks prior to the completion date the contract or subcontract. Sub recipients must conduct more frequent spot checks if the initial spot check or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB. In addition, during the examinations the sub recipient shall verify evidence of fringe benefit plans and payments there under by contractors and subcontractors who claim credit for fringe benefit contributions.

(d). The sub recipient shall periodically review contractors and subcontractors use of apprentices and trainees to verify registration and certification with respect to apprenticeship and training programs approved by either DOL or a state, as appropriate, and that contractors and subcontractors are not using disproportionate numbers of, laborers, trainees and apprentices. These reviews shall be conducted in accordance with the schedules for spot checks and interviews described in Item 5(b) and (c) above.

(e) Sub recipients must immediately report potential violations of the DB prevailing wage requirements to the EPA DB contact listed above and to the appropriate DOL Wage and Hour District Office listed at <https://www.dol.gov/agencies/whd/contact/local-offices>.

Prevailing Wage Requirements for DWSRF Capitalization Grants

The recipient agrees to include in all agreements to provide assistance for any construction project carried out in whole or in part with such assistance made available by a drinking water revolving loan fund as authorized by Section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j-12), a term and condition requiring compliance with the requirements of section 1450(e) of the Safe Drinking Water Act (42 U.S.C.300j-9(e)) in all procurement contracts and sub-grants, and require that loan recipients, procurement contractors and sub-grantees include such a term and condition in subcontracts and other lower tiered transactions. All contracts and subcontracts for any construction project carried out in whole or in part with assistance made available as stated herein shall insert in full in any contract in excess of \$2,000 the contract clauses as attached hereto entitled "Wage Rate Requirements Under The Clean Water Act, Section 513 and the Safe Drinking Water Act, Section 1450(e)." This term and condition applies to all agreements to provide assistance under the authorities referenced herein, whether in the form of a loan, bond purchase, grant, or any other vehicle to provide financing for a project, where such agreements are executed on or after October 30, 2009.

Preamble

With respect to the DWSRF program, EPA provides capitalization grants to each State which in turn provides sub grants or loans to eligible entities within the State. Typically, the sub recipients are municipal or other local governmental entities that manage the funds. For these types of recipients, the provisions set forth under Roman numeral I, below, shall apply. Although EPA and the State remain responsible for ensuring sub recipients' compliance with the wage rate requirements set forth herein, those sub recipients shall have the primary responsibility to maintain payroll records as described in Section I-3(ii)(A), below and for compliance as described in Section I-5.

Occasionally, the sub recipient may be a private for profit or not for profit entity. For these types of recipients, the provisions set forth in Roman Numeral II, below, shall apply. Although EPA and the State remain responsible for ensuring sub recipients' compliance with the wage rate requirements set forth herein, those sub recipients shall have the primary responsibility to maintain payroll records as described in Section II-3(ii)(A), below and for compliance as described in Section II-5.

ATTACHMENT 1

I. Requirements Under Section 1452(a)(5) of the Safe Drinking Water Act For Sub recipients That Are Governmental Entities:

The following terms and conditions specify how recipients will assist EPA in meeting its Davis-Bacon (DB) responsibilities when DB applies to EPA awards of financial assistance with respect to State recipients and sub

recipients that are governmental entities. If a sub recipient has questions regarding when DB applies, obtaining the correct DB wage determinations, DB provisions, or compliance monitoring, it may contact the State recipient. If a State recipient needs guidance, the recipient may contact EPA's Office of Grants and Debarment for guidance at EPA_Grants_Info@epa.gov. The recipient or sub recipient may also obtain additional guidance from the U.S. Department of Labor's (DOL) website at <http://www.dol.gov/whd/>

1. Applicability of the DB prevailing wage requirements.

DB prevailing wage requirements apply to the construction, alteration, and repair of treatment works carried out in whole or in part with assistance made available by a State water pollution control revolving fund and to any construction project carried out in whole or in part by assistance made available by a drinking water treatment revolving loan fund. If a sub recipient encounters a unique situation at a site that presents uncertainties regarding DB applicability, the sub recipient must discuss the situation with the recipient State before authorizing work on that site.

2. Obtaining Wage Determinations.

(a) Sub recipients shall obtain the wage determination for the locality in which a covered activity subject to DB will take place prior to issuing requests for bids, proposals, quotes or other methods for soliciting contracts (solicitation) for activities subject to DB. These wage determinations shall be incorporated into solicitations and any subsequent contracts. Prime contracts must contain a provision requiring that subcontractors follow the wage determination incorporated into the prime contract.

- (i) While the solicitation remains open, the sub recipient shall monitor <https://sam.gov/> weekly to ensure that the wage determination contained in the solicitation remains current. The sub recipients shall amend the solicitation if DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the sub recipients may request a finding from the State recipient that there is not a reasonable time to notify interested contractors of the modification of the wage determination. The State recipient will provide a report of its findings to the sub recipient.
- (ii) If the sub recipient does not award the contract within 90 days of the closure of the solicitation, any modifications or supersedes DOL makes to the wage determination contained in the solicitation shall be effective unless the State recipient, at the request of the sub recipient, obtains an extension of the 90-day period from DOL pursuant to 29 CFR 1.6(c)(3)(iv). The sub recipient shall monitor <https://sam.gov/> on a weekly basis if it does not award the contract within 90 days of closure of the solicitation to ensure that wage determinations contained in the solicitation remain current.

(b) If the sub recipient carries out activity subject to DB by issuing a task order, work assignment or similar instrument to an existing contractor (ordering instrument) rather than by publishing a solicitation, the sub recipient shall insert the appropriate DOL wage determination from <https://sam.gov/> into the ordering instrument.

(c) Sub recipients shall review all subcontracts subject to DB entered into by prime contractors to verify that the prime contractor has required its subcontractors to include the applicable wage determinations.

(d) As provided in 29 CFR 1.6(f), DOL may issue a revised wage determination applicable to a sub recipient's contract after the award of a contract or the issuance of an ordering instrument if DOL determines that the sub recipient has failed to incorporate a wage determination or has used a wage determination that clearly does not apply to the contract or ordering instrument. If this occurs, the sub recipient shall either terminate the contract

or ordering instrument and issue a revised solicitation or ordering instrument or incorporate DOL's wage determination retroactive to the beginning of the contract or ordering instrument by change order. The sub recipient's contractor must be compensated for any increases in wages resulting from the use of DOL's revised wage determination.

3. Contract and Subcontract provisions.

(a) The Recipient shall insure that the sub recipient(s) shall insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a treatment work under the CWSRF or a construction project carried out in whole or in part with assistance made available by the DWSRF, and which is subject to the labor standards provisions of any of the acts listed in § 5.1 or the Safe Drinking Water Act, Section 1452(a)(5), the following clauses:

(1) Minimum wages.

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the DB Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the DB 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.

Sub recipients may obtain wage determinations from the U.S. Department of Labor's website, <https://sam.gov/>.

(ii)(A) The sub recipient(s), on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The State award official shall approve a request for an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the sub recipient(s) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the sub recipient (s) to the State award official. The State award official will transmit a completed conformance request form (SF-1444 or similar) and supporting materials to WHD-CBACONFORMANCE_INCOMING@dol.gov and to the EPA DB Regional Coordinator concurrently. The Department of Labor Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the State award official or will notify the State award official within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the sub recipient(s) do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the sub recipient (s) to the State award official. The State award official will transmit a completed conformance request form (SF-1444 or similar) which indicates the State award official's disagreement and supporting materials to WHD-CBACONFORMANCE_INCOMING@dol.gov and to the EPA DB Regional Coordinator concurrently. The Department of Labor Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the DB Act have been met. The Secretary of Labor may require the contractor to set aside assets in a separate account for the meeting of obligations under the plan or program.

(2) Withholding. The sub recipient(s), shall upon written request of the EPA Award Official or 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 DB prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the EPA may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of

the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the DB Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the DB Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the sub recipient, that is, the entity that receives the sub-grant or loan from the State capitalization grant recipient. Such documentation shall be available on request of the State recipient or EPA. As to each payroll copy received, the sub recipient shall provide written confirmation in a form satisfactory to the State indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the most recent payroll copies for the specified week. The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on the weekly payrolls. Instead, the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <http://www.dol.gov/whd/forms/wh347instr.htm> or its successor site.

The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker and shall provide them upon request to the sub recipient(s) for transmission to the State or EPA if requested by EPA, the State, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sub recipient(s).

(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 provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the State, EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the EPA or State 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 classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with DB and Related Act requirements. All rulings and interpretations of the DB 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 sub recipient(s), State, EPA, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the DB Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the DB Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

4. Contract Provision for Contracts in Excess of \$100,000.

(a) Contract Work Hours and Safety Standards Act. The sub recipient shall insert the following clauses set forth in paragraphs (a)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Item 3, above or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (a)(1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (a)(1) of this section, in the sum of \$29 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (a)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The sub recipient, upon written request of the EPA Award Official or an authorized representative of the Department of Labor, shall withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (a)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (a)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a)(1) through (4) of this section.

(b) In addition to the clauses contained in Item 3, above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29 CFR 5.1, the Sub recipient shall insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Sub recipient shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the EPA and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

5. Compliance Verification

- (a) The sub recipient shall periodically interview a sufficient number of employees entitled to DB prevailing wages (covered employees) to verify that contractors or subcontractors are paying the appropriate wage rates. As provided in 29 CFR 5.6(a)(3), all interviews must be conducted in confidence. The sub recipient must use Standard Form 1445 (SF 1445) or equivalent documentation to memorialize the interviews. Copies of the SF 1445 are available from EPA on request.
- (b) The sub recipient shall establish and follow an interview schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. Sub recipients must conduct more frequent interviews if the initial interviews or other information indicated that there is a risk that the contractor or subcontractor is not complying with DB. Sub recipients shall immediately conduct interviews in response to an alleged violation of the prevailing wage requirements. All interviews shall be conducted in confidence.
- (c) The sub recipient shall periodically conduct spot checks of a representative sample of weekly payroll data to verify that contractors or subcontractors are paying the appropriate wage rates. The sub recipient shall establish and follow a spot check schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, if practicable, the sub recipient should spot check payroll data within two weeks of each contractor or subcontractor's submission of its initial payroll data and two weeks prior to the completion date the contract or subcontract. Sub recipients must conduct more frequent spot checks if the initial spot check or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB. In addition, during the examinations the sub recipient shall verify evidence of fringe benefit plans and payments there under by contractors and subcontractors who claim credit for fringe benefit contributions.
- (d) The sub recipient shall periodically review contractor's and subcontractor's use of apprentices and trainees to verify registration and certification with respect to apprenticeship and training programs approved by either the U.S Department of Labor or a state, as appropriate, and that contractors and subcontractors are not using disproportionate numbers of, laborers, trainees and apprentices. These reviews shall be conducted in accordance with the schedules for spot checks and interviews described in Item 5(b) and (c) above.
- (e) Sub recipients must immediately report potential violations of the DB prevailing wage requirements to the EPA DB contact listed above and to the appropriate DOL Wage and Hour District Office listed at <https://www.dol.gov/agencies/whd/contact/local-offices>.

II. Requirements Under Section 1452(a)(5) of the Safe Drinking Water Act For Sub recipients That Are Not Governmental Entities:

The following terms and conditions specify how recipients will assist EPA in meeting its DB responsibilities when DB applies to EPA awards of financial assistance under the Safe Drinking Water Act, Section 1452(a)(5) with respect to sub recipients that are not governmental entities. If a sub recipient has questions regarding when DB applies, obtaining the correct DB wage determinations, DB provisions, or compliance monitoring, it may contact the State recipient for guidance. If a State recipient needs guidance, the recipient may contact EPA's Office of Grants and Debarment for guidance at EPA_Grants_Info@epa.gov The recipient or sub recipient may also obtain additional guidance from DOL's website at <http://www.dol.gov/whd/>

Under these terms and conditions, the sub recipient must submit its proposed DB wage determinations to the State recipient for approval prior to including the wage determination in any solicitation, contract task orders, work assignments, or similar instruments to existing contractors.

1. Applicability of the Davis- Bacon (DB) prevailing wage requirements.

Under the Safe Drinking Water Act, Section 1452(a)(5), DB prevailing wage requirements apply to the construction, alteration, and repair of treatment works carried out in whole or in part with assistance made available by a State water pollution control revolving fund and to any construction project carried out in whole or in part by assistance made available by a drinking water treatment revolving loan fund. If a sub recipient encounters a unique situation at a site that presents uncertainties regarding DB applicability, the sub recipient must discuss the situation with the recipient State before authorizing work on that site.

2. Obtaining Wage Determinations.

(a) Sub recipients must obtain proposed wage determinations for specific localities at <https://sam.gov/>. After the sub recipient obtains its proposed wage determination, it must submit the wage determination to Ms. Bambi Turner, bambi.turner1@maryland.gov, (410) 537-3146, for approval prior to inserting the wage determination into a solicitation, contract or issuing task orders, work assignments or similar instruments to existing contractors (ordering instruments unless subsequently directed otherwise by the State recipient Award Official.)

(b) Sub recipients shall obtain the wage determination for the locality in which a covered activity subject to DB will take place prior to issuing requests for bids, proposals, quotes or other methods for soliciting contracts (solicitation) for activities subject to DB. These wage determinations shall be incorporated into solicitations and any subsequent contracts. Prime contracts must contain a provision requiring that subcontractors follow the wage determination incorporated into the prime contract.

- (i) While the solicitation remains open, the sub recipient shall monitor <https://sam.gov/> on a weekly basis to ensure that the wage determination contained in the solicitation remains current. The sub recipients shall amend the solicitation if DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the sub recipients may request a finding from the State recipient that there is not a reasonable time to notify interested contractors of the modification of the wage determination. The State recipient will provide a report of its findings to the sub recipient.
- (ii) If the sub recipient does not award the contract within 90 days of the closure of the solicitation, any modifications or supersedes DOL makes to the wage determination contained in the solicitation shall be effective unless the State recipient, at the request of the sub recipient, obtains an extension of the 90-day period from DOL pursuant to 29 CFR 1.6(c)(3)(iv). The sub recipient shall monitor <https://sam.gov/> on a weekly basis if it does not award the contract within 90 days of closure of the solicitation to ensure that wage determinations contained in the solicitation remain current.

(c) If the sub recipient carries out activity subject to DB by issuing a task order, work assignment or similar instrument to an existing contractor (ordering instrument) rather than by publishing a solicitation, the sub recipient shall insert the appropriate DOL wage determination from <https://sam.gov/> into the ordering instrument.

(d) Sub recipients shall review all subcontracts subject to DB entered into by prime contractors to verify that the prime contractor has required its subcontractors to include the applicable wage determinations.

(e) As provided in 29 CFR 1.6(f), DOL may issue a revised wage determination applicable to a sub recipient's contract after the award of a contract or the issuance of an ordering instrument if DOL determines that the sub recipient has failed to incorporate a wage determination or has used a wage determination that clearly does not

apply to the contract or ordering instrument. If this occurs, the sub recipient shall either terminate the contract or ordering instrument and issue a revised solicitation or ordering instrument or incorporate DOL's wage determination retroactive to the beginning of the contract or ordering instrument by change order. The sub recipient's contractor must be compensated for any increases in wages resulting from the use of DOL's revised wage determination.

3. Contract and Subcontract provisions.

(a) The Recipient shall insure that the sub recipient(s) shall insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a treatment work under the CWSRF or a construction project carried out in whole or in part with assistance made available by the DWSRF, and which is subject to the labor standards provisions of any of the acts listed in § 5.1 or the Safe Drinking Water Act, Section 1452(a)(5), the following clauses:

(1) Minimum wages.

(i) All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the DB Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the DB 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.

Sub recipients may obtain wage determinations from DOL's website, <https://sam.gov/>.

(ii)(A) The sub recipient(s), on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The State award official shall approve a request for an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage

rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the sub recipient(s) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the sub recipient(s) to the State award official. The State award official will transmit a completed conformance request form (SF-1444 or similar) and supporting materials to WHD-CBACONFORMANCE_INCOMING@dol.gov and to the EPA DB Regional Coordinator concurrently. The Department of Labor Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the State award official or will notify the State award official within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the sub recipient(s) do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the sub recipient (s) to the State award official. The State award official will transmit a completed conformance request form (SF-1444 or similar) which indicates the State award official's disagreement and supporting materials to WHD-CBACONFORMANCE_INCOMING@dol.gov, and to the EPA DB Regional Coordinator concurrently. The Department of Labor Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the DB Act have been met. The Secretary of Labor may require the contractor to set aside assets in a separate account for the meeting of obligations under the plan or program.

(2) Withholding. The sub recipient(s) shall upon written request of the EPA Award Official or 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 DB prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the EPA may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the

work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the DB Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the DB Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the sub recipient, that is, the entity that receives the sub-grant or loan from the State capitalization grant recipient. Such documentation shall be available on request of the State recipient or EPA. As to each payroll copy received, the sub recipient shall provide written confirmation in a form satisfactory to the State indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the most recent payroll copies for the specified week. The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on the weekly payrolls. Instead, the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <http://www.dol.gov/whd/forms/wh347instr.htm> or its successor site.

The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker and shall provide them upon request to the sub recipient(s) for transmission to the State or EPA if requested by EPA, the State, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sub recipient(s).

(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 provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the State, EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the EPA or State 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 DOL, 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 subcontractors 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 DOL, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less

than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended and 29 CFR part 30.

(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with DB and Related Act requirements. All rulings and interpretations of the DB 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 Sub recipient(s), State, EPA, DOL, or the employees or their representatives.

(10) Certification of eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the DB Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the DB Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

4. Contract Provision for Contracts in Excess of \$100,000.

(a) Contract Work Hours and Safety Standards Act. The sub recipient shall insert the following clauses set forth in paragraphs (a)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Item 3, above or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$29 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The sub recipient shall upon the request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (a)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (a)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a)(1) through (4) of this section.

(b) In addition to the clauses contained in Item 3, above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29 CFR 5.1, the Sub recipient shall insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Sub recipient shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the EPA and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

5. Compliance Verification

- (a) The sub recipient shall periodically interview a sufficient number of employees entitled to DB prevailing wages (covered employees) to verify that contractors or subcontractors are paying the appropriate wage rates. As provided in 29 CFR 5.6(a)(3), all interviews must be conducted in confidence. The sub recipient must use Standard Form 1445 (SF 1445) or equivalent documentation to memorialize the interviews. Copies of the SF 1445 are available from EPA on request.
- (b) The sub recipient shall establish and follow an interview schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. Sub recipients must conduct more frequent interviews if the initial interviews or other information indicated that there is a risk that the contractor or subcontractor is not complying with DB. Sub recipients shall immediately conduct interviews in response to an alleged violation of the prevailing wage requirements. All interviews shall be conducted in confidence.
- (c). The sub recipient shall periodically conduct spot checks of a representative sample of weekly payroll data to verify that contractors or subcontractors are paying the appropriate wage rates. The sub recipient shall establish and follow a spot check schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, if practicable the sub recipient should spot check payroll data within two weeks of each contractor or subcontractor's submission of its initial payroll data and two weeks prior to the completion date the contract or subcontract. Sub recipients must conduct more frequent spot checks if the initial spot check or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB. In addition, during the examinations the sub recipient shall verify evidence of fringe benefit plans and payments there under by contractors and subcontractors who claim credit for fringe benefit contributions.
- (d). The sub recipient shall periodically review contractors and subcontractors use of apprentices and trainees to verify registration and certification with respect to apprenticeship and training programs approved by either the U.S Department of Labor or a state, as appropriate, and that contractors and subcontractors are not using disproportionate numbers of, laborers, trainees and apprentices. These reviews shall be conducted in accordance with the schedules for spot checks and interviews described in Item 5(b) and (c) above.
- (e) Sub recipients must immediately report potential violations of the DB prevailing wage requirements to the EPA DB contact listed above and to the appropriate DOL Wage and Hour District Office listed at <https://www.dol.gov/agencies/whd/contact/local-offices>.

Build America, Buy America Certification for CDBG Project Contractors and Subcontractors

I, _____ (Contractor Representative) acknowledge to and for the benefit of _____ (CDBG Grantee) that I understand the work performed for this project is subject to the requirements of the Build America, Buy America Act;

To comply with the Buy America Preference, all iron and steel used in the project must be produced in the United States;

Produced in America means that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States;

I certify that I have reviewed and understand this requirement as it relates to this bid proposal submitted by my company and the identified subcontractors, if any. If selected, I will provide information necessary to demonstrate compliance with this requirement throughout the construction period.

Contractor Name: _____

Contractor Representative Signature

Date

**MARYLAND COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM
Build America, Buy America Compliance Form
Contractors and Subcontractors - Iron and Steel Products Only**

This form is to be completed by each contractor and subcontractor that performed work on this project.

Contractor: _____

Iron/Steel Product Acquired	Product Description	Manufacturer	Part # If applicable	Manufacturer Certification Received and Attached

I, as a representative of _____, certify that the iron and steel products identified on this list represents all iron and steel products used on this project and that certification and documentation received by the manufacturer confirms that these products are in compliance with the Build America, Buy America Act. All iron and steel products, from the initial melting stage through the application of coatings, occurred in the United States.

Signature: _____ Date: _____

Print Name: _____

NOTE: To avoid duplication, if multiple federal funding sources are used for a project, contractors can submit certification forms provided by those sources as long as the same information is identified and submitted.

Grantee Review Date: _____ Initials: _____

Subcontractor Certification Regarding Debarment and Suspension

CDBG Grantees are required to do debarment checks on all subcontractors receiving CDBG funds. These checks will be completed by using the form provided. The completed form should be placed in your CDBG records with the contract for services. They must be completed by you prior to signing a contract for services.

Note: Debarment checks for construction contractors will still be completed by the CDBG Labor Standards Officer.

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 7 CFR Part 3017, Section 3017.510, Participants' responsibilities. The regulations were published as Part IV of the January 30, 1989 Federal Register (pages 4722-4733).

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - i. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - ii. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - iii. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - iv. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

(2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective shall attach an explanation to this proposal.

Grantees should use the Federal System for Award Management (www.sam.gov) website to determine if the potential contractor is excluded from receiving Federal contracts.

Request for Contractor Debarment Check

Legal Name of Contractor _____

Contractor Address _____

Contractor's Unique Entity ID Number _____

Date Debarment Check Requested _____

CERTIFICATION SIGNATURE: By signing this Certification page, I certify that the necessary actions were performed to complete the debarment check and I am further certifying that this contractor is not debarred or suspended.

Grantee Designee Signature: _____

Date: _____

FOR SUBMISSION TO CDBG LSO

Result of debarment check: _____

CDBG LSO Initials: _____ Date: _____

(Signed Certifications are to be kept in CDBG project files)

Labor Standards Compliance and Payroll Submission Form

**Instructions: Complete Form for Each Contract funded with CDBG funds. Attach copy of first payroll report and employee interview forms. Submit within 2 weeks of receipt of 1st payroll report to your Labor Standards Officer

GRANTEE NAME _____ GRANT # _____

Project Address _____

Brief Project Description _____

Contract Activities _____

Invitation to Bid Date _____ Pre-Bid Meeting Date _____

Bid Due Date _____ Bid Opening Date _____

Date of Contractor Debarment Check _____ Contract Award Date _____

General Contractor Name _____ Contract Amount _____

Pre-Construction Conference Date _____ Notice to Proceed Date _____

of Days in Contract _____

Date of 1st Payroll Report _____

_____ Yes No _____

**Were these initialed and dated by grantee?*

Date of 1st Employee Interview _____ Interview forms attached? _____

Wage Decision and Modification Numbers _____

_____ Yes No _____

**Was this wage decision and the DOL poster posted at the job site?*

Subcontractors' Names and Contract Amounts _____

GRANTEE
CONTACT NAME

DATE

Certified Payroll Weekly Submittal Cover Sheet

_____ Consecutive Workweek Listed

_____ Employees Listed
(or owner executive exemption)

_____ Deductions, Net Pay, Gross Pay Listed

_____ On back of sheet, checkbox for fringe paid in cash **or**
checkbox for fringe paid into plan with list of fringes.

_____ Signed by Owner? If not, the employer is to provide a
letter naming the person who is authorized to serve on
their behalf.

Name of employee authorized to sign payrolls:

Owner Name:

Today's date:

PAYROLL
For contractor's optional use; see instructions at dol.gov/agencies/whd/forms/wh347

Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.



Revised December 2008

OMB No. 1235-0008
Expires 09/30/2026

ADDRESS

PAYROLL NO.

FOR WEEK ENDING

PROJECT AND LOCATION

PROJECT OR CONTRACT NO.

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	(4) DAY AND DATE							(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS			(9) NET WAGES PAID FOR WEEK	
			MON	TUE	WED	THUR	FRI	SAT	SUN				FICA	WITH- HOLDING TAX	OTHER		TOTAL DEDUCTIONS

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a), The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(i) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

We estimate that it will take an average of 55 minutes to complete this collection, including time for reviewing instructions, gathering existing data sources, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W., Washington, D.C. 20210.

Date _____

I, _____ (Name of Signatory Party) _____ (Title) do hereby state:

(1) That I pay or supervise the payment of the persons employed by _____ (Contractor or Subcontractor) on the _____ (Building or Work); that during the payroll period commencing on the _____ day of _____, and ending the _____ day of _____, all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said _____ (Contractor or Subcontractor) from the full

weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:
 (a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

— in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

— Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARKS:

NAME AND TITLE	SIGNATURE

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 3729 OF TITLE 31 OF THE UNITED STATES CODE.

How to Correctly Fill Out a WH-347 Payroll Form

The completion of the WH-347 Payroll Form is optional; contractors may utilize their own payroll system as long as it conforms to the WH-347 Payroll Form and contains all the necessary information. If you utilize WH-347 Payroll Form as a pdf, saving it electronically aids in making any needed corrections.

U.S. Department of Labor
Employment Standards Administration
Wage and Hour Division

WH-347
U.S. Wage and Hour Division
Rev. Dec. 2008

PAYROLL
(For Contractor's Optional Use; See Instructions at www.doi.gov/esa/whd/forms/WH-347_instr.htm)
Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

OMB No.: 1215-0149
Expires: 12/31/2011

NAME OF CONTRACTOR OR SUBCONTRACTOR **Sample Construction Company**

PAYROLL NO. 8

PROJECT AND LOCATION
Robin Street Apartments, Delafield WI 53018

PROJECT OR CONTRACT NO. 31000

ADDRESS 385 West Drive, Madison WI 53703

DATE 04/24/2010

NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER OF EMPLOYER)	EMPLOYER'S IDENTIFYING NUMBER	CLASSIFICATION	WORK CLASSIFICATION	(4) DAY AND DATE							TOTAL HOURS	GROSS AMOUNT EARNED	WITH-HOLDING TAX	FICA	MEDICARE	TOTAL DEDUCTIONS	NET WAGES PAID FOR WEEK	
				Sun	Mon	Tue	Wed	Thu	Fri	Sat								
Alex Driver - #####	2	Power Equipment	Bull Dozer Group		9:00	8:00	5:00	6:00			27.50	\$62.83	\$185.15	\$156.97	\$50.31	\$85.00	\$0.43	\$1,374.03

Indicate the days and dates of the pay period. (should match week ending directly above)

The last day of the payroll period.

Check one of the boxes and list name of contractor or subcontractor

Fill out completely with contractor or subcontractor address

The prime contractor should include the project number as listed in the loan

The name and location of project.

Payrolls must be numbered sequentially and should be based on the weeks worked under a contract.
Type the word "Final" when the last payroll is submitted for the project.

List each worker's name. Only laborers and mechanics performing construction work under the contract wage should be listed.

Please note: Business Owners need only include their name, work classification including "owner" and the daily total hours worked.

Specify the job classification located in the contract wage decision and/or the corresponding job title.

List hourly wage rate and fringes paid in cash (not those paid to plans)

For Contractor's Optional Use: See instructions at www.dol.gov/eis/wh/wh347instr.htm

Persons are not required to respond to the employers of information unless it directly affects DHS contract numbers.

Specify the net amount paid to the employee for the pay

Must accurately reflect overtime and straight time hours worked under the contract.

Specify the total overtime and straight time hours worked on the project.

Specify the gross earnings for the hours worked under the contract.

NAME AND SOCIAL SECURITY NUMBER OF LABORER OR MECHANIC	WORK CLASSIFICATION	DATE							TOTAL HOURS	RATE OF PAY	GROSS AMOUNT EARNED	DEDUCTIONS	TOTAL AMOUNT PAID TO LABORER	
		1	2	3	4	5	6	7						
Alex Turner - #1111	Power Equipment Operator - Bulldozer Group 2								2.00	\$62.53	\$125.06	\$161.00	\$38.43	\$1,374.02
Jason Turner - #1111	General Laborer								4.00	\$15.00	\$60.00	\$136.06	\$76.71	\$1,235.07
Steve Turner - #1111	Apprentice Carpenter								1.50	\$60.15	\$90.23	\$111.00	\$37.71	\$1,406.78
Roy Turner - #1111	Plumber								40.00	\$22.72	\$909.28	\$1,004.30	\$107.71	\$757.01
Bart Turner - #1111	Steamfitter								20.00	\$55.28	\$1,105.60	\$163.46	\$1,569.04	
	Power Equipment Operator - Rotary Drift Group 4								24.00	\$48.97	\$1,175.28	\$142.48	\$1,032.80	

Project and Location: Robin Street Apartments, Deland FL 32718
 Address: 385 West Drive, Merit, FL 32703
 Project No: 0472-25-10
 Inspector No: 3000

With completion of Form WH-347, optional, it is intended for covered employers and subcontractors performing work on Federal, State or assisted construction projects to respond to (48 U.S.C. § 3145) contractors and subcontractors performing work on Federal, State or assisted construction projects to furnish weekly a statement with respect to the wages rate each worker is paid on the project. This statement is required to be submitted to the Federal agency contracting for the project. The statement shall be submitted to the Federal agency contracting for the project. The statement shall be submitted to the Federal agency contracting for the project. The statement shall be submitted to the Federal agency contracting for the project.

Public Business Statement

If part of a worker's weekly wage was earned on projects other than the project described on this payroll, enter the gross amount earned on this contract in the top half of column 7. Enter the gross amount earned during the week for all projects in the bottom half.

Alex Driver worked 29.5 hours on this contract and 12.5 hours on another contract. The gross wages earned on this project, \$1,422.84, is entered in the top half of column 7. The gross wages earned on all projects, \$2,012.46, is entered in the

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER OF WORKER)	(2) NO. OF EXEMPTIONS	(3) WORK CLASSIFICATION	(4) DAY AND DATE							TOTAL HOURS WORKED	RATE OF PAY	GROSS AMOUNT EARNED	DEDUCTIONS				(9) NET WAGES PAID FOR WEEK	
			Sat	Sun	Mon	Tue	Wed	Thu	Fri				Sat	FICA	WITH- HOLDING TAX	Statewide Retirement		Medicare
Alex Driver - ####	2	Power Equipment Bull Dozer Group 2								2.00	\$62.83	\$1,422.84	\$61.00	\$185.15	\$50.31	\$85.00	\$638.43	\$1,374.03
Jason Worker - ####	2	General Laborer								27.50	\$73.20	\$2,012.46	\$36.06	\$132.66	\$42.52	\$467.71	\$1,233.07	
Sharon Wood - ####	3	Carpenter								1.50	\$60.19	\$1,887.49	\$151.00	\$154.77	\$47.19	\$481.31	\$1,406.18	
Reggie Tree - ####	1	Apprentice Carpenter 1st 6 mo. at 40%								40.00	\$32.72	\$1,064.72	\$85.18	\$105.41	\$26.62	\$307.71	\$757.01	
Roy Wrench - ####	5	Plumber								20.00	\$67.88	\$1,004.80	\$163.46	\$147.11	\$51.08	\$480.16	\$1,563.04	
Roy Wrench - ####	5	Steamfitter								20.00	\$69.13	\$1,038.40	\$163.46	\$147.11	\$51.08	\$480.16	\$1,563.04	
Bart Turner - ####	1	Power Equipment Rotary Drill Group 4								24.00	\$60.80	\$2,043.20	\$111.14	\$142.48	\$35.98	\$485.53	\$1,023.27	

If an employee performs multiple work classifications under the contract, use two or more lines to distinguish the different job classifications, hours worked, and hourly wage earned for each.

Combine the two classifications when recording the gross amount earned for this pay period, deductions, and net wages.

A registered apprentice performing work under a contract must be reported. The payroll must include the current pay scale & provide a copy of the apprenticeship agreement.

Provide explanation of "other" deductions on signatory page.

PAYROLL

Optional Use; See instructions at www.dol.gov/esa/whd/forms/wh347
 used to respond to the collection of information unless it displays a currently valid OMS control number

ADDRESS: 385 West Drive, Madison WI 53703 PROJECT OR CONTRACT NO.: 3000

PROJECT AND LOCATION: Robin Street Apartments, Doldfield WI 53018

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (6-9, LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO. OF EMPLOYMENT EXCEPTIONS	(3) WORK CLASSIFICATION	(4) DAY AND DATE							(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS				(9) NET WAGES PAID FOR WEEK		
			Sun	Mon	Tue	Wed	Thu	Fri	Sat				FICA	WITH- HOLDING TAX	State with- holding tax	Medicare		OTHER	
Alex Driver - ####	2	Power Equipment Bull Dozer Group 2								2.00	\$62.83	\$1,422.84	\$161.00	\$185.15	\$156.97	\$50.31	\$85.00	\$638.43	\$1,374.03
Jason Worker - ####	1	General Laborer								4.00	\$49.20	\$2,012.46	\$136.06	\$156.47	\$132.66	\$42.52		\$467.71	\$1,233.07
Sharon Wood - ####	3	Carpenter								1.50	\$60.19	\$1,700.78	\$151.00	\$154.77	\$128.35	\$47.19		\$481.31	\$1,406.18
Reggie Tree - ####	1	Apprentice Carpenter 1st 6 mo. at 40%								40.00	\$32.72	\$1,064.72	\$85.18	\$105.41	\$90.50	\$26.62		\$307.71	\$757.01
Roy Wrench - ####	5	Plumber								20.00	\$67.88	\$1,004.80							
Roy Wrench - ####	5	Steamfitter								20.00	\$69.13	\$1,038.40	\$163.46	\$147.11	\$118.51	\$51.08		\$480.16	\$1,563.04
Bart Turner - ####	1	Power Equipment Rotary Drill Group 4								24.00	\$60.80	\$1,459.20	\$115.14	\$142.48	\$122.33	\$35.98		\$415.93	\$1,023.27

While completion of Form WH-347 is required by 40 U.S.C. § 3145, contractors are not required to file this form with the U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.9(a)(3)(ii) or (iii) if the contractor is not a contractor or mechanic as defined in 29 C.F.R. § 5.9(a)(3)(i).

We estimate that it will take approximately 15 minutes to complete this collection, including suggestions for reducing this burden, since them to the Administrator, Wage and Hour Division, ESA, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W., Washington, D.C. 20710.

(08-01)

Fringe benefits are not paid as cash to Bart Turner: explanation is included under "(c) exceptions" on signatory page.

Date 04/28/2010

I, Tiffany Payer (Name of Signatory Party) Payroll Supervisor (Title)

do hereby state:

(1) That I pay or supervise the payment of the persons employed by Sample Construction Company (Contractor or Subcontractor) on the Robin Street Apartments, Delafield WI; that during the payroll period commencing on the 18 day of 4 2010 and ending the 24 day of 4 2010 all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said Sample Construction Company (Contractor or Subcontractor) from the full weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subpart A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 957, 76 Stat. 357; 40 U.S.C. § 3146), and described below:

Alex Driver - #### - other deductions - \$85 for child support

Explanation of "other"

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete, that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract, that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That: (a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

[X] - Each laborer or mechanic listed in the above referenced payroll has been paid as indicated on the payroll an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

Table with columns: EXCEPTION (GRAPH), EXPLANATION. Row 1: Power Equipment Rotary Drill Group 4, paid directly to plan: health & dental at \$12.50 per hour and Pension at \$8.25 per hour. Includes a box: Explanation of exception to fringe benefits.

NAME AND TITLE: Robert Sample, Owner SIGNATURE

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 201 OF TITLE 31 OF THE UNITED STATES CODE.

Project Wage Rate Sheet

U.S. Department of Housing and Urban Development
Office of Labor Relations

PROJECT NAME:			WAGE DECISION NUMBER/MODIFICATION NUMBER:			
PROJECT NUMBER:			PROJECT COUNTY:			
WORK CLASSIFICATION	BASIC HOURLY RATE (BHR)	FRINGE BENEFITS	TOTAL HOURLY WAGE RATE	LABORERS FRINGE BENEFITS:		\$ TOTAL WAGE
				GROUP #	BHR	
Bricklayers			\$			
Carpenters			\$			\$
Cement Masons			\$			\$
Drywall Hangers			\$			\$
Electricians			\$			\$
Iron Workers			\$			\$
Painters			\$	OPERATORS FRINGE BENEFITS:		\$ TOTAL WAGE
				GROUP #	BHR	
Plumbers			\$			\$
Roofers			\$			\$
Sheet Metal Workers			\$			\$
Soft Floor Layers			\$			\$
Tapers			\$			\$
Tile Setters			\$	TRUCK DRIVERS FRINGE BENEFITS:		\$ TOTAL WAGE
				GROUP #	BHR	
OTHER CLASSIFICATIONS						
			\$			\$
			\$			\$
			\$			\$
ADDITIONAL CLASSIFICATIONS (HUD Form 4230-A)						
WORK CLASSIFICATION	BASIC HOURLY RATE	FRINGE BENEFITS	TOTAL HOURLY WAGE RATE	DATE OF HUD SUBMISSION TO DOL	DATE OF DOL APPROVAL	
			\$			
			\$			
			\$			
			\$			

Payroll Review Compliance Calculator

Did you know? Using the [WH347 PDF form](#) on your computer will automatically calculate wages. And the aforementioned Project Wage Rates sheet is a good companion to the wage decision.



However, if you have *several* weeks of employees to check and need assistance, please ask for the **Payroll Review Compliance Calculator** – An Excel Spreadsheet Workbook. You can use this tool to review payrolls, developed in-house by Labor Standards Compliance Officers, Justin Fair and Dona Sorce. It helps ‘show the work’ to catch common math errors.

REQUEST EXCEL FORMAT

Permissible Payroll Deductions

The following payroll deductions may be made without requesting approval:

- A. Any deduction made in compliance with the requirements of Federal, State, or local law, such as Federal or State withholding income taxes and Federal social security taxes.
- B. Any deduction of sums previously paid to the employee as a bona fide prepayment of wages when such prepayment is made without discount or interest. A “bona fide prepayment of wages” is considered to have been made only when cash or its equivalent has been advanced to the person employed in such manner as to give themselves complete freedom of disposition of the advanced funds.
- C. Any deduction of amounts required by court process to be paid to another, unless the deduction is in favor of the contractor, subcontractor, or any affiliated person, or when collusion or collaboration exists.
- D. Any deduction constituting a contribution on behalf of the person employed to funds established by the employer or representatives of employees, or both, for the purpose of providing either from principal or income, or both, medical or hospital care, pensions or annuities on retirement, death benefits, compensation for injuries, illness, accidents, sickness, or disability, or for insurance to provide any of the foregoing, or unemployment benefits, vacation pay, savings accounts, or similar payments for the benefit of employees, their families and dependents: Provided, however, that the following standards are met: (1) The deduction is not otherwise prohibited by law; (2) it is either: (i) voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of or for the continuation of employment, or (ii) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees; (3) no profit or other benefit is otherwise obtained, directly or indirectly, by the contractor or subcontractor or any affiliated person in the form of commission, dividend, or otherwise; and (4) the deductions shall serve the convenience and interest of the employee.
- E. Any deduction contributing toward the purchase of United States Defense Stamps and Bonds when voluntarily authorized by the employee.
- F. Any deduction requested by the employee to enable themselves to repay loans to or to purchase shares in credit unions organized and operated in accordance with Federal and State credit union statutes.
- G. Any deduction voluntarily authorized by the employee for the making of contributions to governmental or quasi-governmental agencies, such as the American Red Cross.
- H. Any deductions to voluntarily authorized by the employee for the making of contributions to Community Chests, United Givers Funds, and similar charitable organizations.
- I. Any deductions to pay regular union initiation fees and membership dues, not including fines or special assessments: Provided, however, That a collective bargaining agreement between the contractor or subcontractor and representatives of its employees provides for such deductions and the deductions are not otherwise prohibited by law.
- J. Any deduction not more than for the “reasonable cost” of board, lodging, or other facilities meeting the requirements of section 3(m) of the Fair Labor Standards Act of 1938, as amended, and Part 531 of Title 29, Code of Federal Regulations. When such a deduction is made the additional records required under Section 516.25(a) of Title 29, Code of Federal Regulations, shall be kept.

**REQUEST FOR AUTHORIZATION OF
ADDITIONAL CLASSIFICATION AND RATE**

CHECK APPROPRIATE BOX
 SERVICE CONTRACT
 CONSTRUCTION CONTRACT

OMB Control Number: 9000-0066
Expiration Date: 5/31/2022

Paperwork Reduction Act Statement - This information collection meets the requirements of 44 U.S.C. § 3507, as amended by section 2 of the Paperwork Reduction Act of 1995. You do not need to answer these questions unless we display a valid Office of Management and Budget (OMB) control number. The OMB control number for this collection is 9000-0066. We estimate that it will take .5 hours to read the instructions, gather the facts, and answer the questions. Send only comments relating to our time estimate, including suggestions for reducing this burden, or any other aspects of this collection of information to: U.S. General Services Administration, Regulatory Secretariat Division (M1V1CB), 1800 F Street, NW, Washington, DC 20405.

