

## **Project Manual**

for

# God's Country Village and Farmers Market Phase 1

Coudersport Borough Potter County, PA

March 10, 2025

#### **PROJECT MANUAL**

# Potter County God's Country Village and Farmers Market - Phase 1

#### Prepared for:

Potter County One North Main Street Coudersport, PA 16915 (814) 274-8290 Attn: Mr. William Hunt

#### Prepared by:

YSM Landscape Architects 19 South Newberry Street York, PA 17401 (717) 812-9959

Contact: Mr. Charles Strodoski, RLA

March 10, 2025

Project No. 22PTC-01



#### PROJECT DIRECTORY

OWNER:	Potter County
--------	---------------

One North Main Street Coudersport, PA 16915 Attn: Mr. William Hunt Phone: (814) 274-8290

**LANDSCAPE** 

**ARCHITECT:** YSM Landscape Architects

19 South Newberry Street

York, PA 17401

Attn: Chuck Strodoski, RLA Phone: (717) 812-9959

**ELECTRICAL** 

**ENGINEER:** Paragon Engineering Services, Inc.

1620 South Queen Street

York, PA 17403

Attn: Randy Ferree, Electrical Designer

Phone: (717) 854-7374

#### **TABLE OF CONTENTS**

	Page
INVITATION TO BID	1
INSTRUCTIONS TO BIDDERS	IB-1 TO IB-6
NON-COLLUSION AFFIDAVIT	1
BIDDER'S QUALIFICATION FORM	QF-1 TO QF-3
BID BOND	1 TO 2
NON-DISCRIMINATION / SEXUAL HARASSMENT CLAUSE	1 TO 2
NOTICE OF AWARD	1
AGREEMENT	A-1 TO A-4
PERFORMANCE BOND	1 TO 2
PAYMENT BOND	1 TO 2
MAINTENANCE BOND	1 TO 2
NOTICE TO PROCEED	1
GENERAL CONDITIONS	1 TO 44
SUPPLEMENTAL CONDITIONS	SC-1 TO SC-9
PA PREVAILING WAGE RATES	1 TO 7
CHANGE ORDER	1 TO 2
APPLICATION FOR PAYMENT	1 TO 3
CERTIFICATE OF SUBSTANTIAL COMPLETION	1 TO 2
TECHNICAL SPECIFICATIONS	

<b>DIVISION 01</b>	
<u>SECTION</u>	TITLE
01010	GENERAL PROVISIONS
01040	COORDINATION
01120	MULTIPLE CONTRACT SUMMARY
01300	SUBMITTALS
01400	QUALITY CONTROL
01500	TEMPORARY FACILITIES AND CONTROLS
01700	CONTRACT CLOSEOUT

# DIVISION 02 SECTION TITLE 02700 BASES, BALLASTS, PAVEMENTS, AND APPURTENANCES 02750 CONCRETE PAVEMENT 02800 SITE IMPROVEMENTS AND AMENITIES 02900 PLANTING 02920 FINE GRADING, SOIL PREPARTION, AND SEEDING

#### INVITATION TO BID

**OWNER:** Potter County County

One North Main Street Coudersport, PA 16915

(814) 274-8290

**LANDSCAPE** 

**ARCHITECT:** YSM

19 South Newberry Street

York, PA 17401 (717) 812-9959

Sealed proposals will be received electronically by the Potter County Commissioners until 11:00 AM on Friday, March 28, 2025 for the following project:

God's Country Village and Farmers Market – Phase 1 contains two (2) contracts: Contract No. 1 – Site Improvement Contract (General Contract) and Contract No. 2 – Electrical Contract.

Contract No. 1 – Site Improvement Contract includes, but is not limited to providing all labor, materials, equipment, superintendence and appurtenances for the construction of concrete pavements, cobblestone edging, wood fencing and gate, ADA signage and pavement markings, furnishing and delivery of aggregates, planting, lawn seeding and restoration, and other work as described in the contract documents. Alternate work includes landscaping.

Contract No. 2 – Electric Contract includes, but is not limited to providing all labor, materials, equipment, superintendence and appurtenances for the electric work associated with the furnishing and installation of a utility pole and electric appurtenances, and other work as described in the contract documents.

Plans and contract documents are available at no cost on PennBid (www.pennbid.net).

Inquiries shall be submitted using the "Questions" feature in PennBid.

A Performance Bond and Payment Bond each in the amount of one hundred percent (100%) of the contract price shall be required when the successful bidder delivers the signed agreement. A bid bond or certified check shall accompany each proposal to the Owner in the amount of 10 percent of the total base bid. Bids will be effective for 60 calendar days from the bid opening date and may not be withdrawn during this period. All bidders must bid on all items listed on the Bid Form and on each bidding alternative.

The Owner shall award the contract to the lowest responsible bidder or shall reject all bids within 60 days of the date of the bid opening, and no bidder may withdraw his bid before the expiration of such 60-day period; provided, however, that if the award of the contract is delayed by a required approval of another government agency, the sale of bonds or the award of the grant or grants, the Owner shall reject all bids or award the contract to the lowest responsible bidder within 120 days of the date of the BID opening, and no bidder may withdraw his bid before the expiration of such 120-day period. Thirty (30) day extensions of the date for the award of the contract may be made by the mutual written consent of the Owner and the lowest responsible bidder.

Potter County reserves the right to accept or reject any or all bids, to re-advertise and award the contract in the regular manner or to waive any informality in the bid received and to accept any bid deemed to be most favorable in the interest of Potter County.

Potter County Mr. William Hunt, Potter County Planning and GIS Director

#### **INSTRUCTIONS TO BIDDERS**

#### TABLE OF CONTENTS

		Page <u>Number</u>
I-1	Defined Terms	IB-1
I-2	Copies of Bidding Documents	IB-1
I-3	Qualifications of Bidders	IB-1
I-4	Examination of Contract Documents and Site	IB-1
I-5	Availability of Lands for Work, Etc.	IB-2
I-6	Interpretation and Addenda	IB-2
I-7	Bid Security	IB-3
I-8	Contract Time	IB-3
I-9	Liquidated Damages	IB-3
I-10	Substitute or "Or-Equivalent" Items	IB-3
I-11	Subcontractors, Suppliers and Others	IB-3
I-12	Bid Form	IB-3
I-13	Submission of Bids	IB-4
I-14	Modification and Withdrawal of Bids	IB-4
I-15	Opening of Bids	IB-4
I-16	Bids to Remain Subject to Acceptance	IB-4
I-17	Award of Contract	IB-4
I-18	Contract Security	IB-5
I-19	Signing of Agreement	IB-5
I-20	Pre-Bid Conference	IB-5
I-21	Non-Collusion	IB-5

#### **INSTRUCTIONS TO BIDDERS**

#### I-1 DEFINED TERMS

Terms used in these Instructions to Bidders which are defined in the Standard General Conditions of the Construction Contract (EJCDC No. 1910-8 - 1996 Edition) have the meanings assigned to them in the General Conditions.

Certain additional terms used in these Instructions to Bidders have the meanings indicated below which are applicable to both the singular and plural thereof.

- I-1.1 "Bidder" one who submits a Bid directly to Owner as distinct from a sub-bidder, who submits a bid to a Bidder.
- I-1.2 "Successful Bidder" the lowest, qualified, responsible and responsive Bidder to whom Owner, on the basis of owner's evaluation as hereinafter provided, makes an award.
- I-1.3 "Bidding Documents" includes the Invitation to Bid, Instructions to Bidders, the Bid Form, Agreement form, Specifications and the Contract Drawings, including all Addenda issued prior to receipt of Bids.
- I-1.4 "Landscape Architect" refers to Yost Strodoski Mears, 19 South Newberry Street, York, PA 17401.

#### I-2 COPIES OF BIDDING DOCUMENTS

- I-2.1 Complete sets of the Bidding Documents are available at no cost on PennBid (www.pennbid.net)
- I-2.2 Complete sets of Bidding Documents must be used in preparing Bids; neither Owner nor Landscape Architect assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- I-2.3 Owner and Landscape Architect in making copies of Bidding Documents available on the above terms do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

#### I-3 QUALIFICATIONS OF BIDDERS

- I-3.1 In addition to the information included as part of the Bidder's Qualification Form submitted with the bids, each Bidder must be prepared to submit, within five days all information as Owner requires to determine the successful Bidder.
- I-3.2 No Bid will be accepted from anyone who is in arrears to the Owner upon debt or contract, or who is a defaulter on surety or otherwise upon any obligations, or whose work heretofore has been unsatisfactory or dilatory.

#### I-4 EXAMINATION OF CONTRACT DOCUMENTS AND SITE

- I-4.1 It is the responsibility of each Bidder before submitting a Bid:
  - (a) To examine thoroughly the Contract Documents and other related data identified in the Bidding Documents (including "technical data" referred to below);
  - (b) To visit the site to become familiar with and satisfy Bidder as to the general, local and site conditions that may affect cost, progress, performance or furnishing of the Work;
  - (c) To consider federal, state and local laws and regulations that may affect cost, progress, performance or furnishing of the Work;

- (d) To study and carefully correlate Bidder's knowledge and observations with the Contract Documents, and such other related data;
- (e) To promptly notify Landscape Architect of all conflicts, errors, ambiguities or discrepancies which Bidder has discovered in or between the Contract Documents, and other such related documents; and
- I-4.2 Information and data shown or indicated in the Contract Documents with respect to existing underground facilities at or contiguous to the site is based upon information and data furnished to Owner and Landscape Architect by Owners of such underground facilities or others, and Owner and Landscape Architect do not assume responsibility for the accuracy or completeness thereof unless it is expressively provided otherwise in the Supplementary Conditions.
- I-4.3 Before submitting a Bid, each Bidder will, at Bidder's own expense, make or obtain any additional or supplementary examinations, investigations, explorations, tests and studies and obtain any additional information and data which pertain to the physical conditions (surface, subsurface and underground facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, or procedures of construction to be employed by Bidder and safety precautions and programs incident thereto or which Bidder deems necessary to determine its Bid for performing and furnishing the Work in accordance with the time, price and other terms and conditions of the Contract Documents.
- I-4.4 On request, Owner will provide each Bidder access to the site to conduct such examinations, investigations, explorations, tests and studies as each Bidder deems necessary for submission of a Bid. Bidder shall fill all holes, clean up and restore the site to its former condition upon completion of such explorations, investigations, tests and studies.
- I-4.5 The lands upon which Work is to be performed, rights-of-way and easements for access thereto and other lands designated for use by Contractor in performing the Work are identified in the Contract Documents.
- I-4.6 Reference is made to the Supplementary Conditions for the identification of the general nature of Work that is to be performed at the site by Owner or others that relates to the Work for which a Bid is to be submitted. On request, Owner will provide to each Bidder for examination access to or copies of Contract Documents available to Owner (other than portions thereof related to price) for such Work.
- I-4.7 The submission of a Bid will constitute a representation by Bidder that he has complied with every requirement of this I-4, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.

#### I-5 AVAILABILITY OF LANDS FOR WORK, ETC.

The lands upon which Work is to be performed, rights-of-way and easements for access thereto and other lands designated for use by Contractor in performing the Work are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by the Contractor. Easements for permanent structures or permanent changes in existing structures are to be obtained and paid for by the Owner unless otherwise provided in the Contract Documents.

#### I-6 INTERPRETATIONS AND ADDENDA

- I-6.1 All questions about the meaning or intent of the Contract Documents shall be submitted using the "Questions" feature in PennBid at least ten days prior to Bid opening. Replies will be issued by Addenda to all parties having received the Bidding Documents. Questions received less than 10 days prior to the date for opening of Bids will not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- It shall be the duty of each prospective Bidder to ascertain what Addenda, if any, have been issued by the Landscape Architect, which may affect the work to be covered by his proposal, and to inform his prospective Subcontractors.
- I-6.3 Failure of any Bidder to receive any Addendum, as provided for in this paragraph, shall not relieve such Bidder from the obligation of his proposal.

#### I-7 BID SECURITY

- I-7.1 Bid Security shall be made payable to Owner in an amount of 10 percent of the Bidder's maximum Bid price in the form of a certified check or a Bid Bond issued by a surety meeting the requirements of Paragraph 6.3.
- I-7.2 The Bid Security of the Lowest Responsible Bidder will be retained until such Bidder has executed the Agreement, furnished the required Performance Bond and Payment Bond Certificates of Insurance, and executed Agreement; where upon it will be returned. If the Lowest Responsible Bidder fails to furnish the required contract security or fails to execute and return the Agreement within 15 calendar days after the Notice of Award, Owner may annul the Notice of Award and the Bid Security of the apparent Lowest Responsible Bidder may be retained by the Owner until the earlier of the seventh day after the effective date of Agreement or the sixtieth day after the Bid opening, whereupon Bid Security furnished by such Bidders will be returned. Bid Security of other Bidders will be returned upon receipt of an executed Agreement and required Payment Bond and Performance Bond for the Contract. Bid securities that are forfeited will be paid to the Owner as liquidated damages.
- I-7.3 All bonds submitted as Bid Security shall be written on the enclosed Bid Bond only and shall be executed by surety companies legally authorized to do business in Pennsylvania. Such surety companies shall also be named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in current Circular 570 by the Audit Staff Bureau of Accounts, U.S. Treasury Department. Attorney-In-Fact who sign Bid Bond must file with each bond a certified copy of their Power of Attorney to sign said bonds, bearing the same date as the bonds.