INSTRUCTIONS: THE CONTRACTOR SHALL COMPLETE ITEMS 3 THROUGH 16, KEEP A PENDING COPY, AND SUBMIT THE REQUEST, IN QUADRUPLICATE, TO THE CONTRACTING OFFICER.

1. TO: ADMINISTRATOR, WAGE AND HOUR DIVISION U.S. DEPARTMENT OF LABOR WASHINGTON, DC 20210		2. FROM: (REPORTING OFFICE)		
3. CONTRACTOR				4. DATE OF REQUEST
5. CONTRACT NUMBER	6. DATE BID OPENED (SEALED BIDDING)	7. DATE OF AWARD	8. DATE CONTRACT WORK STARTED	9. DATE OPTION EXERCISED (IF APPLICABLE) (SERVICE CONTRACT ONLY)
10. SUBCONTRACTOR (IF ANY)				

11. PROJECT AND DESCRIPTION OF WORK (ATTACH ADDITIONAL SHEET IF NEEDED)

12. LOCATION (CITY, COUNTY, AND STATE)

13. IN ORDER TO COMPLETE THE WORK PROVIDED FOR UNDER THE ABOVE CONTRACT, IT IS NECESSARY TO ESTABLISH THE FOLLOWING RATE(S) FOR THE INDICATED CLASSIFICATION(S) NOT INCLUDED IN THE DEPARTMENT OF LABOR DETERMINATION

NUMBER: _____ DATED: _____

a. LIST IN ORDER: PROPOSED CLASSIFICATION TITLE(S); JOB DESCRIPTION(S); DUTIES; AND RATIONALE FOR PROPOSED CLASSIFICATIONS (Service contracts only) <small>(Use reverse or attach additional sheets, if necessary)</small>	b. WAGE RATE(S)	c. FRINGE BENEFITS PAYMENTS

14. SIGNATURE AND TITLE OF SUBCONTRACTOR REPRESENTATIVE (IF ANY)	15. SIGNATURE AND TITLE OF PRIME CONTRACTOR REPRESENTATIVE
---	---

16. SIGNATURE OF EMPLOYEE OR REPRESENTATIVE	TITLE	CHECK APPROPRIATE BOX-REFERENCING BLOCK 13. <input type="checkbox"/> AGREE <input type="checkbox"/> DISAGREE
--	--------------	---

TO BE COMPLETED BY CONTRACTING OFFICER (CHECK AS APPROPRIATE - SEE FAR 22.1019 (SERVICE CONTRACT LABOR STANDARDS) OR FAR 22.406-3 (CONSTRUCTION WAGE RATE REQUIREMENTS))

- THE INTERESTED PARTIES AGREE AND THE CONTRACTING OFFICER RECOMMENDS APPROVAL BY THE WAGE AND HOUR DIVISION. AVAILABLE INFORMATION AND RECOMMENDATIONS ARE ATTACHED.
- THE INTERESTED PARTIES CANNOT AGREE ON THE PROPOSED CLASSIFICATION AND WAGE RATE. A DETERMINATION OF THE QUESTION BY THE WAGE AND HOUR DIVISION IS THEREFORE REQUESTED. AVAILABLE INFORMATION AND RECOMMENDATIONS ARE ATTACHED.
(Send 3 copies to the Department of Labor)

SIGNATURE OF CONTRACTING OFFICER OR REPRESENTATIVE	TITLE AND COMMERCIAL TELEPHONE NUMBER	DATE SUBMITTED
---	--	-----------------------

Maryland CDBG SF 1444 Instructions
Request for Additional Classification and Wage Rate Form

Attached is a copy of the federal standard form 1444, Request for Authorization of Additional Classification and Wage Rate. This form must be submitted when a wage classification is not listed on the applicable wage decision for Maryland CDBG funded construction projects. The classification and wage rate submitted on this form should bear a reasonable likeness to similar skill classifications listed in the federal wage determination.

This form will be provided to the CDBG Grantee by CDBG staff. The first section, boxes #1 - #13 will be completed by the CDBG labor standards staff. The grantee or general contractor will need to provide the CDBG staff with a list of all subcontractors that that will utilize requested classification(s),

The general contractor is responsible for the completion of the applicable boxes #13a. - #16 and submission of this form to the CDBG Grantee. The CDBG Grantee is responsible for forwarding the completed form to the CDBG Labor Standards Officer, at dona.sorce@maryland.gov. The following are the procedures for the completion and submission of the form:

Boxes 1-13 -to be completed by Maryland CDBG staff.

1. Check "Construction Contract" in the upper right-hand corner.
2. Insert the following information: State of Maryland Department of Housing and Community Development, 7800 Harkins Road, Lanham, MD 20706.
3. Contractor Name
4. Date of Request
5. Contract or Grant Agreement Number
6. Date the bid was opened, if applicable.
7. Date the contract was awarded.
8. Actual date the contractor will be starting or started work.
9. (This box is not applicable.)
10. List all subcontractors that will utilize the labor classification listed in box 13a. If none, enter "N/A."
11. Project title and a brief description of the project.
12. Include both the city and county, as well as Maryland.
13. Federal "General Decision Number" (e.g. MD20220023) and the date.

Boxes 13a. – 16 are to be completed by the contractor.

13a. List all classifications not covered by the federal wage determination, which are utilized by either the general or the subcontractor(s).

13b. The wage rate should bear a reasonable likeness to the category classification wage rates (equipment operators, laborers, truck drivers, etc.) listed in the federal wage determination.



U.S. Department of Labor
Wage and Hour Division

PAYROLL
For contractor's optional use; see instructions at dol.gov/agencies/whd/forms/wh347

Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number.

NAME OF CONTRACTOR OR SUBCONTRACTOR ADDRESS

OMB No. 1235-0008
Expires 09/30/2026

PAYROLL NO.

FOR WEEK ENDING

PROJECT AND LOCATION

PROJECT OR CONTRACT NO.

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) NO OF WITHHOLDING EXEMPTIONS	(3) WORK CLASSIFICATION	(4) DAY AND DATE							(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS				(9) NET WAGES PAID FOR WEEK
			HOURS WORKED EACH DAY										FICA	WITH- HOLDING TAX	OTHER	TOTAL DEDUCTIONS	

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a), The Copeland Act (40 U.S.C. § 3145) contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

We estimate that it will take an average of 55 minutes to complete this collection, including time for reviewing instructions, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W., Washington, D.C. 20210.

(over)

Public Burden Statement

EMPLOYEE RIGHTS

UNDER THE DAVIS-BACON ACT

FOR LABORERS AND MECHANICS EMPLOYED ON FEDERAL OR FEDERALLY ASSISTED CONSTRUCTION PROJECTS

PREVAILING WAGES

You must be paid not less than the wage rate listed in the Davis-Bacon Wage Decision posted with this Notice for the work you perform.

OVERTIME

You must be paid not less than one and one-half times your basic rate of pay for all hours worked over 40 in a work week. There are few exceptions.

ENFORCEMENT

Contract payments can be withheld to ensure workers receive wages and overtime pay due, and liquidated damages may apply if overtime pay requirements are not met. Davis-Bacon contract clauses allow contract termination and debarment of contractors from future federal contracts for up to three years. A contractor who falsifies certified payroll records or induces wage kickbacks may be subject to civil or criminal prosecution, fines and/or imprisonment.

APPRENTICES

Apprentice rates apply only to apprentices properly registered under approved Federal or State apprenticeship programs.

PROPER PAY

If you do not receive proper pay, or require further information on the applicable wages, contact the Contracting Officer listed below:

or contact the U.S. Department of Labor's Wage and Hour Division.



WAGE AND HOUR DIVISION
UNITED STATES DEPARTMENT OF LABOR

1-866-487-9243
TTY: 1-877-889-5627
www.dol.gov/whd



WH1321 REV 10/17

DERECHOS DE EMPLEADOS

PARA TRABAJADORES CON DISCAPACIDADES QUE PERCIBEN UN SALARIO INFERIOR AL MÍNIMO

Este establecimiento cuenta con un certificado que autoriza el pago de salarios inferiores al mínimo a trabajadores discapacitados por el trabajo que realizan. La autorización para pagar salarios inferiores al mínimo a trabajadores con discapacidades por lo general se aplica a trabajo regido por la **Ley de Normas Justas de Trabajo** (FLSA, por sus siglas en inglés), la **Ley de Contratos por Servicios McNamara-O'Hara** (SCA, por sus siglas en inglés) y/o por la **Ley Walsh-Healey Sobre Contratos Públicos** (PCA, por sus siglas en inglés). Tales salarios inferiores al mínimo se conocen como "tasas salariales conmensurables" y son inferiores a las tasas básicas por hora establecidas en la determinación de salarios de la SCA y/o inferiores al salario mínimo de \$7.25 por hora según la FLSA. Una "tasa salarial conmensurable" se basa en la productividad individual del trabajador, no importa cuán limitada sea, en proporción al salario y a la productividad de los trabajadores experimentados que no tienen discapacidades que impactan su productividad cuando realizan esencialmente el mismo tipo, calidad y cantidad de trabajo en el área geográfica de la que proviene la fuerza laboral de la comunidad.

Los empleadores deben hacer disponible y exhibir este cartel en un lugar donde los empleados y los padres y tutores de los trabajadores con discapacidades lo puedan ver claramente.

TRABAJADORES CON DISCAPACIDADES

Los salarios inferiores al salario mínimo según la sección 14(c) no se aplican a menos que la discapacidad del trabajador realmente perjudique sus ingresos o su capacidad productiva para el trabajo que realiza. El hecho de que el trabajador pueda tener una discapacidad no es en sí suficiente para justificar el pago de un salario inferior al mínimo.

Para efectos de las tasas salariales conmensurables según un certificado, un trabajador con una discapacidad se define como: Una persona cuyos ingresos o capacidad productiva se ve afectada por una discapacidad física o mental, incluidas aquellas relacionadas con la edad o las lesiones, para que se realice el trabajo.

Las discapacidades que pueden afectar la capacidad productiva incluyen una discapacidad intelectual o de desarrollo, una discapacidad psiquiátrica, una discapacidad auditiva o visual, y algunas otras discapacidades. Lo siguiente normalmente no afecta la capacidad productiva con el propósito de pagar tasas de salarios conmensurables: discapacidades educativas, desempleo crónico, recibo de beneficios sociales, falta de asistencia a la escuela, delincuencia juvenil y libertad condicional o bajo palabra.

NOTIFICACIÓN AL TRABAJADOR

El empleador debe informar oralmente y por escrito a cada trabajador con una discapacidad y, cuando corresponda, al padre o tutor de dicho trabajador, sobre los términos del certificado según el cual dicho trabajador está empleado.

ELEMENTOS CLAVES DE LAS TASAS DE SALARIO CONMENSURABLE

- **Norma de trabajadores no discapacitados**—El indicador objetivo (generalmente un estudio del tiempo de la producción de trabajadores que no tienen discapacidades que perjudiquen su productividad para el trabajo) contra el cual se mide la productividad de un trabajador con una discapacidad.
- **Tasa de salario prevaleciente**—El salario que se paga a trabajadores experimentados que no tienen discapacidades que perjudiquen su productividad por el mismo trabajo o trabajo similar y que realizan tal trabajo en el área. La mayor parte de los contratos SCA incluye una determinación de salario que especifica las tasas del salario prevaleciente que se tiene que pagar por el trabajo sujeto a SCA.
- **Evaluación de la productividad del trabajador con una discapacidad**—Medida documentada de la producción del trabajador con discapacidad (en términos de cantidad y calidad).

Los salarios de todos los trabajadores que perciben salarios conmensurables tienen que ser revisados, y ajustados si corresponde, en intervalos periódicos. Como mínimo, la productividad de los trabajadores asalariados por hora tiene que reevaluarse al menos cada seis meses y tiene que realizarse un estudio nuevo de salarios prevalecientes al menos una vez cada doce meses. Además, se tienen que revisar, y ajustar según corresponda, los salarios prevalecientes siempre que haya un cambio en el trabajo o en la tasa del salario prevaleciente, tal como cuando se incrementa el salario mínimo aplicable estatal o federal.

WIOA

La Ley de Innovación y Oportunidades Laborales de 2014 (WIOA, por sus siglas en inglés) enmendó la Ley de Rehabilitación al agregar la sección 511, la cual impone limitaciones en el pago de salarios inferiores a los mínimos a las personas con discapacidades al exigir el cumplimiento de ciertos requisitos antes y durante el pago de un salario inferior al mínimo.

ORDEN EJECUTIVA 13658

La Orden Ejecutiva 13658, que establece un salario mínimo para contratistas, estableció un salario mínimo que generalmente tiene que pagarse a los trabajadores que cumplen un contrato o en conexión con un contrato sujeto al Gobierno Federal. Los trabajadores sujetos a esta Orden Ejecutiva y a los que se les debe el salario mínimo completo de la Orden Ejecutiva incluyen a los trabajadores con discapacidades cuyos salarios se calculan conforme a los certificados emitidos según la sección 14(c) de la FLSA.

BENEFICIOS COMPLEMENTARIOS

Ni la FLSA ni la PCA tienen disposiciones que requieran vacaciones, días festivos, o paga por enfermedad, ni otros beneficios complementarios como seguro de salud o planes de pensión. Las determinaciones de salario de SCA pueden requerir pagos de dicho beneficio complementario (o un equivalente en efectivo). Los trabajadores a los cuales se les paga según un certificado que autoriza tasas salariales conmensurables tienen que recibir enteramente los beneficios complementarios adicionales enumerados en la determinación de salario de SCA.

SOBRETIEMPO

En general, si un trabajador se encuentra realizando un trabajo sujeto a la FLSA, SCA y/o PCA, se le tiene que pagar a ese trabajador tiempo y medio, es decir, 1 1/2 de su tasa regular de pago por todas las horas trabajadas después de las 40 horas en una semana laboral.

TRABAJO DE MENORES DE EDAD

Los menores de edad de menos de 18 años tienen que ser empleados de acuerdo con las disposiciones federales para el trabajo de menores de edad de la FLSA. Ninguna persona menor de 16 años de edad puede ser empleada en la manufactura o en un contrato de la PCA.

PROCESO DE SOLICITUD

Los trabajadores con discapacidades a los que se les paga salarios inferiores al salario mínimo pueden solicitar al Administrador de la División de Horas y Salarios del Departamento de Trabajo que un Juez de Derecho Administrativo haga una revisión de las tasas de sus salarios. No se requiere ningún formulario particular de solicitud, excepto que tiene que ser firmado por el trabajador con una discapacidad o su padre o tutor y tiene que contener el nombre y la dirección del empleador. Las solicitudes se pueden enviar por correo a: Administrator, Wage and Hour Division, U.S. Department of Labor, Room S-3502, 200 Constitution Avenue NW, Washington, DC 20210.



DIVISIÓN DE HORAS Y SALARIOS

DEPARTAMENTO DE TRABAJO DE LOS ESTADOS UNIDOS

1-866-487-9243

TTY: 1-877-889-5627

www.dol.gov/whd



WH1284 SPA REV 01/18

DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

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DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

ATTACHMENT A

**TOWN OF EMMITSBURG GENERAL
CONDITIONS EJCDC SECTION 700**

**STANDARD GENERAL CONDITIONS
OF THE CONSTRUCTION CONTRACT**

Prepared By



DEPAUL STREET WATERLINE REPLACEMENT PROJECT
TOWN OF EMMITSBURG, MD
PROJECT MANUAL

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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

TABLE OF CONTENTS

	Page
Article 1—Definitions and Terminology.....	5
1.01 Defined Terms	5
1.02 Terminology.....	9
Article 2—Preliminary Matters	10
2.01 Delivery of Performance and Payment Bonds; Evidence of Insurance.....	10
2.02 Copies of Documents.....	10
2.03 Before Starting Construction	10
2.04 Preconstruction Conference; Designation of Authorized Representatives.....	11
2.05 Acceptance of Schedules.....	11
2.06 Electronic Transmittals.....	11
Article 3—Contract Documents: Intent, Requirements, Reuse.....	11
3.01 Intent.....	11
3.02 Reference Standards	12
3.03 Reporting and Resolving Discrepancies.....	12
3.04 Requirements of the Contract Documents	13
3.05 Reuse of Documents	13
Article 4—Commencement and Progress of the Work.....	14
4.01 Commencement of Contract Times; Notice to Proceed.....	14
4.02 Starting the Work	14
4.03 Reference Points	14
4.04 Progress Schedule.....	14
4.05 Delays in Contractor’s Progress.....	14
Article 5—Site; Subsurface and Physical Conditions; Hazardous Environmental Conditions	16
5.01 Availability of Lands	16
5.02 Use of Site and Other Areas	16
5.03 Subsurface and Physical Conditions.....	17
5.04 Differing Subsurface or Physical Conditions.....	17
5.05 Underground Facilities	19
5.06 Hazardous Environmental Conditions at Site	20
Article 6—Bonds and Insurance	22
6.01 Performance, Payment, and Other Bonds.....	22
6.02 Insurance—General Provisions.....	23
6.03 Contractor’s Insurance.....	24
6.04 Builder’s Risk and Other Property Insurance.....	25
6.05 Property Losses; Subrogation.....	26
6.06 Receipt and Application of Property Insurance Proceeds.....	26

Article 7—Contractor’s Responsibilities	27
7.01 Contractor’s Means and Methods of Construction	27
7.02 Supervision and Superintendence	27
7.03 Labor; Working Hours	27
7.04 Services, Materials, and Equipment	28
7.05 “Or Equals”	28
7.06 Substitutes	29
7.07 Concerning Subcontractors and Suppliers	30
7.08 Patent Fees and Royalties	31
7.09 Permits	32
7.10 Taxes	32
7.11 Laws and Regulations	32
7.12 Record Documents	32
7.13 Safety and Protection	32
7.14 Hazard Communication Programs	33
7.15 Emergencies	34
7.16 Submittals	34
7.17 Contractor’s General Warranty and Guarantee	36
7.18 Indemnification	37
7.19 Delegation of Professional Design Services	37
Article 8—Other Work at the Site	38
8.01 Other Work	38
8.02 Coordination	39
8.03 Legal Relationships	39
Article 9—Owner’s Responsibilities	40
9.01 Communications to Contractor	40
9.02 Replacement of Engineer	40
9.03 Furnish Data	40
9.04 Pay When Due	40
9.05 Lands and Easements; Reports, Tests, and Drawings	40
9.06 Insurance	40
9.07 Change Orders	40
9.08 Inspections, Tests, and Approvals	40
9.09 Limitations on Owner’s Responsibilities	40
9.10 Undisclosed Hazardous Environmental Condition	41
9.11 Evidence of Financial Arrangements	41
9.12 Safety Programs	41
Article 10—Engineer’s Status During Construction	41
10.01 Owner’s Representative	41
10.02 Visits to Site	41
10.03 Resident Project Representative	41
10.04 Engineer’s Authority	42
10.05 Determinations for Unit Price Work	42
10.06 Decisions on Requirements of Contract Documents and Acceptability of Work	42
10.07 Limitations on Engineer’s Authority and Responsibilities	42
10.08 Compliance with Safety Program	42
Article 11—Changes to the Contract	43

11.01	Amending and Supplementing the Contract	43
11.02	Change Orders	43
11.03	Work Change Directives	43
11.04	Field Orders	44
11.05	Owner-Authorized Changes in the Work.....	44
11.06	Unauthorized Changes in the Work.....	44
11.07	Change of Contract Price	44
11.08	Change of Contract Times.....	45
11.09	Change Proposals.....	45
11.10	Notification to Surety	46
Article 12—Claims		47
12.01	Claims	47
Article 13—Cost of the Work; Allowances; Unit Price Work		48
13.01	Cost of the Work.....	48
13.02	Allowances	51
13.03	Unit Price Work	51
Article 14—Tests and Inspections; Correction, Removal, or Acceptance of Defective Work.....		52
14.01	Access to Work	52
14.02	Tests, Inspections, and Approvals	52
14.03	Defective Work	53
14.04	Acceptance of Defective Work.....	53
14.05	Uncovering Work.....	53
14.06	Owner May Stop the Work	54
14.07	Owner May Correct Defective Work	54
Article 15—Payments to Contractor; Set-Offs; Completion; Correction Period		54
15.01	Progress Payments	54
15.02	Contractor’s Warranty of Title	57
15.03	Substantial Completion.....	57
15.04	Partial Use or Occupancy.....	58
15.05	Final Inspection	58
15.06	Final Payment	59
15.07	Waiver of Claims	60
15.08	Correction Period	60
Article 16—Suspension of Work and Termination.....		61
16.01	Owner May Suspend Work.....	61
16.02	Owner May Terminate for Cause.....	61
16.03	Owner May Terminate for Convenience	62
16.04	Contractor May Stop Work or Terminate	62
Article 17—Final Resolution of Disputes.....		63
17.01	Methods and Procedures	63
Article 18—Miscellaneous		63
18.01	Giving Notice.....	63
18.02	Computation of Times	63
18.03	Cumulative Remedies	63

18.04	Limitation of Damages.....	63
18.05	No Waiver	64
18.06	Survival of Obligations.....	64
18.07	Controlling Law.....	64
18.08	Assignment of Contract	64
18.09	Successors and Assigns	64
18.10	Headings	64

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The document prepared by Contractor, in a form acceptable to Engineer, to request progress or final payments, and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The Advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 10. *Claim*
 - a. A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment of Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract.
 - b. A demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal, or seeking resolution of a contractual issue that Engineer has declined to address.

- c. A demand or assertion by Owner or Contractor, duly submitted in compliance with the procedural requirements set forth herein, made pursuant to Paragraph 12.01.A.4, concerning disputes arising after Engineer has issued a recommendation of final payment.
 - d. A demand for money or services by a third party is not a Claim.
11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
 12. *Contract*—The entire and integrated written contract between Owner and Contractor concerning the Work.
 13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
 14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
 15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
 16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
 17. *Cost of the Work*—See Paragraph 13.01 for definition.
 18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
 19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
 20. *Electronic Document*—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital format.
 21. *Electronic Means*—Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by the recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.
 22. *Engineer*—The individual or entity named as such in the Agreement.
 23. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
 24. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto.
 - a. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated into the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, is not a Hazardous Environmental Condition.

- b. The presence of Constituents of Concern that are to be removed or remediated as part of the Work is not a Hazardous Environmental Condition.
 - c. The presence of Constituents of Concern as part of the routine, anticipated, and obvious working conditions at the Site, is not a Hazardous Environmental Condition.
25. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and binding decrees, resolutions, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
 26. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
 27. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date, or by a time prior to Substantial Completion of all the Work.
 28. *Notice of Award*—The written notice by Owner to a Bidder of Owner’s acceptance of the Bid.
 29. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
 30. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
 31. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising Contractor’s plan to accomplish the Work within the Contract Times.
 32. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
 33. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative (RPR) includes any assistants or field staff of Resident Project Representative.
 34. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
 35. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer’s review of the submittals.
 36. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor’s Applications for Payment.
 37. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
 38. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands or areas furnished by Owner which are designated for the use of Contractor.
 39. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.

40. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
41. *Submittal*—A written or graphic document, prepared by or for Contractor, which the Contract Documents require Contractor to submit to Engineer, or that is indicated as a Submittal in the Schedule of Submittals accepted by Engineer. Submittals may include Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers' instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether or not approved or accepted by Engineer, are not Contract Documents. Change Proposals, Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals.
42. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion of such Work.
43. *Successful Bidder*—The Bidder to which the Owner makes an award of contract.
44. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
45. *Supplier*—A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
46. *Technical Data*
- a. Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (1) existing subsurface conditions at or adjacent to the Site, or existing physical conditions at or adjacent to the Site including existing surface or subsurface structures (except Underground Facilities) or (2) Hazardous Environmental Conditions at the Site.
 - b. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then Technical Data is defined, with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06, as the data contained in boring logs, recorded measurements of subsurface water levels, assessments of the condition of subsurface facilities, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical, environmental, or other Site or facilities conditions report prepared for the Project and made available to Contractor.
 - c. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data, and instead Underground Facilities are shown or indicated on the Drawings.
47. *Underground Facilities*—All active or not-in-service underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including but not limited to those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water, other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.

48. *Unit Price Work*—Work to be paid for on the basis of unit prices.
49. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
50. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

- A. The words and terms discussed in Paragraphs 1.02.B, C, D, and E are not defined terms that require initial capital letters, but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives*: The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day*: The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective*: The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
1. does not conform to the Contract Documents;
 2. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 3. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or Paragraph 15.04).
- E. *Furnish, Install, Perform, Provide*
1. The word “furnish,” when used in connection with services, materials, or equipment, means to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 2. The word “install,” when used in connection with services, materials, or equipment, means to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, means to furnish and install said services, materials, or equipment complete and ready for intended use.

4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.
- F. *Contract Price or Contract Times*: References to a change in “Contract Price or Contract Times” or “Contract Times or Contract Price” or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term “or both” is not expressed.
- G. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Performance and Payment Bonds; Evidence of Insurance*

- A. *Performance and Payment Bonds*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner the performance bond and payment bond (if the Contract requires Contractor to furnish such bonds).
- B. *Evidence of Contractor’s Insurance*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each additional insured (as identified in the Contract), the certificates, endorsements, and other evidence of insurance required to be provided by Contractor in accordance with Article 6, except to the extent the Supplementary Conditions expressly establish other dates for delivery of specific insurance policies.
- C. *Evidence of Owner’s Insurance*: After receipt of the signed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each additional insured (as identified in the Contract), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully signed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

- A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 2. a preliminary Schedule of Submittals; and
 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work, and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other Submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review the schedules submitted in accordance with Paragraph 2.03.A. No progress payment will be made to Contractor until acceptable schedules are submitted to Engineer.
 - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 - 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.
 - 4. If a schedule is not acceptable, Contractor will have an additional 10 days to revise and resubmit the schedule.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may send, and shall accept, Electronic Documents transmitted by Electronic Means.
- B. If the Contract does not establish protocols for Electronic Means, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. Subject to any governing protocols for Electronic Means, when transmitting Electronic Documents by Electronic Means, the transmitting party makes no representations as to long-term compatibility, usability, or readability of the Electronic Documents resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the Electronic Documents.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one Contract Document is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents.

- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic versions of the Contract Documents (including any printed copies derived from such electronic versions) and the printed record version, the printed record version will govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.
- F. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Contractor, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- G. Nothing in the Contract Documents creates:
 - 1. any contractual relationship between Owner or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity; or
 - 2. any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity, except as may otherwise be required by Laws and Regulations.

3.02 *Reference Standards*

A. *Standards Specifications, Codes, Laws and Regulations*

- 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, means the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
- 2. No provision of any such standard specification, manual, reference standard, or code, and no instruction of a Supplier, will be effective to change the duties or responsibilities of Owner, Contractor, or Engineer from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner or Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*

- 1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
- 2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any

Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer in writing all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly notify Owner and Contractor in writing that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media versions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein precludes Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the 30th day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the 60th day after the day of Bid opening or the 30th day after the Effective Date of the Contract, whichever date is earlier.

4.02 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work may be done at the Site prior to such date.

4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times must be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work will be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Such an adjustment will be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this

paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:

1. Severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 2. Abnormal weather conditions;
 3. Acts or failures to act of third-party utility owners or other third-party entities (other than those third-party utility owners or other third-party entities performing other work at or adjacent to the Site as arranged by or under contract with Owner, as contemplated in Article 8); and
 4. Acts of war or terrorism.
- D. Contractor's entitlement to an adjustment of Contract Times or Contract Price is limited as follows:
1. Contractor's entitlement to an adjustment of the Contract Times is conditioned on the delay, disruption, or interference adversely affecting an activity on the critical path to completion of the Work, as of the time of the delay, disruption, or interference.
 2. Contractor shall not be entitled to an adjustment in Contract Price for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor. Such a concurrent delay by Contractor shall not preclude an adjustment of Contract Times to which Contractor is otherwise entitled.
 3. Adjustments of Contract Times or Contract Price are subject to the provisions of Article 11.
- E. Each Contractor request or Change Proposal seeking an increase in Contract Times or Contract Price must be supplemented by supporting data that sets forth in detail the following:
1. The circumstances that form the basis for the requested adjustment;
 2. The date upon which each cause of delay, disruption, or interference began to affect the progress of the Work;
 3. The date upon which each cause of delay, disruption, or interference ceased to affect the progress of the Work;
 4. The number of days' increase in Contract Times claimed as a consequence of each such cause of delay, disruption, or interference; and
 5. The impact on Contract Price, in accordance with the provisions of Paragraph 11.07.

Contractor shall also furnish such additional supporting documentation as Owner or Engineer may require including, where appropriate, a revised progress schedule indicating all the activities affected by the delay, disruption, or interference, and an explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work.

- F. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5, together with the provisions of Paragraphs 4.05.D and 4.05.E.
- G. Paragraph 8.03 addresses delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

ARTICLE 5—SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor in writing of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas*

- 1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
 - 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.13, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or in a court of competent jurisdiction; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.
- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris will conform to applicable Laws and Regulations.
 - C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials

and shall restore to original condition all property not designated for alteration by the Contract Documents.

- D. *Loading of Structures*: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings*: The Supplementary Conditions identify:

1. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data;
2. Those drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data; and
3. Technical Data contained in such reports and drawings.

- B. *Underground Facilities*: Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph 5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.

- C. *Reliance by Contractor on Technical Data*: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b.

- D. *Limitations of Other Data and Documents*: Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;
3. the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or
4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor*: If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site:

1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate;
2. is of such a nature as to require a change in the Drawings or Specifications;
3. differs materially from that shown or indicated in the Contract Documents; or
4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine whether it is necessary for Owner to obtain additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the subsurface or physical condition in question may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- E. *Possible Price and Times Adjustments*
 - 1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. Such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
 - c. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
 - 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise;
 - b. The existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice required by Paragraph 5.04.A.

3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
 4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.
- F. *Underground Facilities; Hazardous Environmental Conditions:* Paragraph 5.05 governs rights and responsibilities regarding the presence or location of Underground Facilities. Paragraph 5.06 governs rights and responsibilities regarding Hazardous Environmental Conditions. The provisions of Paragraphs 5.03 and 5.04 are not applicable to the presence or location of Underground Facilities, or to Hazardous Environmental Conditions.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities:* Unless it is otherwise expressly provided in the Supplementary Conditions, the cost of all of the following are included in the Contract Price, and Contractor shall have full responsibility for:
1. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 2. complying with applicable state and local utility damage prevention Laws and Regulations;
 3. verifying the actual location of those Underground Facilities shown or indicated in the Contract Documents as being within the area affected by the Work, by exposing such Underground Facilities during the course of construction;
 4. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 5. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated on the Drawings, or was not shown or indicated on the Drawings with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing regarding such Underground Facility.
- C. *Engineer's Review:* Engineer will:
1. promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy;
 2. identify and communicate with the owner of the Underground Facility; prepare recommendations to Owner (and if necessary issue any preliminary instructions to Contractor) regarding the Contractor's resumption of Work in connection with the Underground Facility in question;
 3. obtain any pertinent cost or schedule information from Contractor; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and
 4. advise Owner in writing of Engineer's findings, conclusions, and recommendations.

During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the Underground Facility may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the Underground Facility in question and conditions affected by its presence have been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- F. *Possible Price and Times Adjustments*
 - 1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, to the extent that any existing Underground Facility at the Site that was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - b. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E; and
 - c. Contractor gave the notice required in Paragraph 5.05.B.
 - 2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
 - 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.
 - 4. The information and data shown or indicated on the Drawings with respect to existing Underground Facilities at the Site is based on information and data (a) furnished by the owners of such Underground Facilities, or by others, (b) obtained from available records, or (c) gathered in an investigation conducted in accordance with the current edition of ASCE 38, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, by the American Society of Civil Engineers. If such information or data is incorrect or incomplete, Contractor's remedies are limited to those set forth in this Paragraph 5.05.F.

5.06 *Hazardous Environmental Conditions at Site*

- A. *Reports and Drawings:* The Supplementary Conditions identify:
 - 1. those reports known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site;
 - 2. drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
 - 3. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and

drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.
- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, as a result of such Work stoppage, such special conditions under which Work is agreed to be resumed by Contractor, or any costs or expenses incurred in response to the Hazardous Environmental Condition, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off. Entitlement to any such adjustment is subject to the provisions of Paragraphs 4.05.D, 4.05.E, 11.07, and 11.08.
- H. If, after receipt of such written notice, Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from

the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.

- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I obligates Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J obligates Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of Contractor's obligations under the Contract. These bonds must remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the terms of a prescribed bond form, the Supplementary Conditions, or other provisions of the Contract.
- B. Contractor shall also furnish such other bonds (if any) as are required by the Supplementary Conditions or other provisions of the Contract.
- C. All bonds must be in the form included in the Bidding Documents or otherwise specified by Owner prior to execution of the Contract, except as provided otherwise by Laws or Regulations, and must be issued and signed by a surety named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Department Circular 570 (as amended and supplemented) by the Bureau of the Fiscal Service, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority must show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- D. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue bonds in the required amounts.
- E. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer in

writing and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which must comply with the bond and surety requirements above.

- F. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- G. Upon request to Owner from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Owner shall provide a copy of the payment bond to such person or entity.
- H. Upon request to Contractor from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Contractor shall provide a copy of the payment bond to such person or entity.

6.02 *Insurance—General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized in the state or jurisdiction in which the Project is located to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Alternative forms of insurance coverage, including but not limited to self-insurance and "Occupational Accident and Excess Employer's Indemnity Policies," are not sufficient to meet the insurance requirements of this Contract, unless expressly allowed in the Supplementary Conditions.
- D. Contractor shall deliver to Owner, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Contractor has obtained and is maintaining the policies and coverages required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, full disclosure of all relevant exclusions, and evidence of insurance required to be purchased and maintained by Subcontractors or Suppliers. In any documentation furnished under this provision, Contractor, Subcontractors, and Suppliers may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those applicable to this Contract.
- E. Owner shall deliver to Contractor, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Owner has obtained and is maintaining the policies and coverages required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, and full disclosure of all relevant exclusions. In any documentation furnished under this provision, Owner may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those relevant to this Contract.
- F. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, will not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- G. In addition to the liability insurance required to be provided by Contractor, the Owner, at Owner's option, may purchase and maintain Owner's own liability insurance. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot

rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

H. Contractor shall require:

1. Subcontractors to purchase and maintain worker's compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project, and to name as additional insureds Owner and Engineer (and any other individuals or entities identified in the Supplementary Conditions as additional insureds on Contractor's liability policies) on each Subcontractor's commercial general liability insurance policy; and
 2. Suppliers to purchase and maintain insurance that is appropriate for their participation in the Project.
- I. If either party does not purchase or maintain the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- J. If Contractor has failed to obtain and maintain required insurance, Contractor's entitlement to enter or remain at the Site will end immediately, and Owner may impose an appropriate set-off against payment for any associated costs (including but not limited to the cost of purchasing necessary insurance coverage), and exercise Owner's termination rights under Article 16.
- K. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect (but is in no way obligated) to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price will be adjusted accordingly.
- L. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests. Contractor is responsible for determining whether such coverage and limits are adequate to protect its interests, and for obtaining and maintaining any additional insurance that Contractor deems necessary.
- M. The insurance and insurance limits required herein will not be deemed as a limitation on Contractor's liability, or that of its Subcontractors or Suppliers, under the indemnities granted to Owner and other individuals and entities in the Contract or otherwise.
- N. All the policies of insurance required to be purchased and maintained under this Contract will contain a provision or endorsement that the coverage afforded will not be canceled, or renewal refused, until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured and Engineer.

6.03 *Contractor's Insurance*

- A. *Required Insurance:* Contractor shall purchase and maintain Worker's Compensation, Commercial General Liability, and other insurance pursuant to the specific requirements of the Supplementary Conditions.
- B. *General Provisions:* The policies of insurance required by this Paragraph 6.03 as supplemented must:
1. include at least the specific coverages required;
 2. be written for not less than the limits provided, or those required by Laws or Regulations, whichever is greater;
 3. remain in effect at least until the Work is complete (as set forth in Paragraph 15.06.D), and longer if expressly required elsewhere in this Contract, and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract;

4. apply with respect to the performance of the Work, whether such performance is by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable; and
 5. include all necessary endorsements to support the stated requirements.
- C. *Additional Insureds*: The Contractor's commercial general liability, automobile liability, employer's liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies, if required by this Contract, must:
1. include and list as additional insureds Owner and Engineer, and any individuals or entities identified as additional insureds in the Supplementary Conditions;
 2. include coverage for the respective officers, directors, members, partners, employees, and consultants of all such additional insureds;
 3. afford primary coverage to these additional insureds for all claims covered thereby (including as applicable those arising from both ongoing and completed operations);
 4. not seek contribution from insurance maintained by the additional insured; and
 5. as to commercial general liability insurance, apply to additional insureds with respect to liability caused in whole or in part by Contractor's acts or omissions, or the acts and omissions of those working on Contractor's behalf, in the performance of Contractor's operations.

6.04 *Builder's Risk and Other Property Insurance*

- A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). The specific requirements applicable to the builder's risk insurance are set forth in the Supplementary Conditions.
- B. *Property Insurance for Facilities of Owner Where Work Will Occur*: Owner is responsible for obtaining and maintaining property insurance covering each existing structure, building, or facility in which any part of the Work will occur, or to which any part of the Work will attach or be adjoined. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, providing coverage consistent with that required for the builder's risk insurance, and will be maintained until the Work is complete, as set forth in Paragraph 15.06.D.
- C. *Property Insurance for Substantially Complete Facilities*: Promptly after Substantial Completion, and before actual occupancy or use of the substantially completed Work, Owner will obtain property insurance for such substantially completed Work, and maintain such property insurance at least until the Work is complete, as set forth in Paragraph 15.06.D. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, and provide coverage consistent with that required for the builder's risk insurance. The builder's risk insurance may terminate upon written confirmation of Owner's procurement of such property insurance.
- D. *Partial Occupancy or Use by Owner*: If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide advance notice of such occupancy or use to the builder's risk insurer, and obtain an endorsement consenting to the continuation of coverage prior to commencing such partial occupancy or use.
- E. *Insurance of Other Property; Additional Insurance*: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, then the entity or individual owning such property item will be responsible for insuring it. If Contractor elects to obtain other special insurance

to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.04, it may do so at Contractor's expense.

6.05 *Property Losses; Subrogation*

- A. The builder's risk insurance policy purchased and maintained in accordance with Paragraph 6.04 (or an installation floater policy if authorized by the Supplementary Conditions), will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors.
 - 1. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils, risks, or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all individuals or entities identified in the Supplementary Conditions as builder's risk or installation floater insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused.
 - 2. None of the above waivers extends to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Any property insurance policy maintained by Owner covering any loss, damage, or consequential loss to Owner's existing structures, buildings, or facilities in which any part of the Work will occur, or to which any part of the Work will attach or adjoin; to adjacent structures, buildings, or facilities of Owner; or to part or all of the completed or substantially completed Work, during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06, will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them, and that the insured is allowed to waive the insurer's rights of subrogation in a written contract executed prior to the loss, damage, or consequential loss.
 - 1. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from fire or any of the perils, risks, or causes of loss covered by such policies.
- C. The waivers in this Paragraph 6.05 include the waiver of rights due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other insured peril, risk, or cause of loss.
- D. Contractor shall be responsible for assuring that each Subcontract contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from fire or other peril, risk, or cause of loss covered by builder's risk insurance, installation floater, and any other property insurance applicable to the Work.

6.06 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of property insurance required by Paragraph 6.04 will be adjusted and settled with the named insured that purchased the policy. Such named

insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.

- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.04 shall maintain such proceeds in a segregated account, and distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, Contractor shall repair or replace the damaged Work, using allocated insurance proceeds.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.01 Contractor's Means and Methods of Construction

- A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. If the Contract Documents note, or Contractor determines, that professional engineering or other design services are needed to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor's expense. Such services are not Owner-delegated professional design services under this Contract, and neither Owner nor Engineer has any responsibility with respect to (1) Contractor's determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

7.02 Supervision and Superintendence

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who will not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.03 Labor; Working Hours

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall maintain good discipline and order at the Site.
- B. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of Contractor's employees; of Suppliers and Subcontractors, and their employees; and of any other individuals or entities performing or furnishing any of the Work, just as Contractor is responsible for Contractor's own acts and omissions.
- C. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site will be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on

Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.04 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work must be new and of good quality, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications will expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment must be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.05 *"Or Equals"*

- A. *Contractor's Request; Governing Criteria:* Whenever an item of equipment or material is specified or described in the Contract Documents by using the names of one or more proprietary items or specific Suppliers, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material, or items from other proposed Suppliers, under the circumstances described below.
 - 1. If Engineer in its sole discretion determines that an item of equipment or material proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer will deem it an "or equal" item. For the purposes of this paragraph, a proposed item of equipment or material will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that the proposed item:
 - 1) is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) has a proven record of performance and availability of responsive service; and
 - 4) is not objectionable to Owner.
 - b. Contractor certifies that, if the proposed item is approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) the item will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense:* Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.