#### I-8 CONTRACT TIME

The numbers of days within which, or the dates by which, the Work is to be completed (the Contract Time) is set forth in the Agreement.

#### I-9 LIQUIDATED DAMAGES

Provisions for liquidated damages, if any, are set forth in the Agreement.

#### I-10 SUBSTITUTE OR "OR-EQUAL" ITEMS

The Contract, if awarded, will be on the basis of materials and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute or "or equal" items. Whenever it is indicated in the Drawings or specified in the Specifications that a substitute or "orequal" item of material or equipment may be furnished or used by Contractor if acceptable to Landscape Architect application for such acceptance will not be considered by Landscape Architect until after the effective date of the Agreement. The procedure for submission of any such

application by Contractor and consideration by Landscape Architect is set forth in Paragraphs 6.05.A, 6.05.B, 6.05.C, 6.05.D, and 6.05.E of the General Conditions.

#### I-11 SUBCONTRACTORS, SUPPLIERS and OTHERS

Qualifications of Subcontractors, Suppliers and others, if any, are set forth in the Supplementary Conditions.

#### I-12 BID FORM

- I-12.1 The Bid Form is included with the Bidding Documents; additional copies may be obtained from Landscape Architect (or the Issuing Office).
- I-12.2 All blanks on the Bid Form must be completed in permanent and legible fashion.
- I-12.3 Bids by corporations must be executed in the corporate name by the president or vice president, (or other person having authority to bind the corporation, accompanied by corporate power of attorney), and the corporate seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation must be shown below the signature. The bids must be notarized.
- I-12.4 Bids by partnerships must be executed in the partnership name and signed by a partner who has the authority to bind the partnership. The executing partner's title must appear under the signature and the official address of the partnership must be shown below the signature. The bids must be notarized.
- I-12.5 All names must be typed or printed in ink below the signature.
- I-12.6 The Bid shall contain an acknowledgement of receipt of all Addenda, the numbers of which must be filled in on the Bid Form.
- I-12.7 The address and telephone number for communications regarding the Bid must be shown.
- I-12.8 Evidence of authority to conduct business as an out-of-state corporation in the state where the work is to be performed shall be provided in accordance with Paragraph I-3 above, state contractor license number, if any, shall also be shown.

#### I-13 SUBMISSION OF BIDS

- I-13.1 Bids shall be submitted electronically via the PennBid Program as indicated in the Invitation to Bid. Visit <a href="https://www.pennbid.net">www.pennbid.net</a>.
- I-13.2 Bids shall be submitted on the electronic Bidding Document forms in PennBid, and shall include attached supporting documentation as identified in the Contract Documents. Typically, forms consist of the Bid Form; the Bid Bond form, the Bidder's Qualification Form, and the Non-Collusion Affidavit. All documents must be completed and received by the time and date indicated in the Invitation to Bid.

#### I-14 MODIFICATION AND WITHDRAWAL OF BIDS

- I-14.1 Bids may be modified or withdrawn in PennBid at any time prior to the opening of Bids.
- I-14.2 Bids may be withdrawn after bid opening without forfeiture of bid security only in accordance with 73 P.S. §1602.

#### I-15 OPENING OF BIDS

Bids will be opened as indicated in the Invitation to Bid.

#### I-16 BIDS TO REMAIN SUBJECT TO ACCEPTANCE

All bids will remain subject to acceptance for 60 days after the day of the Bid opening.

#### I-17 AWARD OF CONTRACT

- I-17.1 Owner reserves the right to reject all Bids, to waive all information, and to refuse to consider nonconforming, non-responsive, or conditional Bids and to reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the project to make an award to that Bidder, whether because the Bid is not responsive or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by Owner. Owner also reserves the right to waive all informalities not involving price, time or changes in the Work and to negotiate contract terms with the Successful Bidder. The evaluation of Bids will be based on the sum of the total Base Bid price plus the total price offered for completing all of the alternate work items selected and awarded by Owner. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.
- 1-17.2 In evaluating Bids, Owner will consider the qualifications of the Bidders, whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, if requested in the Bid Form or prior to the Notice of Award.
- I-17.3 Owner may consider the qualifications and experience of Subcontractors and other persons and organizations proposed for those portions of the Work as to which the identity of Subcontractors and other persons and organizations must be submitted as provided in the Supplementary Conditions. Owner also may consider the operating costs, maintenance requirements, performance data and guarantee of major items of materials and equipment proposed for incorporation in the Work when such data is required to be submitted prior to the Notice to Award.
- I-17.4 Owner may conduct such investigations as Owner deems necessary to assist in the evaluation of the Bid and to establish the responsibility, qualifications and financial ability of Bidders, proposed subcontractors, Suppliers and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to Owner's satisfaction within the prescribed time.
- I-17.5 If the contract is to be awarded, it will be awarded to the Lowest Responsible Bidder whose evaluation by Owner indicates to Owner that the award will be in the best interests of the project.
- I-17.6 If the contract is to be awarded, Owner will give the Lowest Responsible Bidder a Notice of Award within the time specified for Bids to remain irrevocable.

#### I-18 CONTRACT SECURITY

The General Conditions and the Supplementary Conditions set forth Owner's requirements as to Performance, Payment, and Maintenance Bonds. When the Successful Bidder delivers the executed Agreement to Owner, it must be accompanied by the required Performance and Payment Bonds.

If a Bidder desires to post letters of credit as Contract Security rather than bonds, the Bidder must notify the Owner. The Owner will then issue an addenda setting forth the form of letters of credit.

#### I-19 SIGNING OF AGREEMENT

When Owner gives a Notice of Award to the Lowest Responsible Bidder, it will be accompanied by the required number of unsigned counterparts of the Agreement with all other written Contract Documents attached. Within 15 days thereafter Contractor shall sign and deliver the required number of counterparts of the Agreement and the attached documents to Owner with the required Bonds. Thereafter, Owner shall deliver one fully signed counterpart to Contractor.

#### I-20 PRE-BID CONFERENCE

A pre-bid conference, if stated in the Invitation to Bid, will be held at the date and time noted in the Invitation to Bid. Representatives of Owner and Landscape Architect will be present to discuss the project. Bidders are recommended to attend and participate in any such conference. Landscape Architect will transmit all prospective Bidders of record such Addenda, as Landscape Architect considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

#### I-21 NON-COLLUSION

Bidder is required to complete a Non-Collusion Affidavit, to be submitted with the Bid. This affidavit is required on all projects involving public funding as provided in Section 7 of the Pennsylvania Anti-Bid-Rigging Act.

#### I-22 WAGES AND SALARIES

- I-22.1 Attention of Bidders is particularly called to the requirement concerning the payment of not less than the prevailing wage and salary rates specified in the Contract Documents and the conditions of employment with respect to certain categories and classifications of employees.
- I-22.2 The rates of pay set forth in the contract documents are the minimum to be paid during the life of the Contract. It is therefore the responsibility of Bidders to inform themselves as to local labor conditions, such as the length of work day and work week, overtime compensation, health and welfare contributions, labor supply and prospective changes or adjustments of rates.

#### **BID FORM**

# Contract No. 1 - Site Improvement Contract (General Contract)

Project Identification:	God's Country Village and Farmers Market – Phase 1
YSM Project No.:	22PTC-01
Name of Bidder:	
Date:	, 2025
This Bid is submitted to	: Potter County
	One North Main Street

Coudersport, PA 16915

- 1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Bid price and within the Bid Times indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.
- 2. Bidder accepts all of the terms and conditions of the Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid Security. This Bid will remain subject to acceptance for 90 days after the day of Bid opening. Bidder will sign and deliver the required number of counterparts of the Agreement with the Bonds and other documents required by the Bidding Requirements within 15 days after the date of Owner's Notice of Award.
- 3. In submitting this Bid, Bidder represents, as more fully set forth in the Agreement, that:

a.	Bidder has examined and carefully studied the Bidding Documents and the following Addenda receipt of all which is hereby acknowledged:
	receipt of all which is hereby acknowledged.

- b. Bidder has visited the site and become familiar with and is satisfied as to the general, local and site conditions that may affect cost, progress, performance and furnishing of the Work.
- c. Bidder is familiar with and is satisfied as to all federal, state and local laws and regulations that may affect cost, progress, performance and furnishing of the Work.
- d. Bidder is aware of the general nature of the Work to be performed by Owner and others at the site that relates to work for which this Bid is submitted as indicated in the Contract Documents.
- e. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the site, reports and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents.
- f. Bidder has given Landscape Architect written notice of all conflicts, errors, ambiguities or discrepancies that Bidder has discovered in the Contract Documents and the written resolution thereof by Landscape Architect is acceptable to Bidder, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Bid is submitted.
- g. This Bid is genuine and not made in the interest of or on the behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited

any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm or corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over Owner.

- h. Bid is based on Pennsylvania Prevailing Wage Rates as issued for the project.
- i. Bidder understands that unit prices are included for adjustment of the contract amount in the event the Owner directs additional work not shown on the Drawings and no adjustment will be made for actual quantities completed in performing the work shown on the plans.
- 4. Bidder will complete the Work as described on Drawings, sheets S1 through S4 and Specifications contained herein for the following price(s):

Contract No. 1 - Site Improvement Contract (General Contract)

	ltem	Quantity	Unit	Unit Price	Total Price
1	Mobilization/Demobilization	1	LS		
2	Bond and Insurance	1	LS		
3	Erosion Control Measures	1	LS		
4	Layout	1	LS		
5	Concrete Pavement – Parking Area	432	SF		
6	Concrete Pavement – Sidewalk	56	SF		
7	Concrete Pavement – Bench Areas	135	SF		
8	Cobblestone and Edging	1	LS		
9	#2A Coarse Aggregate (Furnish and stockpile on site for installation by Owner)	108	СУ		
10	TSA Aggregate (Furnish and stockpile on site for installation by Owner)	83	СҮ		
11	DSA Aggregate (Furnish and stockpile on site for installation by Owner)	129	СҮ		
12	Wood Fence Privacy Screen and Gate	1	LS		
13	ADA Signage and Pavement Markings	1	LS		
14	Landscaping (Pollinator Garden Planting)	1	LS		
15	Lawn Seeding and Restoration	1	LS		

TOTAL BASE BID (Sum of Total Price, Items 1-15)		
(figures)		
	<b>Dollars</b> and	Cents
(written)		

The stated amount constitutes the Base Bid and includes all fees, insurances, and bonds required to execute the work.

**UNIT PRICE NO. 1 – Drive Surface Aggregate** State the price per one cubic yard (1 c.y.) to furnish drive surface aggregate to the site as specified in Section 02700. Aggregate shall be placed by the Owner.

TC	OTAL UNIT PRICE NO. 1 – Drive Surface Aggregate:	(figures)
	<b>Dollars</b> and	Cents
(w	vritten)	
	NIT PRICE NO. 2 – Trail Surface Aggregate State the price per one cubic yard (1 c.y. rface aggregate to the site as specified in Section 02700. Aggregate shall be placed by the	
TC	OTAL UNIT PRICE NO. 2 – Trail Surface Aggregate:	(figures)
(w	vritten) Dollars and	Cents
sto	NIT PRICE NO. 3 – 2A Coarse Aggregate State the price per one cubic yard (1 c.y. ockpile 2A aggregate on site as specified in Section 02700. Aggregate shall be stock stallation by the Owner.	•
TC	OTAL UNIT PRICE NO. 3 – 2A Coarse Aggregate:(	figures)
_	<b>Dollars</b> and	Cents
(w	vritten)	
fui	EDUCT ALTERNATE NO. 1— Landscaping: State the total amount to be deducted from the rnishing and installation of the Pollinator Garden Planting as outlined on Detail 3/S3 is reported and replaced with lawn seeding.	
TC	OTAL DEDUCT ALTERNATE NO. 1 – Landscaping:	(figures
(w	Dollars andvritten)	Cent
	The Owner may, in its sole discretion, increase or decrease the Site Improvement (application of the unit price and alternates.	Contract, throu
5.	Bidder agrees that the Work will be substantially complete and ready for Final Payme with Paragraph 14.13 of the General Conditions, on or before the dates or within calendar days indicated in the Agreement.	
6.	The following documents are attached to and made a condition of this Bid:	
	a. Required Bid Security in the form of	
	b. A tabulation of subcontractors, suppliers and other persons and organizations	

7. Phone Number and Address for Receipt of Official Communications

c. Public Works Employment Verification Form.

Contact	t Name:			
Address	s:			
Phone I	Number:	Fa	ax Number:	
			n the General Conditions onditions or Instructions.	or Instructions will have
SUBMIT	ITED on	, 2025.		
If Bidde	er is:			
<u>An Individu</u>				
Ву		(Individual's Name	)	(SEAL)
doing b	usiness as			
Busines	ss Address:			
Phone f				
A Partnersh	<u>nip</u>			
Ву		(Firm's Name)		(SEAL)
		(General Partner)		
Busines	ss Address:	·		
Phone I	No.:			

#### **A Corporation**

Ву		(SEAL)
(Corpo	ration Name)	
(State of Inc	orporation)	
Ву		(SEAL)
(Name of Person	Authorized to Sign)	
(Corporate Seal)	(Title)	
Attest		
(\$	Secretary)	
Business Address:		
Phone No.:		
int Venture		
Ву		(SEAI
(	Name)	
()	Address)	
	Name)	(SEAL)
Į.	varie	
(A	Address)	

(Each joint venturer must sign. The manner of signing for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above.)

# BID FORM Contract No. 2 – Electric Contract

Project Identification:	God's Country Village and Farmers Market – Phase 1		
YSM Project No.:	22PTC-01		
Name of Bidder:			
Date:	, 2025		
This Bid is submitted to	o: Potter County One North Main Street		

Coudersport, PA 16915

- The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Bid price and within the Bid Times indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.
- 2. Bidder accepts all of the terms and conditions of the Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid Security. This Bid will remain subject to acceptance for 90 days after the day of Bid opening. Bidder will sign and deliver the required number of counterparts of the Agreement with the Bonds and other documents required by the Bidding Requirements within 15 days after the date of Owner's Notice of Award.
- 3. In submitting this Bid, Bidder represents, as more fully set forth in the Agreement, that:

a.	a. Bidder has examined and carefully studied the Bid	dding Documents and the following Addenda
	receipt of all which is hereby acknowledged:	

- b. Bidder has visited the site and become familiar with and is satisfied as to the general, local and site conditions that may affect cost, progress, performance and furnishing of the Work.
- c. Bidder is familiar with and is satisfied as to all federal, state and local laws and regulations that may affect cost, progress, performance and furnishing of the Work.
- d. Bidder is aware of the general nature of the Work to be performed by Owner and others at the site that relates to work for which this Bid is submitted as indicated in the Contract Documents.
- e. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the site, reports and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents.
- f. Bidder has given Landscape Architect written notice of all conflicts, errors, ambiguities or discrepancies that Bidder has discovered in the Contract Documents and the written resolution thereof by Landscape Architect is acceptable to Bidder, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Bid is submitted.
- g. This Bid is genuine and not made in the interest of or on the behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm

or corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over Owner.

- h. Bid is based on Pennsylvania Prevailing Wage Rates as issued for the project.
- i. Bidder understands that unit prices are included for adjustment of the contract amount in the event the Owner directs additional work not shown on the Drawings and no adjustment will be made for actual quantities completed in performing the work shown on the plans.
- 4. Bidder will complete the Work as described on Drawings, sheets S1 and SE1 and Specifications contained herein for the following price(s):

# Contract No. 2 Electric Contract

Т	OT/	AL BASE BID		(figures)
_			<b>Dollars</b> and	Cents (written)
		ated amount constitutes the Base Bid and includes all te	ees, insurances, and bond	ds required to
		wner may, in its sole discretion, increase or decrease the ice and alternates.	e Electric Contract, throug	h application of the
5.	wit	dder agrees that the Work will be substantially complet the Paragraph 14.13 of the General Conditions, on or lendar days indicated in the Agreement.	-	
6.	The	e following documents are attached to and made a cond	lition of this Bid:	
	a.	Required Bid Security in the form of		
	b.	A tabulation of subcontractors, suppliers and other identified in this Bid.	persons and organization	ons required to be
	c.	Public Works Employment Verification Form.		
7.	Ph	one Number and Address for Receipt of Official Commu	nications	
	Со	ntact Name:		
	Ad	ldress:		
	Ph	one Number: Fax Numbe	r:	
8.	The	e terms used in this Bid which are defined in the Ger meanings assigned to them in the General Conditions		ctions will have the

SUBMITTED on \_\_\_\_\_\_\_, 2025.

If Bidder is:

(SEAL)
(SE
_

#### **A Corporation**

Ву	(SEAL)
(Corporation Name)	
(State of Incorporation)	
By	(SEAL)
(Name of Person Authorized to Sign)	_
(Title)	
Attest	
(Secretary)	
Business Address:	
Phone No.:	
pint Venture	
Ву	(SEAL
(Name)	
(Address)	
Ву	(SEAL)
(Name)	
(Address)	

(Each joint venturer must sign. The manner of signing for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above.)

#### NON-COLLUSION AFFIDAVIT

Sta	ite of)
Co	unty of)
	, being first duly sworn, deposes and says that:
1.	He is (Owner, Partner, Officer, Representative or Agent) of, the Bidder that has submitted the attached Bid;
2.	He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
3.	Such Bid is genuine and is not a collusive or sham Bid;
4.	Neither the said Bidder nor any of its officers, partners, owner, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element for the Bid prices or the Bid price of any Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against or any person interested in the proposed Contract; and
5.	The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of it's agents, representatives, owner, employees, or parties in interest, including this affiant.
	(Signed)
	(Signed)
	(Title)
Sul	bscribed and sworn to before me
thi	s day of
Tit	le
	Commission expires

#### BIDDER'S QUALIFICATION FORM

Bidders submitting bids are required to possess certain prescribed qualifications in order to be considered responsible bidders. Bidders will be required to provide evidence in the form of qualification documentation to demonstrate conformance with the appropriate standards of ability, experience, quality of performance, and integrity.

#### Bidders shall:

• Complete Sections 1-4 and Attachment A of the Bidder's Qualification Form. Bidder's forms may be used for Attachment A.

**SECTION 1:** 

How many years has your organization been in business as a Contractor?				
How many years has your organization been in the business under its present name?				
Under what other or former names has your organization operated?				
List similar or larger projects within the past 3 years on Exhibit A attached:				
If applicable, is your company/organization currently PennDOT qualified? Yes   No				
If no, please explain.				
Have you been a named party in any litigation? Yes □ No □				
If yes, please provide the court in which the litigation was initiated and the Document No.				
SECTION 2:				
Have you ever been a party to, or otherwise involved, in, any action or legal proceeding involving matters related to race, color, nationality, or religion?				
If so, give full details:				
Have you ever been accused of discrimination based upon race, color, nationality, or religion in any action or legal proceeding including any proceeding related to any Federal agency?				
If so, please give full details:				

SECTION 3:					
List the following data: Current volume for 2025 (backlog & new work) \$					
Annual volume of work put in place 2022 2023			2024		
List any project completed within the last two years for which you have not been paid in full. Present reason for non-payment. Please provide name, address and phone number of agency who refused payment to your firm:					
Have you ever defaulted on a contract? If so, where and why?					

SECTION 4:			
The bonding company(s) used must be rate B+ or better:			
Name & Address of Bonding Co.:	(Please attach a letter from your Bonding Company stating that you have the bonding available to cover the project and giving the rating of the Bonding Company.)		
Contact:	Phone:		
Total bondable amount: \$	Current Bonding amount in effect: \$		
Single project bond limit: \$	Standard & Poor's Rating:		
Has a payment bond ever been revoked? If so, explain:			

Bidder's Qualification Form
Prepared by:
Title:
Date:

# EXHIBIT A SIMILAR PROJECT LISTING

Name of Project:	Location		
Dollar Value: \$			
Description:			
LA/Engineer/Architect:	Trade Engineer (if applicable):		
Owner:	Owner Contact:		
Owner Telephone No.:	Date Completed/Will be completed:		
Name of Project:	Location		
Dollar Value: \$			
Description:			
LA/Engineer/Architect:	Trade Engineer (if applicable):		
Owner:	Owner Contact:		
Owner Telephone No.:	Date Completed/Will be completed:		
Name of Project:	Location		
Dollar Value: \$			
Description:			
LA/Engineer/Architect:	Trade Engineer (if applicable):		
Owner:	Owner Contact:		
Owner Telephone No.:	Date Completed/Will be completed:		

## **BID BOND**

BIDDER (Name and Address):				
SURETY (Name and Address of Prin	cipal Place of Busin			
OWNER (Name and Address):				
BID BID DUE DATE: PROJECT (Brief Description Including	ing Location):			
BOND BOND NUMBER: DATE (Not later than Bid due date): PENAL SUM:				
	(Words)		(Figur	res)
IN WITNESS WHEREOF, Surety and the reverse side hereof, do each cause agent, or representative.				
BIDDER		SURETY		
Bidder's Name and Corporate Seal	(Seal)	Surety's Name	e and Corporate Seal	(Seal)
By:		Ву:		
Signature and Title			Signature and Title (Attach Power of Attorn	ney)
Attest:		Attest:		
Attest: Signature and Title			Signature and Title	
Note: (1) Above addresses are (2) Any singular referer applicable.			r party shall be considered p	olural where

- 1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to pay to OWNER upon default of Bidder the penal sum set forth on the face of this Bond.
- 2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by OWNER) the executed Agreement required by the Bidding Documents and any performance and payment Bonds required by the Bidding Documents.
- 3. This obligation shall be null and void if:
- 3.1. OWNER accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by OWNER) the executed Agreement required by the Bidding Documents and any performance and payment Bonds required by the Bidding Documents, or
  - 3.2. All Bids are rejected by OWNER, or
- 3.3. OWNER fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by paragraph 5 hereof).
- 4. Payment under this Bond will be due and payable upon default by Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from OWNER, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
- 5. Surety waives notice of and any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by OWNER and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.
- 6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in paragraph 4 above is received by Bidder and Surety and in no case later than one year after Bid due date.
- 7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
- 8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier or by

United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.

- 9. Surety shall cause to be attached to this Bond a current and effective Power or Attorney evidencing the authority of the officer, agent or representative who executed this Bond on behalf of Surety to execute, seal and deliver such Bond and bind the Surety thereby.
- 10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
- 11. The term "Bid" as used herein includes a Bid, offer or proposal as applicable.

#### NONDISCRIMINATION/SEXUAL HARASSMENT CLAUSE

1. Representations. The Grantee represents that it is presently in compliance with and will remain in compliance with all applicable federal, state, and local laws, regulations, and policies relating to nondiscrimination and sexual harassment for the term of the agreement. The Grantee shall, upon request and within the time periods requested by the Commonwealth, furnish all necessary employment documents and records, including EEO-1 reports, and permit access to its books, records, and accounts by the Commonwealth for the purpose of ascertaining compliance with provisions of this Nondiscrimination/Sexual Harassment Clause.

#### 2. Nondiscrimination/Sexual Harassment Obligations. The Grantee shall not:

- a. in any manner discriminate in the hiring of any employee(s) for the performance of the activities required under this agreement or any subgrant agreement, contract, or subcontract, by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the Pennsylvania Human Relations Act ("PHRA") and applicable federal laws, against any citizen of this Commonwealth who is qualified and available to perform the work to which the employment relates.
- b. in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the PHRA and applicable federal laws, against or intimidate any of its employees.
- c. in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of the PHRA and applicable federal laws, in the provision of services under this agreement or any subgrant agreement, contract, or subcontract.
- d. in any manner discriminate by reason of race, gender, creed, color, sexual orientation, gender identity or expression, or in violation of PHRA and applicable federal laws, against any subgrantee, contractor, subcontractor, or supplier who is qualified to perform the work to which this agreement relates.
- e. in any manner discriminate against employees by reason of participation in or decision to refrain from participating in labor activities protected under the Public Employee Relations Act, Pennsylvania Labor Relations Act, or National Labor Relations Act, as applicable, and to the extent determined by entities charged with the Acts' enforcement and shall comply with any provision of law establishing organizations as employees' exclusive representatives.
- 3. **Establishment of Grantee Policy.** The Grantee shall establish and maintain a written nondiscrimination and sexual harassment policy that complies with the applicable law and these Nondiscrimination/Sexual Harassment provisions and shall inform its employees in writing of the policy. The policy must contain a provision that states that sexual harassment will not be tolerated and employees who practice it will be disciplined. For the entire period of this agreement, the Grantee shall: (1) post its written nondiscrimination and sexual harassment policy or these Nondiscrimination/Sexual Harassment provisions conspicuously in easily accessible and well-lighted places customarily frequented by employees at or near

DCNR-2024-Gen Gen-GPM-1 Rev. 1/2024

where the grant activities are performed; or (2) provide electronic notice of the policy or this clause to its employees not less than annually.

- 4. Notification of Violations. The Grantee's obligations pursuant to these provisions are ongoing from the effective date and through the termination date of the agreement. Accordingly, the Grantee shall notify the Commonwealth if, at any time during the term of this agreement, it becomes aware of any actions or occurrences that would result in violation of these provisions.
- 5. Cancellation or Termination of Agreement. The Commonwealth may cancel or terminate this agreement and all money due or to become due under this agreement may be forfeited for a violation of the terms and conditions of these Nondiscrimination/Sexual Harassment provisions. In addition, the granting agency may proceed with debarment or suspension and may place the Grantee in the Contractor Responsibility File.
- 6. Subgrant Agreements, Contracts, and Subcontracts. The Grantee shall include these Nondiscrimination/Sexual Harassment provisions in its subgrant agreements, contracts, and subcontracts with all subgrantees, contractors, and subcontractors providing goods or services under this agreement. The incorporation of these provisions in the Grantor's subgrants, contracts, or subcontracts does not create privity of contract between the Commonwealth and any subgrantee, contractor, or subcontractor, and no third-party beneficiaries are created by those provisions. If the Grantee becomes aware of a subgrantee's, contractor's, or subcontractor's violation of these provisions, the Grantee shall use its best efforts to ensure the subgrantee's, contractor's, or subcontractor's compliance with these provisions.