- C. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal," which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. *Effect of Engineer's Determination:* Neither approval nor denial of an "or-equal" request will result in any change in Contract Price. The Engineer's denial of an "or-equal" request will be final and binding, and may not be reversed through an appeal under any provision of the Contract.
- E. *Treatment as a Substitution Request:* If Engineer determines that an item of equipment or material proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer consider the item a proposed substitute pursuant to Paragraph 7.06.

7.06 *Substitutes*

- A. *Contractor's Request; Governing Criteria:* Unless the specification or description of an item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material under the circumstances described below. To the extent possible such requests must be made before commencement of related construction at the Site.
 - 1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of equipment or material from anyone other than Contractor.
 - 2. The requirements for review by Engineer will be as set forth in Paragraph 7.06.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
 - 3. Contractor shall make written application to Engineer for review of a proposed substitute item of equipment or material that Contractor seeks to furnish or use. The application:
 - a. will certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design;
 - 2) be similar in substance to the item specified; and
 - 3) be suited to the same use as the item specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times;
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from the item specified; and
 - 2) available engineering, sales, maintenance, repair, and replacement services.

- d. will contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- E. *Contractor's Expense:* Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination:* If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request will be final and binding, and may not be reversed through an appeal under any provision of the Contract. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.06.D, by timely submittal of a Change Proposal.

7.07 *Concerning Subcontractors and Suppliers*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.
- B. Contractor shall retain specific Subcontractors and Suppliers for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor or Supplier to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 5 days.
- E. Owner may require the replacement of any Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such

Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor or Supplier.

- F. If Owner requires the replacement of any Subcontractor or Supplier retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis, Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors and Suppliers.
- J. The divisions and sections of the Specifications and the identifications of any Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.
- K. All Work performed for Contractor by a Subcontractor or Supplier must be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract for the benefit of Owner and Engineer.
- L. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor for Work performed for Contractor by the Subcontractor or Supplier.
- M. Contractor shall restrict all Subcontractors and Suppliers from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed in this Contract.

7.08 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If an invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights will be disclosed in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of

patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.09 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits, licenses, and certificates of occupancy. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

7.10 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.11 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It is not Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this does not relieve Contractor of its obligations under Paragraph 3.03.
- C. Owner or Contractor may give written notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such written notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.12 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.13 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their

responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations.

- B. Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.
- C. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;
 - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- D. All damage, injury, or loss to any property referred to in Paragraph 7.13.C.2 or 7.13.C.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- E. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.
- F. Contractor shall notify Owner; the owners of adjacent property; the owners of Underground Facilities and other utilities (if the identity of such owners is known to Contractor); and other contractors and utility owners performing work at or adjacent to the Site, in writing, when Contractor knows that prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- G. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. Any Owner's safety programs that are applicable to the Work are identified or included in the Supplementary Conditions or Specifications.
- H. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- I. Contractor's duties and responsibilities for safety and protection will continue until all the Work is completed, Engineer has issued a written notice to Owner and Contractor in accordance with Paragraph 15.06.C that the Work is acceptable, and Contractor has left the Site (except as otherwise expressly provided in connection with Substantial Completion).
- J. Contractor's duties and responsibilities for safety and protection will resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of safety data sheets (formerly known as material safety data sheets) or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused by an emergency, or are required as a result of Contractor's response to an emergency. If Engineer determines that a change in the Contract Documents is required because of an emergency or Contractor's response, a Work Change Directive or Change Order will be issued.

7.16 *Submittals*

A. *Shop Drawing and Sample Requirements*

- 1. Before submitting a Shop Drawing or Sample, Contractor shall:
 - a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determine and verify:
 - 1) all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;
 - 2) the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - 3) all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;
 - c. confirm that the Submittal is complete with respect to all related data included in the Submittal.
- 2. Each Shop Drawing or Sample must bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that Submittal, and that Contractor approves the Submittal.
- 3. With each Shop Drawing or Sample, Contractor shall give Engineer specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents. This notice must be set forth in a written communication separate from the Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.

B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall label and submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals.

1. *Shop Drawings*

- a. Contractor shall submit the number of copies required in the Specifications.
- b. Data shown on the Shop Drawings must be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide, and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.C.

2. *Samples*

- a. Contractor shall submit the number of Samples required in the Specifications.

- b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the Submittal for the limited purposes required by Paragraph 7.16.C.
3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. *Engineer's Review of Shop Drawings and Samples*

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the accepted Schedule of Submittals. Engineer's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.
3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
4. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order or other appropriate Contract modification.
5. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for complying with the requirements of Paragraphs 7.16.A and B.
6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, will not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
7. Neither Engineer's receipt, review, acceptance, or approval of a Shop Drawing or Sample will result in such item becoming a Contract Document.
8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.C.4.

D. *Resubmittal Procedures for Shop Drawings and Samples*

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous Submittals.
2. Contractor shall furnish required Shop Drawing and Sample submittals with sufficient information and accuracy to obtain required approval of an item with no more than two resubmittals. Engineer will record Engineer's time for reviewing a third or subsequent resubmittal of a Shop Drawing or Sample, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved Shop Drawing or Sample, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

E. *Submittals Other than Shop Drawings, Samples, and Owner-Delegated Designs*

1. The following provisions apply to all Submittals other than Shop Drawings, Samples, and Owner-delegated designs:
 - a. Contractor shall submit all such Submittals to the Engineer in accordance with the Schedule of Submittals and pursuant to the applicable terms of the Contract Documents.
 - b. Engineer will provide timely review of all such Submittals in accordance with the Schedule of Submittals and return such Submittals with a notation of either Accepted or Not Accepted. Any such Submittal that is not returned within the time established in the Schedule of Submittals will be deemed accepted.
 - c. Engineer's review will be only to determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.
 - d. If any such Submittal is not accepted, Contractor shall confer with Engineer regarding the reason for the non-acceptance, and resubmit an acceptable document.
2. Procedures for the submittal and acceptance of the Progress Schedule, the Schedule of Submittals, and the Schedule of Values are set forth in Paragraphs 2.03, 2.04, and 2.05.

F. Owner-delegated Designs: Submittals pursuant to Owner-delegated designs are governed by the provisions of Paragraph 7.19.

7.17 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer is entitled to rely on Contractor's warranty and guarantee.
- B. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 15.08. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.17 is limited only by applicable Laws and Regulations restricting actions to enforce such rights; provided, however, that after the end of the correction period under Paragraph 15.08:
 1. Owner shall give Contractor written notice of any defective Work within 60 days of the discovery that such Work is defective; and
 2. Such notice will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the notice.
- C. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 1. abuse, or improper modification, maintenance, or operation, by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 2. normal wear and tear under normal usage.
- D. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents, a release of Contractor's obligation to perform the Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.17:
 1. Observations by Engineer;
 2. Recommendation by Engineer or payment by Owner of any progress or final payment;
 3. The issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 4. Use or occupancy of the Work or any part thereof by Owner;

5. Any review and approval of a Shop Drawing or Sample submittal;
 6. The issuance of a notice of acceptability by Engineer;
 7. The end of the correction period established in Paragraph 15.08;
 8. Any inspection, test, or approval by others; or
 9. Any correction of defective Work by Owner.
- E. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract will govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from losses, damages, costs, and judgments (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A will not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

7.19 *Delegation of Professional Design Services*

- A. Owner may require Contractor to provide professional design services for a portion of the Work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that Contractor must furnish to Engineer with respect to the Owner-delegated design.
- B. Contractor shall cause such Owner-delegated professional design services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional. Such design professional must issue all certifications of design required by Laws and Regulations.
- C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Engineer, then such Shop Drawing or other Submittal must bear the written approval of Contractor's design professional when submitted by Contractor to Engineer.
- D. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or

employed by Contractor under an Owner-delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.

- E. Pursuant to this Paragraph 7.19, Engineer's review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:
 - 1. Checking for conformance with the requirements of this Paragraph 7.19;
 - 2. Confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and
 - 3. Establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents.
- F. Contractor shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.
- G. Contractor is not required to provide professional services in violation of applicable Laws and Regulations.

ARTICLE 8—OTHER WORK AT THE SITE

8.01 *Other Work*

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.
- D. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- E. If the proper execution or results of any part of Contractor's Work depends upon work performed by others, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.
- F. The provisions of this article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.05.C.3.

8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
 - 1. The identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 - 2. An itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. The extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

- A. If, in the course of performing other work for Owner at or adjacent to the Site, the Owner's employees, any other contractor working for Owner, or any utility owner that Owner has arranged to perform work, causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment will take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract, and any remedies available to Contractor under Laws or Regulations concerning utility action or inaction. When applicable, any such equitable adjustment in Contract Price will be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times or Contract Price is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.
 - 1. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this Paragraph 8.03.B.
 - 2. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due Contractor.
- C. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility

owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9—OWNER’S RESPONSIBILITIES

9.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer’s status under the Contract Documents will be that of the former Engineer.

9.03 *Furnish Data*

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 *Pay When Due*

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

9.05 *Lands and Easements; Reports, Tests, and Drawings*

- A. Owner’s duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner’s duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
- C. Article 5 refers to Owner’s identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 *Insurance*

- A. Owner’s responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

9.07 *Change Orders*

- A. Owner’s responsibilities with respect to Change Orders are set forth in Article 11.

9.08 *Inspections, Tests, and Approvals*

- A. Owner’s responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 *Limitations on Owner’s Responsibilities*

- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor’s means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor’s failure to perform the Work in accordance with the Contract Documents.

9.10 *Undisclosed Hazardous Environmental Condition*

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 *Evidence of Financial Arrangements*

- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract (including obligations under proposed changes in the Work).

9.12 *Safety Programs*

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe, as an experienced and qualified design professional, the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.07. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Resident Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in the Supplementary Conditions and in Paragraph 10.07.
- B. If Owner designates an individual or entity who is not Engineer's consultant, agent, or employee to represent Owner at the Site, then the responsibilities and authority of such individual or entity will be as provided in the Supplementary Conditions.

10.04 *Engineer's Authority*

- A. Engineer has the authority to reject Work in accordance with Article 14.
- B. Engineer's authority as to Submittals is set forth in Paragraph 7.16.
- C. Engineer's authority as to design drawings, calculations, specifications, certifications and other Submittals from Contractor in response to Owner's delegation (if any) to Contractor of professional design services, is set forth in Paragraph 7.19.
- D. Engineer's authority as to changes in the Work is set forth in Article 11.
- E. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.05 *Determinations for Unit Price Work*

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.06 *Decisions on Requirements of Contract Documents and Acceptability of Work*

- A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.07 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation, and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Contractor under Paragraph 15.06.A, will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.07 also apply to the Resident Project Representative, if any.

10.08 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs of which Engineer has been informed.

ARTICLE 11—CHANGES TO THE CONTRACT

11.01 *Amending and Supplementing the Contract*

- A. The Contract may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
- B. If an amendment or supplement to the Contract includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order.
- C. All changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, must be supported by Engineer's recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of the Engineer.

11.02 *Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 - 1. Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 - 2. Changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 - 3. Changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.05, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters; and
 - 4. Changes that embody the substance of any final and binding results under: Paragraph 11.03.B, resolving the impact of a Work Change Directive; Paragraph 11.09, concerning Change Proposals; Article 12, Claims; Paragraph 13.02.D, final adjustments resulting from allowances; Paragraph 13.03.D, final adjustments relating to determination of quantities for Unit Price Work; and similar provisions.
- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of Paragraph 11.02.A, it will be deemed to be of full force and effect, as if fully executed.

11.03 *Work Change Directives*

- A. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Contract Price.
- B. If Owner has issued a Work Change Directive and:
 - 1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Proposal seeking such an adjustment no later than 30 days after the completion of the Work set out in the Work Change Directive.
 - 2. Owner believes that an adjustment in Contract Times or Contract Price is necessary, then Owner shall submit any Claim seeking such an adjustment no later than 60 days after issuance of the Work Change Directive.

11.04 *Field Orders*

- A. Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly.
- B. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.05 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Changes involving the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters will be supported by Engineer's recommendation.
- B. Such changes in the Work may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work must be performed under the applicable conditions of the Contract Documents.
- C. Nothing in this Paragraph 11.05 obligates Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.06 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.C.2.

11.07 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:
 - 1. Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03);
 - 2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.07.C.2); or
 - 3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).

- C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit will be determined as follows:
1. A mutually acceptable fixed fee; or
 2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. For costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee will be 15 percent;
 - b. For costs incurred under Paragraph 13.01.B.3, the Contractor's fee will be 5 percent;
 - c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.07.C.2.a and 11.07.C.2.b is that the Contractor's fee will be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of 5 percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted Work the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the Work;
 - d. No fee will be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in Cost of the Work will be the amount of the actual net decrease in Cost of the Work and a deduction of an additional amount equal to 5 percent of such actual net decrease in Cost of the Work; and
 - f. When both additions and credits are involved in any one change or Change Proposal, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.

11.08 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment in the Contract Times must comply with the provisions of Article 12.
- B. Delay, disruption, and interference in the Work, and any related changes in Contract Times, are addressed in and governed by Paragraph 4.05.

11.09 *Change Proposals*

- A. *Purpose and Content*: Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; contest an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a set-off against payment due; or seek other relief under the Contract. The Change Proposal will specify any proposed change in Contract Times or Contract Price, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Proposal will address only one issue, or a set of closely related issues.

B. *Change Proposal Procedures*

1. *Submittal*: Contractor shall submit each Change Proposal to Engineer within 30 days after the start of the event giving rise thereto, or after such initial decision.
2. *Supporting Data*: The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal.
 - a. Change Proposals based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.
 - b. Change proposals related to a change of Contract Price must include full and detailed accounts of materials incorporated into the Work and labor and equipment used for the subject Work.

The supporting data must be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event.

3. *Engineer's Initial Review*: Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal. If in its discretion Engineer concludes that additional supporting data is needed before conducting a full review and making a decision regarding the Change Proposal, then Engineer may request that Contractor submit such additional supporting data by a date specified by Engineer, prior to Engineer beginning its full review of the Change Proposal.
 4. *Engineer's Full Review and Action on the Change Proposal*: Upon receipt of Contractor's supporting data (including any additional data requested by Engineer), Engineer will conduct a full review of each Change Proposal and, within 30 days after such receipt of the Contractor's supporting data, either approve the Change Proposal in whole, deny it in whole, or approve it in part and deny it in part. Such actions must be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
 5. *Binding Decision*: Engineer's decision is final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- C. *Resolution of Certain Change Proposals*: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties in writing that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice will be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.
- D. *Post-Completion*: Contractor shall not submit any Change Proposals after Engineer issues a written recommendation of final payment pursuant to Paragraph 15.06.B.

11.10 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12—CLAIMS

12.01 *Claims*

- A. *Claims Process*: The following disputes between Owner and Contractor are subject to the Claims process set forth in this article:
1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents;
 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters; and
 4. Subject to the waiver provisions of Paragraph 15.07, any dispute arising after Engineer has issued a written recommendation of final payment pursuant to Paragraph 15.06.B.
- B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim rests with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
- C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim will be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation*
1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate will stay the Claim submittal and response process.
 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process will resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process will resume as of the date of the conclusion of the mediation, as determined by the mediator.
 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action will be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim will be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and

denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim will be incorporated in a Change Order or other written document to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13—COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

- A. *Purposes for Determination of Cost of the Work:* The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
 2. When needed to determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included:* Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work will be in amounts no higher than those commonly incurred in the locality of the Project, will not include any of the costs itemized in Paragraph 13.01.C, and will include only the following items:
1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor in advance of the subject Work. Such employees include, without limitation, superintendents, foremen, safety managers, safety representatives, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work will be apportioned on the basis of their time spent on the Work. Payroll costs include, but are not limited to, salaries and wages plus the cost of fringe benefits, which include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, will be included in the above to the extent authorized by Owner.
 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts will accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment will accrue to Owner, and Contractor shall make provisions so that they may be obtained.
 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, which will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee will be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed or retained for services specifically related to the Work.

5. Other costs consisting of the following:
- a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - 1) In establishing included costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or the estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. Contractor will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such item.
 - c. *Construction Equipment Rental*
 - 1) Rentals of all construction equipment and machinery, and the parts thereof, in accordance with rental agreements approved by Owner as to price (including any surcharge or special rates applicable to overtime use of the construction equipment or machinery), and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs will be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts must cease when the use thereof is no longer necessary for the Work.
 - 2) Costs for equipment and machinery owned by Contractor or a Contractor-related entity will be paid at a rate shown for such equipment in the equipment rental rate book specified in the Supplementary Conditions. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs.
 - 3) With respect to Work that is the result of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price ("changed Work"), included costs will be based on the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, must cease to accrue when the use thereof is no longer necessary for the changed Work.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
 - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of builder's risk or other property insurance established in accordance with Paragraph 6.04), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses will be included in the Cost of the Work for the purpose of determining Contractor's fee.
 - g. The cost of utilities, fuel, and sanitary facilities at the Site.

- h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
 - i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.
- C. *Costs Excluded*: The term Cost of the Work does not include any of the following items:
- 1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
 - 2. The cost of purchasing, renting, or furnishing small tools and hand tools.
 - 3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
 - 4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
 - 5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
 - 6. Expenses incurred in preparing and advancing Claims.
 - 7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.
- D. *Contractor's Fee*
- 1. When the Work as a whole is performed on the basis of cost-plus-a-fee, then:
 - a. Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.
 - b. for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:
 - 1) When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.
 - 2) When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.
 - 2. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work will be determined in accordance with Paragraph 11.07.C.2.
- E. *Documentation and Audit*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor and pertinent Subcontractors will establish and maintain records of the costs in accordance with generally accepted accounting practices. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all Contractor's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the

Cost of the Work and Contractor's fee. Contractor shall preserve all such documents for a period of three years after the final payment by Owner. Pertinent Subcontractors will afford such access to Owner, and preserve such documents, to the same extent required of Contractor.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances*: Contractor agrees that:
 - 1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 - 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment for any of the foregoing will be valid.
- C. *Owner's Contingency Allowance*: Contractor agrees that an Owner's contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor for Work covered by allowances, and the Contract Price will be correspondingly adjusted.

13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, and the final adjustment of Contract Price will be set forth in a Change Order, subject to the provisions of the following paragraph.
- E. *Adjustments in Unit Price*
 - 1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:
 - a. the quantity of the item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
 - b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.

2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.
3. Adjusted unit prices will apply to all units of that item.

ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

14.01 Access to Work

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply with such procedures and programs as applicable.

14.02 Tests, Inspections, and Approvals

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work will be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 3. by manufacturers of equipment furnished under the Contract Documents;
 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests will be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering will be at Contractor's expense unless Contractor had given Engineer

timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

- A. *Contractor's Obligation*: It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority*: Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects*: Prompt written notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement*: Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties*: When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages*: In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work will be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.

1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work will not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 *Owner May Correct Defective Work*

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace defective Work as required by Engineer, then Owner may, after 7 days' written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15—PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 *Progress Payments*

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.

B. Applications for Payments

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation establishing full payment by Contractor for the materials and equipment; (b) at Owner's request, documentation warranting that Owner has received the materials and equipment free and clear of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
3. Beginning with the second Application for Payment, each Application must include an affidavit of Contractor stating that all previous progress payments received by Contractor have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
4. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. Review of Applications

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work;
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto;
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work;
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid by Owner; or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
 - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. Payment Becomes Due

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. Reductions in Payment by Owner

1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. Claims have been made against Owner based on Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages resulting from Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;

- e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. The Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. The Contract Price has been reduced by Change Orders;
 - i. An event has occurred that would constitute a default by Contractor and therefore justify a termination for cause;
 - j. Liquidated or other damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens; or
 - l. Other items entitle Owner to a set-off against the amount recommended.
2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed will be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
 3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld will be treated as an amount due as determined by Paragraph 15.01.D.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than 7 days after the time of payment by Owner.

15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which will fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have 7 days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner

does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.

- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
 - 1. At any time, Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through 15.03.E for that part of the Work.
 - 2. At any time, Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
 - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
 - 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.04 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is

incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *Final Payment*

A. *Application for Payment*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.12), and other documents, Contractor may make application for final payment.
2. The final Application for Payment must be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
 - d. a list of all duly pending Change Proposals and Claims; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.

B. *Engineer's Review of Final Application and Recommendation of Payment:* If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within 10 days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the final Application for Payment to Owner for payment. Such recommendation will account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. *Notice of Acceptability:* In support of its recommendation of payment of the final Application for Payment, Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to stated limitations in the notice and to the provisions of Paragraph 15.07.

D. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment and issuance of notice of the acceptability of the Work.

- E. *Final Payment Becomes Due*: Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to Contractor within 30 days of Owner's receipt of the final Application for Payment from Engineer.

15.07 *Waiver of Claims*

- A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by Contractor, except as set forth in an outstanding Claim, appeal under the provisions of Article 17, set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted as a Claim, or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the Supplementary Conditions or the terms of any applicable special guarantee required by the Contract Documents), Owner gives Contractor written notice that any Work has been found to be defective, or that Contractor's repair of any damages to the Site or adjacent areas has been found to be defective, then after receipt of such notice of defect Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such adjacent areas;
 - 2. correct such defective Work;
 - 3. remove the defective Work from the Project and replace it with Work that is not defective, if the defective Work has been rejected by Owner, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting from the corrective measures.
- B. Owner shall give any such notice of defect within 60 days of the discovery that such Work or repairs is defective. If such notice is given within such 60 days but after the end of the correction period, the notice will be deemed a notice of defective Work under Paragraph 7.17.B.
- C. If, after receipt of a notice of defect within 60 days and within the correction period, Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others). Contractor's failure to pay such costs, losses, and damages within 10 days of invoice from Owner will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the failure to pay.
- D. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- E. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be

extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

- F. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times directly attributable to any such suspension. Any Change Proposal seeking such adjustments must be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the Progress Schedule);
 - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 - 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) 10 days' written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:
 - 1. declare Contractor to be in default, and give Contractor (and any surety) written notice that the Contract is terminated; and
 - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their

reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond will govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate for Convenience*

- A. Upon 7 days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid for any loss of anticipated profits or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon 7 days' written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, 7 days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17—FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this article:
 - 1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full, pursuant to Article 12; and
 - 2. Disputes between Owner and Contractor concerning the Work, or obligations under the Contract Documents, that arise after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this article, Owner or Contractor may:
 - 1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions;
 - 2. agree with the other party to submit the dispute to another dispute resolution process; or
 - 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18—MISCELLANEOUS

18.01 *Giving Notice*

- A. Whenever any provision of the Contract requires the giving of written notice to Owner, Engineer, or Contractor, it will be deemed to have been validly given only if delivered:
 - 1. in person, by a commercial courier service or otherwise, to the recipient's place of business;
 - 2. by registered or certified mail, postage prepaid, to the recipient's place of business; or
 - 3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

18.02 *Computation of Times*

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of Contractor.

18.07 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Assignment of Contract*

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party to this Contract of any rights under or interests in the Contract will be binding on the other party without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract.

18.09 *Successors and Assigns*

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

18.10 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

ATTACHMENT A

SUPPLEMENTARY CONDITIONS

EJCDC SECTION 800

SUPPLEMENTARY CONDITIONS

Prepared by



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I. SUPPLEMENTARY GENERAL CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract, EJCDC® C-700 (2013 Edition). All provisions that are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added thereto.

1 – DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

SC-1.01. Delete paragraphs 1.01A.1 thru 48 in their entirety and insert in their place:

Addenda - Written or graphic instruments issued prior to the Award of the Contract which modify or interpret the Contract Documents, Drawings and Specifications by additions, deletions, clarifications or corrections.

Agreement – The written instrument, executed by Owner and the Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.

Application for Payment – The form acceptable to Engineer which is to be used by the Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

Approval - Written approval by the Engineer.

Award – The decision of an owner/agent to accept the proposal of the lowest responsible bidder for the Work. Subject to the execution and approval of a satisfactory contract and bond to secure the performance of the Work to such conditions as may be specified or otherwise required by law.

Bid – The offer or proposal of the Bidder submitted in the prescribed manner on the prescribed form setting forth the prices for the Work to be performed.

Bidder – Any person, firm or corporation submitting a Bid for the Work.

Bidding Documents – The Bidding Requirements, the proposed Contract Documents, and all Addenda.

Bidding Requirements – The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.

Bonds – Bid Bond, Performance Bonds, Labor and Material Payment Bonds, Maintenance Bonds, and other instruments of security furnished by the Contractor and his surety in accordance with the Contract Documents.

Calendar Day – Every day shown on the calendar, Saturdays, Sundays and Holidays included.

Change Order – A written order to the Contractor approved by the Town authorizing an addition, deletion or revision in the Work within the general scope of the Contract Documents, or authorizing an adjustment in the Contract Price or Contract Time.

Change Proposal – A written request by the Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.

Claim – (a) A demand or assertion by Owner directly to the Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer’s decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by the Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer’s decision regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer has declined to address. A demand for money or services by a third party is not a Claim.

Conditional Acceptance - The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “conditional acceptance” and “conditionally accepted” as applied to all or part of the Work refer to Conditional Acceptance thereof.

Constituent of Concern—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. (“CERCLA”); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. (“RCRA”); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.

Contract - The entire and integrated written contract between the Owner and Contractor concerning the Work, including the Contract Documents.

Contract Documents – A set of documents issued by the Town for the Project which includes the Invitation to Bid, Information for Bidders, Bid Bond, Bid Form, Supplementary General Conditions, Special Conditions, Special Provisions and other forms and attachments.

Contract Price – The total monies payable to the Contractor under the terms and Conditions of the Contract Documents.

Contract Time – The specific date or the number of days stated in the Bid Form for the completion of the Work, starting from the Notice to Proceed until Conditional Acceptance of the Project.

Contractor – The person, firm or other entity whose bid for Work has been accepted and who has entered into the Contract with Town of Emmitsburg, Maryland to perform the Work. This term shall also mean the Contractor’s representative.

Cost of the Work – See paragraph 13.01 for definition.

County – Frederick County, Maryland

Day – A calendar day of 24 hours lasting from midnight one day to midnight the next day.

DPW – Division of Public Works of Town of Emmitsburg.

Drawings – The part of the Contract Documents which show the characteristics and scope of the Work to be performed and which have been prepared by or for the Town. This term is used interchangeably with the word “Plans” and includes Standard Details bound with the Specifications.

DUSWM - Division of Utilities and Solid Waste Management of Frederick County

Easement – A grant of right of use of the property of an owner for a certain purpose by the grantee.

Effective Date of the Contract - The date, indicated in the Agreement, on which the Contract becomes effective.

Engineer – Fox & Associates, Inc. and/or their duly authorized representative, such representative acting within the scope of the particular duties assigned to or of the authority given to the authorized representative.

Engineering Department –DUSWM Department of Engineering and Planning.

Environmental Pollution – The presence and action of physical, chemical, biological, and human agents that adversely affect individual and community health and welfare; unfavorably alter or destroy ecosystems of importance to man; or degrade significant aesthetic and recreational values.

Equal – Where a product or system is specified in the Contract Documents by one, two or more trade names followed by the phrase “or equal” the “or equal” will be determined by the Engineer.

Field Order – A written order issued by the Engineer to the Contractor during construction effecting a change in the Work not involving an adjustment in the Contract Price or an extension of the Contract Time or a directive to conform to the terms of the Contract.

Final Acceptance – The act of accepting those portions of the project after the one year guarantee period from the date of Conditional Acceptance.

Granular Material – A form of uniformly graded crushed stone or gravel as more particularly specified in the various sections herein and in the drawings in the Standard Details.

Hazardous Environmental Condition - The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.

Inspector – The authorized representative of the Engineer assigned to make detailed inspection of any or all portions of the Work or Materials therefore.

Laws and Regulations; Laws or Regulations - Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

Liens - Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.

Milestone - A principal event in the performance of the Work that the Contract requires the Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.

Notice of Award – The written notice of the acceptance of the Bid from the Town to the successful Bidder.

Notice to Proceed – Written communication issued by the Town to the Contractor authorizing the Contractor to proceed with the Work and establishing the dates of commencement and completion of the Work.

Owner - The individual or entity with which the Contractor has contracted regarding the Work, and which has agreed to pay the Contractor for the performance of the Work, pursuant to the terms of the Contract.

Progress Schedule – A schedule, prepared and maintained by the Contractor, describing the sequence and duration of the activities comprising the Contractor’s plan to accomplish the Work within the Contract Times.

Project – The undertaking to be performed as provided in the Contract Documents.

Project Manual - The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.

Punch List – A list, made near the completion of the Work, indicating items to be furnished or work to be performed by the Contractor or Subcontractor in order to complete the Work as specified in Contract Documents.

Resident Project Representative—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or “RPR” includes any assistants or field staff of Resident Project Representative.

Rock – (See Section 2200).

Samples—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.

Schedule of Submittals—A schedule, prepared and maintained by the Contractor, of required submittals and the time requirements for the Engineer’s review of the submittals and the performance of related construction activities.

Schedule of Values—A schedule, prepared and maintained by the Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor’s Applications for Payment.

Shop Drawings – All drawings, diagrams, illustrations, brochures, schedules and other such data which are prepared by the Contractor, a Sub-Contractor, manufacturer, supplier or distributor, which illustrate how specific portions of the Work shall be fabricated or installed.

Site – The area within the defined boundaries of the project.

Special Conditions – Technical requirements (Section 00800) which are unique to a particular Contract supplementing, modifying or deleting items covered in various Sections.

Divisions 2 through 15 of the Standard Specifications - The Special Provisions for each Specification are delineated separately by the Section number which it supplements, modifies or deletes, or they appear as new Sections with a corresponding new Section Number.

Specifications – The Specifications include but are not limited to the Invitation to Bid, Information for Bidders, Supplemental Conditions, Standard Specifications, and Agreement.

Standard Details – Engineering Department details showing standard products, methods and materials for use on Public Water and Sewer systems.

Subcontractor – An individual, firm or corporation having a direct contract with the Contractor or with any other Subcontractor for the performance of a part of the Work at the site. Subcontractor shall not mean supplier.

Successful Bidder—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of the Contract, subject to stated conditions.

Supplementary Conditions—The part of the Contract that amends or supplements the General Conditions.

Supplier – Any person or organization that supplies materials or equipment for the Work (including that fabricated to a special design), but who does not perform labor at the site.

Technical Data—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.

Town – The Town of Emmitsburg, Maryland

Underground Facilities—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

Unit Price Work—Work to be paid for on the basis of unit prices.

Warranty Period – Time during which the contractor is responsible for any and all work after substantial completion has been granted. This is also known as the correction period.

Work – Any and all obligations, duties and responsibilities necessary to the successful completion of the project assigned to or undertaken by the Contractor under the contract documents, labor, materials, equipment and other incidentals and the furnishing thereof.

Work Change Directive – A written directive to the Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

Written Notice – Any notice to any party to the Contract relative to any part of the Contract in writing and considered delivered and the service thereof completed when posted by mail to the said party at the party’s last given address, or delivered in person to said party or to that party’s authorized representative.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 Delivery of Bonds and Evidence of Insurance

SC-2.01 Delete Paragraphs 2.01 B. and C. in their entirety and insert the following in their place:

- A. Evidence of Contractor’s Insurance: When the Contractor delivers the executed counterparts of the Agreement to the Owner, the Contractor shall also deliver to the Owner copies of the policies of insurance (including all endorsements, and identification of applicable self-insured retentions and deductibles) required to be provided by the Contractor in Article 6. The Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

2.02 Copies of Documents

SC-2.02 Delete Paragraph 2.02.A in its entirety and insert the following new paragraph in its place:

- A. Owner shall furnish to Contractor one (1) copy of the conformed Contract Documents incorporating and integrating all Addenda and any amendments negotiated prior to the Effective Date of the Contract (including one fully executed counterpart of the Agreement) in electronic portable document format (PDF). The contractor is responsible for hard copy reproduction.

ARTICLE 3 – REPORTING AND RESOLVING DISCREPANCIES

SC – 3.03 Add the following new paragraph immediately after paragraph 3.03B

- C. In interpreting the Contract Documents, the Documents shall be given precedence in the following order:

- Field Orders
- Change Order
- Addenda
- Supplemental General Conditions
- Project Specifications
- Frederick County Standard Specifications
- General Conditions (Town of Emmitsburg)
- Drawings
- Standard Details (Project) Frederick County
- Standard Details

ARTICLE 6 – BONDS AND INSURANCE

6.02 Insurance—General Provisions

SC-6.02 Add the following paragraph immediately after Paragraph 6.02.B:

1. Contractor may obtain workers’ compensation insurance from an insurance company that has not been rated by A.M. Best, provided that such company (a) is domiciled in Maryland, (b) is certified or authorized as a workers’ compensation insurance provider by the appropriate state agency, and (c) has been accepted to provide workers’ compensation insurance for similar projects in the state within the last 12 months.

Remove paragraph 6.02.D.

Remove Paragraph 6.02.I.

6.03 Contractor’s Insurance

SC 6.03 Add the following new paragraph immediately after Paragraph 6.03.J:

- K. The limits of liability for the insurance required by Paragraph 6.03 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

1. Workers’ Compensation, and related coverages under Paragraphs 6.03.A.1 and A.2 of the General Conditions:

State:	<u>Statutory</u>
Employer’s Liability:	
Bodily injury, each accident	\$ <u>500,000</u>
Bodily injury by disease, each employee	\$ <u>500,000</u>
Bodily injury/disease aggregate	\$ <u>500,000</u>
Foreign voluntary worker compensation	<u>Statutory</u>

2. Contractor’s Commercial General Liability under Paragraphs 6.03.B and 6.03.C of the General Conditions:

Each Occurrence	\$ <u>2,000,000</u>
General Aggregate	\$ <u>3,000,000</u>
Products - Completed Operations Aggregate	\$ <u>3,000,000</u>
Personal and Advertising Injury	\$ <u>2,000,000</u>

General Liability policy must not exclude XCU Coverage.

Town of Emmitsburg, Maryland must be added as an additional insured. Town of Emmitsburg, Maryland must be added as additional insured for Completed Operations.

3. Automobile Liability under Paragraph 6.03.D. of the General Conditions:

Combined Single Limit of	\$ <u>1,000,000</u>
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Town of Emmitsburg, Maryland must be added as an additional insured.

4. Contractor's Pollution Liability:

Each Occurrence \$ 1,000,000

General Aggregate \$ 2,000,000

Town of Emmitsburg, Maryland must be added as an additional insured.

If box is checked, Contractor is NOT required to provide Contractor's Pollution Liability insurance under this Contract

5. Contractor's Riggers Liability (if applicable):

Each Occurrence \$ 1,000,000

General Aggregate \$ 2,000,000

If box is checked, Contractor is NOT required to provide Contractor's Riggers Liability insurance under this Contract

6. Additional Insureds: In addition to the Owner and the Engineer, include as additional insureds the following: Town of Emmitsburg, Maryland. Additional Insured status must include Completed Operations.

7. Contractor's Professional Liability:

Each Claim \$ 1,000,000

General Aggregate \$ 2,000,000

If box is checked, Contractor is NOT required to provide Contractor's Professional Liability insurance under this Contract

Contractor may provide pollution liability and professional liability policies as a hybrid or combined policy.

8. Installation Floater with "All Risk" coverage with 100% of materials associated with the job.

6.05 *Property Insurance*

SC-6.05.A.1 Add the following new subparagraph after subparagraph 6.05.A.1:

- a. In addition to Owner, Contractor, and all Subcontractors, include as insureds the following: Town of Emmitsburg, Maryland

SC-6.05.A. Add the following to the list of items in Paragraph 6.05.A, as numbered items:

14. include for the benefit of the Owner loss of profits and soft cost coverage including, without limitation, fixed expenses and debt service for a minimum of 12 months with a maximum deductible of 30 days, plus attorney's fees and engineering or other consultants' fees, if not otherwise covered;

6.06 *Waiver of Rights*

SC-6.06 Delete Paragraph 6.06.A through 6.06D in its entirety and insert the following:

- A.** All policies purchased in accordance with Paragraph 6.05, expressly including the builder's risk policy, shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insured thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors.

- B. Any insurance policy maintained by the Owner covering any loss, damage, or consequential loss referred to shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them.
- C. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by builder's risk insurance and any other property insurance applicable to the Work.

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

7.01 Supervision and Superintendence

SC-7.01.B. Delete Paragraph 7.01 B. in its entirety, and insert the following:

- B. Construction Project Manager - Contractor shall employ a competent Construction Project Manager capable of communicating in English and capable of reading and thoroughly understanding the Contract Documents. The construction Project Manager shall be present on-site throughout the duration of the project and shall remain associated with the project until completion unless otherwise requested to be replaced by the Town. The Project Manager shall have at least five (5) years of experience in the work required and perform all coordination activities generally conducted by Project Managers including, but not limited to, subcontractor coordination, utility installations, inspections, testing, material deliveries, etc. The Project Manager shall be present at the pre-construction meeting and shall remain on the project until completion. The owner reserves the right to request a resume of experience for the Project Manager including, but not limited to, requesting references from recent projects. Substitution of Project Managers after the start of the work shall be approved by the owner in advance. The Project Manager shall have full authority to execute the order or directions of the Town. All communications given to the superintendent shall be as binding as if given to Contractor.

7.02 Labor; Working Hours

SC-7.02.B. Delete Paragraph 7.02 B. in its entirety, and insert the following:

1. Regular working hours will be 7:00 AM to 3:30 PM.
2. Owner's legal holidays are *New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day and the following, Election Day, Christmas Eve, and Christmas Day.*
3. All Work at the Site shall be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday or any legal holiday.
4. In the absence of any Laws or Regulations to the contrary, the Contractor may perform the Work on holidays, during any or all hours of the day, and on any or all days of the week, when the Contractor has requested permission to do so at least 10 business days in advance to the Engineer and received written permission authorizing them to do so.
5. Contractor shall be responsible for the cost of any overtime pay or other expense

incurred by the Owner for Engineer's services (including those of the Resident Project Representative, if any), Owner's representative, and construction observations services, occasioned by the performance of Work on Saturday, Sunday, any legal holiday, or as overtime on any regular work day. If Contractor is responsible but does not pay, or if the parties are unable to agree as to the amount owed, then Owner may impose a reasonable set-off against payments due under Article 15.

SC-7.02.C. Add the following new subparagraph immediately after Paragraph 7.02.C:

1. For purposes of administering the foregoing requirement, additional overtime costs are defined as *[here insert parameters for compensated overtime hours]*

7.03 "OR EQUALS"

SC-7.04.E DELETE PARAGRAPH 7.04.E IN ITS ENTIRETY AND INSERT THE FOLLOWING IN ITS PLACE:

- D. TREATMENT AS A SUBSTITUTION REQUEST: IF ENGINEER DETERMINES THAT AN ITEM OF MATERIAL OR EQUIPMENT PROPOSED BY CONTRACTOR DOES NOT QUALIFY AS AN "OR-EQUAL" ITEM, CONTRACTOR SHALL FURNISH THE ITEM AS SPECIFIED.

7.04 SUBSTITUTES

SC-7.05.A DELETE THE LAST SENTENCE OF PARAGRAPH 7.05.A AND INSERT THE FOLLOWING IN ITS PLACE:

CONTRACTOR SHALL SUBMIT THEIR LIST OF PROPOSED SUBSTITUTES AND ASSOCIATED CHANGES TO THE CONTRACT PRICE AND CONTRACT TIME TO THE ENGINEER FOR APPROVAL WITH THEIR BID. THE SPECIFIED ITEM IS TO BE THE BASIS UPON WHICH THE BID IS PREPARED. REQUEST FOR SUBSTITUTIONS AFTER THE BID WILL NOT BE CONSIDERED UNLESS EVIDENCE IS SUBMITTED TO THE ENGINEER THAT THE SPECIFIED MATERIAL IS UNAVAILABLE FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR. (SEE SECTION 1700 OF THE STANDARD SPECIFICATIONS FOR GUIDANCE.)

SC-7.06.O. Add the following new Paragraphs P and Q immediately following Paragraph 7.06.O

- P. The Contractor shall not award Work to Subcontractors in excess of fifty percent (50%) of the Contract Price without prior written approval of the Town.
- Q. The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bond subcontractors to the Contractor by the terms of the Contract Documents insofar as applicable to the work of subcontractors and to give the Contractor the same power as regards terminating any subcontract that the Town may exercise over the Contractor under any provision of the Contract Documents.

SC-7.12.G. Add the following new Paragraphs immediately following Paragraph 7.12.G.

- h. It is a condition of this Contract, and shall be made a condition of each subcontract entered into pursuant to this Contract, that the Contractor and any subcontractor shall not require any laborer or mechanic employed in performance of the Contract to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health or safety, as determined under construction safety and health standards and regulations ([Title 29, Code of Federal Regulations, Part 1926](#), formerly Part 1518, as revised from time to time) promulgated by the United States Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety

Standard Act, (83Stat. 96) and under any construction safety and health standards and regulations promulgated by the Commissioner of Labor and Industry in accordance with the Maryland Occupational Safety and Health Act, of the Labor and Employment Article, Title 5 of the Annotated Code of Maryland (as the same may be amended from time to time).