#### **NOTICE OF AWARD**

Project No. 22PTC-01

To:		Date	:	
(Contractor)				
		Re:	God's Country Villa Market - Phase 1	nge and Farmers
Contractor:				
You are notified that your Bid dated You are the apparent Successful Bidder a				
The Contract Price of the project is			dollars (\$	).
You are required by the Instructions to Owner within 15 days after receipt of this of which are to be executed and returned	s Notice of Awa			
If you fail to execute the Agreement with to consider all your rights arising out forfeiture of Bid Security, and to award otherwise dispose thereof as Owner may	of the accepta Work covered	ance of your B	id by Owner as abar	ndoned, including
Please return an accepted copy of this Norequired Contract Security (Bonds), Instinctuding Workmen's Compensation Affithe Agreement until the required bonds has properly executed the Agreement an	urance Certificated davit to the attention and insurance	ates, and other tention of the u are received, r	documentation (as rundersigned. Owner v	may be required) will not enter into
ACCEPTANCE OF NOTICE				
Receipt of this Notice of Award is hereby acknowledged this day of2025.				
Ву:	_ For:	Potter Count	У	
Title:	Ву:	YSM 19 South Nev York, PA 1740	•	
(Contractor)				

#### **AGREEMENT**

This Agreement	is dated as of the	day of	in t	the year 20	_ by and between t	he Potter
County Commis	ssioners, a municipal c	orporation of t	the Common	wealth of Pen	nsylvania (hereinaf	ter called
Owner) and		(hereinaft	ter called Con	tractor).		
Owner and Con	tractor in consideratio	n of the mutua	l covenants h	ereinafter set	forth, agree as folk	ows:
Article 1.	WORK					
Contractor shal	l complete all Work as	specified or inc	dicated in the	Contract Doc	uments for:	

#### God's Country Village and Farmers Market - Phase 1

#### Article 2. LANDSCAPE ARCHITECT

The project has been designed by YSM, 19 South Newberry Street, York, Pennsylvania 17401, who is hereinafter called Landscape Architect and who is to act as Owner's representative, assume all duties and responsibilities and have the rights and authority assigned to Landscape Architect in Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

#### Article 3. CONTRACT TIME

- 3.1 The Work shall be substantially completed by September 12, 2025. All Work will be completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions by October 3, 2025.
- 3.2 Liquidated Damages are not a part of this Contract.

#### Article 4. CONTRACT PRICE

4.1 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents in lawful money of the United States of America in accordance with Contractor's Total Base Bid Price.

#### Article 5. PAYMENT PROCEDURES

Contractor shall submit Application for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by Landscape Architect as provided in the General Conditions.

- 5.1 Progress Payments. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment as recommended by Landscape Architect. All progress payments will be on the basis of the progress of the Work measured by the schedule of values established in paragraph 2.07.A.3 of the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in the General Requirements.
  - 5.1.1 Prior to substantial completion, progress payments will be made in an amount equal to the percentage indicated below, but, in each case, less the aggregate of payments previously made and less such amounts as Landscape Architect shall determine, or Owner may withhold, in accordance with Paragraph 14.02.B.5 of the General Conditions.

Owner may retain 10 percent of the amount of all progress payment due until 50 percent of the Work has been completed. When the contract is 50 percent completed, the Contractor may apply for a reduction in retainage. At that time,

one-half of the amount retained by Owner shall be returned to Contractor provided that Landscape Architect approves the Application for Payment, that the Contractor is making satisfactory progress and there is no specific cause for greater withholding. Owner, after 50 percent of the Work has been completed, may retain 5 percent of the remaining progress payments. After substantial completion, Owner may retain 1-1/2 times such amount as is required to complete any, then remaining, uncompleted items as certified by Landscape Architect.

- 5.2.1 Upon substantial completion, payment will be made in an amount sufficient to increase total payments to Contractor to 100 percent of the contract price, less such amounts as Landscape Architect shall determine, or Owner may withhold, in accordance with Paragraph 14.02.B.5 of the General Conditions.
- 5.2 Final Payment. Upon final completion and acceptance of the Work in accordance with Paragraph 14.07.B of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Landscape Architect as provided in said Paragraph 14.07.B.

#### Article 6. INTEREST

All money not paid when due as provided in Article 14 of the General Conditions shall bear interest at the maximum rate allowed by law at the place of the project.

#### Article 7. CONTRACTOR'S REPRESENTATIONS

In order to induce Owner to enter into this Agreement Contractor makes the following representations:

- 7.1 Contractor has examined and carefully studied the Contract Documents (including the Addenda listed in Article 8) and the other related data identified in the Bidding Documents including "technical data."
- 7.2 Contractor has visited the site and become familiar with and is satisfied as to the general, local and site conditions that may affect cost, progress, performance or furnishing of the Work.
- 7.3 Contractor is familiar with and is satisfied as to all federal, state and local laws and regulations that may affect cost, progress, performance and furnishing of the Work.
- 7.4 Contractor acknowledges that Owner and Landscape Architect do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Contract Documents with respect to underground facilities at or contiguous to the site. Contractor has obtained and carefully studied (or assumes responsibility for having done so) all such additional supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and underground facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto. Contractor does not consider that any additional examinations, investigations, explorations, tests, studies or data are necessary for the performance and furnishing of the Work at the contract price, within the Contract Times and in accordance with the other terms and conditions of the Contract Documents.
- 7.5 Contractor is aware of the general nature of Work to be performed by Owner and others at the site related to the Work as indicated in the Contract Documents.
- 7.6 Contractor has correlated the information known to Contractor, information and observations obtained from visits to the site, reports and drawings identified in the

Contract Documents and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents.

#### Article 8. CONTRACT DOCUMENTS

The Contract Documents which comprise the entire Agreement between Owner and Contractor concerning the Work consist of the following:

- 8.1 This Agreement (pages A-1 to A-4, inclusive).
- 8.2 Exhibits to this Agreement.
- 8.3 Performance, Payment and Maintenance bonds.
- 8.4 Standard General Conditions of the Construction Contract prepared by the Engineers Joint Contract Documents Committee (EJCDC No. 1910-8 (1996 Edition) (pages 1 to 44, inclusive).
- 8.5 Supplementary Conditions (pages SC-1 to SC-9, inclusive).
- 8.6 Not used.
- 8.7 Specifications bearing the title God's Country Village and Farmers Market Phase 1 and Project No. 22PTC-01.
- 8.8 Drawings, numbered \_\_ -\_\_, inclusive with each sheet bearing the following general title: God's Country Village and Farmers Market Phase 1.
- 8.9 Addenda numbers to , inclusive.
- 8.10 Contractor's Bid inclusive marked Exhibit A.
- 8.11 The following which may be delivered or issued after the effective date of the Agreement and are not attached hereto: All written amendments and other documents amending, modifying, or supplementing the Contract Documents pursuant to Paragraphs 3.04 of the General Conditions.
- 8.12 The documents listed in Paragraphs 8.2 et. seq. above are attached to this Agreement (except as expressly noted otherwise above).

There are no Contract Documents other than those listed above in this Article 8. The Contract Documents may only be amended, modified or supplemented as provided in Paragraphs 3.04 of the General Conditions.

#### Article 9. MISCELLANEOUS

- 9.1 Terms used in this Agreement which are defined in Article 1 of the General Conditions will have the meanings indicated in the General Conditions.
- 9.2 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation monies that may become due and monies that are 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 Documents.
- 9.3. Owner and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect of all covenants, agreements and obligations contained in the Contract Documents.

- 9.4. Any provision or part of the Contract Documents held to be void or unenforceable under any law or regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed or replace such stricken provision or part thereof with a valid and forcible provision that comes as close as possible to expressing the intention of the stricken provision.
- 9.5. This Agreement shall be construed and interpreted in accordance with the laws of the Commonwealth of Pennsylvania, and in the event of dispute the venue of any action brought hereunder, upon the conclusion of mediation shall be in Tioga County Court of Common Pleas.
- 9.6. The Owner has applied and received for funding assistance for the Work through a Pennsylvania Department of Conservation and Natural Resources (DCNR) grant (the "Grant"). Contractor and/or sub-contractors may be required to submit additional information or documentation, and contractor and/or subcontractors may be required to adhere to additional criteria necessary to satisfy the Grant.
- 9.7. Time of the Essence All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are the essence of the Agreement.
- 9.8. In the event of a discrepancy among the Contract Documents, the provisions of this Agreement and the provisions of the Supplementary Conditions shall take precedence over the Standard General Conditions.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement in triplicate. One counterpart each has been delivered to Owner, Contractor and Landscape Architect. All portions of the Contract Documents have been signed or identified by Owner and Contractor or by Landscape Architect on their behalf.

This Agreement will be effective on	, 20		
Owner: Potter County Commissioners	Contractor		
By(Corporate Seal)			
Attest			
Borough address for giving notices:	Contractor addresses for giving notices		
One North Main Street Coudersport, PA 16915			
(If Owner is a public body, attach evidence of authority to sign and	License No.		
resolution or other documents authorizing execution of Agreement.	Agent for service of process:		
	(If Contractor is a corporation, attach evidence of authority to sign.)		

# **Performance Bond**

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):	SURETY (Name and Address of Principal Place of Business):	
OWNER (Name and Address):		
CONTRACT Date: Amount: Description (Name and Location):		
BOND Date (Not earlier than Contract Date): Amount: Modifications to this Bond Form:		
Surety and Contractor, intending to be legally bound hereby, subject Performance Bond to be duly executed on its behalf by its authorized		nereof, do each cause thi
CONTRACTOR AS PRINCIPAL	SURETY	
Company: (Corp. Seal)	Company:	(Corp. Seal)
Signature: Name and Title:	Signature:	
(Space is provided below for signatures of additional parties, if requ	ired.)	
CONTRACTOR AS PRINCIPAL (Corp. Seal)	SURETY Company:	(Corp. Seal)
Signature:Name and Title:	Signature:Name and Title:	

#### EJCDC No. 1910-28-A (1996 Edition)

Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, and the American Institute of Architects.

- 1. The CONTRACTOR and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Contract, which is incorporated herein by reference.
- 2. If the CONTRACTOR performs the Contract, the Surety and the CONTRACTOR have no obligation under this Bond, except to participate in conferences as provided in paragraph 3.1.
- 3. If there is no OWNER Default, the Surety's obligation under this Bond shall arise after:
- 3.1. The OWNER has notified the CONTRACTOR and the Surety at the addresses described in paragraph 10 below, that the OWNER is considering declaring a CONTRACTOR Default and has requested and attempted to arrange a conference with the CONTRACTOR and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Contract. If the OWNER, the CONTRACTOR and the Surety agree, the CONTRACTOR shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive the OWNER's right, if any, subsequently to declare a CONTRACTOR Default; and
- 3.2. The OWNER has declared a CONTRACTOR Default and formally terminated the CONTRACTOR's right to complete the Contract. Such CONTRACTOR Default shall not be declared earlier than twenty days after the CONTRACTOR and the Surety have received notice as provided in paragraph 3.1; and
  - 3.3. The OWNER has agreed to pay the Balance of the Contract Price to:
    - 3.3.1. The Surety in accordance with the terms of the Contract;
- 3.3.2 Another contractor selected pursuant to paragraph 4.3 to perform the Contract.
- 4. When the OWNER has satisfied the conditions of paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
- $4.1.\;$  Arrange for the CONTRACTOR, with consent of the OWNER, to perform and complete the Contract; or
- 4.2. Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or
- 4.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the OWNER for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by the OWNER and the contractor selected with the OWNER's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the Bonds issued on the Contract, and pay to the OWNER the amount of damages as described in paragraph 6 in excess of the Balance of the Contract Price incurred by the OWNER resulting from the CONTRACTOR Default; or
- 4.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances;
- 4.4.1 After investigation, determine the amount for which it may be liable to the OWNER and, as soon as practicable after the amount is determined, tender payment therefor to the OWNER; or
- 4.4.2 Deny liability in whole or in part and notify the OWNER citing reasons therefor.
- 5. If the Surety does not proceed as provided in paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the OWNER to the Surety demanding that the Surety perform its obligations under this Bond, and the OWNER shall be entitled to enforce any remedy available to the OWNER. If the Surety proceeds as provided in paragraph 4.4, and the OWNER refuses the payment tendered or the Surety has denied

- pliability, in whole or in part, without further notice the OWNER shall be entitled to enforce any remedy available to the OWNER.
- 6. After the OWNER has terminated the CONTRACTOR's right to complete the Contract, and if the Surety elects to act under paragraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the OWNER shall not be greater than those of the CONTRACTOR under the Contract, and the responsibilities of the OWNER to the Surety shall not be greater than those of the OWNER under the Contract. To a limit of the amount of this Bond, but subject to commitment by the OWNER of the Balance of the Contract Price to mitigation of costs and damages on the Contract, the Surety is obligated without duplication for:
- 6.1. The responsibilities of the CONTRACTOR for correction of defective Work and completion of the Contract;
- 6.2. Additional legal, design professional and delay costs resulting from the CONTRACTOR's Default, and resulting from the actions or failure to act of the Surety under paragraph 4; and
- 6.3. Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of the CONTRACTOR.
- 7. The Surety shall not be liable to the OWNER or others for obligations of the CONTRACTOR that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the OWNER or its heirs, executors, administrators, or successors.
- 8. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders and other obligations.
- 9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the Work or part of the Work is located and shall be instituted within two years after CONTRACTOR Default or within two years after the CONTRACTOR ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
- $10.\,$  Notice to the Surety, the OWNER or the CONTRACTOR shall be mailed or delivered to the address shown on the signature page.
- 11. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the Contract was be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted here from and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

#### 12. Definitions.

- 12.1 Balance of the Contract Price: The total amount payable by the OWNER to the CONTRACTOR under the Contract after all proper adjustments have been made, including allowance to the CONTRACTOR of any amounts received or to be received by the OWNER in settlement of insurance or other Claims for damages to which the CONTRACTOR is entitled, reduced by all valid and proper payments made to or on behalf of the CONTRACTOR under the Contract.
- 12.2. Contract: The agreement between the OWNER and the CONTRACTOR identified on the signature page, including all Contract Documents and changes thereto.
- 12.3. CONTRACTOR Default: Failure of the CONTRACTOR, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.
- 12.4. OWNER Default: Failure of the OWNER, which has neither been remedied nor waived, to pay the CONTRACTOR as required by the Contract or to perform and complete or comply with the other terms thereof.

# **Payment Bond**

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):		SURETY (Name and Address of Pri of Business):	ncipal Place
OWNER (Name and Address):			
CONTRACT Date: Amount: Description (Name and Location):			
BOND Date (Not earlier than Contract Date): Amount: Modifications to this Bond Form:			
Surety and Contractor, intending to be Payment Bond to be duly executed on i		oject to the terms printed on the reverse side d officer, agent, or representative.	hereof, do each cause the
CONTRACTOR AS PRINCIPAL Company:	(Corp. Seal)	SURETY Company:	(Corp. Seal)
Signature:Name and Title:	•	Signature:Name and Title: (Attach Power of Attorney)	,
(Space is provided below for signatures	s of additional parties, if r	required.)	
CONTRACTOR AS PRINCIPAL Company:	(Corp. Seal)	SURETY Company:	(Corp. Seal)
Signature:Name and Title:		Signature:Name and Title:	

# EJCDC No. 1910-28-B (1996 Edition)

Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, the American Institute of Architects, the American Subcontractors Association, and the Associated Specialty Contractors.

- 1. The CONTRACTOR and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the OWNER to pay for labor, materials and equipment furnished for use in the performance of the Contract, which is incorporated herein by reference.
- 2. With respect to the OWNER, this obligation shall be null and void if the CONTRACTOR:
- 2.1. Promptly makes payment, directly or indirectly, for all sums due Claimants, and
- 2.2. Defends, indemnifies and holds harmless the OWNER from all claims, demands, liens or suits by any person or entity who furnished labor, materials or equipment for use in the performance of the Contract, provided the OWNER has promptly notified the CONTRACTOR and the Surety (at the addresses described in paragraph 12) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to the CONTRACTOR and the Surety, and provided there is no OWNER Default.
- 3. With respect to Claimants, this obligation shall be null and void if the CONTRACTOR promptly makes payment, directly or indirectly, for all sums due.
- 4. The Surety shall have no obligation to Claimants under this Bond until:
- 4.1. Claimants who are employed by or have a direct contract with the CONTRACTOR have given notice to the Surety (at the addresses described in paragraph 12) and sent a copy, or notice thereof, to the OWNER, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.
  - 4.2. Claimants who do not have a direct contract with the CONTRACTOR:
- 1. Have furnished written notice to the CONTRACTOR and sent a copy, or notice thereof, to the OWNER, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed; and
- 2. Have either received a rejection in whole or in part from the CONTRACTOR, or not received within 30 days of furnishing the above notice any communication from the CONTRACTOR by which the CONTRACTOR had indicated the claim will be paid directly or indirectly; and
- 3. Not having been paid within the above 30 days, have sent a written notice to the Surety and sent a copy, or notice thereof, to the OWNER, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the CONTRACTOR.
- 5. If a notice required by paragraph 4 is given by the OWNER to the CONTRACTOR or to the Surety, that is sufficient compliance.
- 6. When the Claimant has satisfied the conditions of paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:
- 6.1. Send an answer to the Claimant, with a copy to the OWNER, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.
  - 6.2. Pay or arrange for payment of any undisputed amounts.
- 7. The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
- 8. Amounts owed by the OWNER to the CONTRACTOR under the Contract shall be used for the performance of the Contract and to satisfy claims, if any, under any Performance Bond. By the CONTRACTOR furnishing and the OWNER accepting this Bond, they agree that all funds earned by the CONTRACTOR in the performance of the Contract are dedicated to satisfy obligations of the

- CONTRACTOR and the Surety under this Bond, subject to the OWNER's priority to use the funds for the completion of the Work.
- 9. The Surety shall not be liable to the OWNER, Claimants or others for obligations of the CONTRACTOR that are unrelated to the Contract. The OWNER shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.
- 10. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related Subcontracts, purchase orders and other obligations.
- 11. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the Work or part of the Work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by paragraph 4.1 or paragraph 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
- 12. Notice to the Surety, the OWNER or the CONTRACTOR shall be mailed or delivered to the addresses shown on the signature page. Actual receipt of notice by Surety, the OWNER or the CONTRACTOR, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.
- 13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is, that this Bond shall be construed as a statutory Bond and not as a common law bond.
- 14. Upon request of any person or entity appearing to be a potential beneficiary of this Bond, the CONTRACTOR shall promptly furnish a copy of this Bond or shall permit a copy to be made.

#### 15. DEFINITIONS

- 15.1. Claimant: An individual or entity having a direct contract with the CONTRACTOR or with a Subcontractor of the CONTRACTOR to furnish labor, materials or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Contract, architectural and engineering services required for performance of the Work of the CONTRACTOR and the CONTRACTOR's Subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.
- $15.2.\ Contract:$  The agreement between the OWNER and the CONTRACTOR identified on the signature page, including all Contract Documents and changes pthereto.
- 15.3. OWNER Default: Failure of the OWNER, which has neither been remedied nor waived, to pay the CONTRACTOR as required by the Contract or to perform and complete or comply with the other terms thereof.

#### MAINTENANCE BOND

Know all men by these presents, that we,	, hereinafter
	(Contractor)
called the Principal, and	, hereinafter called the Surety a
(Surety)	•
corporation organized and existing under the law	s of the of
	rmly bound unto
	(Owner)
hereinafter called the Obligee, as hereinafter so	et forth, in the full and just sum (equal to 10% of the
	Dollars (\$), lawful money of the
	of which we bind ourselves, our heirs, executor
Witness that:	
Whereas, the Principal, heretofore submitted to the to perform the work for the Obligee, in connection	he Obligee a certain Proposal dated, 20 on with the construction of
	as set forth in the Contrac
Doguments as prepared by Vest Stredeski Magre	

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

The Principal and the Surety agree that any alterations, changes and/or additions to the Contract Documents, and/or any alterations, changes and/or additions to the Work to be performed in accordance with the Contract Documents, and/or alterations, changes and/or additions to the Contract, and/or any giving by the Obligee of any extensions of time for the performance of the Work in accordance with the Contract Documents, and/or any act of forbearance of either the Principal or the Obligee toward the other with respect to the Contract Documents, and/or the reduction of any percentage to be retained by the Obligee as permitted by the Contract Documents, shall not release, in any manner whatsoever, the Principal and the Surety, or either of them, or their heirs, executors, administrators, successors and assigns from liability and obligations under this Bond; and the Surety for value received, does waive notice of any such alterations, changes, additions, extensions of time, act of forbearance and/or reduction of retained percentages.

IN WITHESS WHEREOF, the Princip delivered this day of _	al and the Surety cause this Bond to be signed, sealed and, 20
	PRINICIPAL
	Date:
Principal	By:
	Address:
Witness	
Address:	(Seal)
	<u>SURETY</u>
	Date:
Surety	By:Attorney-in-Fact
	Address:
Witness	
Address:	(Seal)

# **NOTICE TO PROCEED**

Project No.22PTC-01

To:	Date:, 202	25
	<b>Re:</b> God's Country Village and Far Market - Phase 1	mers
Contractor:		
Payment Bond, and Certificates of Insurance to be in order. You are hereby not	wner, received the executed Agreement, Performance I Coverage, and other required documentation, and found ified to proceed with the Work on Contract No untry Village and Farmers Market – Phase 1 Constru	them
Project.	, 3	
In accordance with Article 3 of the Agreeme and payment on or before	nt, all Work shall be completed and ready for final inspe	ection
Please return an accepted copy of this Notice	to Proceed to the attention of the undersigned.	
ACCEPTANCE OF NOTICE		
Receipt of this Notice to Proceed is hereby		
acknowledged this		
day of, 2	025.	
Ву:		
Title:	By:	
	(Owner)	
(Contractor)	Potter County One North Main Street Coudersport, PA 16915	

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

# STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

# ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By

[INSERT LOGOS]

PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE a practice division of the NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

AMERICAN CONSULTING ENGINEERS COUNCIL

AMERICAN SOCIETY OF CIVIL ENGINEERS

This document has been approved and endorsed by

The Associated General [seal] Contractors of America

Construction Specifications Institute

[seal]

These General Conditions have been prepared for use with the Owner-Contractor Agreements (No. 1910-8-A-1 or 1910-8-A-2) (1996 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other. Comments concerning their usage are contained in the EJCDC User's Guide (No. 1910-50). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. 1910-17) (1996 Edition).

EJCDC No. 1910-8 (1996 Edition)

# Copyright ©1996

National Society of Professional Engineers 1420 King Street, Alexandria, VA 22314

American Consulting Engineers Council 1015 15th Street N.W., Washington, DC 20005

American Society of Civil Engineers 345 East 47th Street, New York, NY 10017

# TABLE OF CONTENTS

Page	

ARTI	TICLE 1 - DEFINITIONS AND TERMINOLOGY	6
	1.01 Defined Terms	6
	1.02 Terminology	8
ARTI	TICLE 2 - PRELIMINARY MATTERS	
	2.01 Delivery of Bonds	
	2.02 Copies of Documents	
	2.03 Commencement of Contract Times; Notice to Proceed	
	2.04 Starting the Work	
	2.05 Before Starting Construction	9
	2.06 Preconstruction Conference	10
	2.07 Initial Acceptance of Schedules	10
ARTI	TICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE	10
711(11	3.01 Intent	
	3.02 Reference Standards	
	3.03 Reporting and Resolving Discrepancies	
	3.04 Amending and Supplementing Contract Documents	
	3.05 Reuse of Documents	
	5.05 Reuse of Documents	11
ARTI	TICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS	; REFERENCE
	POINTS	12
	4.01 Availability of Lands	12
	4.02 Subsurface and Physical Conditions	12
	4.03 Differing Subsurface or Physical Conditions	
	4.04 Underground Facilities	
	4.05 Reference Points	
	4.06 Hazardous Environmental Condition at Site	
лрті	TCLE 5 - BONDS AND INSURANCE	15
АКП	5.01 Performance, Payment, and Other Bonds	
	5.01 Licensed Sureties and Insurers	
	5.03 Certificates of Insurance	
	5.04 CONTRACTOR's Liability Insurance	
	5.05 OWNER's Liability Insurance	
	5.06 Property Insurance	
	5.07 Waiver of Rights	
	5.08 Receipt and Application of Insurance Proceeds	
	5.09 Acceptance of Bonds and Insurance; Option to Replace	
	5.10 Partial Utilization, Acknowledgment of Property Insurer	19
ARTI	TCLE 6 - CONTRACTOR'S RESPONSIBILITIES	19
	6.01 Supervision and Superintendence	19
	6.02 Labor; Working Hours	19
	6.03 Services, Materials, and Equipment	
	6.04 Progress Schedule	20
	6.05 Substitutes and "Or-Equals"	20
	6.07 Patent Fees and Royalties	22

6.08 <i>I</i>	Permits	22
6.09 1	Laws and Regulations	23
	Taxes	
	Use of Site and Other Areas	
	Safety and Protection	
	Safety Representative	
	Hazard Communication Programs	
	Emergencies	
	Shop Drawings and Samples	
	Continuing the Work	
	CONTRACTOR's General Warranty and Guarantee	
	ndemnification	
ARTICLE 7 - OTH	ER WORK	27
	Related Work at Site	
	Coordination	
7.02	oorunuuon	2/
	NER'S RESPONSIBILITIES	
	Communications to Contractor	
	Replacement of ENGINEER	
	Furnish Data	
	Pay Promptly When Due	
	Lands and Easements; Reports and Tests	
	nsurance	
	Change Orders	
	Inspections, Tests, and Approvals	
	imitations on OWNER's Responsibilities	
	Undisclosed Hazardous Environmental Condition	
8.11 <i>I</i>	Evidence of Financial Arrangements	28
ARTICLE 9 - ENG	INEER'S STATUS DURING CONSTRUCTION	28
9.01	OWNER'S Representative	28
9.02 V	/isits to Site	28
9.03 <i>I</i>	Project Representative	29
9.04 (	Clarifications and Interpretations	29
9.05 A	Authorized Variations in Work	29
9.06 <i>I</i>	Rejecting Defective Work	29
	Shop Drawings, Change Orders and Payments	
	Decisions on Requirements of Contract Documents and Acceptability of Work	
	Limitations on ENGINEER's Authority and Responsibilities	
ARTICLE 10 - CH	ANGES IN THE WORK; CLAIMS	30
	Authorized Changes in the Work	
	Unauthorized Changes in the Work	
	Execution of Change Orders	
	Notification to Surety	
	Claims and Disputes	
ADTICLE 11 CO	ST OF THE WORK, CASH ALLOWANGES, UNIT DRICE WORK	22
	ST OF THE WORK; CASH ALLOWANCES; UNIT PRICE WORK	
	Cost of the Work	
	Cash Allowances	
11.03	Unit Price Work	34