- i. Contractor agrees to comply with all Federal and State regulations pertaining to employee safety and health (MOSHA, OSHA, DOT, etc.). The Town of Emmitsburg reserves the right to review the Contractor's Safety and Health Program on request and during the duration of the contract shall conduct periodic monitoring of the Contractor's safety performance i.e. wearing of appropriate personal protective equipment etc. If a safety concern of imminent danger is noted the Town shall reserve the right to stop all work immediately until the safety concern is adequately addressed.
- j. The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work in accordance with the MOSHA regulations. A MOSHA inspector shall be allowed to enter the Site without delay. The inspector shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to all employees on the Work and other persons who may be affected thereby, all the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- k. In case of suspension of Work for any cause whatever, the Contractor shall be responsible for the Project and shall take such precautions as may be necessary to prevent damage to the Work, provide for proper drainage and shall erect any necessary temporary structures, signs, or other facilities at this expense. During such period of suspension of Work, the Contractor shall properly and continuously maintain in acceptable growing conditions, all living material in newly established plantings, seedlings, and sodding furnished under this Contract, and shall take adequate precautions to protect new growth and other important growth against injury.
- l. The bidder warrants that the product supplied to the Town of Emmitsburg, Maryland shall conform in all respects to the standards set forth in the Occupational Safety and Health Act of 1970, as amended, and the failure to comply with this condition will be considered as a breach of contract. Any fines levied because of inadequacies to comply with these requirements shall be borne solely by the bidder responsible for same.

7.9 Taxes

DELETE THE ENTIRE PARAGRAPH AND INSERT THE FOLLOWING IN ITS PLACE:

- A. The Contractor shall pay all taxes, levies, duties and assessments of any nature which may be applicable to any work under this Contract. The Contract amount and any approved change order amounts shall include all taxes imposed by law. The Contractor shall make any and all payroll deductions required by law. The Contractor herein indemnifies and holds the Town harmless from any liability regarding any and all such taxes, levies, duties, assessments and deductions

The price quoted in Bid Proposals to supply labor and materials to The Town of Emmitsburg shall include all costs necessary for the complete performance of the work in

full conformity with the conditions of the Contract Documents, and shall include all licenses and permit fees and all applicable Federal, State, County, Municipal, or other taxes due by the contractor.

The Contractor is responsible for, and by submitting a bid agrees to pay, all retail sales, income, real estate, sales and use, transportation and special taxes applicable to and assessable against any materials, equipment, processes, and operation incident to or involving in the construction. The Contractor is responsible for ascertaining and acquainting himself with such taxes and making all necessary arrangements to pay same.

7.16 *Shop Drawings, Samples, and Other Submittals*

Add the following:

As first order of work, the Contractor shall prepare and submit to the Town Project Manager a schedule for the submission of working drawings. The schedule shall include each type of working drawings (e.g., form plans, structural steel, etc.). Approximate number of drawings to be reviewed, estimated date of first submission, and estimated rate of submission of drawings (e.g. 5 weeks). Where possible, the most crucial drawings shall be submitted first with enough time for review to minimize delays during construction.

All shop plans and working drawings for the subject structure shall be sent to:

Town of Emmitsburg
Attn: Cathy Willets AND Sabrina King
300A South Seton Avenue
Emmitsburg, MD 21727

To expedite the checking and distribution of working drawings, fabricators or suppliers may send prints directly to the above address with copies of all correspondence to the Contractor. If the Contractor requests that all plans be routed through his/her office, then the establishment of that procedure should be the first order of work as to avoid possible misunderstanding as to the processing. The Town Project Manager shall not be responsible for any delays caused by this plan of action, inadequate coordination, preparation of submittal, and time required for review by the Town and/or regulatory agencies and as such, will not be cause for time extensions to the Contract. The Contractor, fabricator, or supplier shall furnish to the above address two (2) prints each of all working drawings, etc. for primary review. After review by the Town and the return thereof, the Contractor shall make such corrections to the drawings as have been indicated. The Contractor shall submit six (6) revised / corrected copies of stamping and distribution. Of the six (6) copies submitted, two (2) will be retained by the Department of Planning

SC-7.17.A. Delete Paragraph 7.17.A in its entirety and insert the following in its place:

- A. The Contractor shall guarantee all materials and equipment furnished and Work performed for a period of one year from the date of Substantial Completion. The Contractor warrant and guarantee for a period of one year from the date of Conditional Acceptance that the completed Work is free from all defects due to faulty materials or workmanship and the Contractor shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the Work resulting from such defects. The Town will give notice of observed defects with reasonable promptness. In the event that the Contractor should fail to make such repairs, adjustments, or other work that may be made necessary by such defects, the Town may have the work accomplished and the Contract amount retained may be used to pay for these repairs of the work or material under this guarantee.

ARTICLE 10 – ENGINEER’S STATUS DURING CONSTRUCTION

10.03 *Project Representative*

SC-10.03 Add the following new paragraphs immediately after Paragraph 10.03.A:

- B. The Owner may appoint such other person or persons as he may deem necessary to inspect, at any time or times, the materials and equipment furnished and the Work done under this Contract, said inspections to be made at the shops or plants, at the site of the Work or at any or all said places, at the discretion of the Owner.
- C. Work and materials will be inspected promptly, but if for any reason delays should occur, the Contractor shall have no claims for damages or extra compensation. Materials and workmanship shall always be subject to the approval of the Owner; but no inspection, approval or acceptance of any part of the Work or of the materials used therein, nor any payment on account thereof, shall prevent the rejections of said materials or Work at any time thereafter during the existence of the Contract, should said Work or materials be found to be defective or not in accordance with the requirements of the specifications and Contract.
- D. At all times during progress of the Work, the Contractor shall, if so required by the Engineer, permit, or secure permission for, the Engineer or any duly authorized inspector or representative of the Owner to enter any factory, shop or other place where any materials and equipment to be supplied for the Work under this contract are prepared, manufacture or constructed at any time or times while such preparations, manufacture or construction is in progress. The Contractor shall furnish and prepare or cause to be furnished and prepare 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 Contractor shall also provide all tools, testing machines, materials, and labor necessary for the required testing, inspection and weighing at the shops, plants, and/or sites of the Work, of the materials and equipment and of any and all parts thereof to be supplied for the Work under this Contract.
- E. The Engineer shall be notified of the time and place of preparation, manufacture or construction of all material, equipment and deliveries for all or part of the Work before delivery at the site of the Work. Such notification shall be given a sufficient time in advance of the beginning of the Work on such material, equipment and services to allow arrangements to be made for inspecting and testing.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.03 Unit Price Work

13.03.B Add the following:

The right is expressly reserved, except as herein otherwise specifically limited, to increase or diminish them as many be deemed reasonably necessary or desirable by the Owner to complete the work contemplated by this contract, and as such increase or diminution shall in no way vitiate this contract, nor shall any such increase or diminution give cause for claims or liability for damages.

SC 13.03.E Delete Paragraph 13.03.E in its entirety and insert the following in its place:

- E. The unit price of an item of Unit Price Work shall be subject to reevaluation and adjustment under the following conditions:
1. if the extended price of a particular item of Unit Price Work amounts to 50 percent or more of the Contract Price (based on estimated quantities at the time of Contract formation) and the variation in the quantity of that particular item of Unit Price Work actually furnished or performed by the Contractor differs by more than 25 percent from the estimated quantity of such item indicated in the Agreement; and
 2. if there is no corresponding adjustment with respect to any other item of Work; and
 3. if the Contractor believes that the Contractor has incurred additional expense as a result thereof, the Contractor may submit a Change Proposal, or if the Owner believes that the quantity variation entitles the Owner to an adjustment in the unit price, the Owner may make a Claim, seeking an adjustment in the Contract Price.

ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

Add the following:

14.2.1 INSPECTION AND INSPECTOR AUTHORITY:

The authorized representatives and agents of the Owner shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and relevant data and records.

Inspectors, employed by the Town, shall be authorized to inspect all work done and materials furnished. Such inspection may extend to all or any part of the work and to the preparation or manufacture of the materials to be used. An inspector or inspectors will be stationed on the project to report to the Town Project Manager as to the progress of the work and the manner in which it is being performed; to report whenever it appears that the materials furnished and work performed by the Contractor fail to fulfill the requirements of the specifications and contract; and to call the attention of the Contractor any such failure or other default. No inspection nor any failure to inspect shall relieve the Contractor from any obligation to perform all of the work strictly in accordance with the requirements of the specifications. In case of any dispute arising between the Contractor and any inspector as to materials furnished or the manner of performing the work, the inspector shall have the authority to reject materials or suspend the work until the question at issue can be referred to and decided by the Town Project Manager.

The inspectors shall not be authorized to revoke, alter, enlarge, relax, or release any requirements of these specifications, nor to approve or accept any portion of work, nor to issue instructions contrary to the plans and specifications, nor to approve accept any portion of work, nor to issue instructions contrary to the plans and specifications. Inspectors shall in no case act as foreman to perform other duties for the Contractor, nor interfere with the management of the work by the latter. Any instructions which the inspectors may give the Contractor shall in no way be constructed as binding the Town Project Manager or the Owner in any way, nor releasing the Contractor from fulfillment of the terms of the Contract.

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.3 Substantial Completion

Add the following new paragraph to SC 15.3: A.

The Contractor shall employ and supply a sufficient force of workers, materials and equipment and shall progress the work with such diligence so as to ensure completion of the work prior to the contract completion date.

15.1 Progress Payments

SC 15.1.D Delete paragraph 15.1.D and replace with the following:

1. Thirty days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 15.01.E) become due, and when due will be paid by Owner to Contractor

15.3 Substantial Completion

Add the following new paragraph to SC 15.3: A.

The Contractor shall employ and supply a sufficient force of workers, materials and equipment and shall progress the work with such diligence so as to ensure completion of the work prior to the contract completion date.

SC 15.3.G Add the following new paragraph to SC 15.03: G. The warranty period will last for 365 days and begin on the date that substantial completion is granted.

15.4 Partial Use or Occupancy

SC-15.4 Delete Paragraph 15.4 in its entirety and use the following:

- A. Whenever the Engineer determines that a portion of the Work is in an apparent acceptable condition and that placing that portion of Work into operation will result in a benefit to the Town, that portion of the Work shall be tested for issuance of a letter of Substantial Completion. Upon issuance of the Letter of Substantial Completion by the Engineer, it shall be placed into beneficial operation. The date of Substantial Completion shall be the effective commencement date for any guarantee applicable to the specific equipment or Work. The Contractor shall be advised of operation and maintenance responsibility for the particular piece of equipment and/or portion of Work commencing with the date of Substantial Completion.

- B. All written conditions, if any, in the Letter of Substantial Completion are binding to the Contractor. Failure to comply with such conditions within the time stated therein will be cause for rescission of the Letter of Substantial Completion and rescission of commencement of the guarantee may be reinstated upon reissuance of the Letter of Conditional Acceptance by the Engineer as set forth above.
- C. Letter of Substantial Completion does not relieve the Contractor of his responsibility under any of the provisions of these Contract Documents unless explicitly noted herein and/or in the written Letter of Substantial Completion.
- D. Written consent of surety and endorsement from the insurance carrier or carriers permitting use of any completed or partially completed portions of the Work by the Town shall be secured and submitted to the Engineer prior to issuance of a Letter of Substantial Completion.
- E. Until approval of the final estimate for the entire Contract by the Town, it shall be the Contractor's responsibility to protect and guarantee all portions of the substantially completed Work against damages resulting from vandalism, theft, floods, fire and malfunction due to other equipment or Work not yet accepted unless such damage is the direct result of negligence on the part of the Town personnel or fair wear and tear. Should repairs be required due to any reasons other than the exceptions stated above, they shall be performed at no expense to the Town and the guarantee commitment date shall be modified to coincide with the date of re-acceptance in accordance with the provisions set forth herein.
- F. Should the Contractor be unable to perform repairs, the Owner may direct that the necessary repairs be performed by others, and the cost therefore be deducted from monies owed the Contractor. In such a case, the guarantee commitment date shall be modified to coincide with the date of completion of repairs by others.
- G. Any Punch List items not corrected by the Contractor within sixty (60) days after Written Notice during the one (1) year guarantee period from the date of Substantial Completion, will be corrected by Town of Emmitsburg. Town of Emmitsburg will then seek to be made whole for the repair via the bond being held. If the contract is funded partially or in fully by the State or Federal Government, sufficient funds will be withheld by the Town to insure that all Punch List items are corrected.
- H. Contractor shall be subject to liquidated damages. This penalty shall be \$300.00 / calendar day.

ARTICLE 17 – FINAL RESOLUTION OF DISPUTES

17.01 Methods and Procedures

SC-17.01 Delete 17.01 in its entirety and replace with the following

SC-17.01 Disputes and Arbitration

- A. Pursuant to §5-5A-01(e)(1) of the Courts and Judicial Proceedings Article of the Annotated Code of Maryland, questions of fact arising from a dispute between performance under the contract, shall be subject to determination by one of the following:
 - i) A neutral person selected by, or under a procedure established by, the highest executive authority of the municipal corporation; or

- ii) If the other party to the dispute does not accept as neutral the person selected under item (i) of this paragraph, an arbitration panel composed of:
 - 1. One member designated by the highest executive authority of the municipal corporation;
 - 2. One member designated by the other party to the dispute; and
 - 3. One member to be selected by mutual agreement of the two designated members from lists submitted by the parties to the dispute.

The decision of the selected person or panel shall be final and binding

- B. The only parties to any proceeding to determine a dispute shall be the Contractor and the Owner, unless the Contractor and Owner otherwise agree to allow additional parties.
- C. Before submitting a request for determination of a dispute under this section, a party must first request a resolution of the issue by the Town of Emmitsburg. The Town shall issue a final written response to the request. If the party is unable to satisfactorily resolve the dispute with the Town and desires a determination of the dispute under this section, a notice for the determination of a dispute shall be sent in writing to the other party to this agreement and to the Town Burgess or their designee, and a copy sent to the consultant.
- D. A request for a determination of a dispute must be filed with the Town Burgess or their designee within 60 days of the determination by the Town.
- E. Unless otherwise agreed, the Contractor shall carry on the Work and maintain its progress during any dispute proceedings as if no dispute had occurred, and the owner shall continue to make payments to the Contractor in accordance with the contract documents for items not subject to the dispute.

**ATTACHMENT C PROJECT
SPECIFICATIONS**

TABLE OF CONTENTS

DIVISION	DESCRIPTION	SECTION
1	GENERAL REQUIREMENTS	
	Site Conditions	01010
	Measurement and Payment	01025
	Testing, Inspections and Reports	01100
	Site Access and Storage	01530
	Protection of Existing Utilities and Facilities	01535
	Temporary Facilities and Environmental Protection	01800
	Maintenance of Traffic	02040
	Construction Stakeout	02130
2	SITE WORK	
	Erosion and Sediment Control Measures	015723
	Removal of Existing Pavement, Sidewalk, Curb or Combination Curb & Gutter	024100
	Water System	221113
	Earthwork	310000
	Aggregate Subbase Course	311117
	Asphaltic Concrete Paving	321216
	Concrete Sidewalks, Curb and Gutter	311613
	Seeding and Sodding	329219

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SECTION 01010

SITE CONDITIONS

Except as indicated herein, work shall be in accordance with the requirements of Section 01010 of the Frederick County Standard Specifications for Water Mains, Sanitary Sewers, and Related Structures.

I. General

A. Description

At the end of the first paragraph, add the following:

“Related Work Specified Elsewhere:

Section 01100—Inspections, Tests, Schedules and Reports

Section 01520—Maintenance of Utility Operations During Construction

Section 01530—Site Access and Storage

Section 01535—Protection of Existing Facilities”

B. Existing Utilities

2. Delete the third sentence. Replace with “5 days in advance of starting work, the Contractor shall notify Miss Utility at 1-800-257-7777.”
3. Delete the first sentence. Replace with “5 days in advance of starting work, the Contractor shall notify Miss Utility at 1-800-257-7777.”

- END OF SECTION -

SECTION 01025

MEASUREMENT AND PAYMENT

All work on the Contract Documents and included in the Project Specifications is to be paid for as shown on the Proposal Form. Payment for all material furnished and installed shall be made in accordance with the Total Bid Price (Base Bid Items + Contingent Items).

Payment for the work performed under this Contract will be made at the lump sum and unit prices bid, which prices shall include all labor, tools, equipment, materials, and all work necessary to complete the project as shown and specified, in strict accordance with all the requirements of the Contract Documents, and to the satisfaction of the Owner and the Engineer.

It is intended that all work as shown on the plans and included in the specifications be paid for as listed under the items on the Proposal Form. The Contractor shall not be entitled to receive additional compensation for anything furnished or done except such as extra work as shall be required by written order.

The absence from the "Proposal Form" of work shown on the drawings and /or described in the specifications, as required to complete the entire project, shall be interpreted as meaning that the cost is considered incidental to the Contract.

The following bid item descriptions are intended to supplement the Frederick County "General Conditions and Standard Specifications". Reference to specific specification divisions and sections in the descriptions of the bid items below does not preclude compliance with all County standard specifications and Contract Documents and Project Specifications in their entirety.

BASE BID ITEMS

1. ITEM No. 1001 & 2001- Mobilization

- a. The Mobilization bid price bid shall include: mobilization and demobilization to the site or sites defined within the contract documents, transporting all equipment and materials; temporary sanitary facilities; complete setup, removal, repair, coordination and payment of fees associated with temporary staging facilities; project signs; loading, hauling and disposal of all construction related debris and excess excavated material not provided for elsewhere in the Contract Documents; advance coordination, notification and scheduling with City and all affected utility companies, businesses, and homeowners; scheduling of work to accommodate residents, business owners and special circumstances encountered during construction and/or as indicated in the Contract Documents.
- b. This item shall not be measured for payment.
- c. Mobilization will be paid for at the Contract lump sum price. The lump sum bid for mobilization shall be limited to ten (10) percent of the total base bid price. Payment of

50 percent of the Mobilization item will be made in the first monthly invoice after the Contractor has established the necessary facilities. The remaining 50 percent will be prorated throughout the remaining contract period and the prorated portion paid at each remaining monthly invoice. The payment will be full compensation for all material, labor, equipment, tools and incidentals necessary to complete the work.

2. ITEM No. 102 & 20070- Site Restoration

- a. The Contractor shall completely restore all property disturbed during construction, including, but not limited to: driveways, topsoil, lawn/landscaping, flowerbeds, fence, and mailboxes. All property shall be restored to the condition prior to construction to the Owner's satisfaction.

- END OF SECTION -

CONTINGENT ITEMS

Contingent Items in the Proposal are for work required/performed in addition to that shown on the Contract Drawings and in the Specifications and are to be used and paid for only at the written direction and authorization of the Engineer. Payment for these items shall be made for the materials furnished and placed, in addition to those shown, or beyond the limits indicated in the Contract Documents. The Town reserves the right to unlimited increase or decrease of the estimated quantities shown in the Bid Forms, without additional Unit Price increase for the duration of the Contract. The Contractor will not be allowed to submit a claim against the Town for any adjustment to the contract unit price bid, should the Contingent item(s) be increased, decreased, or eliminated entirely.

Payment for any contingent item(s) used, will be made on the basis of the quantities as actually measured and as specified in the Specifications. Materials, Construction Requirements and Basis of Payment, shall be as specified elsewhere in the Plans, Specifications, Special Provisions, or Addenda.

3001. Excavation Below Subgrade for Unsuitable Soil - In the event that the pipe trench (in excess of the full width and to the bottom of the trench) or structure subgrade material is deemed unsuitable by the Engineer, contingent excavation and backfill will be used. Contractor will be paid the unit price per CY shown on the Bid Schedule of Contingent Items for excavation of unsuitable material to include removal of material and disposal off site and to bring native material or select backfill to the site, and for placement, compaction and testing of backfill.
3002. Backfill with select material - The contractor will be responsible for the furnishing, transportation, placement, and proper compaction structural fill required for footings, foundations, and slabs. Measurement is by cubic yard actually transported to the site and, payment will be made for actual quantities measured at the unit price per cubic yard listed in the Contingent Items Proposal Form.
3003. Additional Test Pits – The contractor will be responsible for test pitting of existing utilities in the project corridor that may impact the work as shown on the contract drawings, including at every known utility crossing. This cost is considered incidental to the project for shown utilities. Where test pitting is required of utilities not shown on the drawings, as a result of the Miss Utility locate or other methods, those test pits shall be paid for on a contingent

basis in accordance with the unit cost per test pit in the proposal form and shall include restoration.

- 3004. Furnishing and Placing Crusher Run (CR-6) – The contractor will be responsible for the furnishing, transportation, placement, and proper compaction of MSHA Crusher Run (CR-6) required for roadways, footings, foundations, and slabs. Measurement is by cubic yard actually transported to the site and, payment will be made for actual quantities measured at the unit price per cubic yard listed in the Contingent Items Proposal Form.
- 3005. Furnishing and Placing 8” Filter Log – The contractor will be responsible for the furnishing, transportation, placement, and proper installation of 8” Filter Log for sediment control purposes. Measurement is the linear foot and, payment will be made for actual quantities measured at the unit price listed in the Contingent Items Proposal Form.

- END OF SECTION -

SECTION 01100

TESTING, INSPECTIONS AND REPORTS

PART 1 - GENERAL

1.1 Summary:

- A. This Section specifies administrative and procedural requirements for testing and inspection services.
- B. Services include inspections and tests and related actions including reports, performed by independent agencies, governing authorities, and the Contractor. They do not include Contract enforcement activities performed by the Engineer.
- C. Inspection and testing services are required to verify compliance with requirements specified or indicated. These services do not relieve the Contractor of responsibility for compliance with Contract Document requirements.
- D. Requirements of this Section relate to customized fabrication and installation procedures, not production of standard products.
 - 1. Specific quality control requirements for individual construction activities are specified in the Sections that specify those activities. Those requirements, including inspections and tests, cover production of standard products as well as customized fabrication and installation procedures.
 - 2. Inspections, test and related actions specified are not intended to limit the Contractor's quality control procedures that facilitate compliance with Contract Document requirements.
 - 3. Requirements for the Contractor to provide quality control services required by the Engineer, Owner, or authorities having jurisdiction are not limited by provisions of this Section.
- E. Contractor shall retain services of acceptable independent agencies for testing required by specifications and pay costs related thereto.
- F. Independent agencies for testing shall be approved by the Town of Emmitsburg.
- G. The testing laboratory service shall not relieve the Contractor of its responsibility for compliance with the requirements of the Contract Documents. Testing laboratory services are provided for the sole and exclusive benefit of the Owner in monitoring the quality and performance of the Contractor's work. Results of tests made by the testing laboratory will be made available to the Contractor and shall be a basis for rejection of non-conforming or defective work. Additional tests/inspections required by the Owner shall not be the basis for any claim by the Contractor for additional compensation.

1.2 RESPONSIBILITIES

- A. Contractor Responsibilities: The Contractor shall provide inspections, tests and similar quality control services, specified in individual Specification Sections and required by governing authorities, except where they are specifically indicated to be the Owner's

responsibility, or are provided by another identified entity; these services include those specified to be performed by an independent agency and not by the Contractor. Costs for these services shall be included in the Contract Sum.

1. The Contractor shall employ and pay an independent agency, to perform specified quality control services.
 2. Where the Owner has engaged a testing agency or other entity for testing and inspection of a part of the Work, and the Contractor is also required to engage an entity for the same or related element, the Contractor shall not employ the entity engaged by the Owner, unless otherwise agreed in writing with the Owner.
 3. Retesting: The Contractor is responsible for retesting where results of required inspections, tests or similar services prove unsatisfactory and do not indicate compliance with Contract Document requirements, regardless of whether the original test was the Contractor's responsibility.
 4. Cost of retesting construction revised or replaced by the Contractor is the Contractor's responsibility, where required tests were performed on original construction.
 5. Associated Services: The Contractor shall cooperate with agencies performing required inspections, tests and similar services and provide reasonable auxiliary services as requested. Notify the agency sufficiently in advance of operations to permit assignment of personnel. Auxiliary services required include but are not limited to:
 - a. Providing access to the Work and furnishing incidental labor and facilities necessary to facilitate inspections and tests.
 - b. Taking adequate quantities of representative samples of materials that require testing or assisting the agency in taking samples.
 - c. Providing facilities for storage and curing of test samples, and delivery of samples to testing laboratories.
 - d. Providing the agency with a preliminary design mix proposed for use for materials mixes that require control by the testing agency.
 - e. Security and protection of samples and test equipment at the Project site.
- B. ~~Owner Responsibilities: The Owner will provide inspections, tests and similar quality control services specified to be performed by independent agencies and not by the Contractor, except where they are specifically indicated as the Contractor's responsibility or are provided by another identified entity. Costs for these services are not included in the Contract Sum.~~
- ~~1. The Owner will employ and pay for the services of an independent agency, testing laboratory or other qualified firm to perform services which are the Owner's responsibility.~~
 - ~~2. The Owner will employ and pay for the services of an independent Commissioning Agent and TAB services.~~
- C. Duties of the Testing Agency: The independent testing agency engaged to perform inspections, sampling and testing of materials and construction specified in individual Specification Sections shall cooperate with the Engineer and Contractor in performance of its duties and shall provide qualified personnel to perform required inspections and tests.
1. The agency shall notify the Engineer and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 2. The agency is not authorized to release, revoke, alter or enlarge requirements of the Contract Documents, or approve or accept any portion of the Work.

3. The agency shall not perform any duties of the Contractor.
- D. Coordination: The Contractor and each agency engaged to perform inspections, tests and similar services shall coordinate the sequence of activities to accommodate required services with a minimum of delay. Additionally, Contractor and each agency shall coordinate activities to avoid the necessity of removing and replacing construction to accommodate inspections and tests.
1. The Contractor is responsible for scheduling times for inspections, tests, taking samples and similar activities.

1.3 SUBMITTALS

- A. The independent testing agency shall submit a certified written report of each inspection, test or similar service, to the Engineer, Owner and Contractor. Reports shall bear the seal and signature of a Professional Engineer registered in the State of Maryland and competent in the required testing practice. All test reports shall show the location where the test was performed or at which the work or batch represented by the test was placed. Test reports shall include all information specified in the AASHTO or ASTM test procedure used. Improperly completed reports will not be accepted.
- B. Submit additional copies of each written report directly to the governing authority, when the authority so directs.
- C. Report Data: Written reports of each inspection, test or similar service shall include, but not be limited to:
1. Date of issue.
 2. Project title and number.
 3. Name, address and telephone number of testing agency.
 4. Dates and locations of samples and tests or inspections.
 5. Names of individuals making the inspection or test.
 6. Designation of the Work and test method.
 7. Identification of product and Specification Section.
 8. Complete inspection or test data.
 9. Test results and an interpretation of test results.
 10. Ambient conditions at the time of sample-taking and testing.
 11. Comments or professional opinion as to whether inspected or tested Work complies with Contract Document requirements.
 12. Name and signature of laboratory inspector.
 13. Recommendations on retesting.
- D. Field reports shall be made available to the Engineer by the Testing Agency. Final reports shall be forwarded to the Engineer, Owner and Contractor no later than 1 week following the testing. Results of all tests taken, including failing tests, shall be reported.

1.4 QUALITY ASSURANCE

- A. Each independent inspection and testing agency engaged on the Project shall be authorized by authorities having jurisdiction to operate in the State of Maryland. Agencies testing soil and

rock shall meet the requirements of ASTM D3740. Agencies testing asphalt or concrete shall meet the requirements of ASTM D3666 or D1077, respectively. All Testing Agencies shall meet the requirements of ASTM E329.

- B. A trained and properly qualified representative of the Testing Agency shall observe, sample, and test the materials and work, on the project, as required by these specifications and as directed by the Engineer.
- C. If any materials furnished or the work performed by the Contractor fails to fulfill the Specification requirements, such deficiencies shall be reported to the Engineer and the Contractor immediately. Preliminary written field reports of all tests and observation results shall be given to the Contractor immediately after they are performed.

1.5 DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements at no additional cost to the Owner.
- B. If, in the opinion of the Engineer or Owner, it is not practical to remove and replace the Work, the Engineer will direct appropriate remedy or adjust payment.
- C. The defective Work may remain, but sum/price will be adjusted to new sum/price at the discretion of Engineer or Owner.
- D. Individual specification sections may modify these options or may identify specific formula or percentage sum/price reduction.
- E. Authority of Engineer, or other appropriate agent identified to perform assessment by the Engineer or Owner, to assess defects and identify payment adjustments, is final.
- F. Non-Payment for Rejected Products: In addition to replacement of rejected Work, payment will not be made for rejected products for any of the following:
 - 1. Products wasted or disposed of in a manner that is not acceptable.
 - 2. Products determined as unacceptable before or after placement.
 - 3. Products not completely unloaded from transporting vehicle.
 - 4. Products placed beyond lines and levels of required Work.
 - 5. Products remaining on hand after completion of the Work.
 - 6. Loading, hauling, and disposing of rejected products.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

3.1 SCHEDULE OF INSPECTIONS AND TESTS

- A. Soils Tests:

1. Soil Analysis Method: Make one test for each type of soil used under structures and paving.
 - a. Liquid Limit ASTM 04318.
 - b. Plastic Limit: ASTM 04318.
 - c. Plasticity Index: ASTM 04318.
 - d. Moisture-Density Relationship: ASTM 0698 or ASTM D4253, 04254 as applicable.
 - e. In-Place Density: ASTM 02922.
 - f. One laboratory maximum density test.
2. Quantity of Analysis: One set for each 1,000 sf for each lift
 - a. Perform in-place density tests on fill material at building, paving, and utility trenches.

B. Backfilling and Compaction Quality Control During Construction:

1. Contractor will employ an independent testing and inspection agency to conduct tests and inspections, interpret them, evaluate results for compliance with specifications and report findings to Owner, Contractor and Engineer as their interests may appear.
2. Quality Control Testing During Construction: Testing agency shall inspect and approve subgrades and fill layers before further Work is performed.
 - a. Perform field density tests in accordance with ASTM D 1556 (sand cone method) or ASTM D 2922 (nuclear method-shallow depth), as applicable.
 - b. Footing Subgrade: For each stratum of soil on which footings will be placed, conduct at least one test to verify required design bearing pressure. Subsequent verification and approval of each footing subgrade may be based on a visual comparison of each subgrade with related tested strata, when acceptable to Engineer.
 - c. Paved Areas: Provide one test per 100 linear foot trench and additional tests as directed by the Engineer; one test per 1,000 square feet for general grading and additional tests as directed by the Engineer for general grading. Testing for water and sewer laterals shall be one test per layer of trench backfill minimum, or as directed.
 - d. When the tests indicate that density or moisture content does not meet requirements specified herein, the particular layer or portion thereof, as determined by the Engineer, shall be reworked by rolling or by scarifying, wetting or drying and recompacting until the required density has been obtained. The Contractor will be required to submit documentation including, but not limited to, compaction test reports and soil proctors being used, as work progresses to assure compliance with the requirements of the Specifications.
 - e. Upon completion of all trench backfill and embankment fills, a final compaction test report and certification by an approved geotechnical

consultant shall be provided for review and approval by the Town prior to commencing construction of curbs/ roadways, etc.

- f. Compaction test reports shall include date taken, location (Station), moisture content, optimum moisture, dry density, maximum density, and percent compaction. Additionally, the locations of tests are to be plotted on the profile view of the approved drawings at the depth and station they were taken.
- g. The approved subgrade for roadway pavement shall be tested for compaction after proof rolling of subgrade.

C. Portland Cement Concrete:

- 1. Sampling and testing for quality control during placement of concrete shall include the following, as directed by Engineer.
- 2. Sampling Fresh Concrete: ASTM C-172, except modified for slump to comply with ASTM C 94.
 - a. Slump: ASTM C 143; one test for each concrete load at point of discharge; and one test for each set of compressive strength test specimens.
 - b. Air Content: ASTM C 143, volumetric method for lightweight or normal weight concrete; ASTM C 231 pressure for normal weight concrete; one for each set of compressive strength test specimens.
 - c. Concrete Temperature: Test hourly when air temperature is 40^o Fahrenheit and below, and when 80^o Fahrenheit and above; and each time a set of compression test specimens are made.
 - d. Compression Test Specimen: ASTM C 31; one set of 4 standard cylinders for each compressive strength test, unless otherwise directed. Mold and store cylinders for laboratory cured test specimens. Secure samples in accordance with ASTM C 172.
 - e. Compressive Strength Tests: ASTM C 39; one set for each day's pour, or for each 100 cu. yds. or fraction thereof, of each concrete class placed in any one day or for each 5,000 sq. ft. of surface area placed; 2 specimens tested at 7 days; 2 specimens tested at 28 days.
 - f. When frequency of testing will provide less than 5 strength tests for a given class of concrete, conduct testing from at least 5 randomly selected batches or from each batch if fewer than 5 are used.
 - g. Strength level of concrete will be considered satisfactory if averages of sets of three consecutive strength test results equal or exceed specified compressive strength, and no individual strength test result falls below specified compressive strength by more than 500 psi.
- 3. Test results shall be reported in writing to Engineer, Contractor and Owner (1 copy each). Reports of compressive strength tests shall contain the project identification,

name of Contractor, name of concrete supplier, truck number and batch number, date of concrete placement, name of concrete testing service and certifying Engineer, concrete type and class, ambient and concrete temperatures, location of concrete batch in structure, design compressive strength at 28 days, concrete mix proportions and materials; slump and air test results, compressive breaking strength and type of break for both 7-day tests and 28-day tests.

4. Test Evaluation: Concrete cylinder tests shall be evaluated by Engineer in accordance with ACI 318 and ACI 214.
5. Additional Tests: Testing service shall make additional tests of in-place concrete when test results indicate specified concrete strengths and other characteristics have not been attained in structure, as directed by Engineer. Testing service may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C-142, or by other methods as directed. Contractor shall pay for tests conducted, and additional testing as may be required, when unacceptable concrete is verified.
6. In event that additional coring tests do not show strength required or as determined by load tests made in accordance with ACI 318, and if tests indicate necessity, defective parts shall be removed and replaced, or shall be reinforced as directed by Engineer at Contractor's expense, including expense of tests. If tests indicate structure adequately meets requirements of Contract Documents, test results of defective cylinders shall be waived.
7. Contractor's Responsibility: Contractor shall observe daily work of testing laboratory in field and laboratory and shall report all known deviations to approved standards to Engineer within 24 hours. Failure to so notify Engineer in event of deviations shall not waive the Contractor's approval of subsequent test results.
8. Curing Box: Contractor shall construct an insulated curing box to cure concrete cylinders and maintain required temperatures. Construct each box large enough to store a minimum of 18 cylinders.

D. Asphalt Pavement:

1. General: Test in-place asphalt concrete paving courses for compliance with requirements for thickness and surface smoothness.
2. Field Density Tests: ASTM D2950 Standard Test Method for Density of Bituminous Concrete in Place by Nuclear Methods
 - a. Locations: Subgrade, base courses, surface course.
 - b. Number: One for each 1,000 square yards or fraction thereof.
 - c. Field Thickness: ASTM D3549.
3. Asphalt Cores: ASTM D5361 Standard Practice for Sampling Compacted Asphalt Mixtures for Laboratory Testing
 - a. Locations: Base courses.

- b. Number: Perform a minimum of three (3) cores per 1000 tons
 - 4. Thickness: In-place compacted thickness of asphalt concrete paving will not be acceptable if exceeding following allowable variation from required thickness:
 - a. Base Course: 1/2", plus or minus.
 - b. Surface Course: 1/4", plus or minus.
 - 5. Surface Smoothness: Test finished surface of each asphalt concrete course for smoothness, using 10' straightedge applied parallel with, and at right angles to centerline of paved area. Surfaces will not be acceptable if exceeding the following tolerances for smoothness:
 - a. Base Course Surface: 1/4". Wearing Course Surface: 3/16".
- E. Structural Concrete:
 - 1. Aggregate Tests:
 - a. Typical: Check the proposed aggregate in accordance with ASTM C33.
 - b. For concrete 6000 psi and higher, perform ASTM 0799 also.
 - 2. Mix Design: Check the proposed mixes for proportions, water cement ratio and slump in accordance with ACI 301 and 318.
 - 3. Slump Tests: Take slump tests per ASTM C143 at the beginning of each day's placing operations and whenever water adjustments or noticeable change of slump occurs, with a minimum of one for each set of test cylinders.
 - 4. Sampling:
 - a. Make five standard cylinders at the beginning of each placement, and five more standard cylinders for every 50 cubic yards placed. Take extra samples at noticeable change in the concrete makeup. Cure per ASTM C192.
 - b. Determine and report air content per ASTM C231, 0173, or 0138 for each set of test cylinders.
 - c. Perform sampling in compliance with ASTM 0172.
 - d. Samples for pumped concrete to be taken at end of line, at location of placement.
 - 5. Testing:
 - a. Test cylinders for compression in accordance with ASTM 039.
 - b. Test two lab cured cylinders at 7 days and two field cured cylinders at 28 days averaging test results. Store one (1) cylinder for testing at 56 days in the event the 28 days strength tests do not meet strength requirements.
- F. Reinforcing Steel:
 - 1. Visual Inspection: Inspect reinforcing steel in structural concrete to determine if the size, type, splices, laps, clearances, and number of reinforcing bars complies with the specifications and drawings.
- G. Bolted Connections:
 - 1. Types:
 - a. Calibrated torque wrench if washers are used.

- b. If turn of nut method is used without washers, observe the set of every bolt.
2. Number for Torque Wrench Test: Test minimum two bolts of every third connection between floor beams, girders and columns.
3. Analysis: If insufficient torque occurs on any tested bolt, test all bolts at that connection at the Contractor's expense.

H. Steel Weld Tests:

1. Types: One of the following testing procedures may be used on any field or shop weld.
 - a. Liquid penetrant.
 - b. Magnetic particle.
 - c. Radiographic.
 - d. Ultrasonic.
 - e. Visual inspection at small welds.
2. Number of Tests: 100% of full penetration and field welds, 10% of other shop welds. Test of shop welds shall be done at fabricator's shop prior to painting and shipping.
3. Number of Retests: Number of welds to be retested will be determined by the number of welds that fail the initial testing.
4. All welds that fail shall be rewelded and retested until they pass the test.
5. Test two additional welds for every weld failure at the Contractor's expense.
6. Weld Quality: Comply with the quality requirements of the American Institute of Steel Construction Manual of Steel Construction.
7. Testing Laboratory shall obtain and review copy of certification of all welders.

I. Insulating Concrete:

1. Type of Tests:
 - a. Field Wet Density: ASTM C138.
 - b. Laboratory Tests: Dry density and compressive strength ASTM C495.
2. Number of Test Sets:
 - a. One per 5,000 square feet.
 - b. Not less than one for each day's work.

J. Masonry Mortar and Grout Quality Control During Construction:

1. Masonry Mortar: The designated testing agency shall sample and test mortars in accordance with property specifications of ASTM C 270 and evaluate in accordance with ASTM C780. At least one test for each 5000 square feet of wall area or portion thereof.
2. Masonry Grout: Designated testing agency shall sample and test masonry grout in accordance with ASTM C 1019 for each 5,000 square feet of masonry wall surface.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

3.1 Inspection and Testing Reports

- A. Copies of inspection and testing reports shall be submitted to Engineer (2 copies), Contractor and Owner (1 copy each).
- B. Reports shall be clearly and neatly typed (handwritten reports will not be accepted) and shall contain pertinent project information for each type of test. Submit samples of each report form for approval.

END OF SECTION

SECTION 01530

SITE ACCESS AND STORAGE

PART 1 -- GENERAL

1.01 The Requirement

A. Access Roads

1. The Contractor shall construct and maintain temporary construction entrances and access roads as required to perform the Work.
2. Access roads and construction entrances shall be located within the property lines of the Owner or public right-of-way unless the Contractor independently secures easements for his use and convenience. Contractor shall submit written documentation to the Engineer for any secured easements across privately held property. Easement agreement shall specify terms and conditions of use and provisions for site restoration. A written release from the property owner certifying that all terms of the easement agreement have been compiled by the Contractor shall be furnished to the Engineer prior to final payment.
4. Existing access roads used by the Contractor shall be suitably maintained by the Contractor at his expense during construction. Contractor shall not restrict Owner access to existing facilities. Engineer may direct Contractor to perform maintenance of existing access roads when Engineer determines that such work is required to insure all weather access by the Owner.

B. Parking Areas

1. The Contractor shall construct and maintain suitable parking areas for construction personnel on the project site where approved by the Engineer and the Owner.

C. Restoration

1. At the completion of the work, the surfaces of land used for access roads and parking areas shall be restored by the Contractor to its original condition and to the satisfaction of the Engineer. At a minimum, such restoration shall include establishment of a permanent ground cover adequate to restrain erosion for all disturbed areas.

D. Traffic Regulations

1. Contractor shall obey all traffic laws and comply with all the requirements, rules and Maryland State Highway Administration, Frederick County, and other local authorities having jurisdiction to maintain adequate warning signs, lights, barriers, etc., for the protection of traffic on public roadways.