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES	34
12.01 Change of Contract Price	34
12.02 Change of Contract Times	35
12.03 Delays Beyond CONTRACTOR's Control	35
12.04 Delays Within CONTRACTOR's Control	35
12.06 Delay Damages	35
ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE	OF
DEFECTIVE WORK	
13.01 Notice of Defects	
13.02 Access to Work	
13.03 Tests and Inspections	
13.04 Uncovering Work	
13.05 OWNER May Stop the Work	
13.06 Correction or Removal of Defective Work	
13.07 Correction Period	
13.08 Acceptance of Defective Work	37
13.09 OWNER May Correct Defective Work	38
ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION	38
14.01 Schedule of Values	
14.02 Progress Payments	
14.03 CONTRACTOR's Warranty of Title	
14.04 Substantial Completion	
14.05 Partial Utilization	
14.06 Final Inspection	
14.07 Final Payment	
14.09 Waiver of Claims	
ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION	42
15.01 OWNER May Suspend Work	
15.02 OWNER May Terminate for Cause	
15.03 OWNER May Terminate For Convenience	
15.04 CONTRACTOR May Stop Work or Terminate	
ARTICLE 16 - DISPUTE RESOLUTION	44
16.01 Methods and Procedures	44
ARTICLE 17 - MISCELLANEOUS	44
17.01 Giving Notice	
17.02 Computation of Times	
17.03 Cumulative Remedies	
17.04 Survival of Obligations	
17.05 Controlling Law	44

# **GENERAL CONDITIONS**

# ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

# 1.01 Defined Terms

- A. Wherever used in the Contract Documents and printed with initial or all capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof.
- 1. Addenda--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the Contract Documents.
- 2. Agreement--The written instrument which is evidence of the agreement between OWNER and CONTRACTOR covering the Work.
- 3. Application for Payment--The form acceptable to ENGINEER which is to be used by CON-TRACTOR 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.
- 4. Asbestos--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
- 5. *Bid*--The offer or proposal of a bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- 6. *Bidding Documents*--The Bidding Requirements and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).
- 7. *Bidding Requirements*--The Advertisement or Invitation to Bid, Instructions to Bidders, Bid security form, if any, and the Bid form with any supplements.
- 8. *Bonds*--Performance and payment bonds and other instruments of security.
- 9. Change Order--A document recommended by ENGINEER 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, issued on or after the Effective Date of the Agreement.

- 10. Claim--A demand or assertion by OWNER or CONTRACTOR seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.
- 11. Contract--The entire and integrated written agreement between the OWNER and CONTRACTOR concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.
- 12. Contract Documents--The Contract Documents establish the rights and obligations of the parties and include the Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR's Bid (including documentation accompanying the Bid and any post Bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Agreement, the Notice to Proceed, the Bonds, these General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement, together with all Written Amendments, Change Orders, Work Change Directives, Field Orders, and ENGINEER's written interpretations and clarifications issued on or after the Effective Date of the Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents. Only printed or hard copies of the items listed in this paragraph are Contract Documents. Files in electronic media format of text, data, graphics, and the like that may be furnished by OWNER to CONTRACTOR are not Contract Documents.
- 13. Contract Price--The moneys payable by OWNER to CONTRACTOR for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of paragraph 11.03 in the case of Unit Price Work).
- 14. Contract Times--The number of days or the dates stated in the Agreement to: (i) achieve Substantial Completion; and (ii) complete the Work so that it is ready for final payment as evidenced by ENGINEER's written recommendation of final payment.
- 15. *CONTRACTOR*--The individual or entity with whom OWNER has entered into the Agreement.

- 16. Cost of the Work--See paragraph 11.01.A for definition.
- 17. Drawings--That part of the Contract Documents prepared or approved by ENGINEER which graphically shows the scope, extent, and character of the Work to be performed by CONTRACTOR. Shop Drawings and other CONTRACTOR submittals are not Drawings as so defined.
- 18. Effective Date of the Agreement--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
- 19. *ENGINEER*--The individual or entity named as such in the Agreement.
- 20. ENGINEER's Consultant--An individual or entity having a contract with ENGINEER to furnish services as ENGINEER's independent professional associate or consultant with respect to the Project and who is identified as such in the Supplementary Conditions.
- 21. Field Order--A written order issued by ENGINEER which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.
- 22. *General Requirements*--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.
- 23. Hazardous Environmental Condition--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.
- 24. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
- 25. Laws and Regulations; Laws or Regulations-Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
- 26. *Liens*--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.

- 27. *Milestone*--A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.
- 28. *Notice of Award*--The written notice by OWNER to the apparent successful bidder stating that upon timely compliance by the apparent successful bidder with the conditions precedent listed therein, OWNER will sign and deliver the Agreement.
- 29. *Notice to Proceed*--A written notice given 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 under the Contract Documents.
- 30. *OWNER*--The individual, entity, public body, or authority with whom CONTRACTOR has entered into the Agreement and for whom the Work is to be performed.
- 31. *Partial Utilization*--Use by OWNER of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work.
  - 32. *PCBs*--Polychlorinated biphenyls.
- 33. Petroleum--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.
- 34. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part as may be indicated elsewhere in the Contract Documents.
- 35. *Project Manual*--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.
- 36. Radioactive Material--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
- 37. Resident Project Representative--The authorized representative of ENGINEER who may be assigned to the Site or any part thereof.

- 38. *Samples*--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
- 39. Shop Drawings--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for CONTRACTOR and submitted by CONTRACTOR to illustrate some portion of the Work.
- 40. *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 for access thereto, and such other lands furnished by OWNER which are designated for the use of CONTRACTOR.
- 41. *Specifications*--That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.
- 42. 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 at the Site.
- 43. 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 thereof.
- 44. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements these General Conditions.
- 45. Supplier--A manufacturer, fabricator, supplier, distributor, materialman, 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 any Subcontractor.
- 46. *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 those that convey electricity, gases, steam, liquid petroleum

- products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- 47. *Unit Price Work*--Work to be paid for on the basis of unit prices.
- 48. Work--The entire completed 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, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.
- 49. Work Change Directive--A written statement to CONTRACTOR issued on or after the Effective Date of the Agreement and signed by OWNER and recommended by ENGINEER ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.
- 50. Written Amendment--A written statement modifying the Contract Documents, signed by OWNER and CONTRACTOR on or after the Effective Date of the Agreement and normally dealing with the nonengineering or nontechnical rather than strictly construction-related aspects of the Contract Documents.

# 1.02 Terminology

# A. Intent of Certain Terms or Adjectives

1. Whenever in the Contract Documents the terms "as allowed," "as approved," or terms of like effect or import are used, or 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 action or determination will be solely to evaluate, in general, the completed Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed 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 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 paragraph 9.10 or any other provision of the Contract Documents.

# B. Day

1. The word "day" shall constitute a calendar day of 24 hours measured from midnight to the next midnight.

# C. Defective

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it does not conform to the Contract Documents or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or 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 14.04 or 14.05).

# D. Furnish, Install, Perform, Provide

- 1. The word "furnish," when used in connection with services, materials, or equipment, shall mean 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, shall mean 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, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
- 4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of CONTRACTOR, "provide" is implied.

E. Unless stated otherwise in the Contract Documents, words or phrases which 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 Bonds

A. When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish.

# 2.02 Copies of Documents

A. OWNER shall furnish to CONTRACTOR up to ten copies of the Contract Documents. Additional copies will be furnished upon request at the cost of reproduction.

# 2.03 Commencement of Contract Times; Notice to Proceed

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement 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 Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

# 2.04 Starting the Work

A. CONTRACTOR shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

#### 2.05 Before Starting Construction

A. CONTRACTOR's Review of Contract Documents:

Before undertaking each part of the Work,
CONTRACTOR shall carefully study and compare the
Contract Documents and check and verify pertinent figures
therein and all applicable field measurements.
CONTRACTOR shall promptly report in writing to
ENGINEER any conflict, error, ambiguity, or discrepancy
which CONTRACTOR may discover and shall obtain a
written interpretation or clarification from ENGINEER
before proceeding with any Work affected thereby;

however, 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 knew or reasonably should have known thereof.

- B. *Preliminary Schedules:* Within ten days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), CONTRACTOR shall submit to ENGINEER for its 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 Documents;
  - 2. a preliminary schedule of Shop Drawing and Sample submittals which will list each required submittal and the times for submitting, reviewing, and processing such submittal; 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.
- C. Evidence of Insurance: Before any Work at the Site is started, CONTRACTOR and OWNER shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which CONTRACTOR and OWNER respectively are required to purchase and maintain in accordance with Article 5.

# 2.06 Preconstruction Conference

A. Within 20 days after the Contract Times start to run, but before any Work at the Site is started, a conference attended by 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 2.05.B, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

# 2.07 Initial Acceptance of Schedules

A. Unless otherwise provided in the Contract Documents, at least ten days before submission of the first Application for Payment a conference attended by CONTRACTOR, ENGINEER, and others as appropriate will be held to review for acceptability to ENGINEER as provided below the schedules submitted in accordance with paragraph 2.05.B. CONTRACTOR shall have an additional ten days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall 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 any specified Milestones and 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 Shop Drawing and Sample 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 component parts of the Work.

# ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

# 3.01 Intent

- A. The Contract Documents are complementary; what is called for by one is as binding as if called for 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. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to OWNER.

C. Clarifications and interpretations of the Contract Documents shall be issued by ENGINEER as provided in Article 9.

# 3.02 Reference Standards

- 1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement 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 or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of OWNER, CONTRACTOR, or ENGINEER, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents, nor shall any such provision or instruction be effective to assign to OWNER, ENGINEER, or any of ENGINEER's Consultants, agents, or employees 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 Contract Documents.

#### 3.03 Reporting and Resolving Discrepancies

#### A. Reporting Discrepancies

If, during the performance of the Work, CONTRACTOR discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, CONTRACTOR shall report it to ENGINEER in writing at once. CONTRACTOR shall not proceed with the Work affected thereby (except in an emergency as required by paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in paragraph 3.04; provided, however, that CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any such conflict, error, ambiguity, or discrepancy unless CONTRACTOR knew or reasonably should have known thereof.

#### B. Resolving Discrepancies

- 1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:
  - a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); 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 Amending and Supplementing Contract Documents

- A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways: (i) a Written Amendment; (ii) a Change Order; or (iii) a Work Change Directive.
- B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways: (i) a Field Order; (ii) ENGINEER's approval of a Shop Drawing or Sample; or (iii) ENGINEER's written interpretation or clarification.

# 3.05 Reuse of Documents

A. CONTRACTOR and any Subcontractor or Supplier or other individual or entity performing or furnishing any of the Work under a direct or indirect contract with OWNER: (i) shall not 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 ENGINEER's Consultant, including electronic media editions; and (ii) shall not reuse any of 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 adaption by ENGINEER. This prohibition will survive final payment, completion, and

acceptance of the Work, or termination or completion of the Contract. Nothing herein shall preclude CONTRACTOR from retaining copies of the Contract Documents for record purposes.

# ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; REFERENCE POINTS

#### 4.01 Availability of Lands

- A. OWNER shall furnish the Site. OWNER shall notify CONTRACTOR 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. OWNER will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If CONTRACTOR and OWNER are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in OWNER's furnishing the Site, CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.
- 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 the Work is to be performed 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.

# 4.02 Subsurface and Physical Conditions

- A. Reports and Drawings: The Supplementary Conditions identify:
  - 1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that ENGINEER has used in preparing the Contract Documents; and
  - 2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that ENGINEER has used in preparing the Contract Documents.

- B. Limited Reliance by CONTRACTOR on Technical Data Authorized: CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER, or any of ENGINEER's Consultants 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: or
  - 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.

# 4.03 Differing Subsurface or Physical Condition

- A. *Notice:* If CONTRACTOR believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:
  - 1. is of such a nature as to establish that any "technical data" on which CONTRACTOR is entitled to rely as provided in paragraph 4.02 is materially inaccurate; or
  - 2. is of such a nature as to require a change in the Contract Documents; or
  - 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 6.16.A), notify OWNER and ENGINEER in writing about such condition. CONTRACTOR shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. ENGINEER's Review: After receipt of written notice as required by paragraph 4.03.A, ENGINEER will promptly review the pertinent condition, determine the necessity of OWNER's obtaining additional exploration or tests with respect thereto, and advise OWNER in writing (with a copy to CONTRACTOR) of ENGINEER's findings and conclusions.

# C. Possible Price and Times Adjustments

- 1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition 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 meet any one or more of the categories described in paragraph 4.03.A; and
  - 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 paragraphs 9.08 and 11.03.
- 2. CONTRACTOR shall not be entitled to any adjustment in the Contract Price or Contract Times if:
  - a. CONTRACTOR knew of the existence of such conditions at the time CONTRACTOR made a final commitment to OWNER in respect of Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or
  - b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for CONTRACTOR prior to CONTRACTOR's making such final commitment; or
  - c. CONTRACTOR failed to give the written notice within the time and as required by paragraph 4.03.A.

If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in paragraph 10.05. However, OWNER. ENGINEER. ENGINEER's Consultants shall not be liable to CONTRACTOR for any claims, costs, losses, or 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) sustained CONTRACTOR on or in connection with any other project or anticipated project.

# 4.04 *Underground Facilities*

- A. Shown or Indicated: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to OWNER or ENGINEER by the owners of such Underground Facilities, including OWNER, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
  - 1. OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and
  - 2. the cost of all of the following will be included in the Contract Price, and CONTRACTOR shall have full responsibility for:
    - a. reviewing and checking all such information and data,
    - b. locating all Underground Facilities shown or indicated in the Contract Documents,
    - c. coordination of the Work with the owners of such Underground Facilities, including OWNER, during construction, and
    - d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

#### B. Not Shown or Indicated

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract

Documents, 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 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to OWNER and ENGINEER. ENGINEER will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, CONTRACTOR shall be responsible for the safety and protection of such Underground Facility.

If ENGINEER concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price of Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that CONTRACTOR did not know of and could not reasonably have been expected to be aware of or to have anticipated. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, OWNER or CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

#### 4.05 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.

# 4.06 Hazardous Environmental Condition at Site

- A. Reports and Drawings: Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the ENGINEER in the preparation of the Contract Documents.
- B. Limited Reliance by CONTRACTOR on Technical Data Authorized: CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER or any of ENGINEER's Consultants 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; or
  - 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 any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. CONTRACTOR shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by CONTRACTOR, Subcontractors, Suppliers, or anyone else for whom CONTRACTOR is responsible.
- D. If CONTRACTOR encounters a Hazardous Environmental Condition or if CONTRACTOR or anyone for whom CONTRACTOR is responsible creates a Hazardous Environmental Condition, CONTRACTOR shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by paragraph 6.16); and (iii) 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.

- E. CONTRACTOR shall not be required to resume Work in connection with such condition or in any affected area until after OWNER has obtained any required permits related thereto and delivered to CONTRACTOR written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. 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, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by CONTRACTOR, either party may make a Claim therefor as provided in paragraph 10.05.
- F. 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. If OWNER and CONTRACTOR cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in paragraph 10.05. OWNER may have such deleted portion of the Work performed by OWNER's own forces or others in accordance with Article 7.
- G. To the fullest extent permitted by Laws and Regulations, OWNER shall indemnify and hold harmless CONTRACTOR. Subcontractors. ENGINEER. ENGINEER's Consultants and the officers, directors, partners, employees, agents, other 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 a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by CONTRACTOR or by anyone for whom CONTRACTOR is responsible. Nothing in this paragraph 4.06.E shall obligate OWNER to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

- H. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, other 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 a Hazardous Environmental Condition created by CONTRACTOR or by anyone for whom CONTRACTOR is responsible. Nothing in this paragraph 4.06.F shall obligate CONTRACTOR to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- I. The provisions of paragraphs 4.02, 4.03, and 4.04 are not intended to apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

# ARTICLE 5 - BONDS AND INSURANCE

# 5.01 Performance, Payment, and Other Bonds

- A. CONTRACTOR shall furnish performance and payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. These Bonds shall remain in effect at least until one year after the date when final payment becomes due, except as provided otherwise by Laws or Regulations or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Contract Documents.
- B. All Bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current 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. All Bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act.
- C. If the surety on any Bond furnished by CON-TRACTOR 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 paragraph 5.01.B, CONTRACTOR shall within 20 days thereafter substitute another Bond and surety, both of which shall comply with the requirements of paragraphs 5.01.B and 5.02.

#### 5.02 Licensed Sureties and Insurers

A. All Bonds and insurance required by the Contract Documents to be purchased and maintained by OWNER or CONTRACTOR shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue Bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

# 5.03 *Certificates of Insurance*

A. CONTRACTOR shall deliver to OWNER, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by OWNER or any other additional insured) which CONTRACTOR is required to purchase and maintain. OWNER shall deliver to CONTRACTOR, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by CONTRACTOR or any other additional insured) which OWNER is required to purchase and maintain.

# 5.04 CONTRACTOR's Liability Insurance

A. CONTRACTOR shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from CONTRACTOR's performance of the Work and CONTRACTOR's other obligations under the Contract Documents, whether it is to be performed 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:

- 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;
- 2. claims for damages because of bodily injury, occupational sickness or disease, or death of CONTRACTOR's employees;

- 3. claims for damages because of bodily injury, sickness or disease, or death of any person other than CONTRACTOR's employees;
- 4. claims for damages insured by reasonably available personal injury liability coverage which are sustained: (i) by any person as a result of an offense directly or indirectly related to the employment of such person by CONTRACTOR, or (ii) by any other person for any other reason;
- 5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and
- 6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.
- B. The policies of insurance so required by this paragraph 5.04 to be purchased and maintained shall:
  - 1. with respect to insurance required by paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insureds (subject to any customary exclusion in respect of professional liability) OWNER, ENGINEER, ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;
  - 2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;
    - 3. include completed operations insurance;
  - 4. include contractual liability insurance covering CONTRACTOR's indemnity obligations under paragraphs 6.07, 6.11, and 6.20;
  - 5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least thirty

days prior written notice has been given to OWNER and CONTRACTOR and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the CONTRACTOR pursuant to paragraph 5.03 will so provide);

- 6. remain in effect at least until final payment and at all times thereafter when CONTRACTOR may be correcting, removing, or replacing defective Work in accordance with paragraph 13.07; and
- 7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment (and CONTRACTOR shall furnish OWNER and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to OWNER and any such additional insured of continuation of such insurance at final payment and one year thereafter).

# 5.05 OWNER's Liability Insurance

A. In addition to the insurance required to be provided by CONTRACTOR under paragraph 5.04, OWNER, at OWNER's option, may purchase and maintain at OWNER's expense OWNER's own liability insurance as will protect OWNER against claims which may arise from operations under the Contract Documents.

#### 5.06 Property Insurance

- A. Unless otherwise provided in the Supplementary Conditions, OWNER shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
  - 1 include the interests of OWNER, CON-TRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants. and anv other individuals or entities identified Supplementary Conditions, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an additional insured:

- 2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;
- 3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
- 4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by OWNER prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by ENGINEER;
- 5. allow for partial utilization of the Work by OWNER;
  - 6. include testing and startup; and
- 7. be maintained in effect until final payment is made unless otherwise agreed to in writing by OWNER, CONTRACTOR, and ENGINEER with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.
- B. OWNER shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and any other individuals or entities identified in the Supplementary Conditions, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.
- C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to OWNER and CONTRACTOR and to each other additional

insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with paragraph 5.07.

- D. OWNER shall not be responsible for purchasing and maintaining any property insurance specified in this paragraph 5.06 to protect the interests of CONTRACTOR, Subcontractors, or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by CONTRACTOR, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.
- E. If CONTRACTOR requests in writing that other special insurance be included in the property insurance policies provided under paragraph 5.06, OWNER shall, if possible, include such insurance, and the cost thereof will be charged to CONTRACTOR by appropriate Change Order or Written Amendment. Prior to commencement of the Work at the Site, OWNER shall in writing advise CONTRACTOR whether or not such other insurance has been procured by OWNER.

# 5.07 Waiver of Rights

A. OWNER and CONTRACTOR intend that all policies purchased in accordance with paragraph 5.06 will protect OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies 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 of the insureds or additional insureds thereunder. OWNER and CONTRACTOR waive all rights against each other and their respective officers, directors, partners, employees, agents, and other 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 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 Subcontractors, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by OWNER as trustee or otherwise payable under any policy so issued.

- B. OWNER waives all rights against CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them for:
  - 1. loss 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 peril whether or not insured by OWNER; and
  - 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by OWNER during partial utilization pursuant to paragraph 14.05, after Substantial Completion pursuant to paragraph 14.04, or after final payment pursuant to paragraph 14.07.
- C. Any insurance policy maintained by OWNER covering any loss, damage or consequential loss referred to in paragraph 5.07.B 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, ENGINEER, or ENGINEER's Consultants and the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them.

# 5.08 Receipt and Application of Insurance Proceeds

A. Any insured loss under the policies of insurance required by paragraph 5.06 will be adjusted with OWNER and made payable to OWNER as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of paragraph 5.08.B. OWNER shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order or Written Amendment.

B. OWNER as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to OWNER's exercise of this power. If such objection be made, OWNER as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, OWNER as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, OWNER as fiduciary shall give bond for the proper performance of such duties.

# 5.09 Acceptance of Bonds and Insurance; Option to Replace

A. If either OWNER or CONTRACTOR has any objection to the coverage afforded by or other provisions of the Bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by paragraph 2.05.C. OWNER and CONTRACTOR shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the Bonds and insurance required of such party by the Contract Documents, 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. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent Bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

# 5.10 Partial Utilization, Acknowledgment of Property Insurer

A. If OWNER finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

# 6.01 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. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of OWNER or ENGINEER in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents. CONTRACTOR shall be responsible to see that the completed Work complies accurately with the Contract Documents.

B. At all times during the progress of the Work, CONTRACTOR shall assign a competent resident superintendent thereto who shall not be replaced without written notice to OWNER and ENGINEER except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the Site and shall have authority to act on behalf of CONTRACTOR. All communications given to or received from the superintendent shall be binding on CONTRACTOR.

# 6.02 Labor; Working Hours

A. CONTRACTOR shall provide competent, suitably qualified personnel to survey, lay out, and construct the Work as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the Site.

B. 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 shall be performed during regular working hours, and CONTRACTOR will not permit overtime work or the performance of Work on Saturday, Sunday, or any legal holiday without OWNER's written consent (which will not be unreasonably withheld) given after prior written notice to ENGINEER.

# 6.03 Services, Materials, and Equipment

A. Unless otherwise specified in the General Requirements, 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.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for by the Specifications shall 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. All materials and equipment shall 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.

#### 6.04 Progress Schedule

- A. CONTRACTOR shall adhere to the progress schedule established in accordance with paragraph 2.07 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 2.07) proposed adjustments in the progress schedule that will not result in changing the Contract Times (or Milestones). Such adjustments will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the General Requirements applicable thereto.
  - 2. Proposed adjustments in the progress schedule that will change the Contract Times (or Milestones) shall be submitted in accordance with the requirements of Article 12. Such adjustments may only be made by a Change Order or Written Amendment in accordance with Article 12.

# 6.05 Substitutes and "Or-Equals"

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description 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 or no substitution is permitted, other items of material or equipment or material or equipment of other

Suppliers may be submitted to ENGINEER for review under the circumstances described below.

- 1. "Or-Equal" Items: If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by ENGINEER as an "or-equal" item, in which case review and approval of the proposed item may, in ENGINEER's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:
  - a. in the exercise of reasonable judgment ENGINEER determines that: (i) it is at least equal in quality, durability, appearance, strength, and design characteristics; (ii) it will reliably perform at least equally well the function imposed by the design concept of the completed Project as a functioning whole, and;
  - b. CONTRACTOR certifies that: (i) there is no increase in cost to the OWNER; and (ii) it will conform substantially, even with deviations, to the detailed requirements of the item named in the Contract Documents.

#### 2. Substitute Items

- a. If in ENGINEER's sole discretion an item of material or equipment proposed by CONTRACTOR does not qualify as an "or-equal" item under paragraph 6.05.A.1, it will be considered a proposed substitute item.
- b. CONTRACTOR shall submit sufficient information as provided below to allow ENGINEER to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by ENGINEER from anyone other than CONTRACTOR.
- c. The procedure for review by ENGI-NEER will be as set forth in paragraph 6.05.A.2.d, as supplemented in the General Requirements and as ENGINEER may decide is appropriate under the circumstances.