E. Storage of Equipment and Materials

1. Contractor shall store his equipment and materials at the job site in accordance with the requirements of Section 01000 and as hereinafter specified. All equipment and materials shall be stored in accordance with manufacturer's recommendations and as directed by the Owner or Engineer, and in conformity to applicable statutes, ordinances, regulations and rulings of the public authority having jurisdiction. Where space or strip heaters are provided within the enclosure for motors, valve operators, motor starters, panels, instruments, or other electrical equipment, the Contractor shall make connections to these heaters from an appropriate power source and operate the heaters with temperature control as necessary until the equipment is installed and being operated according to its intended use.
2. Contractor shall enforce the instructions of Owner and Engineer regarding the posting of regulatory signs for loadings on structures, fire safety, and smoking areas.
3. Contractor shall not store materials or encroach upon private property without the written consent of the property owner(s).
4. Contractor shall not store unnecessary materials or equipment on the job site, and shall take care to prevent any structure from being loaded with a weight which will endanger its security or the safety of persons.
5. Materials shall not be placed in such a way to impede the use of fire hydrants by the local fire department.
6. The Contractor shall provide adequate temporary storage buildings or facilities, if required, to protect materials or equipment on the job site at no cost to the Owner.

PART 2 -- PRODUCTS

(NOT USED)

PART 3 -- EXECUTION

(NOT USED)

PART 4 – MEASUREMENT AND PAYMENT

Measurement and payment to be in accordance with Division 1, Section 01025.

- END OF SECTION -

SECTION 01535

PROTECTION OF EXISTING UTILITIES AND FACILITIES

PART 1 -- GENERAL

1.01 The Requirement

- A. Contractor shall be responsible for the preservation and protection of property adjacent to the Work site against damage or injury as a result of his operations under this Contract. Any damage or injury occurring on account of any act, omission or neglect on the part of the Contractor shall be restored in a proper and satisfactory manner or replaced by and at the expense of the Contractor to an equal or superior condition than previously existed.
- B. The Contractor shall protect from damage all existing facilities and utilities (1) at or near the work site and (2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this Contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Owner may have the necessary work performed and charge the cost to the Contractor.
- C. The Contractor's responsibility for the contract site applies to the full limits of the contract regardless of the extent or nature of contract work at a particular location. This obligation begins when the contract is awarded and continues until contract final acceptance. The Contractor shall promptly address all written damage claims of the public and, if not addressed directly, claims shall be promptly turned over to the Contractor's insurance carrier without prejudicing the validity of the claim. There should be an interval of no more than 10 work days between receipt of a written claim by the Contractor and receipt by the carrier. The Contractor and/or the Insurance Carrier are expected to investigate, determine and adjust such claims promptly and fairly with notice to the Town. The Town will monitor claims by the public. If the Contractor fails to provide satisfactory resolution through a timely claims adjustment process or denies the claim without proper cause and justification, the Town may withhold payment due to the Contractor's Non-Compliance of the contract agreement or utilize other remedies.
- D. Contractor shall comply promptly with such safety regulations as may be prescribed by the Owner or the local authorities having jurisdiction and shall immediately correct any unsafe conditions created by, or unsafe practices on the part of his employees. In the event of the Contractor's failure to comply, the Owner may take the necessary measures to correct unsafe conditions or practices and all costs thereof will be deducted from any monies due the Contractor. Failure of the Engineer to direct the correction of unsafe conditions or practices shall not relieve the Contractor of his responsibility hereunder.
- E. In the event of damage claims or alleged damage to property as a result of Work, the

Contractor shall be responsible for costs in connection with the settlement of or defense against such claims.

- F. Prior to commencement of Work, the Contractor, at his own expense, shall take such surveys as may be necessary to establish the pre-existing condition of the property, existing facilities in vicinity of Work and areas that will be impacted by Work. Contractor shall provide a copy of the survey to the Owner. The Owner may perform additional survey to document pre-existing conditions to the Owner's satisfaction. Before final payment can be made, the Contractor shall furnish satisfactory evidence that all claims for damage have been legally settled or sufficient funds to cover such claims have been placed in escrow, or that an adequate bond to cover such claims has been obtained.

1.02 Protection of Work, Equipment and Material

- A. During the progress of Work and up to the date of final payment, the Contractor shall be solely responsible for the care and protection of Work, equipment and materials covered by the Contract as set forth in the General Conditions.
- B. All Work, equipment and materials shall be protected against damage, injury or loss from any cause whatsoever, and the Contractor shall make good any such damage, injury or loss at his own expense. Protection measures shall be subject to the approval of the Engineer.

1.03 Barricades, Warning Signs and Lights

- A. The Contractor shall provide, erect and maintain as necessary, strong and suitable barricades, danger signs and warning lights in areas accessible to the public, as required by the authority having jurisdiction, to insure safety to the public. All barricades and obstructions in these areas shall be illuminated at night and all lights for this purpose shall be kept burning from sunset to sunrise.
- B. Contractor shall provide and maintain such other warning signs and barricades in areas of and around their respective Work as may be required for the safety of all those employed in the Work, the Owner's operating personnel, or those visiting the site.

1.04 Existing Utilities and Structures

- A. The term existing utilities shall be deemed to refer to both publicly-owned and privately-owned utilities such as electric power and lighting, telephone, water, gas, storm drains, process lines, sanitary sewers and all appurtenant structures.

The following public utility organizations have existing utilities in the vicinity of the Work:

- Potomac Edison
- Verizon
- Comcast

-Columbia Gas

- B. Where existing utilities and structures are indicated on the Drawings, it shall be understood that all of the existing utilities and structures affecting the Work may not be shown and that the locations of those shown are approximate only. It shall be the responsibility of the Contractor to ascertain the actual extent and exact location of existing utilities and structures. In every instance, the Contractor shall notify the proper authority having jurisdiction and obtain all necessary directions and approvals before performing any Work in the vicinity of existing utilities.
- C. Prior to beginning any excavation Work, the Contractor shall, through field investigations, determine any conflicts or interferences between existing utilities and new utilities to be constructed under this project. This determination shall be based on the actual locations, elevations, slopes, etc., of existing utilities as determined in the field investigations, and locations, elevation, slope, etc. of new utilities as shown on the Drawings. If an interference exists, the Contractor shall bring it to the attention of the Engineer as soon as possible. If the Engineer agrees that an interference exists, he shall modify the design as required. Additional costs to the Contractor for this change shall be processed through a Change Order as detailed in the General Conditions. In the event the Contractor fails to bring a potential conflict or interference to the attention of the Engineer prior to beginning excavation Work, any actual conflict or interference which does arise during the Project shall be corrected by the Contractor, as directed by the Engineer, at no additional expense to the Owner.
- D. The Work shall be carried out in a manner to prevent disruption of existing services and to avoid damage to the existing utilities. Temporary connections shall be provided, as required, to insure uninterrupted of existing services. Any damage resulting from the Work of this Contract shall be promptly repaired by the Contractor at his own expense in a manner approved by the Engineer and further subject to the requirements of any authority having jurisdiction. Where it is required by the authority having jurisdiction that they perform their own repairs or have them done by others, the Contractor shall be responsible for all costs thereof.
- E. Where excavations by the Contractor require any utility lines or appurtenant structures to be temporarily supported and otherwise protected during the construction Work, such support and protection shall be provided by the Contractor. Such Work shall be performed in a manner satisfactory to the Engineer and the respective authority having jurisdiction over such Work. In the event the Contractor fails to provide proper support or protection to any existing utility, the Engineer may, at his discretion, have the respective authority to provide such support or protection as may be necessary to insure the safety of such utility, and the Contractor shall be responsible for all costs thereof.

PART 2 -- PRODUCTS

(NOT USED)

PART 3 -- EXECUTION

(NOT USED)

PART 4 – MEASUREMENT AND PAYMENT

Measurement and payment to be in accordance with Division 1, Section 01025.

- END OF SECTION -

SECTION 01800

TEMPORARY FACILITIES AND ENVIRONMENTAL PROTECTION

Except as indicated herein, work shall be in accordance with the requirements of Section 01800 of the Frederick County Standard Specifications for Water Mains, Sanitary Sewers, and Related Structures.

I. General

I. Environmental Protection

7. Erosion and Sediment Control

- b. In second paragraph, first sentence, delete “Maryland Soil Conservation Service Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas” and replace with “2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control.”

- f. Delete second sentence. Replace with “All other sediment control materials and devices shall be in accordance with the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control.”

- g.
 - 10. Delete. Replace with “Construct all sediment and erosion control devices in accordance with the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control.”

PART 4 – MEASUREMENT AND PAYMENT

Measurement and payment to be in accordance with Division 1, Section 01025.

- END OF SECTION -

SECTION 02040

MAINTENANCE OF TRAFFIC

PART 1-GENERAL.

- 1.01 This work shall consist of maintaining vehicular and pedestrian traffic on or along any transportation facility as specified in the Contract Documents. This Section sets forth the traffic control requirements necessary for the safe and continuous maintenance of traffic throughout the area affected by the work, and is intended to minimize inconveniences to the traveling public, while providing for the safety of motorists, pedestrians, and workers.

All work shall be in accordance with the latest issue of the Manual on Uniform Traffic Control Devices (MUTCD), Specifications, Plans, Special Provisions, and as directed by the Engineer.

Items used for temporary maintenance of traffic shall be removed from the project site when no longer needed and become the property of the Contractor, unless otherwise specified in the Contract Documents.

The Contractor shall replace damaged traffic control devices, such as yield or stop signs, within four hours of notification by the Engineer. The Contractor shall take the necessary corrective action as approved by the Engineer to adequately warn and protect the public until the signs are replaced.

No more than twenty-five (25) feet (longitudinal) of trenching and no trenches crossing a roadway shall remain open between the hours of 5 p.m. and 8 a.m. Any trench left open at night shall be covered with steel plates or backfilled to adjoining road surface. The steel plates size and thickness shall be determined by the Engineer and/or Inspector in the field.

1.02 TRAFFIC CONTROL PLAN (TCP).

- A. This work shall consist of the development and implementation of a TCP. The TCP will include the design and placement of items such as signing, pavement markings, delineation, channelization, barriers, crash cushions, and other items as required.
- B. The Contractor shall make a request to the Town / County /State for any lane or shoulder closures 24 hours in advance of the time any traffic lane or shoulder is to be closed. Unless otherwise specified in the Contract Documents, all travel lanes shall be restored at the end of the work day and no travel lane shall be reduced to less than 10 ft. Prior to opening the closed lane or shoulder, the Contractor shall clear the lane or shoulder of all material, equipment, and debris.
- C. Plans or revisions to plans submitted for approval shall be drawn to the same degree, likeness, and sophistication as that of the Contract Plans.
- D. Submittals shall be on sheets measuring 22 x 34 in. with a standard margin and a standard title block at the lower right corner approximately 4 x 8 in., or on 8-1/2 x 11 in. paper with a 1 in.

margin and a title block.

- E. Plans shall indicate the proposed traffic movements throughout the area affected by the work for each phase of construction, have all routes labeled, show north arrow, and any other information that would clarify the TCP.

1.03 MAINTENANCE OF TRAFFIC (MOT).

- A. This work shall consist of maintaining traffic safely and efficiently through and around the area affected by the work.
 - 1. Maintenance of Existing Roadway. The Contractor shall be responsible for maintaining the existing roadway surface and shoulders, detour roads, entrances, and pavement markings within the limits of the project, throughout the duration of the Contract.
 - 2. Any hazardous condition which exists or develops throughout the duration of the Contract, such as potholes or shoulder defects, shall be repaired or patched by the Contractor as directed by the Engineer.
 - 3. Existing Regulatory Signs, Warning Signs, Guide Signs and Pavement Markings. Existing signs that are not applicable due to temporary traffic conditions, shall be relocated when necessary, turned, completely covered with opaque material, or removed with the approval of the Engineer. They shall be properly redisplayed to traffic as soon as conditions warrant. The Contractor shall replace any existing signs misplaced or damaged by the Contractor's operations at no additional cost to the Owner.
 - 4. The Contractor shall inventory the locations of all existing pavement markings including legends and symbols with the Engineer prior to construction. The inventory shall include type, size, location, and color and be submitted to the Engineer. The Contractor may mark up a set of Contract Plans or submit their own sketches or drawings.
 - 5. Storage and Movement of Equipment, Material, and Vehicles.

No equipment or material shall be stored or permitted to stand in unprotected areas or open areas within 30 ft from where traffic is being maintained unless protected by traffic barriers. The Contractor's employees shall not park their vehicles within the right-of-way of the through highway, unless written permission for an exception is given by the Engineer. All equipment, material, storage, and parking areas shall have advance written approval from the Engineer. Storage of equipment and material may be permitted closer than 30 ft, subject to the following restrictions:

 - a. Approved temporary traffic barrier shall be in place prior to storage of any equipment or materials.
 - b. Equipment and material are prohibited from being within 4 ft behind the face of the traffic barrier.
 - c. No equipment or material shall be stored or standing in open areas closer than 30 ft from where traffic is being maintained, unless the equipment or material is stored in conformance with the AASHTO Roadside Design Guide.

6. Areas used for storage of equipment and material shall be restored to their original condition immediately upon completion of their use. No additional compensation will be provided for this work.
7. Vehicles and equipment shall enter and leave the work area in the direction of traffic flow.
8. Work performed on, or adjacent to the traveled way, shall be performed in the direction of traffic flow unless written approval is obtained from the Engineer prior to beginning the work.
9. The Contractor's vehicles and equipment shall enter on and exit from the roadway at interchanges or legally allowed public use crossovers. Making U-turns across any medians or crossovers signed FOR USE OF AUTHORIZED AND EMERGENCY VEHICLES ONLY by the Contractor's vehicles or equipment is prohibited unless written approval is granted by the Engineer.

B Warning Lights and Devices.

1. Warning lights and flags shall be used on warning signs as specified in the TCP, the Contract Documents, or as directed by the Engineer. During hours of darkness, any channelizing device used to warn of a spot hazard shall have one Type A low intensity flashing warning light attached to the side adjacent to traffic. Two Type A low intensity flashing warning lights shall be attached to the top of each Type III barricade.

C General Requirements for Temporary Pavement Markings

1. Temporary pavement markings are those markings placed upon the roadway to serve an area of work activity or a work phase for a period of time after which they are to be removed.
2. When approved by the Engineer, a less than full complement of pavement markings and reduced dimension markings for dashed center lines and lane lines may be permitted. Where less than a full complement of pavement markings or reduced dimension markings are used, the time of use shall not exceed two weeks.
3. Full dimension TPMs shall conform to the MUTCD and the Pavement
4. Reduced dimension TPMs shall conform to the MUTCD, except that the dashed center lines and lane lines may consist of 4 ft segments and 36 ft gaps. All other dimension elements shall be as specified in the MUTCD and the Pavement Marking Dimension Table.
5. TPMs generally use short lived marking materials that are easily removed. Material requirements are described elsewhere in these Specifications.

D Specific Requirements for TPMs.

1. As a minimum at the close of each day, the roadway shall have all center and lane lines in place.
2. During the work day while work activity is underway, center and lane lines shall be in place or the lines shall be represented by channelizing devices, signs, or other traffic control devices to clearly define and mark all vehicle paths.
3. Along two-lane, two-way roadways, the center line shall consist of a continuous double solid yellow center line, a single dashed yellow center line at full dimension, or a single dashed yellow center line at reduced dimension as directed by the Engineer.
4. No passing zones shall be marked and signed as specified in the Contract Documents or as directed by the Engineer. All no passing zones may be identified by signing for a period not to exceed seven days.
5. Where edge lines are not in place, appropriate channelizing devices or other delineation shall be used to delineate the edge of the roadway.

E Channelizing Devices.

When channelizing traffic the requirements shall conform to the MUTCD and the following:

1. Maximum spacing in feet for channelizing devices in a taper shall be the posted speed limit.
2. Maximum spacing in feet for channelizing devices in a tangent shall be twice the posted speed limit in mph.
3. Channelizing devices shall be spaced at 25 ft intervals to define interchange gore areas or other unusual highway alignments unless a closer spacing is directed by the Engineer.

1.04 TEMPORARY TRAFFIC SIGNS (TTS).

A. DESCRIPTION

1. This work shall consist of furnishing and installing TTS on or along any transportation facility as specified in the Contract Documents.
2. The Contractor shall maintain sign faces free of tape, tape residue, or any other foreign matter, and shall remove any advertisements from signs and supports. Supplemental signs shall not cover any part of the face of the primary sign.
3. The signing shall conform to MUTCD. All work area warning signs shall be 48 x 48 in. unless otherwise specified.
4. Signs that will be in place for more than three working days shall be mounted on two 4 x 4 in. wood posts unless otherwise specified. The height of the sign shall be as specified in MUTCD. Additional bracing of signs is prohibited. The tops of the wood posts shall not protrude more than 3 in. beyond the nearest edge of the sign. Wood posts 4 x 4 in. shall

be placed a minimum of 4 ft into the ground. Wood posts 4 x 6 in. shall be placed a minimum of 5 ft into the ground.

5. Signs on portable supports for temporary conditions shall be mounted so that the bottom of the sign shall not be less than 1 ft above the roadway pavement elevation. Portable sign supports shall be self-erecting, able to withstand a wind velocity of 70 mph, and shall be able to maintain themselves within five degrees rotation around their vertical axis.
6. Fabricated wood signs or flexible roll up signs shall be used only as directed by the Engineer. Fabricated aluminum signs, including material thickness, shall conform to the SI-ISB. Diamond shaped warning signs 48 x 48 in. or larger shall be a minimum of 0.125 in. thick.
7. TTS shall not be installed until inspected and approved by the Town. The signs shall not be displayed to traffic until directed by the Town. TTS shall be properly maintained, remain in place only as needed, and be immediately removed thereafter. Where operations are performed in phases or stages, only those signs that apply to the present conditions shall be displayed to traffic.
8. Special care shall be exercised to properly space signs along the highway to ensure that traffic is provided adequate sight distance to both work zone signs and existing signs. When a sign is not indicative of actual conditions such as during periods of temporary shutdown or extended periods of no work being performed (including lunchtimes and overnight periods), the Contractor shall remove the entire work zone setup and remove the sign, turn it away from all traffic (turning parallel to traffic is prohibited), or completely cover it with an opaque material that is approved by the Engineer. This will not be required for non-work periods of time up to one hour.
9. Signs shall not be obscured by weeds, shrubs, trees, construction equipment, materials or waste materials, personal vehicles, or any other obstruction and shall conform to the sight distance requirements as specified in the Contract Documents.
10. TTS for both daytime and nighttime use shall be reflectorized.
11. Sign Replacement. Signs shall be new or in like new condition. Signs that become faded, illegible, or damaged shall be replaced as directed by the Engineer.

1.05 TEMPORARY PAVEMENT MARKINGS.

A. DESCRIPTION:

1. This work shall consist of furnishing, installing, and removing temporary pavement markings as specified in the Contract Documents or as directed by the Engineer. These markings shall include lines, letters, numbers, arrows, and symbols.

B. MATERIALS.

1. Removable Preformed

2. Pavement Marking Material
3. Nontoxic Waterborne Pavement Markings

C. CONSTRUCTION.

1. The Contractor shall maintain and be responsible for any defects in materials and workmanship of the pavement markings for the duration of the contract. The Contractor shall replace them as necessary within this period as directed by the Engineer at no additional cost to the Owner.
2. The pavement markings shall be applied in conformance with the manufacturer's recommendations and the Contract Documents. Markings shall be applied in the same direction as the flow of traffic. The location of these markings shall be as specified in the Contract Documents or as directed by the Engineer.
3. Pavement markings may be applied to either new or existing paved surfaces. When applied to newly paved surfaces, the markings shall be placed before traffic is allowed on the pavement. Nontoxic waterborne pavement markings shall be used for all temporary pavement markings except for the final surface. The Contractor may use removable preformed pavement markings on intermediate pavement lifts at no additional cost to the Administration.
 - a. Surface Condition. Prior to application of pavement markings, the pavement surface shall be clean, dry and free of all contaminants, including curing compound, dirt, and loose particles. Residual pavement markings shall be removed. Loose or poorly constructed markings shall also be removed.
4. Pavement Marking Removal. All removable preformed pavement markings shall be completely removed prior to application of the permanent markings. On stage construction or final surfaces of portland cement concrete pavements, any objectionable adhesive residue shall be removed by water blasting or other methods as may be approved by the Engineer. Open flame is prohibited to remove adhesive residue. The Contractor shall remove all nonapplicable pavement markings so that there is no damage to the existing or final surface.

1.06 OTHER MATERIALS FOR MAINTENANCE OF TRAFFIC.

- A. DESCRIPTION. This work shall consist of furnishing and placing drums and maintaining in like new condition. The drums shall be located as specified in the Contract Documents or as directed by the Engineer.
- B. MATERIALS.
 1. Reflectorization Plastic Drums
 2. Reflectorization Cones
 3. Orange Mesh Fencing

C. Reflectorization Plastic Drums

1. Drums shall be manufactured of low density polyethylene (PE) to withstand impact without damage to themselves or vehicles. The drum shall have a height of 36 in. and a minimum diameter of 18 in. Drums may have one or more flat sides as long as the minimum 18 in. diameter is satisfied. The reflective stripes shall be horizontal, circumferential, orange and white, 6 in. wide, two each of white and orange alternating with the top stripe being orange.
2. Drums shall be adequately weighted with bags of sand or sand filled bases to keep them from moving. Sandbags, with no other attachments, shall rest on the base of the drum.
3. The Contractor will be permitted to neatly stencil their name or identification mark at the bottom of the nonreflective portion of the drum in maximum 2 in. high letters. No other markings or writings will be permitted on the vertical side of the drum.

D. Reflectorization Cones

1. Drums damaged by traffic shall be replaced within four hours after the Contractor is notified.
2. Cones shall have a minimum height of 28 in., with a minimum circular inside diameter of 10 in. at the base. Cones shall be reflectorized via reflectorized sheeting or collars during periods of darkness and be equipped with cone anchor collars as approved by the Engineer and as needed to maintain an upright position.
3. Cones shall be installed as specified in the Contract Documents or as directed by the Engineer.
4. Cones damaged by traffic shall be replaced within four hours after the Contractor is notified.

E. Orange Mesh Fencing

1. Temporary orange mesh construction fence shall consist of furnishing and installing new or like new temporary orange mesh construction fence. The fence shall be used where specified in the Contract Documents or where directed by the Engineer. This fence is not a safety barrier.
2. Fence posts shall be 4 ft high round posts having a 1.90 in. outside diameter, or a 5-1/2 ft high, 2 in. steel U channel.
3. Samples of the fence fabric, fence posts, movable precast concrete blocks, tie wire, tension wires and other miscellaneous hardware shall be submitted to the Engineer prior to installing any fencing.
4. Temporary orange construction fence shall be a minimum of 4 ft high with a maximum post spacing of 8 ft. When the fence is installed on a paved surface, a precast concrete block shall be used to support the round fence post. The concrete block shall have a round hole

through the center of the block in which the round post shall be inserted. When the fence is installed in unpaved areas, steel U channel fence posts shall be driven 1-1/2 ft into the ground.

1.07 FLAGGER.

- A. DESCRIPTION. This work shall consist of furnishing flaggers when specified in the Contract Documents or as directed by the Engineer. Flagging shall conform to MUTCD. All outfits and equipment (STOP/SLOW paddles, pilot cars or other vehicles, air horns or bull horns, field telephones, two-way radios, site illumination, etc.) will be subject to the approval of the Engineer. Flaggers shall have completed an Administration approved flagger training course within the last three years. The failure of any flagger to perform the required duties shall be grounds for the Engineer to require a replacement.

Two-way radios, field telephones, or pilot vehicles shall be used whenever flaggers are not within sight distance of each other, or when directed by the Engineer.

2.01 MEASUREMENT AND PAYMENT.

- A. Unless otherwise specified, Maintenance of Traffic will not be measured but will be paid for at the Contract Lump Sum Price. The payment will be full compensation for relocating, turning, completely covering and uncovering or removing and resetting, maintaining in like new condition and cleaning all existing and temporary traffic signs, and any other traffic control device. Also included is the inventory of all existing pavement markings and the treatment of any other traffic control device not included in these Specifications but are necessary for the fulfillment of the Contract requirements and implementation of the approved Traffic Control Plan, and for all material, labor, equipment, tools, and incidentals necessary to complete the work. Payment of the Contract lump sum price will be prorated and paid in equal amounts on each monthly estimate. The number of months used for prorating will be the number estimated to complete the work.
- a. When additional Contract pay items for Maintenance of Traffic are specified in the Contract Documents, measurement and payment will conform to the pertinent pay items included in the Contract Documents.
 - b. Cones, reflective collars, anchoring devices, STOP/SLOW paddles, sign flags, and warning lights will not be measured but the cost will be incidental to the Contract price for Maintenance of Traffic unless otherwise specified in the Contract Documents.
 - c. Temporary traffic control devices, which in the Engineer's opinion need replacement, shall be replaced immediately by the Contractor. The cost to replace traffic control devices, including all material, labor, equipment and tools, will not be measured but will be incidental to the Contract price for Maintenance of Traffic except when specifically set up in the Contract Documents as a separate Contract pay item.
 - d. Material, equipment, and labor necessary for the construction and removal of temporary or detour roads will be measured and paid for at the Contract unit price

for the pertinent items used.

END OF SECTION 02040

SECTION 02130
CONSTRUCTION STAKEOUT

1. General

1.1 Description

- A. This work shall consist of providing all labor, materials, tools and equipment necessary for placing, and maintaining construction layout stakes necessary for the proper prosecution of the work under the Contract, in conformance with the Drawings and Specifications and standard engineering and surveying practices, including all calculations required to accomplish the WORK.
- B. The WORK shall include the staking, referencing and all other actions as may be required to preserve and restore land monuments and property corners which are situated within the Project area, and to establish monuments as shown on the Drawings.
- C. The Contractor shall carefully preserve benchmarks, property line and corner survey markers, monuments, location reference points and stakes (collectively, "reference points"). The Contractor shall be responsible for any mistakes or expense that may be caused by the loss or disturbance of any reference points, including, without limitation, the cost to remove and reconstruct improvements constructed by the Contractor in the wrong location. If any such reference point is removed, displaced, damaged, or destroyed, it shall be accurately replaced at the Contractor's expense by a person appropriately licensed by the State of Maryland for Land Surveying before completion of the Work, all subject to the approval and acceptance of the Engineer.

2. Materials

Not applicable

3. Execution

3.1 Construction

- A. All construction surveying involving shall be done by, or under the direction of, a Registered Land Surveyor licensed in the State of Maryland.
- B. The OWNER will supply information relative to the approximate locations of monuments and corners, but final responsibility for locations, referencing, and restoration shall rest with the CONTRACTOR.
- C. The Contractor shall exercise care in the preservation of stakes and bench marks set by themselves or others and shall reset them at his own expense when any are damaged or destroyed.

- D. In the event the CONTRACTOR does not replace the survey monuments and property corners disturbed by the CONTRACTOR's operations, the OWNER may, after first notifying the CONTRACTOR, replace the monuments in question. The cost of such replacements shall be deducted from payments to the CONTRACTOR.
- E. The CONTRACTOR shall provide the OWNER with a copy of all surveyors' notes, prior to the request for final payment, and include the information on the record drawings.
- F. The CONTRACTOR shall use competent, qualified personnel and suitable equipment for the layout work required and shall furnish all stakes, templates, straightedges and other devices necessary for establishing, checking and maintaining the required points, lines and grades.
- G. The CONTRACTOR shall perform all staking necessary to delineate clearing and/or grubbing limits; all cross sections necessary for determination of excavation and embankment quantities, including intermediate and/or remeasure cross sections as may be required; all slope staking; all staking of culverts and drainage structures, including the necessary checking to establish the proper location and grade to best fit the conditions on site; the setting of such finishing stakes as may be required; the staking of right-of-way; the staking, referencing and other actions as may be required to preserve or restore land monuments and property corners; and all other staking necessary to complete the project.
- H. Field notes shall be kept in standard bound notebooks in a clear, orderly and neat manner, consistent with standard engineering and surveying practices. The CONTRACTOR's field books shall be available for inspection by the ENGINEER at any time.
- I. All field survey notes, including those which become source documentations from which quantities for payment are computed, shall be recorded by a note keeper furnished by the CONTRACTOR. The note keeper shall be thoroughly familiar with generally accepted standards of good survey note keeping practice.
- J. The ENGINEER may randomly spot-check the CONTRACTOR's surveys, staking and computations at the ENGINEER's discretion. After the survey or staking has been completed, the CONTRACTOR shall provide the ENGINEER with a minimum of 72 hours notice prior to performing any WORK, and shall furnish the appropriate data as required, to allow for such random spot-checking; however, the OWNER assumes no responsibility for the accuracy of the WORK.
- K. Within ten days of Notice to Proceed, unless otherwise approved by the ENGINEER, the CONTRACTOR shall stake the location of the new water, sewer, and/or storm drain service connections to each home. The stake shall be a surveyor's lathe marked as to the type of service, and placed at the right-of-way line, at the location shown on the Drawings.

3.2 Layout

- A. The Contractor will furnish the following prior to commencement of work by the

Contractor.

1. Establish horizontal and vertical control. Surveyor shall perform field-run survey control to establish and /or check horizontal and vertical control in site datum for the purpose of construction stakeout.
2. Limits of disturbance, sediment and erosion control devices. Stakeout shall include the following: Limits of disturbance (LOD), sediment and erosion control devices with stakes set at 75' intervals and at angle breaks where needed along the layout.
3. Site Grading /Embankment Slope Grading. Stakeout shall include the following: stakes set at 50' stations along the bottoms and tops of slopes to the tie-out points. Cut sheets shall be provided to finished grade.
4. Center Line of Roads. Stakeout for the centerline of roadway shall include the following: Stakes set at the centerline of road at 50 foot stations, PCs, PTs, High and Low Points in the roads. Cut Sheets shall be provided based on finished grade.
5. Sanitary Sewer. Stakeout shall include the following: Set 2 offsets to the center of each manhole along with offsets set at 50 foot intervals along sewer lines. A Cut Sheet shall be provided to the invert of the pipe.
6. Waterline. Stakeout shall include the following: Set offsets to the center of waterline at 50 foot intervals on tangents and 25 foot intervals on curves. 2 offsets will be set at all water house connections, fire hydrants and horizontal bends. A Cut Sheet shall be provided to the invert of the pipe.
7. Storm Drain. Stakeout shall include the following: Set 2 offsets at each front corner of storm drain inlet at face of curb, 2 offsets to center of manholes and inlets. Stake an offset at the ends of pipe and at 50 intervals along the pipe. A Cut Sheet shall be provided to the top of structure at face of curb, finished grade or invert of pipe.
8. Curb & Gutter / Edge Paving. Stakeout shall include the following: 5 foot offsets to the face of curb or edge of paving set every 50 feet along tangents, every 25 feet along curves, and at all PC's, PT's, high/low points, and grade breaks. A 5 foot offset shall be set at the center of each handicap ramp. A Cut Sheet shall be provided to top of curb or finished grade at edge of pavement.

4. Method of Measurement and Payment

- A. This work will not be measured but will be paid for on a lump sum basis. The work will be paid for at the Contract lump sum price bid, which price shall be full compensation for all labor, materials, equipment, and incidentals necessary to complete the work.

END OF SECTION

SECTION 01 57 23
EROSION AND SEDIMENT CONTROL MEASURES

PART 1 - GENERAL

1.01 Description:

- A. This work shall consist of the installation of both structural and vegetative-erosion and sediment control practices as indicated on the Plans. The practices shall include, but are not limited to, the use of berms, dikes, swales, silt fences, inlet protection, sediment traps and sediment basins, crushed stone, filters or other approved methods indicated on the Plans.
- B. Erosion and sediment control measures shall be implemented any time that land is disturbed by construction activities including clearing, grading, excavating, stripping, filling or related work unless exempt by State law or local ordinance.
- C. Application of erosion and sediment control measures shall be coordinated with the construction of permanent drainage facilities such as storm sewers, culverts, paved ditches, etc. to insure effective control of erosion from the construction site.
- D. The Contractor shall contact the State sediment and Erosion Control Inspector at 301-600-3507 at least five days prior to the start of construction. An on site pre-construction meeting will be required.

1.02 Reference Documents:

- A. The contractor shall obtain and maintain on the site at all times a copy of the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control, available from MDE.
- B. The specific construction requirements in this document for the practices being employed are to be strictly adhered to throughout construction.

1.03 Permits:

- A. The contractor shall be responsible for obtaining all required permits such as sediment control permits, grading permits and/or state environmental permits as required before beginning any work which will result in the disturbance of land.
- B. The Contractor shall not utilize any off site areas for obtaining borrow material or for depositing spoil material unless those areas have an approved erosion and sediment control plan and all current permits as may be required by state law or local ordinance.

1.04 Training, Certifications, and Accounts.

- A. The Erosion and Sediment Control Manager (ESCM) and the Superintendent shall have valid certification from successful completion of the MDE "Responsible Personnel Certification Training for Erosion and Sediment Control" and the Administration's "Erosion and Sediment Control Certification Training for Contractors and Inspectors." The certifications shall be current for the duration of the Contract.

1.05 Erosion and Sediment Control Manager (ESCM)
Erosion and Sediment Control Measures

A. The ESCM is responsible for the implementation of the ESC measures and methods of operations, including implementation of corrective actions. The ESCM shall have the authority to implement ESC, schedules, and methods of operation for both on-site and off-site activities. When the Contract Documents indicate a limit of disturbance (LOD) is greater than or equal to 1 acre, the ESCM is also a member of the stormwater team. Duties include the following.

1. Attend the pre-construction meeting.
2. Attend the initial ESC field meeting and periodic field meetings to evaluate the effectiveness of ESC measures installed and to plan for the implementation of additional measures for subsequent areas of soil disturbance, which includes developing a list of activities and schedules to ensure compliance with the Contract Documents and conformance requirements as specified. Must be on site at a frequency and duration to ensure compliance.
3. Perform daily inspections of the installed ESC measures and ensure they are always in place and functioning.
4. Maintain a daily log of the ESC inspections that includes documenting steps taken for corrective actions and submit a daily written report to the Engineer at the end of each calendar day.
5. Conduct inspections after a storm event of 0.25 inches or greater, within 24 hours, either the same day the rainfall event concludes or the next day, concurrently with the Engineer, submitting a written report documenting observations and corrective actions, to the Engineer.
6. Authorize mobilization of crews 24 hours a day each calendar day to make immediate repairs and implement corrective actions to ESC measures. Coordinate with the Engineer and the REC to ensure that all deficiencies are immediately corrected, and that Contract remains in compliance.
7. When requested, accompany the Engineer and Regional Environmental Coordinator (REC) during compliance inspections and inspections made by regulatory agency personnel.
8. Ensure prohibited discharges are not released and measures are in place to prevent prohibited discharges from occurring.
9. Ensure dewatering activity and turbidity monitoring is performed, recorded, documented, and ensure documentation includes corrective actions taken.

1.06 Conformance Requirements.

B. In addition to the Contract Documents, conform with the latest applicable regulations, regulatory approvals, regulatory permits, and other documents, including but not limited to, the following.

1. Annotated Code of Maryland and the Code of Maryland Regulations (COMAR) 26.17.01 (Erosion and Sediment Control), 26.17.02 (Stormwater Management), 26.17.04 (Construction on Nontidal Waters and Floodplains), and 26.17.06 (Water Appropriation or Use).
2. Title 9 of the Environment Article, Annotated Code of Maryland and COMAR 26.08.04.

3. The provisions of the Federal Clean Water Act (CWA), 33 U.S.C. §1251 et seq., as amended by the Water Quality Act of 1987, and its implementing regulations at 40 Code of Federal Regulations (CFR) Parts 122, 123, 124, 125 and 127.
4. General Permit for Stormwater Discharge Associated with Construction Activity General National Pollutant Discharge Elimination System (NPDES) Permit Number MDRC0000 State Discharge Permit Number 20CP0000.
5. ESC Handbook, which refers to the handbook codified in COMAR 26.17.01 titled "2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control", or its successor.
6. MDE Waterway Construction Guidelines.

PART 2 - MATERIALS

2.01 Materials:

- A. Seed, sod, mulches, fertilizer, topsoil and other materials for vegetative practices shall be as specified in Section 32 05 34 unless otherwise specified on the approved Plans.
- B. Aggregate and stone, filter cloth, gabion baskets and concrete materials for slope and channel paving shall meet the requirements specified on the approved Plans and in the 2011 Maryland Standards and Specifications For Soil Erosion and Sediment Control
- C. Rigid and flexible slope drains shall be as specified on the approved Plans or as directed by the Engineer.
- D. Materials for pipe spillways including barrel, riser, anti-seep collars, trash racks and related items shall be as specified on the approved Plans.

PART 3 - EXECUTION

3.01 Construction:

- A. The Contractor shall adhere strictly to the "sequence of construction" as indicated in the Contract Documents. If such a "sequence of construction" is not included on the approved Plans, the Contractor shall submit his schedules of erosion and sediment control work to the Architect for approval. No work shall begin until erosion control schedules are approved.
- B. Phasing of erosion and sediment control measures with the construction project, unless approved otherwise, shall be as follows:
- C. Clear only those areas as required to construct the erosion and sediment control practices indicated on the Plans as perimeter controls and install the perimeter controls as detailed before continuing construction. Perimeter controls shall include earth berms, embankments, swales, silt fence, stone outlet structures, pipe outlet structures and sediment basins.
- D. Proceed with clearing, stripping, grading and related construction activity to the extent that erosion from exposed surfaces can be managed effectively by the controls in place. The contractor shall

endeavor to minimize the extent of exposed earth by avoiding mass grading as practical, and shall follow with stabilization immediately as finished grading is accomplished. No disturbed ' earth shall be allowed to remain exposed for longer than 14 days without receiving temporary stabilization with seed and mulch, or mulch anchored by a mulching tool outside of the growing season.

- E. As construction of drainage structures is completed, apply the erosion controls where detailed on the Plans for pipe entrances, inlets, etc. and apply permanent structural practices as may be indicated for grade stabilization, slope protection, open channels and swales.

3.02 Maintenance, Removal and Restabilization:

- A. Contractor shall inspect all erosion control measures within 24 hours of the end of each rainfall event that exceeds 0.25", or daily during periods of prolonged rainfall, or weekly during periods without rainfall. Any structures found to need maintenance or repair shall be serviced immediately to insure continuous functioning. Special attention should be given to cleanout of sediment trapping devices such as silt traps and sediment basins so that minimum design storage volumes are never reduced by excess sediment.
- B. After contributing areas become stabilized with vegetation and/or hard surfacing, the Contractor may remove the specific erosion and sediment controls protecting those areas after obtaining approval from the Soil & Erosion Control Inspector.
- C. Re-stabilization of surfaces disturbed by the removal of erosion and sediment controls shall commence immediately following removal. Re-stabilization efforts shall include restoration of surfaces to required grades, topsoiling, seeding, sodding, mulching or other treatment as specified on the Plans.

MEASUREMENT AND PAYMENT

A. Payment:

1. ESC measures will be paid for at the Contract Unit price for each item as indicated in the Bid Schedule of the Bid Form.
2. The payment will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work.
3. Maintenance, repairs, rehabilitation, removal, removal and resetting, relocation, and corrective actions of and to ESC measures will not be measured, but the cost will be incidental to the Contract price for the pertinent item.
4. The cost of providing an Erosion and Sediment Control Manager to provide inspections and record keeping in accordance with the National Pollutant Discharge Elimination System (NPDES) permit coverage for Stormwater Associated with Construction Activity will not be measured but the cost will be incidental to the pertinent items.
5. Claims against the Owner for delays directly or indirectly resulting from non-compliance, ESC field modifications, MDE enforcement actions, and shutdowns that are a result of negligence, changes in regulations, or willful misdirection will not be considered.

SECTION 02 41 00 - REMOVAL OF EXISTING PAVEMENT,
SIDEWALK, PAVED DITCHES, CURB, OR COMBINATION CURB AND GUTTER

1.01 DESCRIPTION

1. Remove to full depth and dispose of existing pavement, sidewalk, paved ditches, curb, or combination curb and gutter.

2.01 MATERIALS

Not applicable.

3.01 CONSTRUCTION

1. Full Depth Saw Cut. Saw cut to full depth the existing pavement, sidewalk, paved ditches, curb, or combination curb and gutter along the lines specified or as directed.
2. Use of Removed Pavement, Sidewalk, Paved Ditches, Curb, or Combination Curb and Gutter. When approved, removed materials may be broken and used in the work. Refer to 204.02.01.
3. Protection of Retained Pavement, Sidewalk, Paved Ditches, Curb, or Combination Curb and Gutter. Protect all sections designated to remain from being damaged. Repair or replace damaged areas.

4.01 MEASUREMENT AND PAYMENT

1. The payment will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work.
2. Removal of existing pavement, sidewalk, paved ditches, curb or combination curb and gutter, and full depth saw cuts within the limits of any class of excavation will not be measured but the cost will be incidental to the Contract unit price for the Class of Excavation in which it occurs.

Payment for this work will be made using the applicable items included in the Contract Documents.

SECTION 22 11 13
WATER SYSTEM

1.0 GENERAL

A. Description.

1. The Frederick County Special Provisions for Sanitary Sewer and Water Mains, as found in the Frederick County General Conditions and Standard Specifications for Water Mains, Sanitary Sewer and Related Structures, (latest revision) are hereby incorporated by reference. The Contractor shall be familiar with the Special Provisions and the modifications to the specifications listed.
2. This Section includes construction, testing and disinfecting of permanent water supply, fire protection and distribution piping to the limits indicated in accordance with the Contract Documents.

B. DEMOLITION OF WATERMAIN SYSTEM

This item shall include all equipment, materials and labor necessary to provide for the removal of the existing gravity system installed by others.

1. This water system was previously constructed by others and shall be removed in its entirety.
2. Materials, equipment and debris resulting from demolition operations, not retained by the Town shall become property of the Contractor. Disposal shall be at an approved site selected by the Contractor. Disposal shall be in accordance with all applicable Town, County, State and Federal laws.

C. Quality Assurance.

1. Chlorination and Field Tests
 - a. The Contractor shall chlorinate and field test all new main installation before connecting them to the existing system. The Engineer shall determine the amount of main to be chlorinated and tested at any one time and reserves the right to separate the installation into several test sections, in the event of long extensions, or installation of pipe designed for different head conditions, or for other reasons.
 - b. The Contractor shall cap and buttress the new main between the sections of the existing pipe.
 - c. The Contractor shall furnish at his own cost and expense all necessary bulkheads, caps, plugs or other fittings required to stop off, temporarily, the main for test purposes.
 - d. After the main is satisfactorily tested according to the requirements of the specifications, the Contractor shall remove the buttresses and caps and connect the new main with the existing main by means restrained mechanical joint solid sleeve and 3 3/4" wide ductile iron spacer or other Engineer approved method.

- e. Use continuous feed method or slug method for chlorination as outlined in AWWA for disinfecting water mains. All chlorine shall be introduced in solution and fed at a constant rate using a force pump. At the end of the 24 hour period, the treated water shall contain no less than 10 mg/L (10 parts per million) chlorine throughout the main being tested.”

- f. Test restrictions.

Test pressure shall not be less than 150 psi pressure at the highest point along the test section or more than 200 PSI at the low point.

Test pressure shall not exceed pipe or thrust-restrain design pressures.

The hydrostatic test shall be of at least 2-hour duration.

Test pressure shall not vary by more than 5 psi (35 KPa or 0.35 bar) for the duration of the test.

Valves shall not be operated in either direction at differential pressure exceeding the rated valve working pressure. (Use of a test pressure greater than the rated valve pressure can result in trapped test pressure between the gates of a double-disc gate valve. For tests at these pressures, the test setup should include provision, independent of the valve, to reduce the line pressure to the rated valve pressure on completion of the test. The valve can then be opened enough to equalize the trapped pressure with the line pressure, or fully opened if desired.)

Test pressure shall not exceed the rated pressure of the valves when the pressure boundary of the test section includes closed, resilient-seated gate valves or butterfly valves.

- g. Pressurization.

After the pipe has been laid, all newly laid pipe or any test section thereof shall be subjected to a hydrostatic pressure of at 150 psi at the point of testing. Each test section of pipe shall be slowly filled with water, and the specified test pressure, based on the elevation of the lowest point of the line or section under test and corrected to the elevation of the test gauge, shall be applied by means of a pump connected to the pipe in a manner satisfactory to the owner. Valves shall not be operated in either the opening or closing direction at differential pressures above the rated pressure. It is good practice to allow the system to stabilize at the test pressure before conducting the leakage test. [Formula for calculating head pressure is 2.3' head = 1 psi/1' head = 0.43 psi]

- h. Air removal.

Before applying the specified test pressure, air shall be expelled completely from the pipe, valves and hydrants. If permanent air vents are not located at all high points, the contractor shall install corporation cocks at such points so the air can be expelled as the line is filled with water. After all the air has been expelled, the corporation cocks shall be closed and the test pressure applied. At the conclusion of the pressure test, the corporation cocks shall be removed and plugged with approved brass plugs.

- i. Examination.

Any exposed pipe, fittings, valves, hydrants and joints shall be examined carefully

during the test. Any damaged or defective pipe, fittings, repaired or replaced with sound material, and the test shall be repeated until it is satisfactory to the Construction Manager.

j. Leakage defined.

Leakage shall be defined as the quantity of water that must be supplied into the newly laid pipe or any valved section thereof to maintain pressure within 5 psi (35 MPa . or 0.35 bar) of the specified test pressure after the pipe has been filled with water and the air has been expelled. Leakage shall not be measured by a drop in pressure in a test section over a period of time.

k. Allowable leakage.

No Pipe installation will be accepted if the leakage is greater than that determined by the following formula:

$$L = \frac{S \times D \times \sqrt{P}}{133,000}$$

Where:

L = allowable leakage, in gallons per hour S = length of pipe tested, in feet

D = nominal diameter of the pipe, in inches

P =average test pressure during the leakage test, in pounds per square inch (gauge)

1. No testing is allowed against closed metal-seated valves or butterfly valves. Testing may be allowed against new resilient seated valves if written approval is received from the Engineer.
2. When hydrants are in the test section, the test shall be made against closed hydrant valves.

1. The newly installed main shall be disinfected in accordance with the AWWA C651. Following chlorination and testing, the main should be flushed as soon as possible (within 24 hours), since prolonged exposure to high concentration of chlorine might damage the asphaltic seal coating.
- m. The procedure for testing should not be applied to air-pressure testing because of the safety hazards involved.

2. Quality assurance for precast concrete utility structures is specified in Section 3360.

D. Submittals.

1. Submit certified test reports and certificates of compliance before delivery of materials as specified in Section 1100 for all pipe furnished by the Contractor under this Section. Certifications shall include Contract Number, job location, Contractor's name, types, classes and strengths of pipe and pipe manufacturer's name.
2. Submit certificates of compliance for all material furnished by the Contractor under this Section, in accordance with Section 1100.

3. A packing list shall accompany every shipment and shall contain the following information: contract number, truck number, kind and class of pipe, fittings and valves and appurtenances, length of pipe and other pertinent information.
4. Submit shop drawings where indicated in accordance with Section 1200 and Section 3360 where applicable.
5. Submit manufacturer's certified drawings of the valves including valve operators, gear ratios, and design flows and pressure differential, performance charts and parts list. Furnish manufacturer's certified test reports for all tests specified in the referenced standards and all tests performed on valve operators. Submit a manufacturer's affidavit stating that valves furnished comply with all applicable provisions of the referenced standards and modifications thereto described herein.
6. Fittings shall be marked with weight, manufacturer's mark, year, month and date cast, and number of lot. Couplings shall be marked in accordance with MSS SP—25 Standard Marking System for Valves, Fittings, Flanges and Unions.

E. Inspection.

1. All items furnished by the Contractor under this section shall be inspected by the Town of Emmitsburg personnel before installation. Notify the Engineer three working days before proposed inspection, as specified in Section 1100.

2.0. MATERIALS

A. General

1. The Contractor shall furnish all pipe, fittings, fire hydrants, valves, valve boxes, meter yokes and vaults, and manhole or vault frames, covers and steps and all glands, gaskets, nuts and bolts for mechanical joint pipe and all other necessary materials for proper completion of the work.

B. Materials Requirements

1. Pipe and fittings
 - A. General— all pipe of the same material and size shall be furnished by the same manufacturer. Each pipe length and fitting shall be clearly marked with the manufacturer's name and trademark.
 - B. Ductile iron pipe shall meet the requirements of AWWA C151 with mechanical joint or push on joint. Pipe shall be bituminous coated outside and cement lined with double thickness inside. Cement mortar lining for pipe and fittings, shall be in accordance with ANSI/AWWA C104/A21.4. Asphaltic outside coating shall be in accordance with ANSI/AWWA C151/A21.51 for pipe and ANSI/AWWA C110/A21.10 or ANSI/AWWA C153/ A21.53 for fittings. Cure cement lining with a bituminous seal coat.

1. 3” - 6” size pipe shall be class 50
 2. 8” and larger size pipe shall be class 52
 3. Restrained joint pipe and fittings shall be U.S. Pipe’s TR FLEX Pipe and Fittings or approved equal. Restraint of field cut pipe shall be provided with U.S. Pipe’s TR FLEX GRIPPER® Ring, TR FLEX Pipe field weldments or approved equal.
 4. All non-TR-Flex® piping connections shall utilize Megalug® Series 1100 (or approved equal) joint restraint hardware.
 5. All restrained push-on joints not specified as TR-Flex shall be FIELD LOK 350 Gaskets.
 6. Fittings for use with ductile iron pipe shall be Class 250 gray cast iron conforming to AWWA C110 and C151, or Class 350 ductile iron. Ductile iron shall conform to ASTM A536, minimum grade 70—50—05. Nominal thicknesses of DI fittings shall be equal to, or exceed, Class 53 ductile iron pipe thicknesses. Radii of curvatures shall conform to AWWA C110. Provide accessories as required to connect with plain end of slip joint pipe or cut pipe. Gaskets shall be plain rubber and tee head bolts and hexagon nuts shall be low alloy steel, USALLOY, CORTENLOY or equal.
 7. Fittings shall be of uniform quality, true to pattern, strong, tough, of even grain, sound, smooth, without cold shuts, swells, scabs, blisters and sand holes, cracks or other defects. Plugs, filled holes and welds will not be allowed. Fittings shall be clean and entirely free of grease and oil, substantially free of blacking, dirt, sand, rust, slag and fluxing. Remove rough spots in sockets or on plain ends or walls before lining and coating.
 8. Fittings shall be bituminous coated outside and cement lined with double thickness inside in accordance with AWWA C 104. Flanges shall be cast integrally with body and shall have the same thickness over their entire circumference. Faces shall be perpendicular to axis of pipe.
 9. Bolt holes in fitting flanges shall straddle the vertical centerline when the fitting is positioned to change the fluid flow in a horizontal direction. Drill or core bolt holes completely through flanges so as to be free of sand and projections. Gage to assure dimensional bolt circle control, location and size of holes and concentricity with the socket or gland lip.
- c. Copper pipe shall be seamless, type K and meet requirements of ASTM B88. Fittings shall be copper meeting requirements of ASTM B62, free of injurious blowholes, porosity, shrinkage, cracks or other injurious defects, smooth and well cleaned, and shall meet requirements of AWWA C800 and the following:
- (1) Corporation Stops and Couplings: Copper tube outlets of all corporation stops shall be of the compression type and shall be fitted with a coupling nut threaded according to

AWWA C—800, which shall have a machined bearing in the skirt part equal to or greater in length than the outside diameter of the corresponding size type K copper pipe, in inches. Protect inlet threads with a plastic coating in shipment.

The corporation stops and couplings size 3/4" thru 1"; Ford No. F1000. Test certificates shall be furnished by the Contractor, certifying that all corporation stops have been subjected to a production line test by the manufacturer of 85 PSIG air pressure while submerged in water, in both open and closed position of the key, and shall show no leakage. Period of observation shall be 10 second minimum. Stops shall be subjected to a 300 PSIG hydrostatic test and shall not leak top or bottom and shall not show signs of structural failure.

- (2) Curb Stops: The curb stops shall be of the type having an inverted key, with copper couplings for the inlet and outlet. The curb stops and couplings shall be suitable for use with Type "K" Copper Tubing, Soft Temper.

Inlets and outlets of all curb stops shall be of the compression fitting type and shall be fitted with a coupling nut threaded according to AWWA Specification C—800, which shall have a machined bearing in the skirt part equal to or greater in length than the outside diameter of the corresponding size type K copper pipe, in inches.

The curb stops shall be suitable for installation in conjunction with the Buffalo Type, two—piece screw type curb boxes.

The curb stops shall be:

Pack Joint Type: Ford Series No. B44 with compression fittings

Test certificates shall be furnished by the contractor, certifying that all curb stops and couplings have been subjected to a production line test by the manufacturer of 85 PSIG air pressure while submerged in water, in both open and closed position of the key, and shall show no leakage. Period of observation shall be 10 second minimum. Stops shall be subjected to a 300 PSIG hydrostatic test and shall not leak top or bottom and shall not show signs of structural failure.

- (3) Couplings:

The copper to copper couplings shall be those known as the three part type consisting of a tubing connection coupling nut. The copper tube end of the couplings shall be the flare or pack joint type for connecting to type K copper service pipe. The opposite end, and all coupling nuts shall be threaded in accordance with AWWA C—800.

The iron pipe end of all copper to iron pipe fittings shall be threaded in accordance with the National Bureau of Standards Handbook H—28 Standard for American National Pipe Threads.

The copper line couplings shall be one of the following manufacturer's or equal.

CATALOG NUMBERS

<u>DESCRIPTION</u>	<u>MUELLER</u>	<u>FORD</u>
3 Prt. Cu. to Cu.	H—15400	C22 Series
Cu. to M. IPT	H—15425	C28 Series
Cu. to Fem.IPT	H—15450	C22 Series
Straight Pack Joint		C44 Series

2. Valves

- a. Gate valves 4-inch through 16-inch shall be iron body, bronze mechanical joint, resilient seat with non-rising stem and a 2-inch open left square operating nut conforming to AWWA C509 or C515. "Gate valves larger than 16-inch shall be built and tested in accordance with AWWA C515 and shall be iron body, bronze mounted, resilient seat, valves with non-rising stems and a standard 2-inch open left operating nut and of ample strength to withstand and operate under the following working pressures. Valves 12 Inches in diameter and smaller shall meet a working pressure of 250 psi. Valves larger than 12-inch diameter shall meet 200 psi plus the water hammer. Use of gate valves larger than 16-inch shall be approved by the Engineer.
Gearing and bypass are not required on smaller than 30-inch diameter valves. Gate valves 30-inch diameter and larger shall be equipped with bypass and bevel gearing enclosed in a grease filled gear case, tracks and scrapers for horizontal or spur gearing for vertical installation. Unless otherwise specified, or indicated, all valves shall be mechanical joint. Flanged ends shall be specified if the valves are to be placed in valve vaults. ' Furnish valves complete with required joint materials. Extension stems shall be provided for valves where operating nut is more than 4 feet below finished grade.
- a. Butterfly valves, if specified on contract documents, 42-inch and smaller shall be Class 150B and shall conform to the requirements of AWWA C504. Ground level indicators with extension stems are required on all butterfly valves.
- b. All internal ferrous components and surfaces of the valves, with the exception of stainless steel and finished or bearing surfaces, shall be shop painted with two coats (10 mils min. dry film thickness) of the manufacturer's premium epoxy for corrosion resistance. Damaged surfaces shall be repaired in accordance with the manufacturer's recommendations.
- c. Air release valves shall be two inch, universal, with surface diameter 1/4 inch, range of working pressure from 0 to 165 pounds, stainless steel float, resilient seat and screwed connection; Crispin Model U-20, Apco combination air release valve model 145-C, or equal.
- d. Pressure relief valves 1 inch and under shall have bronze bodies and above 1 inch shall have cast iron bodies, bronze fitted with grey iron diaphragm base and straight chamber and phosphorus bronze diaphragm. The ratio of the diaphragm area to the seat area shall be adequate to overcome sticking. The seat disc shall be of non-corrodible, non-sticking material capable of withstanding extreme temperatures. Valves shall permit dismantling for repairs and cleaning without being removed from

the line. Valves shall conform to the ASME Boiler Construction Code as approved by both the Underwriters Lab., and the National Board of Boiler Pressure Vessel Inspectors. All valves shall be designed for a minimum working pressure at least equal to the working pressure of the corresponding pipeline and shall have adjustment over a range of at least 20 percent above or below the required setting pressure of the installation.

1. Pressure relief valves (non-potable water service) shall be diaphragm activated, single seat, pilot operated and shall maintain a constant upstream pressure by relieving excess pressure. The valve shall be normally closed and shall open to maintain the required back pressure when the valve inlet pressure reaches the pilot control set point. The initial pilot control setting shall be 78 psi. The stem shall be stainless steel and shall be guided through the center for 100% of the stem travel. The main valve throttling plug shall be provided with V-port sections to insure precise control at low flow rates. All internal metal parts shall be bronze or stainless steel. The control pilot shall be direct acting, spring loaded, and adjustable with bronze body and stainless steel trim. The diaphragm and seat disc shall be BUNA-N. The valve shall be of the angle or globe pattern as shown on the Drawings and shall be fully repairable in the line. The pressure relief valve shall be the Model 428CP as manufactured by Bailey, Fresno, California, or equal.
2. Air and vacuum/pressure air release valve assemblies shall be installed at all the locations specified herein or indicated on the Drawings and shall be installed complete with all appurtenant piping and valves as required for a complete and operable installation. The valves shall be constructed of cast iron with stainless steel float, and all working parts shall be bronze, brass, stainless steel, or other corrosion resistant material. The valves shall be designed for a minimum working pressure of 150 psi and a test pressure of 300 psi. The valves shall include isolation valve and backflushing attachments which shall consist of blow-off valves, quick disconnect couplings, and a minimum of 5 feet of rubber hose suitable for backflushing without dismantling the valve. All air and exhaust from the valve shall be piped to a suitable disposal point. All valves 1-inch diameter and larger shall have a 1/4-inch min. diameter drain plug.
3. The pressure air release valve (potable water only) shall be constructed of cast iron with stainless steel trim and stainless-steel float, and all working parts shall be bronze, brass, stainless steel, or other corrosion resistant material. The valves shall be designed for a minimum working pressure of 150 psi and a test pressure of 300 psi. All valves shall be provided with "soft seating" material to provide drip-tight closure at 1 to 65 psig. All valves shall be provided with a vacuum check.
- e. All internal and external ferrous components and surfaces of the valves, with the exception of stainless steel and finished or bearing surfaces, shall be shop painted with two coats (10 mils min. dry film thickens) of the manufacturer's premium epoxy for corrosion resistance. Damaged surfaces shall be repaired in accordance with the manufacturer's recommendations.
- f. Globe valves shall be two inches, Class B meeting requirements of FS WW-51A, 150 lbs screwed. Globe valves (service/compressed air) shall be bronze body and bonnet with brass stem and stainless steel regrindable disc plug. Valves shall be Jenkins Valve Fig. 546-P, Crane Co., or equal with minimum 300 psi non-shock cold water

pressure rating and screwed ends.

- g. Backflow preventer shall be the size shown on the Drawings and shall be of the double check valve principle. Backflow preventer installation shall include isolation valves and four test cocks, furnished as an assembly. Valve body shall be galvanized cast iron with bronze working parts and springs, plastic coated carbon steel valve discs, neoprene coated cotton duck diaphragm. For backflow preventers less than 2-1/2", the installation assembly also shall include a strainer. Isolation valves for backflow preventers shall be ball valves, except for size 2-1/2" and larger which shall be resilient seat gate valves. Test cocks shall be located as recommended by the manufacturer to facilitate functional testing of the assembly.

Valve shall be designed to suction a maximum working pressure of 175 psi and a hydrostatic test pressure of 350 psi. Valve shall be Hershey Products, Inc., Model Bosco, Cla-Val Co., or equal.

- h. Valve boxes shall be of cast iron or combination of cast iron and PVC, complete with cover marked WATER. Valve boxes shall be extension type, with screw adjustment, and with flared base. The vacuum valves shall be provided with "soft seating" material to provide drip tight closure at 1 to 65 psig. The boxes shall be of such length to permit adjustment in both directions, to the depth of cover required over the pipe at the valve location. Boxes shall not be set so as to transmit surface loads to the valve. (See Standard Detail)
- i. All valve boxes shall be placed so as not to transmit shock or stress to the valve and shall be centered and plumb over the operating nut of the valve. The ground in the trench upon which the valve boxes rest shall be thoroughly compacted to prevent settlement. The boxes shall be fitted together securely and set so that the cover is recessed 1/4-1/2" below the final grade of the adjacent material per detail 114.1.
- j. All valves will be furnished and installed with stainless steel hardware.

- 3. **Fire hydrants shall be M&H Model 929. Each hydrant shall have one 5 inch diameter Storz Connection and two 2 1/2 inch hose nozzles, nozzle gaskets, 5-1/4 main inch valve, 1-1/2 inch pentagonal operating nut, open left. Both hose nozzles shall have National Standard Thread. Hydrants shall be designed for 4 -1/2 foot bury and six (6) inch mechanical joint inlet. Hydrants shall be marked with the name of the manufacturer, size of valve opening, and the year of manufacture, all in accordance with AWWA C-502.**

4 Indicate depth of bury by the following methods:

- 1) Raised figures on the barrel to show depth in feet. the figure shall be on the barrel, just below the swivel flange so that it is visible when installed. The figure shall be raised at least 1/8 inch above the barrel and surface and the height of the figure shall be at least one inch and shall be integrally cast with the barrel.

- 5 The inlet connection shall be a 6-inch, Class 250, mechanical joint bell and shall meet the general requirements for Standard Mechanical Joint Cast Iron Pipe and Fittings, furnished with necessary accessories for each such mechanical joint. The bolts shall

be made of low alloy steel such as Corten or Usalloy. The gaskets shall be made of rubber. Glands shall be made of high strength cast iron consistent in design and strength with the elbows with which they are to be used. Elbow or inlet connection shall be shipped assembled with hydrant.

- c. The outside of the hydrant above the finished ground line to a height just above the hydrant nozzles (or to the hydrant bonnet if so construed) shall be thoroughly cleaned, primed and then painted with two coats of Rhinamel Gray No. 202-31-00 paint as manufactured by the Grow Chemical Coating Corp., Tropical Plant Div., or equal. Top section of hydrant above the nozzles (on the hydrant bonnet, if so construed) shall be likewise cleaned and then painted with two coats of safety yellow as manufactured by the previously mentioned vendor, or Derusto #AO-40 or equal. Proposed paint substitution shall be presented to the Engineering Department with complete details, painting design, paint color chips and at least one pint of the proposed paint.

Paint the inside and the outside of the barrel below the ground line and the cast iron elbow inside and outside with bituminous coating; ANSI A-21.10 for potable water. The bituminous coating shall be of such composition as to make a smooth, tough and tenacious coating, neither so soft as to flow when exposed to the sun nor so brittle as to crack and scale off when exposed to temperature below freezing.

The Bituminous coating may be applied hot or cold either by brushing, dipping or by spraying. The coating materials may be subjected to chemical and physical testing to confirm its uniformity and quality.

At no time shall there be any evidence of general peeling or scaling of the coating. Any serious damage to the coating because of rough handling in shipment or hauling shall be repaired to its original condition by the manufacturer at no cost to the Owner.

- d. External operating and cap nuts shall be of pentagonal shape. The pentagon shall measure 1-1/2 inches from point to flat at the base of the nut and 1-7/16 inches at the top.
Hydrant shall be open by turning operating nut left (counter clockwise). Direction of opening shall be indicated on the top of operating nut by means of a raised arrow.

4. Stuffing box packing shall be the "O" ring seal.

- a. The following parts are to be bronze as specified in AWWA C-502.

Drain Valve, Valve Seats or Seat Rings Stuffing Box (Bronze-brushed Cast Iron) Stuffing Box Parts Hold Down Nut Threaded Stem Nut (sleeve).

- b. The barrel of the hydrant shall be in two cast iron or ductile iron break at or near the finished grade; the cast iron shall conform to American Standard Specifications ANSIA21.- 51. The nozzle section shall be attached to the lower barrel section by means of a tapered flange ring held in place by suitable "hydrant head" bolts and nuts. The flange and flange rings shall be so designed that the top or upper barrel section, including the bonnet and operating nut, may be revolved 360 degrees for facing without disturbing the bottom section of the barrel. (The use of a split bronze insert ring will not be permitted).

- c. Fire hydrant connection appurtenances shall be as follows:

- 1) Anchor coupling shall be from 12 to 13 inches long, weighing approximately 70 pounds, double thickness cement lined, and bituminous sealed as per AWWA C104, six inch cast iron mechanical joint, class 250, with an integrally cast standard mechanical joint gland on one end and one loose end rotatable ductile iron gland on the other end. The plain end shall be of sufficient dimension to form a mechanical joint with a six-inch mechanical joint bell. Straps, bolts, and nuts shall meet the requirements of ASTM A36 and A301, as specified in Section 5500.

3.0 EXECUTION

A. Laying Pipe

1. A minimum of 3'-5" cover shall be maintained over all mains.
2. Lay pipe to a true uniform line and grade as indicated on plans and as recorded on cut sheets.
3. Trench excavation and backfill and test pits shall be specified in Section 2200. Excavate test pits as specified in Section 2200 sufficiently in advance of trench construction so that reasonable changes in line and grade can be made where the location of existing structures varies from that shown. The Contractor shall adjust pipeline profile as required at connections to existing mains, subject to the approval of the Engineer. Completely excavate sufficient trench to ensure that no unforeseen obstructions exist before commencing pipe installation. Work occasioned by failure to take such precautions shall be performed at no cost to the Town.
4. Only proper and suitable tools and appliances for the safe and convenient handling and laying of pipes and fittings shall be used. Pipe, fittings and valves shall be carefully handled and lowered into the trench. Under no circumstances shall any pipe or fitting be dumped or rolled into the trench or be allowed to drop against the pipe or fitting already in the trench. Great care shall be taken to prevent the pipe lining and coating from being damaged, and any lining of coating damaged in any way shall be repaired by the Contractor to the satisfaction of the Engineer.

6. Installation

- a. Align pipe so that no shoulder or unevenness results on the inside of the mains. Cutting where required to fit into the line or to bring to the required location, shall be done in a satisfactory manner with an approved cutting tool or tools which will leave a smooth edge and at right angles to the axis of the pipe and not otherwise damage the pipe or lining. Such cuts shall be made at no cost to the Owner.
- b. Joint deflection of mechanical joint and Tyton joint pipe shall be as indicated on Standard Details and the Plans, unless otherwise approved by the Engineer.
- c. Special care shall be taken to ensure that the pipes are well bedded on a solid foundation in accordance with Standard Details and Section 2200. Any defects

due to settlement shall be made good by the Contractor at no expense to the Owner. Bell holes shall be dug sufficiently large to ensure the making of proper joints.

- d. Springing of pipe to replace any section will not be allowed, except by permission of the Engineer.
- e. Pipe fittings and valves shall be secured in place by concrete foundation or thrust blocks or by strapping as shown on the plans and in accordance with the Standard Details.

B. Joints

1. Mechanical Joints

- a. Mechanical joints consist of rubber gaskets, cast iron gland rings, bolts, and hexagonal nuts. Prior to assembling joint, both pipe sections to be in contact with the gasket shall be cleared with a wire brush so as to obtain a clean, smooth surface free of rust and foreign materials.
- b. Assemble joints in accordance with AWWA C111 and C600 and as specified herein. Clean with soapy water and lubricate contact surfaces with vegetable oil soap. Slip the gasket over the spigot end into the bell. Center the spigot end in the bell. Complete the joint by alternate tightening of proper number, size and length bolts 180 degrees apart with a torque wrench set at the range listed in the chart below, so that the gland and face of the flange present parallel faces during the procedure. The first bolt to be tightened shall be at the bottom of joint. Second shall be at the top of the joint, etc.

TORQUE RANGE

4" to 6"	50	to	60	foot pounds
8"	60	to	70	foot pounds
12"	70	to	80	foot pounds
Larger than 12"	75	to	90	foot pounds

- c. Where satisfactory sealing of the joint is not attained at the maximum permissible torque, disassemble, reclean, and reassemble the joint with a new gasket.

2. Push—on Joints

- a. Push—on joints consist of a circular rubber gasket which fits into a specially designed bell or socket end of the pipe and over the spigot end of the pipe using the manufacturer's recommended lubricant. File or grind the spigot on field cut pipe lengths to resemble the pipe as manufactured so that the spigot end will slip into the socket intact without hindrance or gasket damage. Place an identifying mark on pipe that is not furnished with a depth mark on the spigot to show the depth of the socket.

Push-on joints for such pipe shall be in accordance with ANSI/AWWA C111/A21.11 "Rubber-Gasket Joints for Ductile-Iron Pipe and Fittings." Pipe thickness shall be designed in accordance with ANSI/AWWA C150/A21.50 "Thickness Design of Ductile-Iron Pressure Pipe," and shall be based on laying conditions and internal pressures as stated in the project plans and specifications.

- b. Assemble joints in accordance with AWWA C600 and as specified herein. Clean with soapy water the inside of the socket and outside of the spigot and the pipes to be jointed to obtain clean, smooth surfaces free of foreign materials. Apply a thin film of gasket lubricant furnished by the joint manufacturer to the inside surface of the gasket and to the outside surface of the spigot. Enter the spigot into the socket. Complete the joint by forcing the spigot into the socket up to the depth mark, using equipment designed for the purpose.

C. Fittings and Valves

1. Install fittings, and valves where indicated on the plans. Set fittings and valves and join to pipe as hereinbefore specified. Where valves occur on the end of a pipeline, place a cast iron plug or blind flange and secure in the exposed bell before backfilling the trench.
2. Provide a valve box and extension stem where required for the following: nut operated valves; valves on which the operating mechanism is enclosed in a grease case; valves 1.6—inch and larger in diameter; valves with exposed gearing or operating mechanism; air valves.
3. Set valve box at right angle to the water main, centered and plumb over the operating nut of the valve extension Stem with nut from three to four feet below top of cover with the box cover flush with the surface of the finished grade, or set to the elevation shown on the drawings. Support as required to maintain nut in position. Before installation, ascertain that valves are in proper working order. If valves are not operating properly, notify the Engineer immediately. Backfill and compact under and around valve boxes to insure no vertical loads are transmitted to the valve operators. The flange at the bottom of the bottom section shall rest upon bricks as shown on the Standard Detail.

D. Hydrants

1. Install fire hydrants where indicated on the Plans in accordance with the Standard Details. Set plumb at the elevation directed by the Engineer. Place the steamer outlet normal to the street line. Strap fire hydrant to main as shown on the Standard Details.
2. The hydrant shall be firmly set on a solid concrete block and a minimum of 1/3 cubic yard of 1/2" to 3/4" size stone granular material which shall extend to a point approximately 4 inches above the waste opening in accordance with the Standard Details.

3. Lay fire hydrant connections level, in the manner specified hereinbefore for laying pipe.

E. Water House Connections

1. Provide water house connections from the water mains to property lines with one continuous piece of “K” copper pipe at the elevations indicated on the Plans, Standard Details, or directed by the Engineer. Install corporation stops, curb stops, and/or meter vaults where indicated. Mark the location of the end of the water connection pipe at the property line with a 2 x 4 timber, painted green, placed vertically from the bottom of the trench and extending two feet above grade.
2. Except where otherwise specified herein tapping of the water main and insertion of the corporation stops shall be performed by qualified personnel. No tapping for these services shall be performed prior to the testing and acceptance of the main.
 - a. Provide a service saddle where tapping a ductile iron water pipe for a corporation stop up to two inches in diameter. Maintain a minimum of 18 inches from tap to the bell end of the pipe. After making the connection and completing the installation, open and leave open the corporation stop.
 - b. Do not tap dry unless directed by the Engineer. If so directed, make the tap as specified herein and leave the trench open at the tap until the water main has been placed in service and the taps have been inspected.

F. Corporation Stop for Chlorination Purposes

1. Provide one—inch corporation stop and coupling in water mains for chlorination purposes where directed by the Engineer. The corporation stop shall be removed after testing and the contractor shall install a standard corporation stop threaded brass plug per AWWA - A800.

G. Valve Vaults and Manholes

1. Provide valve vaults and manholes where indicated on the Plans in accordance with Section 3360 of the Specifications and Standard Details. Do not complete to final grade until grading is complete and proper alignment is insured. Set frames to grade using brick as indicated on the Standard Details. Space steps as indicated on the Standard Details and the Plans.

H. Buttresses, Anchorage & Harnessing

1. Provide buttress, anchorages and harnessing where indicated on the Plans or directed by the Engineer in accordance with the Standard Details. The Engineer will inspect and approve excavations before buttresses and anchorages are placed. The entire face of the excavation against which buttresses will bear shall be firm bearing, flat and at proper angle to the pipe connections. The concrete shall be cured seven days between placing concrete and pressurizing mains.

I. Connections to Existing Lines

1. Before the start of construction, dig test pits on all connections to existing work. The Engineer will examine the test pits and establish line and grade and determine material required at connections.
2. Notify the Engineer at least three working days prior to proposed connection construction. Make connections at such time and in such manner as the Engineer directs.
3. The Town will notify the consumers and operate or have DPW personnel operate all valves necessary to shut off the mains. The Town will make every reasonable effort to have tight shut offs, but does not warrant that the mains will be dry. Complete the connections with the greatest possible speed.
4. Certain information is shown on the drawings relative to existing pipe and other construction. This information was transferred from existing records and is deemed to be reliable but the Town does not warrant or guarantee that either the locations, the dimensions or the type of material are exactly as shown.
5. Water House Connection Renewals
 - a. Plug existing tap and provided saddle on cleaned main.
 - b. Where directed by the Engineer, abandon the existing tap and retap the main line water pipe.
 - c. Furnishing material for and tapping main line water pipe shall be performed by experienced personnel.
 - d. Provide corporation stops and couplings and curb stops or meter vaults at each house connection in accordance with the Standard Details. Stops shall be turned to off position prior to installation.
 - e. Where directed by the Engineer, provide meter housing and meter yokes and valves in accordance with the Standard Details.

4.0 MEASUREMENT , PAYMENT and WARRANTY

A. Pipe Furnished by the Contractor

1. Furnishing and installing pipe will be measured for payment by the Contract Lump Sum Price of the various types and sizes provided, measured as recorded on cut sheets. No deductions will be made for the lengths of the fittings, connections or valves.

Payment will be made for the quantities measured for each size per the Contract Linear Foot Price.

2. Payment will include provision of fittings, valves, valve boxes, branch connections,

and connections to new and existing facilities and corporation stops and couplings for chlorination.

3. Payment will include excavation, backfill, and bedding as specified in Section 2200.

B. House Connections

1. Furnishing and installing house connections will be measured for payment by each of the various types and sizes installed complete in place indicated on the plans or as directed by the Engineer.

Payment will be made per the Contract Per Each Price.

2. Payment will include installation of fittings, curb stops, corporation stops, valves, valve boxes, and connections to new and existing facilities.
3. Payment will include excavation, backfill, and bedding as specified in Section 2200.

C. House Connection with Outside Meters

1. Furnishing and installing house connection with outside meter will be measured for payment by each of the various types and sizes installed complete in place indicated on the plans or as directed by the Engineer in accordance with the Standard Detail.

Payment will be made per the Contract Per Each Price.

2. Payment will include installation of fittings, corporation stops, meter yokes, meter idlers, branch pieces if applicable, meter housings, meter box covers and connections to new and existing facilities.
3. Payment will include excavation, backfill and bedding as specified in Section 2200.

D. Fire Hydrants, Standard and Dewatering Types

1. Installing fire hydrants of either type will be measured for payment by each type installed complete in place, per plans, including parts of connections as shown on the Standard Details, strapping and blocking, and buttresses, and incidental appurtenances.

Payment will be made per the Contract Per Each Price.

2. Payment will include excavation, backfill and bedding, as specified in Section 2200.

E. Cap and Blow-Off or Blow-Off

1. Providing and installing cap and blow—off will be measured for payment by each of the various types and sizes installed complete in place as indicated on the plans or as directed by the Engineer in accordance with the Standard Detail.

Payment will be made per the Contract Per Each Price.

2. Payment will include excavation, backfill and bedding as specified in Section 2200, furnishing and installing all fittings, pipe, valve and valve boxes.

J. Non—Payment Items

1. The following items will not be measured for payment but the cost thereof will be considered as incidental to the contract.
 - a. Removal of existing facilities that interfere with the project.
 - b. Abandonment, plugging, blocking or bricking shut and disposal of existing facilities.
 - c.. Restoration and restabilization of disturbed areas.
 - d. Erosion checks
 - e. Concrete anchors
 - f. Harnessing and Blocking
 - g. Testing
 - h. Chlorination
 - i. Timber marking house connections
 - j. Replacement of various appurtenant connections and devices required for watertight installations.

4.01 Warranty:

1. The Contractor shall guarantee the watermain and appurtenances free from defects in materials and workmanship, for a period of one year from the date of final acceptance. During this time the Contractor shall replace any defective work at no cost to the Owner. All repairs shall be made equal to or better than the original and subject to the Owners approval.

SECTION 31 00 00

EARTHWORK

PART 1 GENERAL

1.01 Description

A. This Section includes excavation, backfill, grading and related items in accordance with the Contract Documents.

B. Incorporated by Reference

1. The Frederick County General Conditions and Standard Specifications for Water Mains, Sanitary Sewer and Related Structures, latest revision,
2. Maryland State Highway Administration, Standard Specifications for Construction and Materials, January, 2020 (latest revision)
3. Town of Emmitsburg Ordinance 16.20.02 relating to Development.

The Contractor shall be familiar with the Special Provisions and the modifications to the specifications listed.

C. Definitions

- a. Fill material is material used for trench backfill, structural fill and backfill and embankment.
- b. Filled areas are areas which have received trench backfill, structural fill or embankment materials, placed and compacted as specified herein.
- c. Structural fill and backfill area upon or within which a structure is to be constructed.
- d. Paved areas are areas over which paving exists, or is to be placed under this Contract, or areas designated on the plans to receive future paving.
- e. Open areas are all areas other than the following: paved areas, areas within the public right-of-way of the Frederick County, areas upon which structures are to be constructed, and improved grassed areas.
- f. Improved grassed areas are areas so designated on the Plans.
- g. Borrow fill and borrow trench backfill are suitable materials meeting requirements specified herein, and excavated off-site due to unsuitability of site excavated material.

1.02 Quality Assurance

1. The Contractor shall furnish a guarantee that filled areas will not suffer from ponding or settlement in excess of the following limitations for a period of one year from the date of final acceptance.
 - a. Paved areas and areas within five feet of structures, 0.05 foot.
 - b. All other areas, 0.10 foot.

Fill material which settles in excess of the above limitations shall be removed and replaced with suitable material at no cost to the Owner. Structures, paving, landscaping and other site improvements damaged by settlement, shall be removed and replaced at no cost to the Owner.

2. Inspection and Testing
 - a. Place fill material and perform earthwork under continuous monitoring of the geotechnical engineer. The Town, at their expense, shall have field density tests performed on the compaction of each layer of fill in accordance with one of the following: ASTM D1556; ASTM D2922; or ASTM D2617. After completion of each layer of fill in a designated area, the Contractor shall provide equipment to cut out smooth surface spot locations designated by the geotechnical engineer on which to perform test. Copies of the test results shall be given to the Town of Emmitsburg and Fox & Associates, Inc. for their files. When the tests indicate that density or moisture content does not meet requirements specified herein, the particular layer or portion thereof, when directed by the geotechnical engineer, shall be reworked by rolling, scarifying, wetting, drying and recompacting until the required density has been obtained.

PART 2 MATERIALS

2.01 Fill Material

1. General Requirements for all Fill Material
 - a. All fill material shall be free of refuse and vegetable matter, frozen material and other objectionable material.
 - b. Excavated materials meeting these requirements and the requirements stipulated below for the appropriate type of placement shall be used when approved by the Engineer. Otherwise, the Contractor shall excavate haul, and place material from other approved sources off-site.
2. Trench Backfill
 - a. Earth for backfill shall be free from large lumps, clods, and rocks and shall be placed along the sides of the pipe for the full width of the trench in layers not exceeding 6 inches of uncompacted depth. Each layer shall be compacted

simultaneously on both sides of the pipe by means of an approved mechanical tamper. Special care shall be taken to compact the backfill thoroughly under the haunches of the pipe. This method of filling and compaction shall continue until the backfill is completed to a minimum height of 9 inches above the top of the pipe. The contractor shall protect all pipe from damage due to construction equipment or other vehicular traffic passing over the pipe. Backfill may be placed immediately after laying the pipe.

Immediately after spreading each layer, the material shall be compacted with compaction equipment approved by the Engineer. Rolling shall be done in a longitudinal direction along the trench beginning at the edges and progressing toward the center.

Material 1 ft. below the top of the subgrade shall be compacted to not less than 92 percent of the maximum dry density as specified in ASSHTO T-180. Material in the top 1 ft. shall be compacted to not less than 97 percent of the maximum dry density. In-place density shall be determined by MSMT 350 or 352. When necessary, the layer shall be wetted or dried in order to compact the layer to the required density. The resultant moisture content of the embankment material, when finally compacted to the required density, shall be within 2 percentage points of optimum.

- b. Fill material for trenches under paved areas and areas to be paved shall conform to requirements for fill material for trenches in open areas up to the top 12 inches below the pavement base course. The top 12 inches of backfill shall meet one of the following materials requirements:
 - (1) Soil having a maximum density not less than 105 pounds per cubic foot as determined by AASHTO T99, Method A, with a liquid limit not exceeding 34; a plasticity index not exceeding 7; containing no stones larger than three inches in the greatest dimension.
 - (2) Special backfill, crushed stone or bank run having a maximum dry weight not less than 115 pounds per cubic foot as determined by AASHTO T99, Method A, with a liquid limit not exceeding 30; a plasticity index not exceeding 6; conforming to MSHA gradation CR 6, or gravel SB II.
- c. Borrow Trench Backfill shall meet materials requirements listed under 2b above or the following:
 - (1) Dry concrete sand meeting requirements ASTM C33, placed up to one foot below finished grade and topped with earth meeting requirements of 2b(1) in non-paved areas, and with materials meeting requirements of 2b(2) in paved areas.
- d. Do not change the type of borrow materials used between manholes.

1. Granular backfill below subgrade, replacement for unsuitable material shall be 1/2" to 1 1/2" size stone granular material.

2.03 Sheeting and Shoring

1. Sheeting, shoring, and bracing materials shall be timber or steel, designed to retain the earth around structures to prevent cave-ins and settlements and to fulfill all safety requirements.
 - a. Timbers shall be structural grade with a minimum working stress of 1100 psi.
 - b. Steel sheet piling shall conform to the requirements of ASTM A328, continuous interlocking type.

2.04 Shoring Design

1. Submit to the Engineer, a statement certified by a Professional Structural Engineer, registered in the State of Maryland, attesting to the adequacy of shoring, sheeting and retention system components for trenches and excavations to:
 - a. Withstand lateral earth and hydrostatic pressure loads.
 - b. Enable a safe wall system to allow excavation to proceed.
 - c. The maximum allowable deflection for shoring, sheeting and retention system that will not interfere with subsequent construction
2. Certify completed system meets law, ordinances and Building Code requirements.
3. Certify the components are properly designed or selected for locale and application intended and installation was made in accordance with practices standard to the industry.

PART 3 EXECUTION

3.01 Topsoil

1. Removal, Storage and Protection
 - a. Prior to blasting or excavation, the topsoil shall be removed, stored and protected. All topsoil within the work area shall be removed unless otherwise directed. The topsoil shall be stored on well drained land approved by the Engineer.

3.02 Excavation

1. General
 - a. All material excavated shall be unclassified. **No additional compensation will be made for Rock Excavation.** Excavation shall be carried out to the lines and grades indicated on the plans. **Excavation shall include removal and disposal of all materials encountered**, including rock (or shale) materials, unsuitable bedding and backfill material regardless of their nature or the manner in which they are removed.

In general, removal of rock will be considered as unclassified excavation and no specific payment will be made therefore except when a bid item is provided in the Bid Schedule for rock excavation.

- b. Excavation for on-grade slabs and pavements shall be sufficient to allow for fills, base and waterproofing materials where indicated and required. Excavation for planting areas shall allow for topsoil. Excavation for formed concrete shall be sufficient to allow for convenient construction and removal of forms, and to allow for application of waterproofing and curing materials where indicated.

2. Test Pit Excavation

- a. Test pit excavation shall be performed with extreme caution and in such a manner that no damage occurs to the facility being test pitted. See special requirements in Sections 22 11 13 and 22 13 13.

3. Rock Excavation

- a. Whether or not rock is shown on the plans, the Contractor is responsible for making his own investigation to determine if rock is present. The presence of rock and the furnishing and placing of suitable backfill material **shall not** entitle the Contractor to additional compensation above and beyond the Contract lump sum price, which includes disposal, off-site, of all rock excavated.
- b. Unless otherwise directed, rock shall be fully taken out at least 25 feet in advance of the laying of mainline pipe and 10 feet past the end of all laterals, to a point directly under the pipe, six inches below the outer bottom, and to the trench width over the outside of the pipe, (exclusive of bells) on each side, as shown on the Standard Detail. Rock shall be removed sufficiently at joints so that they may be properly made. The space below the outer bottom of the pipe shall be filled with a six inch minimum of approved granular bedding. At bell holes the four inch minimum clearance must be held.
- c. Rock appearing in miscellaneous excavations, tunnels, or where future pipes are to connect with those laid under the contract, shall be excavated in accordance with the directions; and to the line prescribed by the Engineer.
- d. Blasting will not be allowed.
- e. Rock excavation may be paid for only when, additional excavation is required outside of the trench limits shown on the plan and only when approval is given by the Owner's representative to deviate from the typical trench section. In no case will pavements, manholes, and similar structures be classed as rock nor will specific payment be made for drilling and blasting materials that can be removed by other methods.

4. Removal of Unsuitable Material

- a. Where material not meeting the requirements of fill material and deemed unsuitable by the Engineer is encountered either contiguous to or within the proposed limits of excavation shown, the Engineer may direct its removal. Depth of removal will be determined by the Engineer.
5. Unauthorized Excavation
- a. Where unauthorized excavations are made below indicated elevations under slabs, footings, pipes or structures, restore to proper elevations with fill materials as specified hereinbefore and as directed by the Engineer at no cost to the Owner.
6. Sheeting, Shoring and Bracing
- a. Sheeting, shoring and bracing shall be placed so as not to interfere with the construction work and shall be entirely independent of all footings and structures.
 - b. Remove sheeting, shoring, bracing and all wood forms unless otherwise directed by the Engineer in writing concurrently with backfilling operations in a manner that precludes settlement of the backfill excavation.
 - c. Place and remove sheeting and shoring as required to assure safe working conditions and prevent accidents and cave—ins.
7. Trench Excavation
- a. Excavations shall comply with OSHA Construction Industry Standards (29CFR Part 1926) Subpart P, Excavations, Trenching, and Shoring. All excavations shall be completed and maintained in a safe and stable condition throughout the total construction phase. Structure and trench excavations shall be completed to the specified elevations and to the length and width required to safely install, adjust, and remove any forms, bracing, or supports necessary for the installation of the work. Excavations outside the lines and limits shown on the drawings or specified herein required to meet safety requirements shall be the responsibility of the contractor in constructing and maintaining a safe and stable excavation.
 - b. Excavate trenches to the width and depth indicated on the Standard Details and on the plans. Provide uniform and continuous bearing and support for pipe or structure on granular bedding. Remove rock, when encountered, to a minimum depth of six inches below the pipe, and the same depth below the bell. If the external shape of the trench cannot be preserved or the trench varies from the shape of the structures, the space between the desired trench dimensions and the bottom of the excavation as made, shall be filled with granular backfill as specified hereinbefore allowing for placement of granular bedding where specified. Material deemed unsuitable by the Engineer in the bottom of the trench shall be removed and replaced with granular backfill. Depth and width of removal shall be as directed by the Engineer. Perform excavation in the immediate vicinity of adjacent and contiguous facilities by means that will not

damage the facility. Damage caused to existing facilities by the Contractor's operations shall be repaired at no expense to the Owner.

- c. Trench excavation shall proceed no more than 75 feet in advance of the placing of backfill unless otherwise authorized by the Engineer, to the widths and depths shown on the Standard Details. The Engineer may require backfilling and subsequent re—excavation on trenches left open an unreasonable amount of time in advance of laying of pipe, at no expense to the Owner. Trenches left open overnight, or during periods when the Contractor's forces are not present shall be so protected or enclosed and marked as to cause no danger to the public or others.
- d. Sides of trenches in improved public rights of way and adjacent to other structures shall be practically plumb. Where permitted by the Engineer, sides of trenches in other areas may be sloped from a point two feet above the top of the pipe to grade. Such slopes shall be at no additional cost to the Owner. Slopes shall be such as will not allow displacement of material or danger to personnel.

Bell holes shall be excavated in the bottoms of trenches wherever necessary to permit the proper making of joints.

- e. Trench Sheeting
 - (1) Trench sheeting shall conform to requirements specified hereinbefore and the following:
 - (2) Where sheeting is used, the trench width as shown on the Standard Details shall be applied between the interior faces of the sheeting as driven.
 - (3) Remove sheeting as backfilling progresses. Compact contiguous areas concurrent with removal of sheeting. Leave sheeting in place only when so directed by the Engineer in writing. Trim such sheeting to a minimum of 1 1/2 feet below grade.

3.03 Backfill Operations

1. General

- a. Do not place, spread or compact fill material while it is frozen or thawing or place upon or adjacent to frozen or thawing ground or during unfavorable weather conditions. When the work is interrupted by rain, fill operations shall not be resumed until field tests indicate that the moisture content and density of the fill are within the limits specified. Any compacted layer which has been frozen shall be removed before the next layer is placed upon it.
- b. Moisture content of fill material shall be within two percent of the optimum for the material as determined by AASHTO T99, Method

A. Prior to commencing compaction, fills shall be brought to specified

water content by either aerating the material if it is too wet, or spraying the material with water if it is too dry. Thoroughly mix each lift before compaction to assure uniform distribution of water content. Distribute rocks of permissible sizes through the fill material and fill and compact to eliminate all voids.

2. Preparation

- a. Before depositing fills, remove all vegetative matter, mud, muck and otherwise unsuitable soils from the surfaces upon which fill materials are to be placed and fill irregularities and cavities.
- b. Completely fill boring voids and test pit excavations within the limits of excavation with sand, lean concrete or crushed stone up to the level of the proposed subgrade, as directed by the Engineer.

3. Placing Fill Material for Structural Fills and Embankments

- a. Compact the surface upon which the fill material is to be deposited to the density specified hereinafter for compaction of fill.
- b. Where embankments are made on hillsides or slopes, step or bank the slope of the original ground upon which the fill is to be placed when so directed by the Engineer.
- c. Place fill material in uniform lifts of not more than eight inches in uncompacted thickness. Spread each layer uniformly and evenly. Perform compaction using compacting rollers, pneumatic or vibratory compactors or other equipment and methods approved by the Engineer. Jetting or puddling of backfill will not be allowed without permission of the Engineer.
- d. Compact each six inch layer to not less than the following percents of maximum densities at a moisture content within two percent optimum for the material as determined by the listed AASHTO method.
 - (1) Under Flexible Pavement: 95 percent except for top foot which shall be 100 percent per AASHTO- T99.
 - (2) Under State Highway Pavement: top one foot, 97 percent AASHTO-T180; remainder, 92 percent AASHTO T180.
 - (3) In areas other than existing paved street rights-of-way, future street rights-of-way or in any traveled roadway, from a point two feet above the top of the pipe to the bottom of the topsoil, the backfill shall be placed in one foot lifts and solidly compacted by the use of a roller, or other mechanical device. The density of this backfill must be compacted to 100% of the adjacent soil density and equal to or less than the existing adjacent soil moisture content. The pipe and structures must be bedded on proper subbase material and completely covered with suitable material as specified in 2.02-1. The geotechnical engineer

shall test the adjacent soil for density and moisture content as the contractor excavates the trench. Each lift will be tested during excavation and the test results will be used as target values for determining proper compaction while backfilling, based on each lift elevation. If the excavated soil has a higher moisture content than the adjacent soil, it must be dried before use, or select material must be used. This procedure is only applicable to “green” areas. Adjacent soil is considered to be soil, left or right and perpendicular to the point of excavation. The adjacent soil is limited to the width of the easement.

- e. Continue filling operation until the fill has been brought to the finished slopes and grades shown on the Contract Drawings, making proper allowances for thickness of topsoil, pavement slabs. Construct fill so that surface will be sloped to drain at all times and deposit fills so as to prevent excessive moisture accumulation from rainwater.
- f. Compaction by rollers or heavy equipment will not be permitted within a five foot strip adjacent to structures.

4. Placing Trench Backfill

- a. Placing trench backfill shall conform to the requirement specified herein before placing structural fills and embankments, modified as follows.
- b. Place granular bedding and haunching in accordance with the Standard Details.
- c. Compact up to two feet above top of the pipe by mechanical tampers in maximum six inch layers.
- d. Complete backfill and compaction in not more than one-foot lifts as hereinbefore specified under III.C.3. utilizing such compaction equipment as will not damage the pipe and pipe joints. Pipe and pipe joints damaged by the Contractor’s operations shall be removed and replaced at no cost to the Owner.
- e. When borrow trench backfill material meeting requirements specified elsewhere herein is utilized lift height requirements will be determined in the field based on test sections and tests prescribed and observed by the Engineer and based on type of compaction equipment.
- f. In new subdivision work where water and sewer house connections are to be placed in the same trench, backfill above the sewer house connection as hereinbefore specified up to a point four feet below proposed finished grade. Provide temporary backfill above this point to the surface until laying of water house connection is commenced.

At this time, reexcavate as required to lay water line and compact as hereinbefore specified.

- g. Do not backfill around pipe, connections or fittings until measurements and locations are completed by the Engineer or Inspector.

3.04 Finish Grading

1. Perform grading operations so that the excavation will be well drained at all times. Maintain drainage ditches and keep them open and free from soil, debris, and leaves until final acceptance of the work. Finish all grading on neat, regular lines conforming to the sections, lines, grades and contours shown on the Plans or if not shown, in accordance with the criteria set forth hereinafter. Perform grading work in proper sequence with all other associated operations.
2. Structures and pavement; bring finished subgrade to the elevation as shown on the drawings. Bring entire area to the finished subgrade elevation before excavating for footings.
3. Grading criteria for structures greater than 20 feet in maximum dimension; perform grading in accordance with the following requirements if not indicated otherwise in the Contract Documents.
 - a. Place fill at a minimum slope of two percent for a minimum of ten feet beyond the exterior wall or exterior face of the structure. From the edge of the ten foot extension, slope to existing grade at a maximum slope of 1:2.5.
4. Uniformly grade all areas disturbed by the Project, at trench locations, excavated and fill areas and adjacent transition areas so that finished surfaces are at the proposed grade or are approximately at preexisting grades, adjusted as required to provide positive drainage.

3.05 Material Storage

1. Deposit excess excavated material and unsuitable material offsite. Topsoil shall be stockpiled in a location approved by the Engineer.

3.06 Dewatering and Drainage

1. If water is encountered in excavation, provide pumps of sufficient capacity to remove the water while the excavations are being made and until the concrete footings have been poured, the foundation walls or other structures erected up to grade or until the excavation has been backfilled. Do not allow sediment laden water to flow into any watercourse or drainageway or overland without first filtering it through an approved desilting device. Use of woven and non-woven fiber material will be allowed when approved by the Engineer.
2. Provide all necessary temporary surface drainage and keep the same operating to the satisfaction of the Engineer until permanent drainage or finish grading has been completed. Do not allow damming or ponding of water in gutters or Storm drains.

3.07 Restoration of Surface Facilities

1. The Contractor shall restore and restabilize surface features and facilities damaged or

destroyed during construction to at least the condition existing before construction, in accordance with Section 1900 and other applicable sections of the Specifications.

PART 4 PAYMENT

4.01 Excavation and Backfill for Utility Structures and Trench Excavation and Backfill

1. Excavation and backfill for utility structures and trench excavation and backfill with approved material excavated from the bottom of the trench or the lower level of the granular bedding where indicated, will not be measured separately for payment but the cost thereof will be included in the Contract unit price for water and/or sewer.
2. The Contractor shall be responsible for all excavation and backfill within the pipe embedment zone and the final backfill zone. The Contractor will be responsible for meeting the backfill and compaction requirements using acceptable on-site material or approved imported material. No additional payment will be made for disposal of unsuitable material, drying or modification of the on-site material to meet compaction requirements or for importing approved material. All material, labor and equipment will be included in the Contract lump sum price.
3. Excavation and backfill for utility structures and trench excavation and backfill in excess of the limits described above will not be paid for except as authorized in writing by the Engineer.

4.02 Granular Backfill Below Subgrade / Pipe Foundation

1. Excavation of unsuitable material and replacement with granular backfill below subgrade at the direction of the Engineer will be measured by the cubic yard actually replaced, measured by the volumes by Average End method.
2. Excavation of unsuitable material and replacement with crushed aggregate below the pipe embedment zone, at the direction of the Engineer, will be measured by the cubic yard actually replaced, measured by the volumes by Average End method.
3. Payment will be made for the quantities measured at the fixed contingent unit price per cubic yard listed in the bid schedule.
4. Payment will include disposal off-site of unsuitable material.

4.03 Test Pits

1. Test pits in the numbers, at the locations and to the limits directed by the Engineer shall be paid per the Contract lump sum price.
2. Payment will include backfill and material as specified herein before.

4.04 Non—Payment Items

1. The following items of work will not be measured for payment but will be considered

as incidental to the Contract:

- a. dewatering, watering
- b. finish grading
- c. preparation of subgrade
- d. compaction
- e. sheeting and shoring, for the convenience of the Contractor or for compliance to the safety regulations
- f. blasting
- g. removal and disposal of excess material
- h. granular base under slabs and pipe bedding.
- i. placing structural fill and embankment using suitable materials available on site.
- j. rock excavation, including disposal off-site of all rock excavated plus placing suitable backfill material.
- k. removal and disposal of the existing sanitary sewer and all appurtenances. Disposal shall be at an approved site selected by the Contractor. Disposal shall be in accordance with all applicable City, State and Federal laws.
- l. Removal and disposal of unsuitable soil, existing pipe, concrete manholes and appurtenances Disposal shall be at an approved site selected by the Contractor. Disposal shall be in accordance with all applicable City, State and Federal laws.

END OF SECTION

SECTION 32 11 17
AGGREGATE SUBBASE COURSES

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Subbase materials.
- B. Installation standards.
- C. Spreading of material.
- D. Compacting.
- E. Field quality control.

1.02 RELATED SECTIONS

- A. Aggregate base course for pavements is specified in Section 32 11 23 - Aggregate Base Courses.

1.03 CLASSIFICATION

- A. Aggregate subbases are designated as Class 1, Class 2, or Class 3. The class of aggregate subbase shall be indicated.

1.04 MEASUREMENT AND PAYMENT

- A. General: Measurement and payment for aggregate subbase will be either by the lump-sum method or by the unit price method as determined by the listing of the bid item for aggregate subbase indicated in the Bid Schedule of the Bid Form.
- B. Lump Sum: If the Bid Schedule indicates a lump sum for aggregate subbase, the lump sum method of measurement and payment will be in accordance with Section 01 20 00 Price and Payment Procedures, Article 1.03.

C. Unit Price:

- 1. If the Bid Schedule indicates a unit price for aggregate subbase, the unit price method of measurement and payment will be as follows:
 - a. Measurement: Aggregate subbase will be measured for payment by the cubic yard of each class of aggregate placed in the Work. The quantity for payment will be the square area placed multiplied by the thickness, and divided by the cubic yard, based on the dimensions, neat lines or pay lines, and sections indicated on the Contract Drawings.
 - b. Payment: Aggregate subbase will be paid for at the indicated Contract unit prices for the computed quantities as determined by the measurement method

1.05 REFERENCES

- A. American Society for Testing and Materials (ASTM):
 - 1. ASTM C136 Test Method for Sieve Analysis of Fine and Coarse Aggregates
 - 2. ASTM D421 Practice for Dry Preparation of Soil Samples for Particle-Size Analysis and Determination of Soil Constants
 - 3. ASTM D1241 Specification for Materials for Soil-Aggregate Subbase, Base, and Surface Courses
 - 4. ASTM D1557 Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort
 - 5. ASTM D2419 Test Method for Sand Equivalent Value of Soils and Fine Aggregate
 - 6. ASTM D2844 Test Method for Resistance R-Value and Expansion Pressure of Compacted Soils
 - 7. ASTM D2922 Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
 - 8. ASTM D3017 Test Method for Moisture Content of Soil and Soil- Aggregate in Place by Nuclear Methods (Shallow Depth)

- B. Maryland State Highway Administration (MSHA) Standard Specifications, 2008 edition:
 - 1. Section 501 Aggregate Base Courses

1.06 SUBMITTALS

- A. General: Refer to Submit under provisions of Section 7.16 of the Standard General Conditions of the Construction Contract.
- B. Product Data: Submit source, gradation, R-value, and sand equivalent for the proposed subbase material.
- C. Test Reports: Submit plant and field test reports as specified in Articles 2.02 and 3.05 herein.

PART 2 - PRODUCTS

2.01 SUBBASE MATERIAL

- A. Aggregate for the various classes of aggregate subbases at the time the subbase material is deposited on the prepared sub grade shall conform with ASTM D1241 and the following requirements:

1. SECTION 901 – AGGREGATES

2.02 SOURCE QUALITY CONTROL

- A. The Contractor shall perform sampling and tests of the aggregate base material in accordance with the ASTM Test Methods herein specified, to determine compliance

with specified requirements. Samples shall be taken from material as delivered to the site, and shall be prepared in accordance with ASTM D421, as applicable.

- B. Aggregate grading or sand equivalent test shall represent no more than 500 cubic yards of subbase material or one day's production, whichever is the greater amount.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. The Contractor shall request an inspection by the Engineer and obtain acceptance of the prepared sub grade before proceeding with placement of the aggregate subbase.
- B. The sub grade to receive aggregate subbase, immediately prior to spreading, shall conform to the compaction and elevation tolerances indicated for the material involved and shall be free of standing water and loose or extraneous material.

3.02 INSTALLATION STANDARDS

- A. Aggregate subbase shall be applied over the prepared sub grade and compacted in accordance with Section 3.04.
- B. Aggregate subbase shall be minimum uniform thickness after compaction of dimensions indicated. Where not indicated, compacted thickness shall be six inches.
- C. Compaction expressed in percentage in this Section refers to the maximum dry density as determined by ASTM D1557.

3.03 SPREADING OF MATERIAL

- A. Aggregate for subbase shall be delivered as uniform mixtures of fine and coarse aggregate and shall be spread in layers or windrows without segregation.
- B. When approved by the Engineer, aggregate subbase may be dumped in piles on the sub grade and spread ahead to stabilize the sub grade.
- C. Aggregate subbase shall be free from pockets of large and fine material. Segregated materials shall be remixed until uniform.
- D. Aggregate subbase material shall be moisture-conditioned to near optimum moisture content in accordance with the applicable requirements of Section 501 of the MSHA Standard Specifications.
- E. Aggregate subbase 6 inches and less in thickness may be spread and compacted in one layer. For thickness greater than 6 inches, the subbase aggregate shall be spread and compacted in two or more layers of uniform thickness not greater than 6 inches each.

3.04 COMPACTING

- A. Relative compaction of each layer of compacted aggregate subbase material shall be not less than 95 percent as determined by ASTM D1557.
- B. Immediately after placement, compact the material to the required density. During compaction operations, maintain the moisture content of the material to within 2 percent of optimum moisture. Determine the optimum moisture content and maximum dry density as follows:
 - (a) Sand Aggregate Base and Bank Run Gravel Base per T 180.
 - (b) Graded Aggregate Base and Graded Stabilized Aggregate Base per MSMT 321.
- C. Compact graded aggregate base, bank run gravel base, and sand aggregate base to at least 97 percent of the maximum dry density. Compact graded stabilized aggregate base to at least 95 percent of the maximum dry density. Measure in place density per MSMT 350 or 352.
- D. Begin compaction operations, except on superelevated curves, at the sides of the course. Overlap the shoulder or berm at least 1 ft and progress toward the center parallel to the center line of the roadway. On superelevated curves, begin compaction at the low side and progress toward the high side. Continue compaction operations until all compaction marks are removed.
- E. Thickness of finished subbase shall not vary more than one inch from the indicated thickness at any point. Subbase that does not conform to this requirement shall be reshaped or reworked, watered, and recompact to achieve compliance with specified requirements.
- F. The surface of the finished aggregate subbase at any point shall not vary more than one inch above or below the indicated grade.

3.05 FIELD QUALITY CONTROL

- A. The Contractor shall perform field tests in accordance with ASTM D2922 to determine compliance with specified requirements for density and compaction of subbase material, and with ASTM D3017 to determine moisture-content compliance of the installed subbase material.
- B. Testing frequency shall be not less than one test for every 2,000 square feet of subbase material, per layer or lift.

END OF SECTION 32 11 17

SECTION 32 12 16
ASPHALTIC CONCRETE PAVING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This work shall consist of constructing hot mix asphalt (HMA) pavement as specified in the Contract Documents, including surface course, binder course and base course.

1.02 RELATED SECTIONS

Section 02220 - Earthwork

Section 02505 - Paving Subbase Course

Construction Drawings

Maryland State Highway Administration Standard Specifications for Construction and Materials (Latest Revision):

Aggregates	901
Performance Graded Asphalt Binders	904.02
Tack Coat	904.03
Hot Mix Asphalt Mixes	904.04
Crack Filler	911.01
Production Plant	915

1.03 SUBMITTALS

- A. Design Mix: Before any asphaltic concrete paving is constructed, submit actual design mix to the Engineer for review and/or approval. Design mix submittal shall follow the format as indicated Maryland State Highway Administration Section 504; and shall include the type/name of the mix, gradation analysis, grade of asphalt cement used, flow, effective asphalt content (percent), and direct references to the applicable highway department specifications sections for each material. The design shall be for a mixture listed in the current edition of the applicable state roadway specifications. Mix designs over three (3) years old will not be accepted by the Owner.
- B. Material Certificates: Submit material certificates to on-site independent testing laboratory which is signed by material producer and Contractor, certifying that materials comply with, or exceed, the requirements herein.

1.05 REFERENCES

- A. Maryland State Highway Administration (MSHA):

1. MSHA Standard Specifications for Construction and Materials, 2001 Edition
 - a. Section 504 – Hot Mix Asphalt Pavement
Section 501 - Aggregate Base Courses
Section 901 - Aggregates
Section 904 – Performance Graded Asphalt Binders & HMA
- B. American Society for Testing and Materials (ASTM):
 1. ASTM D995 - Requirements for Mixing Plants for Hot-mixed, Hot-laid Bituminous Paving Mixtures.
 2. ASTM D2027 - Liquid Asphalt Medium Curing.

1.06 ENVIRONMENTAL CONDITIONS

- A. HMA material shall only be placed on roadway surfaces when the ambient air and surface temperature is at least 40 F and rising for surface mixes and at least 32 F and rising for base mixes. The pavement surfaces shall be clean and dry and approved by the Engineer before HMA paving begins. Placing HMA material on a frozen graded aggregate base is prohibited. When weather conditions differ from these limits, material en route from the plant to the job site may be used at the Contractor's risk. If placement of the material is stopped by the Engineer, all material en route shall be wasted at no additional cost to the Owner.
- B. Apply bituminous prime and tack coats ONLY when the ambient temperature in the shade is 50°F and when the temperature has not been below 35°F for a minimum of 12 hours immediately prior to application.
- C. DO NOT apply when the subbase surface is wet or contains an excess of moisture which would prevent uniform distribution and the required penetration.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Provide asphalt-aggregate mixture as recommended by local or state paving authorities, unless otherwise specified, to suit project conditions. Use locally available materials and gradations which meet MSHA Section 901 specifications and exhibit satisfactory records of previous installations.
- B. Asphalt Cement: Comply with AASHTO MP-1 Performance Graded Binder Specification

2.02 STABILIZING SUBBASE COURSE MATERIALS

- A. Subbase Course: Shall consist of constructing a stabilizing granular base in accordance with MSHA Section 501.

2.03 ASPHALT PAVEMENT MATERIALS

- A. Bituminous Concrete Base Course: Shall consist of constructing one or more layers of hot-mixed, hot-laid bituminous concrete base course in accordance with MSHA Specifications Section 504.
- B. Bituminous Concrete Binder Course: Shall consist of constructing one or more layers of hot-mixed hot laid bituminous concrete binder course in accordance with MSHA Specifications Section 504.
- C. Wearing Course: Shall consist of constructing a wearing course hot-mixed, hot-laid asphalt concrete to requirements of MSHA Specifications Section 504.

2.04 ASPHALT PAVEMENT MIX

- A. The Contractor shall develop a Superpave mix design in conformance with AASHTO PP 28. HMA Superpave mixes shall conform to the specification for Superpave Volumetric Mix Design, AASHTQ MP 2, and shall be designed for the Equivalent Single Axle Loading (ESAL) range specified in the Contract Documents.

The Contractor may elect to use crushed, recycled asphalt pavement (RAP) material or a maximum of 5 percent roofing shingles from manufacturing waste. The allowable percentage and its suitability for use shall be determined in conformance with MSMT 412. When using 15 percent or less of RAP, binder viscosity adjustments are not required.

The use of RAP may be considered for applications where higher polish value aggregates are required. Approval for use will be on an individual project basis. Documentation of RAP stockpile quality and traceability shall be submitted to the Engineer for approval prior to use.

Crushed glass shall not be used in surface mixes. RAP and roofing shingles from manufacturing waste shall not be used in gap-graded mixes, surface mixes requiring high polish aggregate, or mixes requiring elastomer type polymer binder.

- B. Pavement shall be in strict accordance with MSHA Section 504 Hot Mix asphalt Pavement and Section 904 - Performance Graded Asphalt Binders & HMA
- C. Hot mix asphalt (HMA) mixes shall be produced in a plant as specified in MSHA Section 915.
- D. Aggregates shall conform to Section 901, and AASHTQ MP2 with the exception that the aggregate retained on the 4.75 mm sieve shall be tested for flat and elongated

particles in conformance with D 4791. When recycled asphalt pavement is used in an HMA mix as defined in MSMT 412, it shall be considered an aggregate source.

2.05 EQUIPMENT

- A. Maintain equipment in satisfactory operating condition and correct breakdowns in a manner that will not delay or be detrimental to progress of paving operations.

PART 3 - EXECUTION

3.01 INSPECTION/PREPARATION

- A. An Independent Testing Laboratory, furnished by the Contractor and approved by the Owner shall be retained to perform compaction of in-place bituminous paving material for compliance with requirements stated herein and in accordance with MSHA Specifications.
- B. Verify subgrade for conformity with elevations and sections immediately before placing aggregate subbase material.
- C. Prior to placement of subbase or crushed aggregate surfacing - proofroll subgrade to identify unstable areas. Stability will be determined based on movement of material under compaction equipment. When the specified stability cannot be obtained, excavate material in the area to a depth that, when replaced and compacted, the subgrade will have required stability.
- D. Subbase or crushed aggregate surfacing material SHALL NOT be placed on a wet, frozen, unstable or unsuitable subgrade or subbase.

3.02 PREPARATION

- A. Prior to placement of paving material, the foundation shall be constructed as specified in the Contract Documents and approved by the Engineer. When paving over existing pavement, all excess crack filling or patch material shall be removed and all spalls and potholes shall be cleaned, tack coated, filled and tamped with HMA before placement. Manholes, valve boxes, inlets, and other appurtenances within the area to be paved shall be adjusted to grade as directed by the Engineer.
- B. Remove loose material from compacted subbase material surface immediately before applying prime coat.
- C. Proof roll prepared subbase material surface to check for areas requiring additional compaction and areas requiring removal and recompaction.
- D. Do not begin paving work until deficient subbase material areas have been corrected and are ready to receive paving.

3.03 TRANSPORTING HOT MATERIALS

- A. Transport asphalt concrete mixtures from mixing plant in trucks having tight, clean compartments.
- B. Provide covers over hot asphalt concrete mixture when transporting to protect from weather and to prevent loss of heat.
- C. During periods of cold weather or for long-distance deliveries, provide insulation around entire truck bed surfaces.

3.04 PLACEMENT OF ASPHALT PAVEMENT

- A. HMA shall be placed by the paver. Delivery of the mixture by the hauling units and placement shall be continuous. The temperature of the mixture shall be a minimum of 225 F at the time of placement. Broadcasting of loose mixture over the new surface is prohibited.
- B. Immediately following placement of the HMA, the mixture shall be compacted by rolling to an in place density of 92.0 to 97.0 percent of the maximum density. In place compaction shall be completed before the mixture cools below 185 F, as determined by a probe type surface thermometer, supplied by the Contractor and approved by the Engineer.
- C. Place asphalt pavement within 24 hours of priming subbase course.

3.05. Equipment:

- A. Paver: Place asphaltic concrete ONLY with self-powered unit equipped with an activated screed or strike-off assembly, and capable of spreading and finishing widths and depths shown, in accordance with MSHA Section 504.

Pavers will be inspected and approved by the Engineer based upon the manufacturer's specification manual (copy to be provided by the Contractor). The paver shall be a self-contained, self-propelled unit capable of spreading the mixture true to line grade and cross slope. The paver shall be equipped with a screed or strike off assembly that will produce a finished surface of the required smoothness and texture without tearing, shoving or gouging the mixture. The paver shall have automatic controls for transverse slope and grade. Controls shall be capable of sensing grade from an outside reference line or ski and sensing the transverse slope of the screed to maintain the required grade and transverse slope within plus or minus 0.1 of the required slope percentage.

Manual operation will be permitted in the construction of irregularly shaped and minor areas, or where directed by the Engineer.

Reference lines or other suitable markings to control the horizontal alignment shall be provided by the Contractor, subject to the approval of the Engineer.

- B. Hand Placement: Areas inaccessible to paver, upon approval by Engineer, may be placed by hand, maintaining required course depth.
- C. Roller: Self-propelled, smooth steel wheel with nominal weight of 10 tons, or approved equivalent vibratory compactor, in accordance with MSHA.
 - 1. 3 M.P.H. maximum speed during compaction.
 - 2. Use mechanical tampers in areas not accessible to roller.
 - 3. Place bituminous concrete base course to compacted depth indicated.
 - 4. Place bituminous binder course to compacted depth indicated.
 - 5. Place surface course to compacted depth indicated.
 - 6. Ensure asphalt pavement is minimum 225°F immediately after placing and PRIOR to initial rolling.
 - 7. Compact each asphalt paving course to required density with approved rolling equipment in accordance with MSHA Specifications. Start compaction as soon as pavement will bear equipment without checking or undue displacement.
 - 8. Carry out compaction in three operations in pass sequence. Ensure each pass of roller overlaps previous passes to ensure a smooth surface free of roller marks. Keep roller wheels sufficiently moist so as not to pick up material.
 - 9. Perform hand tamping in areas not accessible to rolling equipment. Remove areas that are loose, broken, mixed with dirt, or otherwise defective, or that show an excess or deficiency of bituminous material. Replaced with fresh hot mixture and compact to conform to surrounding area.
 - 10. Ensure joints made during paving operations are straight, clean, vertical and free of broken or loose material. Prime vertical surfaces of joints to ensure tight bond.
 - 11. Tolerances: Maximum allowable deviation from elevations and grades indicated for pavement courses:

Bituminous Concrete Base Course: 4 inch in 10 ft.

Binder Course: 4 inch in 10 ft.

Wearing Course: 3/16 inch in 10 ft.

Depressions retaining or ponding water or mounds in pavement, or ridges at joints WILL NOT BE ACCEPTABLE.

- 12. Apply a tack coat to the existing pavement, structures, and curb line prior to paving.
- 13. Seal all joints along the curb line and joints along the existing pavement with hot bituminous material or emulsified asphalt.
- 14. Maintain equipment in satisfactory operating condition and correct breakdowns in a manner that will not delay or be detrimental to progress of paving operations.

15. All new pavement damaged from fuel spills or other material injurious to bituminous material shall be removed and replaced at the Contractor's expense prior to proceeding with paving operations.

3.06 EXISTING PAVEMENT

- A. **Abutting Existing Pavement:** In areas where new bituminous pavement abuts existing pavement, the existing pavement shall be saw cut to its full depth to form straight lines or smooth curved lines as indicated and the resulting vertical face shall be painted with tack coat material.
- B. Condition existing pavement surface with bituminous tack coat in accordance with MSHA Section 504.

3.07 CLEANING AND PROTECTION

- A. **Cleaning:** After completion of paving operations, clean all surfaces of excess or spilled asphalt materials to satisfaction of the Engineer.
- B. **Protection:**
 1. After final rolling, DO NOT PERMIT vehicular traffic on asphalt concrete pavement until it has cooled and hardened, and in NO CASE SOONER THAN 24 HOURS.
 2. Provide barricades and warning devices as required to protect pavement and the general public.
 3. When applicable, cover openings of structures in the area of paving until permanent coverings are placed or installed.

3.08 FIELD QUALITY CONTROL

- A. **Independent Testing Laboratory,** furnished by the Contractor and approved by the Owner, shall be retained to perform construction testing of in-place asphaltic concrete courses for compliance with requirements for thickness, compaction and surface smoothness. Asphaltic surface and base courses shall be randomly cored at a minimum rate of one core for every 20,000 square feet of paving. However, no less than three cores in light duty areas and three cores in heavy duty areas shall be obtained. Coring holes shall be immediately filled with full-depth asphalt. Asphaltic Concrete pavement samples shall be tested for conformance with the mix design.
- B. **Grade Control:** Establish and maintain required lines and elevations.
- C. **Thickness:** In-place compacted thickness shall not be less than thickness specified on the shall be removed and replaced to the proper thickness, at the discretion of the

Owner; until specified thickness of the course is met or exceeded at no additional expense to the Owner.

- E. Surface Smoothness: Testing shall be performed on the finished surface of each asphalt concrete course for smoothness, using 10'-0" straightedge applied parallel with, and at right angles to centerline of paved area. The results of these tests shall be made available to the owner upon request. Surfaces will not be acceptable if the following 10' straightedge tolerances for smoothness are exceeded.

Base Course Surface: 1/4"

Binder Course Surface: 1/4"

Wearing Course Surface: 3/16"

- F. Check surface areas at intervals necessary to eliminate ponding areas. Remove and replace unacceptable paving as directed by Owner.
- G. Compaction: Field density test for in place materials shall be performed at the discretion of the Engineer by examination of field cores in accordance with one of the following standards:
 - 1. Bulk specific gravity of paraffin-coated specimens: ASTM D-1 1 88.
 - 2. Bulk specific gravity using saturated surface-dry specimens: ASTM D-2726.
- H. Rate of testing shall be one core per 20,000 square feet of pavement, with a minimum of 3 cores from heavy-duty areas and 3 cores from standard-duty areas. Cores shall be cut from areas representative of the project. Areas of insufficient compaction shall be delineated, removed, and replaced in compliance with the specifications at no expense to the Owner.

PART 4 PAYMENT AND WARRANTY

4.01 Warranty:

- A. The Contractor shall guarantee the asphalt concrete pavement free from defects in materials and workmanship, for a period of one year from the date of final acceptance. During this time the Contractor shall replace any defective work at no cost to the Owner. All repairs shall be made equal to or better than the original pavement, per the Original Contract and subject to the Owners approval.

4.02 Payment:

- B. The payment, per Contract Lump Sum Price, will be full compensation for saw cutting, milling, grinding, removal, disposal, trimming of the existing pavement, subgrade preparation, placing all materials including tack coat, steel plates, emergency filler, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

SECTION 32 16 13
CONCRETE SIDEWALKS AND CURBS AND GUTTERS

PART 1 GENERAL

1.01 Description

A. This Section includes removing and replacing concrete curb, curb & gutter and sidewalks and providing new curb, curb & gutter and sidewalk, within the limits indicated, including preparation of subgrade and providing base courses as required in accordance with the Contract Documents.

B. Related Sections: The following Sections contain requirements that relate to this Section:

Section 32 16 13: Sidewalk Curb & Gutter

Section 32 11 17:Aggregate Subbase.

Section 33 40 00 Storm Drain

Section 02 56 13 Geomembrane Liner.

Section 31 20 00 Earth Moving

Division 3 Section "Cast-in-Place Concrete" for general building applications of concrete.

Division 7 Section "Paving Joint Sealants" for joint fillers and sealants within concrete paving and at joints with adjacent construction.

C. All work in this section shall comply with the Americans with Disabilities Act, 1990 or latest revision.

1.02 BASIS FOR PAYMENT

A. Sidewalk - Payment of the quantities of sidewalks measured as specified will be at the contract lump sum price.

B. Curbs and Gutters - Payment of the quantities of curbs and gutters measured as specified will be at the contract lump sum price.

1.03 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)

AASHTO M 182(2005; R 2009) Standard Specification for Burlap Cloth Made from Jute or Kenaf and Cotton Mats

ASTM INTERNATIONAL (ASTM)

ASTM A185/A185M(2007) Standard Specification for Steel Welded Wire Reinforcement, Plain, for Concrete

ASTM A615/A615M(2009b) Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement

ASTM C 143/C 143M(2010) Standard Test Method for Slump of Hydraulic-Cement Concrete

ASTM C 171(2007) Standard Specification for Sheet Materials for Curing Concrete

ASTM C 173/C 173M(2010b) Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method

ASTM C 309(2007) Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete

ASTM C 31/C 31M(2010) Standard Practice for Making and Curing Concrete Test Specimens in the Field

ASTM C 920(2011) Standard Specification for Elastomeric Joint Sealants

ASTM C172/C172M(2010) Standard Practice for Sampling Freshly Mixed Concrete

ASTM C231/C231M(2010) Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method

ASTM D 1751(2004; R 2008) Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types)

ASTM D 1752(2004a; R 2008) Standard Specification for Preformed Sponge Rubber Cork and Recycled PVC Expansion

ASTM D5893/D5893M(2010) Cold Applied, Single Component, Chemically Curing Silicone Joint Sealant for Portland Cement Concrete Pavements

American Concrete Institute (ACI) 301, "Specifications for Structural Concrete for Buildings.

ACI 318, "Building Code Requirements for Reinforced Concrete."

Concrete Reinforcing Steel Institute (CRSI) "Manual of Standard Practice."

1.04 SYSTEM DESCRIPTION

CONCRETE SIDEWALKS
AND CURBS AND GUTTERS

A. General Requirements - Provide plant, equipment, machines, and tools used in the work subject to approval and maintained in a satisfactory working condition at all times. The equipment shall have the capability of producing the required product, meeting grade controls, thickness control and smoothness requirements as specified. Use of the equipment shall be discontinued if it produces unsatisfactory results. The Contracting Officer shall have access at all times to the plant and equipment to ensure proper operation and compliance with specifications.

B. Slip Form Equipment

Slip form paver or curb forming machine, will be approved based on trial use on the job and shall be self-propelled, automatically controlled, crawler mounted, and capable of spreading, consolidating, and shaping the plastic concrete to the desired cross section in 1 pass.

Slip Form Method for Curb and Gutter to Comply with MSHA Specifications Per Section 806.03.03.

1.05 SUBMITTALS

A. Submit the following in accordance with Section Submit under provisions of Section 7.16 of the Standard General Conditions of the Construction Contract:

- SD-03 Product Data
- Concrete
- Copies of certified delivery tickets for all concrete used in the construction.
- SD-06 Test Reports
- Field Quality Control
- Copies of all test reports within 24 hours of completion of the test.

1.06 ENVIRONMENTAL REQUIREMENTS

A. Do not place concrete when the air temperature reaches 40 degrees F and is falling, or is already below that point. Placement may begin when the air temperature reaches 2 degrees C 35 degrees F and is rising, or is already above 5 degrees C 40 degrees F. Make provisions to protect the concrete from freezing during the specified curing period. If necessary to place concrete when the temperature of the air, aggregates, or water is below 2 degrees C 35 degrees F, placement and protection shall be approved in writing. Approval will be contingent upon full conformance with the following provisions. The underlying material shall be prepared and protected so that it is entirely free of frost when the concrete is deposited. [Mixing water and aggregates] [Mixing water] [Aggregates] shall be heated as necessary to result in the temperature of the in-place concrete being between 10 and 30 degrees C 50 and 85 degrees F. Methods and equipment for heating shall be approved. The aggregates shall be free of ice, snow, and frozen lumps before entering the mixer. Covering and other means

shall be provided for maintaining the concrete at a temperature of at least 10 degrees C 50 degrees F for not less than 72 hours after placing, and at a temperature above freezing for the remainder of the curing period.

- B. Placing During Warm Weather - The temperature of the concrete as placed shall not exceed 30 degrees C 85 degrees F except where an approved retarder is used. The mixing water and/or aggregates shall be cooled, if necessary, to maintain a satisfactory placing temperature. The placing temperature shall not exceed 35 degrees C 95 degrees F at any time.

1.07 QUALITY ASSURANCE

- A. Concrete Manufacturer Qualifications: Manufacturer of ready-mixed concrete products complying with ASTM C 94 requirements for production facilities and equipment.
- B. Concrete Testing Service: The Owner shall employ a qualified independent testing agency to perform materials evaluation tests and to design concrete mixes.
- C. Field-Constructed Mockup: Cast mockup of size indicated or as required to demonstrate typical joints, surface finish, texture, color, and standard of workmanship.
 - 1. When Engineer determines that mockup does not meet requirements, demolish and remove it from the site and cast another until the mockup is accepted.
 - 2. Keep accepted mockup undisturbed during construction as a standard for judging completed paving. Undamaged mockup may be incorporated into the Work.
 - 3. Demolish accepted mockup and remove from site when directed by Engineer.
- E. Preinstallation Conference: Conduct conference at Project site to comply with requirements of Division 1 Section "Project Meetings" and the following:
 - 1. Before installing portland cement concrete paving, meet with representatives of authorities having jurisdiction, Owner, Architect, consultants, independent testing agency, and other concerned entities to review requirements. Notify participants at least 3 working days before conference.

1.08 SUBMITTALS

- A. General: Submit the following according to the Conditions of the Contract and Division 1 Specification Sections.
- B. Shop Drawings:
 - 1. Submit formwork and shoring shop drawings.
 - 2. Indicate the following:
 - a. Pertinent dimensions, openings, methods of construction, types of connections, materials, joint arrangement and details, ties and shores, location of framing, studding and bracing, and temporary supports.

- b. Means of leakage prevention for concrete exposed to view in finished construction.
 - c. Sequence and timing of erection and stripping assumed compressive strength at time of stripping, height of lift and height of drop during placement.
 - d. Vertical, horizontal and special loads in accordance with ACI 347, Section 2.2 and camber diagrams, when applicable.
 - e. Notes to formwork erector showing size and location of conduits and piping embedded in concrete in accordance with ACI 318, Section 6.3.
- C. Product data for proprietary materials and items, including reinforcement and forming accessories, admixtures, joint systems, curing compounds, dry-shake finish materials, and others if requested by Architect.
 - D. Design mixes for each class of concrete. Include revised mix proportions when characteristics of materials, project conditions, weather, test results, or other circumstances warrant adjustments.
 - E. Laboratory test reports for evaluation of concrete materials and mix design tests.
 - F. Material certificates in lieu of material laboratory test reports when permitted by Architect. Material certificates shall be signed by manufacturer and Contractor certifying that each material item complies with or exceeds requirements. Provide certification from admixture manufacturers that chloride content complies with requirements.
 - G. Minutes of preinstallation conference.

PART 2 PRODUCTS

2.01 CONCRETE

- A. Provide concrete conforming to the applicable requirements of MSHA Class 3, air entrained. Concrete shall be a State Highway Administration approved mix design, from a State Highway Administration approved batch plant.

2.02 Air Content

- A. Mixtures shall have air content by volume of concrete of 5 to 7 percent, based on measurements made immediately after discharge from the mixer.

2.03 Slump

- A. The concrete slump shall be 50 mm plus or minus 25 mm 2 inches plus or minus 1 inch where determined in accordance with ASTM C 143/C 143M.

2.04 Reinforcement Steel

- A. Reinforcement bars shall conform to ASTM A615/ A615M. Wire mesh reinforcement shall conform to ASTM A185/ A185M.

2.05 CONCRETE CURING MATERIALS

- A. Impervious sheet materials shall conform to ASTM C 171, type optional, except that polyethylene film, if used, shall be white opaque.
- B. Burlap shall conform to AASHTO M 182.
- C. White Pigmented Membrane-Forming Curing Compound
- D. White pigmented membrane-forming curing compound shall conform to ASTM C 309, Type 2.

2.06 CONCRETE PROTECTION MATERIALS

- A. Concrete protection materials shall be a linseed oil mixture of equal parts, by volume, of linseed oil and either mineral spirits, naphtha, or turpentine. At the option of the Contractor, commercially prepared linseed oil mixtures, formulated specifically for application to concrete to provide protection against the action of deicing chemicals may be used, except that emulsified mixtures are not acceptable.

2.07 JOINT FILLER STRIPS

- A. Contraction joint filler for curb and gutter shall consist of hard-pressed fiberboard.
- B. Expansion joint filler, premolded, shall conform to ASTM D 1751 or ASTM D 1752, 13 mm 1/2 inch thick, unless otherwise indicated.

2.08 JOINT SEALANTS

- A. Joint sealant, cold-applied shall conform to ASTM C 920 or ASTM D5893/D5893M.

2.09 FORM WORK

- A. Design and construct form work to ensure that the finished concrete will conform accurately to the indicated dimensions, lines, and elevations, and within the tolerances specified. Forms shall be of wood or steel, straight, of sufficient strength to resist springing during depositing and consolidating concrete. Wood forms shall be surfaced plank, 50 mm 2 inches nominal thickness, straight and free from warp, twist, loose knots, splits or other defects. Wood forms shall have a nominal length of 3 m 10 feet. Radius bends may be formed with 19 mm 3/4 inch boards, laminated to the required thickness. Steel forms shall be channel-formed sections with a flat top surface and with welded braces at each end and at not less than two intermediate points. Ends of steel forms shall be interlocking and self-aligning. Steel forms shall include

flexible forms for radius forming, corner forms, form spreaders, and fillers. Steel forms shall have a nominal length of 3 m 10 feet with a minimum of 3 welded stake pockets per form. Stake pins shall be solid steel rods with chamfered heads and pointed tips designed for use with steel forms.

2.10 Sidewalk forms shall be of a height equal to the full depth of the finished sidewalk.

2.11 Curb and Gutter Forms

- A. Curb and gutter outside forms shall have a height equal to the full depth of the curb or gutter. The inside form of curb shall have batter as indicated and shall be securely fastened to and supported by the outside form. Rigid forms shall be provided for curb returns, except that benders or thin plank forms may be used for curb or curb returns with a radius of 3 m 10 feet or more, where grade changes occur in the return, or where the central angle is such that a rigid form with a central angle of 90 degrees cannot be used. Back forms for curb returns may be made of 38 mm 1-1/2 inch benders, for the full height of the curb, cleated together. In lieu of inside forms for curbs, a curb "mule" may be used for forming and finishing this surface, provided the results are approved.

PART 3 EXECUTION

3.01 SUBGRADE PREPARATION

- A. The subgrade shall be constructed to the specified grade and cross section prior to concrete placement. Subgrade shall be placed and compacted in conformance with Section 32 11 17.

3.02 Sidewalk Subgrade

- A. The subgrade shall be tested for grade and cross section with a template extending the full width of the sidewalk and supported between side forms.

3.03 Curb and Gutter Subgrade

- A. The subgrade shall be tested for grade and cross section by means of a template extending the full width of the curb and gutter. The subgrade shall be of materials equal in bearing quality to the subgrade under the adjacent pavement.

3.1.3 Maintenance of Subgrade

- A. The subgrade shall be maintained in a smooth, compacted condition in conformity with the required section and established grade until the concrete is placed. The subgrade shall be in a moist condition when concrete is placed. The subgrade shall be prepared and protected to produce a subgrade free from frost when the concrete is deposited.

3.04 FORM SETTING

- A. Set forms to the indicated alignment, grade and dimensions.
- B. Hold forms rigidly in place by a minimum of 3 stakes per form placed at intervals not to exceed 4 feet.
- C. Corners, deep sections, and radius bends shall have additional stakes and braces, as required.
- D. Clamps, spreaders, and braces shall be used where required to ensure rigidity in the forms. F
- E. Forms shall be removed without injuring the concrete.
- F. Bars or heavy tools shall not be used against the concrete in removing the forms.
- G. Any concrete found defective after form removal shall be promptly and satisfactorily repaired.
- H. Forms shall be cleaned and coated with form oil each time before concrete is placed. Wood forms may, instead, be thoroughly wetted with water before concrete is placed, except that with probable freezing temperatures, oiling is mandatory.

3.05 Sidewalks

- A. Set forms for sidewalks with the upper edge true to line and grade with an allowable tolerance of 1/8 inch in any 10 foot long section. After forms are set, grade and alignment shall be checked with a 10 foot straightedge.
- B. Forms shall have a transverse slope of 1/4 inch per foot with the low side adjacent to the roadway. Side forms shall not be removed for 12 hours after finishing has been completed.

3.06 Curbs and Gutters

- A. The forms of the front of the curb shall be removed not less than 2 hours nor more than 6 hours after the concrete has been placed. Forms back of curb shall remain in place until the face and top of the curb have been finished, as specified for concrete finishing. Gutter forms shall not be removed while the concrete is sufficiently plastic to slump in any direction.

3.07 SIDEWALK CONCRETE PLACEMENT AND FINISHING

- A. Before placing concrete, moisten the subgrade with as much water as it can absorb. Mix the concrete according to MSHA 915.03.04. Volumetric batching and continuous mixing will be permitted. Deposit the concrete on the prepared subgrade in successive

batches to the full width of the sidewalk. Thoroughly spade along the edges and tamp the entire surface area to eliminate voids. Strike off and screed the concrete to the top of the forms.

- B. Float the surface and apply a broom finish. Do not plaster the surface. Use a 1/4 in. edging tool on all outside edges and all joints.
- C. Place joints as specified. Tool or saw dummy joints a minimum of 3/4 in. deep. Match adjacent joints in curb or pavement. Place expansion joint material to the full depth of the concrete.

3.08 Formed Sidewalks

- A. Place concrete in the forms in one layer.
- B. When consolidated and finished, the sidewalks shall be of the thickness indicated.
- C. After concrete has been placed in the forms, a strike-off guided by side forms shall be used to bring the surface to proper section to be compacted.
- D. The concrete shall be consolidated by tamping and spading or with an approved vibrator, and the surface shall be finished to grade with a strike off.

3.09 Concrete Finishing

- A. After straight-edging, when most of the water sheen has disappeared, and just before the concrete hardens, finish the surface with a wood or magnesium float or darby to a smooth and uniformly fine granular or sandy texture free of waves, irregularities, or tool marks. A scored surface shall be produced by brooming with a fiber-bristle brush in a direction transverse to that of the traffic, followed by edging.

3.10 Edge and Joint Finishing

- A. All slab edges, including those at formed joints, shall be finished with an edger having a radius of 1/4 inch.
- B. Transverse joint shall be edged before brooming, and the brooming shall eliminate the flat surface left by the surface face of the edger.
- C. Corners and edges which have crumbled and areas which lack sufficient mortar for proper finishing shall be cleaned and filled solidly with a properly proportioned mortar mixture and then finished.

3.11 Surface and Thickness Tolerances

- A. Finished surfaces shall not vary more than 5/16 inch from the testing edge of a 10-foot straightedge. Permissible deficiency in section thickness will be up to 1/4 inch.

3.12 CURB AND GUTTER CONCRETE PLACEMENT AND FINISHING

- A. Concrete shall be placed to the section required in a single lift. Consolidation shall be achieved by using approved mechanical vibrators. Curve shaped gutters shall be finished with a standard curb "mule".

3.13 Curb and Gutter Finishing

- A. Approved slipformed curb and gutter machines may be used in lieu of hand placement.

3.14 Concrete Finishing

- A. Exposed surfaces shall be floated and finished with a smooth wood float until true to grade and section and uniform in texture. Floated surfaces shall then be brushed with a fine-hair brush with longitudinal strokes.
- B. The edges of the gutter and top of the curb shall be rounded with an edging tool to a radius of 1/2 inch. Immediately after removing the front curb form, the face of the curb shall be rubbed with a wood or concrete rubbing block and water until blemishes, form marks, and tool marks have been removed. The front curb surface, while still wet, shall be brushed in the same manner as the gutter and curb top. The top surface of gutter and entrance shall be finished to grade with a wood float.

3.15 Joint Finishing

- A. Curb edges at formed joints shall be finished as indicated.

3.16 Surface and Thickness Tolerances

- A. Finished surfaces shall not vary more than 6 mm 1/4 inch from the testing edge of a 3 m 10-foot straightedge. Permissible deficiency in section thickness will be up to 6 mm 1/4 inch.

3.17 SIDEWALK JOINTS

- A. Sidewalk joints shall be constructed to divide the surface into rectangular areas.
- B. Transverse contraction joints shall be spaced at a distance equal to the sidewalk width or 1.5 m 5 feet on centers, whichever is less, and shall be continuous across the slab.
- C. Longitudinal contraction joints shall be constructed along the centerline of all sidewalks 3 m 10 feet or more in width.
- D. Transverse expansion joints shall be installed at sidewalk returns and opposite expansion joints in adjoining curbs.

- E. Where the sidewalk is not in contact with the curb, transverse expansion joints shall be installed as indicated.
- F. Expansion joints shall be formed about structures and features which project through or into the sidewalk pavement, using joint filler of the type, thickness, and width indicated.
- G. Expansion joints are not required between sidewalks and curb that abut the sidewalk longitudinally.

3.18 Sidewalk Contraction Joints

- A. The contraction joints shall be formed in the fresh concrete by cutting a groove in the top portion of the slab to a depth of at least one-fourth of the sidewalk slab thickness, using a jointer to cut the groove, or by sawing a groove in the hardened concrete with a power-driven saw, unless otherwise approved.
- B. Sawed joints shall be constructed by sawing a groove in the concrete with a 3 mm 1/8 inch blade to the depth indicated. An ample supply of saw blades shall be available on the job before concrete placement is started, and at least one standby sawing unit in good working order shall be available at the jobsite at all times during the sawing operations.

3.19 Sidewalk Expansion Joints

- A. Expansion joints shall be formed with 13 mm 1/2 inch joint filler strips.
- B. Joint filler in expansion joints surrounding structures and features within the sidewalk may consist of preformed filler material conforming to ASTM D 1752 or building paper.
- C. Joint filler shall be held in place with steel pins or other devices to prevent warping of the filler during floating and finishing.
- D. Immediately after finishing operations are completed, joint edges shall be rounded with an edging tool having a radius of 3 mm 1/8 inch, and concrete over the joint filler shall be removed.
- E. At the end of the curing period, expansion joints shall be cleaned and filled with cold-applied joint sealant. Joint sealant shall be gray or stone in color.

3.20 Reinforcement Steel Placement

- A. Reinforcement steel shall be accurately and securely fastened in place with suitable supports and ties before the concrete is placed.

3.21 CURB AND GUTTER JOINTS

- A. Curb and gutter joints shall be constructed at right angles to the line of curb and gutter.

3.22 Contraction Joints

- A. Contraction joints shall be constructed directly opposite contraction joints in abutting portland cement concrete pavements and spaced so that monolithic sections between curb returns will not be less than 5 feet nor greater than 15 feet in length.
- B. Contraction joints (except for slip forming) shall be constructed by means of 1/8 inch thick separators and of a section conforming to the cross section of the curb and gutter. Separators shall be removed as soon as practicable after concrete has set sufficiently to preserve the width and shape of the joint and prior to finishing.
- C. When slip forming is used, the contraction joints shall be cut in the top portion of the gutter/curb hardened concrete in a continuous cut across the curb and gutter, using a power-driven saw. The depth of cut shall be at least one-fourth of the gutter/curb depth and 1/8 inch in width.

3.23 Expansion Joints

- A. Expansion joints shall be formed by means of preformed expansion joint filler material cut and shaped to the cross section of curb and gutter.
- B. Expansion joints shall be provided in curb and gutter directly opposite expansion joints of abutting portland cement concrete pavement, and shall be of the same type and thickness as joints in the pavement. Where curb and gutter do not abut portland cement concrete pavement, expansion joints at least 1/2 inch in width shall be provided at intervals not less than 30 feet nor greater than 120 feet.
- C. Expansion joints shall be provided in non-reinforced concrete gutter at locations indicated.
- D. Expansion joints shall be sealed immediately following curing of the concrete or as soon thereafter as weather conditions permit.
- E. Expansion joints and the top 1 inch depth of curb and gutter contraction-joints shall be sealed with joint sealant. The joint opening shall be thoroughly cleaned before the sealing material is placed. Sealing material shall not be spilled on exposed surfaces of the concrete.
- F. Concrete at the joint shall be surface dry and atmospheric and concrete temperatures shall be above 50 degrees F at the time of application of joint sealing material. Excess

material on exposed surfaces of the concrete shall be removed immediately and concrete surfaces cleaned.

3.24 CURING AND PROTECTION

- A. Protect concrete against loss of moisture and rapid temperature changes for at least 7 days from the beginning of the curing operation.
- B. Protect unhardened concrete from rain and flowing water. All equipment needed for adequate curing and protection of the concrete shall be on hand and ready for use before actual concrete placement begins. Protection shall be provided as necessary to prevent cracking of the pavement due to temperature changes during the curing period.

3.25 Mat Method

- A. The entire exposed surface shall be covered with 2 or more layers of burlap. Mats shall overlap each other at least 6 inches. The mat shall be thoroughly wetted with water prior to placing on concrete surface and shall be kept continuously in a saturated condition and in intimate contact with concrete for not less than 7 days.

3.26 Impervious Sheeting Method

- A. The entire exposed surface shall be wetted with a fine spray of water and then covered with impervious sheeting material.
- B. Sheets shall be laid directly on the concrete surface with the light-colored side up and overlapped 12 inches when a continuous sheet is not used.
- C. The curing medium shall not be less than 18-inches wider than the concrete surface to be cured, and shall be securely weighted down by heavy wood planks, or a bank of moist earth placed along edges and laps in the sheets.
- D. Sheets shall be satisfactorily repaired or replaced if torn or otherwise damaged during curing. The curing medium shall remain on the concrete surface to be cured for not less than 7 days.

3.27 Membrane Curing Method

- A. A uniform coating of white-pigmented membrane-curing compound shall be applied to the entire exposed surface of the concrete as soon after finishing as the free water has disappeared from the finished surface.
- B. Formed surfaces shall be coated immediately after the forms are removed and in no case longer than 1 hour after the removal of forms.

- C. Concrete shall not be allowed to dry before the application of the membrane. If any drying has occurred, the surface of the concrete shall be moistened with a fine spray of water and the curing compound applied as soon as the free water disappears.
- D. Curing compound shall be applied in two coats by hand-operated pressure sprayers at a coverage of approximately 200 square feet/gallon for the total of both coats. The second coat shall be applied in a direction approximately at right angles to the direction of application of the first coat.
- E. The compound shall form a uniform, continuous, coherent film that will not check, crack, or peel and shall be free from pinholes or other imperfections. If pinholes, abrasion, or other discontinuities exist, an additional coat shall be applied to the affected areas within 30 minutes.
- F. Concrete surfaces that are subjected to heavy rainfall within 3 hours after the curing compound has been applied shall be resprayed by the method and at the coverage specified above. Areas where the curing compound is damaged by subsequent construction operations within the curing period shall be resprayed.
- G. Necessary precautions shall be taken to insure that the concrete is properly cured at sawed joints, and that no curing compound enters the joints. The top of the joint opening and the joint groove at exposed edges shall be tightly sealed before the concrete in the region of the joint is resprayed with curing compound. The method used for sealing the joint groove shall prevent loss of moisture from the joint during the entire specified curing period.
- H. Approved standby facilities for curing concrete pavement shall be provided at a location accessible to the jobsite for use in the event of mechanical failure of the spraying equipment or other conditions that might prevent correct application of the membrane-curing compound at the proper time.
- I. Concrete surfaces to which membrane-curing compounds have been applied shall be adequately protected during the entire curing period from pedestrian and vehicular traffic, except as required for joint-sawing operations and surface tests, and from any other possible damage to the continuity of the membrane.

3.28 Backfilling

- A. After curing, debris shall be removed and the area adjoining the concrete shall be backfilled, graded, and compacted to conform to the surrounding area in accordance with lines and grades indicated.

3.29 Protection

Completed concrete shall be protected from damage until accepted.

- A. Repair damaged concrete and clean concrete discolored during construction.

- B. Concrete that is damaged shall be removed and reconstructed for the entire length between regularly scheduled joints.
- C. Refinishing the damaged portion will not be acceptable. Removed damaged portions shall be disposed of as directed.

3.30 Protective Coating

- A. Protective coating, of linseed oil mixture, shall be applied to the exposed-to-view concrete surface after the curing period, if concrete will be exposed to de-icing chemicals within 6 weeks after placement.
- B. Concrete to receive a protective coating shall be moist cured.

3.31 Application

- A. Curing and backfilling operation shall be completed prior to applying two coats of protective coating. Concrete shall be surface dry and clean before each application.
- B. Coverage shall be by spray application at not more than 50 square yards/gallon for first application and not more than 70 square yards/gallon for second application, except that the number of applications and coverage for each application for commercially prepared mixture shall be in accordance with the manufacturer's instructions.
- C. Coated surfaces shall be protected from vehicular and pedestrian traffic until dry.

3.32 Precautions

- A. Protective coating shall not be heated by direct application of flame or electrical heaters and shall be protected from exposure to open flame, sparks, and fire adjacent to open containers or applicators. Material shall not be applied at ambient or material temperatures lower than 50 degrees F.

3.33 FIELD QUALITY CONTROL

- A. Perform the inspection and tests described and meet the specified requirements for inspection details and frequency of testing.
- B. Based upon the results of these inspections and tests, take the action and submit reports as required below, and any additional tests to insure that the requirements of these specifications are met.

3.34 Concrete Testing

3.34.1 Strength Testing

- A. Provide molded concrete specimens for strength tests. Samples of concrete placed each day shall be taken not less than once a day not less than once for every 250 cubic yards of concrete.
- B. The samples for strength tests shall be taken in accordance with ASTM C172/C172M.
- C. Cylinders for acceptance shall be molded in conformance with ASTM C 31/C 31M by an approved testing laboratory.
- D. Each strength test result shall be the average of 2 test cylinders from the same concrete sample tested at 28 days, unless otherwise specified or approved.
- E. Concrete specified on the basis of compressive strength will be considered satisfactory if the averages of all sets of three consecutive strength test results equal or exceed the specified strength, and no individual strength test result falls below the specified strength by more than 500 psi.

3.34.2 Air Content

- A. Determine air content in accordance with ASTM C 173/C 173M or ASTM C231/C231M.
- B. ASTM C231/C231M shall be used with concretes and mortars made with relatively dense natural aggregates.
- C. Two tests for air content shall be made on randomly selected batches of each class of concrete placed during each shift.
- D. Additional tests shall be made when excessive variation in concrete workability is reported by the placing foreman or the inspector.
- E. If results are out of tolerance, the placing foreman shall be notified and he shall take appropriate action to have the air content corrected at the plant.
- F. Additional tests for air content will be performed on each truckload of material until such time as the air content is within the tolerance specified.

3.34.3 Slump Test

- A. Two slump tests shall be made on randomly selected batches of each class of concrete for every 250 cubic yards, or fraction thereof, of concrete placed during each shift. Additional tests shall be performed when excessive variation in the workability of the concrete is noted or when excessive crumbling or slumping is noted along the edges of slip-formed concrete.

3.34.4 Thickness Evaluation

- A. The anticipated thickness of the concrete shall be determined prior to placement by passing a template through the formed section or by measuring the depth of opening of the extrusion template of the curb forming machine.
- B. If a slip form paver is used for sidewalk placement, the subgrade shall be true to grade prior to concrete placement and the thickness will be determined by measuring each edge of the completed slab.

3.34.5 Surface Evaluation

- A. The finished surface of each category of the completed work shall be uniform in color and free of blemishes and form or tool marks.

3.35 SURFACE DEFICIENCIES AND CORRECTIONS

- A. When measurements indicate that the completed concrete section is deficient in thickness by more than 1/4 inch the deficient section will be removed, between regularly scheduled joints, and replaced.

3.36 High Areas

- A. In areas not meeting surface smoothness and plan grade requirements, high areas shall be reduced either by rubbing the freshly finished concrete with carborundum brick and water when the concrete is less than 36 hours old or by grinding the hardened concrete with an approved surface grinding machine after the concrete is 36 hours old or more.
- B. The area corrected by grinding the surface of the hardened concrete shall not exceed 5 percent of the area of any integral slab, and the depth of grinding shall not exceed 1/4 inch.
- C. Pavement areas requiring grade or surface smoothness corrections in excess of the limits specified above shall be removed and replaced.

3.37 Appearance

- A. Exposed surfaces of the finished work will be inspected by the Engineer and any deficiencies in appearance will be identified. Areas which exhibit excessive cracking, discoloration, form marks, or tool marks or which are otherwise inconsistent with the overall appearances of the work shall be removed and replaced.

END OF SECTION

SECTION 32 92 19
SEEDING AND SODDING

PART 1 - GENERAL

1.01 Description:

- A. This Section includes seeding and sodding to the limits shown as required for restoration and restabilization of disturbed areas, and as directed by the Engineer, including preparation of seed and sod bed, fertilizer, lime and mulch, in accordance with the Contract Documents.

1.02 Submittals:

- A. Submit certificates of compliance before delivery of materials for the following items:

1. Topsoil
2. Seed
3. Sod
4. Fertilizer
5. Lime
6. Mulch

1.03 Construction Criteria:

- A. The following classes of restoration as defined below are noted in the Restoration Schedule on the drawings.

1. Type A Sod (established lawns park lawns and highly mowed public spaces). Commence continuous restoration work within 10 days after completion of work between first manholes but no later than 10 days after commencement of trench excavation operations.
2. Type B Sod (sodded swales)
3. Type C Surge stone (seeded and stone - lined swales)
4. Type D Seed (Improved areas) Type of seeding operation shall be as specified in II.B. of this Section.
5. Type E Seed (unimproved and outfall areas). Type of seeding operation shall be as specified in II. B of this Section.
6. Type F (Development sites with existing stabilization of temporary mulch or planted seed)- Restore in kind and maintain.

1.04 Reference Documents:

- A. The Contractor shall obtain and maintain on the site at all times a copy of requirements of Maryland Turf Grass Law and Regulations, publication no. 41, available from the Seed and Turf lab, Agronomy Department, University of Maryland, College Park, Maryland 20742.

PART 2 - MATERIALS

2.01 Topsoil:

- A. Topsoil stockpiled for re-use (if any) shall be approved prior to incorporation in Work. If quantity of stockpiled topsoil is insufficient, provide additional topsoil as required.
- B. No topsoil is to be removed from site without Owner's permission.
- C. Prior to re-use on-site, stockpiled topsoil shall be screened and inspected by geotechnical engineer for compliance with specifications. Geotechnical engineer shall inspect and certify topsoil prior to its re-use on-site.
- D. Existing or imported topsoil shall be a fertile, friable, sandy loam containing organic matter of 2 percent or greater and shall be capable of sustaining vigorous plant growth. Top-soil shall consist of 60-75 percent sand, 15-30 percent silt, and 5-10 percent clay. It shall be free of admixture of subsoil, and contain no stones, lumps, clods of hard earth, slag, cinders, sticks, plants or their roots, trash or other extraneous materials greater than 1" in dimension. Topsoil must also be free of plant parts of Mugwort, Bermuda grass, Quack grass, Johnson grass, nut sedge, poison ivy, Canada thistle, or others as specified. Top-soil shall not be used for planting operations while in a frozen or muddy condition. Top-soil sources shall be tested by a recognized laboratory at expense of Contractor for pH, soil texture and soluble salts. Test results must be presented to Landscape Architect prior to placement of topsoil on site. Topsoil shall contain 3 percent decomposed organic determined by loss on ignition on moisture-free samples dried in accordance with current methods of Association of Official Agricultural Chemists. Topsoil shall meet the following analysis as determined by the MSHA Standard Hydrometer Test. Sand, silt and clay are defined in AASHTO M146.
- E. Acceptable soil test results:

1.	pH range:	5.8-7.0
2.	Organic Matter	10%
3.	Magnesium (Mg)	100+ units
4.	Phosphorus (P205)	150+ units
5.	Potassium (K20)	120+ units
6.	Soluble Salts/Conductivity	Not to exceed 450 ppm/0.9 mmhos/cm (in soil); Not to exceed 300 ppm/2.5 mmhos/cm (in high organic mix)
7.	Boron	not to exceed 3 lbs./acre

8. Manganese not to exceed 50 lbs./acre

F. Topsoil Installation:

1. Topsoil mixture shall not to be spread until underground pipe work and fine sub grading is completed to the satisfaction of Owner in accordance with drawings.
2. Immediately prior to dumping and spreading topsoil mixture, subsurface shall be loosened by disking or by scarifying to depth of at least 5 inches to permit thorough bonding of topsoil. Fine grade areas to be top soiled to new contour grades, less topsoil mixture depth.
3. Add together a mixture of two-thirds sandy loam topsoil and one-third com-post by volume to a depth of 4inches and rototill into subsoil. During spreading operation, this mixture shall be raked and stones in excess of one inch in diameter and rubbish shall be removed.
4. Topsoil mixture shall have a minimum thickness of six inches after natural settlement and light rolling and shall conform to grades and elevations as shown on drawings. Do not place topsoil mixture when muddy or frozen conditions exist.
5. Topsoil mixture shall be spread in areas to be sodded or seeded.
6. Obtain topsoil from project site stockpiles established during clearing operations. Obtain additional topsoil required for landscape development from off-site sources and transport to project site at no increase to Contract Sum. Topsoil shall not be delivered in frozen or muddy condition. Topsoil shall be screened before delivery to project site.
7. Transport excess topsoil from project site to off-site disposal areas or relocate excess topsoil stockpiles to locations on project site, where directed by Engineer.

2.02 Seed:

- A. Unless otherwise specified herein, seed shall be certified by the Maryland State Board of Agriculture and shall conform to requirements of Maryland Turf Grass Law and Regulations, Publication number 41.
- B. Supply the following for improved areas which will be mowed regularly, and are dry and semi shady:

Semi-Shade Mix:

Kentucky Bluegrass's
20-30% Certified Merion
20-30% Certified Kenblue or South Dakota Certified
10-40% Certified Adelphi, Baron, Birka or Pennstar

Creeping Red Fescue
10-50% Certified Pennlawn or Jamestown

Seeding Rate: Sow mixture at 260 pounds per acre, or six pounds per 1,000 square feet between March 1 and May 31 and between August 15 and October 31.

Premixed certified grass mixture labeled 'Maryland Certified 30-30-30-10 Seed Mixture' will be acceptable.

- C. Supply the following for improved areas which will be mowed regularly and are dry, in heavy shade:

Heavy Shade Mix:

Kentucky Bluegrass

20% Certified Merion
30% Certified Kenblue or South Dakota, Adelph, Baron, Birka or
Pennstar (any combination thereof)

Creeping Red Fescue
50% Certified Pennlawn or Jamestown

Seeding rate: Sow mixture at 140 pounds per acre or three pounds per 1,000 square feet between March 1 and May 31 and between August 15 and October 31.

Supply the following for unimproved areas not to be mowed (or mowed infrequently) and are drought-prone:

Drought-Prone Mix:

Tall Fescue:
80-90% Certified Kentucky 31

Annual Rye Grass
10-20% (Certification not required)

Seeding rate: Sow mixture at 130 pounds per acre or three pounds per 1,000 square feet between March 1 and May 31 and between August 15 and October 31.

- E. Supply the following for unimproved areas which are poorly drained areas and areas that are subject to frequent flooding:

Wet Area Mix:

Tall Fescue:
75% Certified Kentucky 31

Reed Canarygrass:
25% (Certified Not Required)

Seeding Rate: Sow mixture at 130 pounds per acre or three pounds per 1,000 square feet between March 1 and May 31 and between August 15 and October 31.

- F. Supply one of the following for temporary grass stabilization;

Temporary Seed Mixture:

Sudangrass or Annual Ryegrass: Seeding rate; sow mixture at 40 pounds per acre or one pound per 1,000 square feet between March 15th and May 31st and between August 15th and October 15th.

Millet: Seeding rate; sow mixture at 40 pounds per acre or one pound per 1,000 square feet between May 31st and August 15th.

Do not use the above in maintained turf areas.

2.03 Sod:

General:

- A. Sod shall be Certified or Approved grade as designated by the Maryland State Board of Agriculture and shall conform to Requirements of Maryland Turf Grass Law and Regulations, publications number 41.
- B. Sod shall be machine cut at a uniform thickness of 3/4 inch \pm 1/4 inch, excluding top growth and thatch. Each individual sod piece shall be strong enough to support its own weight when lifted by the ends. Broken pads, irregularly shaped pieces, and torn or uneven ends will not be acceptable.
- C. Sod replacing previously established stand of turf shall be similar in kind to that which existed prior to construction.
- D. Sod placed where no grass existed prior to construction or replacing a lawn consisting mainly of coarse textured grass without a dominate species shall be as follows:
- E. "Maryland State Approved" Multi-Use Turf Sod Tall Fescue:

- F. 90-100% Certified Kentucky 31
- G. Kentucky Bluegrasses:
 - 1. 0-10% Certified Kenblue (Kentucky origin), Certified Herion, or South Dakota Certified
- H. Sod replacing a lawn consisting mainly of fine textured grass without a dominant species shall be as follows:
- I. Maryland Certified 30-30-30-10 sod.

2.04 Fertilizer:

- A. Fertilizer shall be uniform in composition, free flowing and delivered to the site fully labeled according to applicable state fertilizer laws and shall bear the name, trade name or trademark and warranty of the producer.
- B. The Contractor shall submit soils samples to an approved soils testing laboratory for fertilizing recommendations. Apply fertilizer in accordance with a soil test report and as recommended by the University of Maryland Extension.
- C. Lawn fertilizer may not be applied between November 15 and March 1.

2.05 Lime:

- A. Lime shall be ground limestone containing at least 50 percent total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such a fineness that at least 50 percent will pass through a 100 mesh sieve and 98% will pass through a 20 mesh sieve.
- B. Supply 70 pounds per 1,000 square feet (1-1/2 tons per acre) on sandy and silty soils or 100 pounds per 1,000 square feet 2.3 per acre) on clay or clay loam soils.

2.06 Mulch:

- A. Mulch for protection of permanent seeding shall conform to the following requirements:
 - 1. Straw, clean, weed free, unrotted straw applied at a rate of not less than 70 pounds per 1,000 square feet (1 1/2 tons per acre) and shall be anchored with: Mulch anchoring tool (flat slopes), mulch nettings, cut back and emulsified asphalt (five gallons per 1,000 square feet), Curasol AH (five gallons per 1,000 square feet), Terra Tack II (20 gallons per 1,000 square feet), or Petroset (Manufacturer's recommendations).

2. Mulch nettings, jute or excelsior blanket.

Mulch utilized as temporary protection and stabilization shall conform to the above materials requirements. Rate of application shall be as directed by the Engineer. Stone mulch will be permitted at the option of the Engineer.

3. Wood chips, coverage to be 1-1/2 inches deep.

Use either straw or cellulose wood fiber for landscaping.

PART 3 – EXECUTION

3.01 Permanent Seeding:

- A. Harrow, disc, or otherwise loosen subsoil to a depth of four inches. Spread topsoil evenly over prepared subsoil to the following depths:

slopes 3:1 or steeper; two inches after compaction

slopes flatter than 3:1, four inches after compaction

- B. Remove objectionable material such as stones, 1-1/2 inches or larger, clods, brush, roots and trash from the top four inches of soil.
- C. Apply lime and fertilizer at the rates specified in "Materials", and thoroughly mix into the top six inches. Scarify the area and rake until the surface is leveled up to provide a maximum of two inches in variation, and the soil is friable and of uniform fine texture.
- D. Immediately prior to seeding apply additional fertilizer at the rates specified in "Materials", and work into the top two inches of the soil.
- E. Perform harrowing discing, scarifying and raking on the contour of slopes steeper than 3:1.
- F. Moisten seedbed during periods of high temperatures and when directed by the Engineer.
- G. Apply seed mixture uniformly with mechanical power driven seeders, mechanical cyclone hand seeders or hydroseeding equipment. (Slurry for hydroseeder may contain seed and fertilizer only.)
- H. Disc seed one inch into soil in floodplain areas. Rake, roll or drag the seedbed in all other areas, if hydroseeder or cyclone seeder is used.
- I. Apply mulch at the rates specified in "Materials".
- J. Anchor mulch as specified.

3.02 Temporary Seeding:

- A. Loosen top two inches of seedbed.
- B. Apply lime and fertilizer at the rates specified in "Materials".
- C. Moisten seedbed during periods of high temperature and when directed by the Engineer.
- D. Apply seed mixture uniformly with mechanical power drawn seeders, mechanical cyclone hand seeders or hydroseeding equipment. (Slurry for hydroseeder may contain seed and fertilizer only.)
- E. Disc seed one inch into soil in floodplain areas. Rake, roll or drag seedbed in all other areas, if hydroseeded or cyclone seeder is used.
- F. Apply mulch at the rates specified in "Materials".
- G. Anchor mulch as specified.

3.03 Sodding:

- A. Harrow disc or otherwise loosen subsoil to a depth of five inches.
- B. Remove objectionable material such as stones, 1-1/2 inches or larger, clods, brush, roots and trash from top four inches of soil.
- C. Apply lime and fertilizer at the rates specified in "Materials" and thoroughly mix into the loosened subsoil. Scarify the area and rake until the surface is leveled to provide a maximum of two inches in variation, and the soil is friable and of uniform fine texture.
- D. Immediately prior to sodding apply additional fertilizer at the rates specified in "Materials" and work into the top two inches subsoil.
- E. Perform harrowing, discing, scarifying and raking on the contour of slopes steeper than 3:1.
- F. Moisten sod bed if dry and when directed by the Engineer.
- G. Deliver sod to the site within 24 hours after being cut and install sod within 36 hours after being cut.
- H. During wet weather, dry sod sufficiently to prevent tearing during handling and placing. During dry weather, water sod sufficiently before lifting to insure its vitality and to prevent dropping off of soil during handling.

- I. Sod which has desiccated will be rejected and shall be replaced by the Contractor at no cost to the Owner.
- J. Place sod in straight lines parallel to one another. Stagger lateral joints and butt tight. On slopes 5:1 and steeper lay sod with long edges parallel to the contour starting at the top of the slope. In drainage ditches and sodded channels, lay sod with the long edge parallel to the flow of water.
- K. On slopes 2:1 and steeper and in surface drainage V-shaped or flat bottomed ditches, stake each strip of sod with at least, two stakes, spaced not more than two feet apart, or wire staples.
- L. Immediately upon completion of a section of sodding, roll, tamp, and water until the underside of the sod pad and soil surface beneath it are thoroughly wet and in contact with each other so as to eliminate air pockets.
- M. Completion of laying, rolling, tamping and watering shall be within an eight hour period.
- N. Perform sodding between September 15 and May 15.

3.04 Mulch Only:

- A. Perform grading as required. Place and anchor mulch only at the rates specified in "Materials" where indicated and where directed by the Engineer.

3.05 Time Restrictions:

- A. When permanent seeding or sodding is specified or directed, and seeding is not allowed because of time restrictions specified in "Materials", utilize one or more of the following methods to prevent erosion and sedimentation until such time as permanent seeding or sodding is allowed:
 - 1. Place and anchor straw mulch.
 - 2. Apply temporary seeding.
 - 3. Prepare soil as for permanent seeding and then mulch as specified; overseed during next seasonal seeding period.
 - 4. Provide other erosion control measures acceptable to the Engineer and the Sediment Control Inspector.
 - 5. Remove straw or wood chips used as temporary mulch or work into subsoil to a minimum depth of six inches prior to initiation of permanent seeding application.

3.06 Maintenance of Seeded and Sodded Areas:

- A. Maintain seeded and sodded areas until accepted stand of grass is established. Water seeded and sodded areas as necessary to maintain adequate moisture in the upper four inches of soil and keep mowed to a height of two to three inches. Do not remove more than 1/3 of the grass leaf during initial mowing. Do not mow sod until it is firmly rooted.
- B. Inspect seeded and sodded areas for failures and necessary repairs. Provide replacements during the specified planting seasons. If stand of turf is inadequate as determined by the Engineer, overseed and fertilize using half of the rates originally applied, or resod.
- C. If stand is over 60 percent damaged, reestablish following original lime, fertilizer, seed or sod bed preparation and seeding or sodding recommendations.

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