- d. CONTRACTOR shall first make written application to ENGINEER for review of a proposed substitute item of material or equipment that CONTRACTOR seeks to furnish or use. The application shall certify that the proposed substitute item will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified, and be suited to the same use as that specified. The application will state the extent, if any, to which the use of the proposed substitute item will prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not 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 work on the Project) to adapt the design to the proposed substitute item and whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute item from that specified will be identified in the application, and available engineering, sales, maintenance, repair, and replacement services will be indicated. application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change, all of which will be considered by ENGINEER in evaluating the proposed substitute item. ENGINEER may require CON-TRACTOR to furnish additional data about the proposed substitute item.
- B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is shown or indicated in and expressly required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by ENGINEER. CONTRACTOR shall submit sufficient information to allow ENGINEER, in ENGINEER's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The procedure for review by ENGINEER will be similar to that provided in subparagraph 6.05.A.2.
- C. Engineer's Evaluation: ENGINEER will be allowed a reasonable time within which to evaluate each

- proposal or submittal made pursuant to paragraphs 6.05.A and 6.05.B. ENGINEER will be the sole judge of acceptability. No "or-equal" or substitute will be ordered, installed or utilized until ENGINEER's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." ENGINEER will advise CONTRACTOR in writing of any negative determination.
- D. Special Guarantee: OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.
- E. ENGINEER's Cost Reimbursement: ENGINEER will record time required by ENGINEER and ENGINEER's Consultants in evaluating substitute proposed or submitted by CONTRACTOR pursuant to paragraphs 6.05.A.2 and 6.05.B and in making changes in the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) occasioned thereby. Whether or not ENGINEER approves a substitute item so proposed or submitted by CONTRACTOR, CONTRACTOR shall reimburse OWNER for the charges of ENGINEER and ENGINEER's Consultants for evaluating each such proposed substitute.
- F. *CONTRACTOR's Expense:* CONTRACTOR shall provide all data in support of any proposed substitute or "or-equal" at CONTRACTOR's expense.
- 6.06 Concerning Subcontractors, Suppliers, and Others
- A. CONTRACTOR shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to OWNER as indicated in paragraph 6.06.B), whether initially or as a replacement, against whom OWNER may have reasonable objection. CONTRACTOR shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom CONTRACTOR has reasonable objection.
- B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to OWNER in advance for acceptance by OWNER by a specified date prior to the Effective Date of the Agreement, and if CONTRACTOR has submitted a list thereof in accordance with the Supplementary Conditions, OWNER's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity

so identified may be revoked on the basis of reasonable objection after due investigation. CONTRACTOR shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued or Written Amendment signed. No acceptance by OWNER of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of OWNER or ENGINEER to reject defective Work.

- C. CONTRACTOR shall be fully responsible to OWNER and ENGINEER for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions. Nothing in the Contract Documents shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between OWNER or ENGINEER and any such Subcontractor, Supplier or other individual or entity, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.
- D. CONTRACTOR shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR.
- E. CONTRACTOR shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with ENGINEER through CONTRACTOR.
- F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- G. All Work performed for CONTRACTOR by a Subcontractor or Supplier will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and ENGINEER. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in paragraph 5.06, the agreement between the CONTRAC-

TOR and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against OWNER, CONTRACTOR, ENGINEER, ENGINEER's Consultants, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, and other 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 such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, CONTRACTOR will obtain the same.

# 6.07 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 a particular 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 shall be disclosed by OWNER in the Contract Documents. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees or agents, and other consultants 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.

# 6.08 Permits

A. Unless otherwise provided in the Supplementary Conditions, CONTRACTOR shall obtain and pay for all construction permits and licenses. 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 opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. CONTRACTOR shall pay all

charges of utility owners for connections to the Work, and OWNER shall pay all charges of such utility owners for capital costs related thereto, such as plant investment fees.

#### 6.09 Laws and Regulations

- A. CONTRACTOR shall give all notices and comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither OWNER nor ENGINEER shall be responsible for monitoring CONTRACTOR's compliance with any Laws or Regulations.
- B. If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, CONTRACTOR shall bear 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; however, it shall not be CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve CONTRACTOR of CONTRACTOR's obligations under paragraph 3.03.
- C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work may be the subject of an adjustment in Contract Price or Contract Times. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in paragraph 10.05.

#### 6.10 *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.

#### 6.11 Use of Site and Other Areas

# A. Limitation on Use of Site and Other Areas

1. CONTRACTOR shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other

- materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.
- 2. Should any claim be made by any such owner or occupant because of the performance of the Work, CONTRACTOR shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.
- To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultant, and the officers, directors, partners, employees, agents, and other consultants 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 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 by or based upon CONTRACTOR's performance of the Work.
- B. Removal of Debris During Performance of the Work: During the progress of the Work CONTRACTOR shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. Cleaning: Prior to Substantial Completion of the Work CONTRACTOR shall clean the Site and make it ready for utilization by OWNER. At the completion of the Work CONTRACTOR shall remove from the Site 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 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 property to stresses or pressures that will endanger it.

#### 6.12 Record Documents

A. CONTRACTOR shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to ENGINEER for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to ENGINEER for OWNER.

# 6.13 Safety and Protection

- A. CONTRACTOR shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. 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, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. 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. CONTRACTOR shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property. All damage, injury, or loss to any property referred to in paragraph 6.13.A.2 or 6.13.A.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 (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of OWNER or ENGINEER or ENGINEER's

Consultant, 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). CONTRACTOR's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and ENGINEER has issued a notice to OWNER and CONTRACTOR in accordance with paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

# 6.14 Safety Representative

A. CONTRACTOR shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

#### 6.15 Hazard Communication Programs

A. CONTRACTOR shall be responsible for coordinating any exchange of 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.

# 6.16 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 threatened 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 thereby or are required as a result thereof. If ENGINEER determines that a change in the Contract Documents is required because of the action taken by CONTRACTOR in response to such an emergency, a Work Change Directive or Change Order will be issued.

# 6.17 Shop Drawings and Samples

A. CONTRACTOR shall submit Shop Drawings to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. All submittals will be identified as ENGINEER may require and in the number of copies specified in the General Requirements. The data shown on the Shop Drawings will 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 6.17.E.

- B. CONTRACTOR shall also submit Samples to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. Each Sample will be identified clearly as to material, Supplier, pertinent data such as catalog numbers, and the use for which intended and otherwise as ENGINEER may require to enable ENGINEER to review the submittal for the limited purposes required by paragraph 6.17.E. The numbers of each Sample to be submitted will be as specified in the Specifications.
- C. Where a Shop Drawing or Sample is required by the Contract Documents or the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER as required by paragraph 2.07, 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.

# D. Submittal Procedures

- 1. Before submitting each Shop Drawing or Sample, CONTRACTOR shall have determined and verified:
  - a. all field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
  - b. all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;
  - c. all information relative to means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto; and
  - d. CONTRACTOR shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.
- 2. Each submittal shall bear a stamp or specific written indication that CONTRACTOR has

satisfied CONTRACTOR's obligations under the Contract Documents with respect to CONTRACTOR's review and approval of that submittal.

3. At the time of each submittal, CONTRACTOR shall give ENGINEER specific written notice of such variations, if any, that the Shop Drawing or Sample submitted may have from the requirements of the Contract Documents, such notice to be in a written communication separate from the submittal; and, in addition, shall cause a specific notation to be made on each Shop Drawing and Sample submitted to ENGINEER for review and approval of each such variation.

#### E. ENGINEER's Review

- 1. ENGINEER will timely review and approve Shop Drawings and Samples in accordance with the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER. 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, conform to the information given in 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 (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- 3. ENGINEER's review and approval of Shop Drawings or Samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of each submittal as required by paragraph 6.17.D.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 approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for complying with the requirements of paragraph 6.17.D.1.

#### F. Resubmittal Procedures

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.

#### 6.18 *Continuing the Work*

A. CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by paragraph 15.04 or as OWNER and CONTRACTOR may otherwise agree in writing.

# 6.19 CONTRACTOR's General Warranty and Guarantee

- A. CONTRACTOR warrants and guarantees to OWNER, ENGINEER, and ENGINEER's Consultants that all Work will be in accordance with the Contract Documents and will not be defective. CONTRACTOR's warranty and guarantee hereunder excludes defects or damage caused by:
  - 1. abuse, modification, or improper 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.
- B. CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents:
  - 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 acceptance by OWNER or any failure to do so;
- 6. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by ENGINEER;
- 7. any inspection, test, or approval by others; or
- 8. any correction of defective Work by OWNER.

#### 6.20 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, and other 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 experts and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage:
  - 1. is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom; and
  - 2. is caused in whole or in part 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, regardless of whether or not caused in part by any negligence or omission of an individual or entity indemnified hereunder or whether liability is imposed upon such indemnified party by Laws and Regulations regardless of the negligence of any such individual or entity.
- B. In any and all claims against OWNER or ENGINEER or any of their respective consultants, agents,

officers, directors, partners, or employees 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 6.20.A shall 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.

- C. The indemnification obligations of CONTRAC-TOR under paragraph 6.20.A shall not extend to the liability of ENGINEER and ENGINEER's Consultants or to the officers, directors, partners, employees, agents, and other consultants and subcontractors of each and any of them arising out of:
  - 1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
  - 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

# ARTICLE 7 - OTHER WORK

# 7.01 Related Work at Site

- A. OWNER may perform other work related to the Project at the Site by OWNER's employees, or let other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:
  - 1. written notice thereof will be given to CONTRACTOR prior to starting any such other work; and
  - 2. if OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in paragraph 10.05.
- B. CONTRACTOR shall afford each other contractor who is a party to such a direct contract and each

utility owner (and OWNER, if OWNER is performing the other work with OWNER's employees) proper and safe access to the Site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work and shall properly coordinate the Work with theirs. Unless otherwise provided in the Contract Documents, 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 their work and will only cut or alter their work with the written consent of ENGINEER and the others whose work The duties and responsibilities of will be affected. CONTRACTOR under this paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of CONTRACTOR in said direct contracts between OWNER and such utility owners and other contractors.

C. If the proper execution or results of any part of CONTRACTOR's Work depends upon work performed by others under this Article 7, 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.

# 7.02 Coordination

- A. If OWNER intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:
  - 1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified:
  - 2. the specific matters to be covered by such authority and responsibility will be itemized; and
  - 3. the extent of such authority and responsibilities will be provided.
- B. Unless otherwise provided in the Supplementary Conditions, OWNER shall have sole authority and responsibility for such coordination.

#### 8.01 *Communications to Contractor*

A. Except as otherwise provided in these General Conditions, OWNER shall issue all communications to CONTRACTOR through ENGINEER.

# 8.02 Replacement of ENGINEER

A. In case of termination of the employment of ENGINEER, OWNER shall appoint an engineer to whom CONTRACTOR makes no reasonable objection, whose status under the Contract Documents shall be that of the former ENGINEER.

#### 8.03 Furnish Data

A. OWNER shall promptly furnish the data required of OWNER under the Contract Documents.

# 8.04 Pay Promptly When Due

A. OWNER shall make payments to CONTRACTOR promptly when they are due as provided in paragraphs 14.02.C and 14.07.C.

# 8.05 Lands and Easements; Reports and Tests

A. OWNER's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.01 and 4.05. Paragraph 4.02 refers to OWNER's identifying and making available to CONTRACTOR copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by ENGINEER in preparing the Contract Documents.

# 8.06 Insurance

A. OWNER's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

# 8.07 Change Orders

A. OWNER is obligated to execute Change Orders as indicated in paragraph 10.03.

# 8.08 Inspections, Tests, and Approvals

A. OWNER's responsibility in respect to certain inspections, tests, and approvals is set forth in paragraph 13.03.B.

# 8.09 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.

# 8.10 Undisclosed Hazardous Environmental Conditions

A. OWNER's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in paragraph 4.06.

# 8.11 Evidence of Financial Arrangements

A. If and to the extent OWNER has agreed to furnish CONTRACTOR reasonable evidence that financial arrangements have been made to satisfy OWNER's obligations under the Contract Documents, OWNER's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

# ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

# 9.01 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 Documents and will not be changed without written consent of OWNER and ENGINEER.

# 9.02 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 9.10, and 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 authority over or be responsible 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.

#### 9.03 Project Representative

A. If OWNER and ENGINEER agree, ENGINEER will furnish a Resident Project Representative to assist ENGINEER in providing more extensive observation of the Work. The responsibilities and authority and limitations thereon of any such Resident Project Representative and assistants will be as provided in paragraph 9.10 and in the Supplementary Conditions. If OWNER designates another representative or agent to represent OWNER at the Site who is not ENGINEER's Consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

# 9.04 *Clarifications and Interpretations*

A. ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents as ENGINEER may determine necessary, which shall be consistent with the intent of and reasonably inferable from the Contract Documents. Such written clarifications and interpretations will be binding on OWNER and CONTRACTOR. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a written clarification

or interpretation, a Claim may be made therefor as provided in paragraph 10.05.

#### 9.05 Authorized Variations in Work

A. ENGINEER may authorize minor variations in the Work from the requirements of the Contract Documents which 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. These may be accomplished by a Field Order and will be binding on OWNER and also on CONTRACTOR, who shall perform the Work involved promptly. If OWNER and CONTRACTOR are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of a Field Order, a Claim may be made therefor as provided in paragraph 10.05.

# 9.06 Rejecting Defective Work

A. ENGINEER will have authority to disapprove or reject Work which ENGINEER believes to be defective, or that ENGINEER believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. ENGINEER will also have authority to require special inspection or testing of the Work as provided in paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

# 9.07 Shop Drawings, Change Orders and Payments

- A. In connection with ENGINEER's authority as to Shop Drawings and Samples, see paragraph 6.17.
- B. In connection with ENGINEER's authority as to Change Orders, see Articles 10, 11, and 12.
- C. In connection with ENGINEER's authority as to Applications for Payment, see Article 14.

# 9.08 Determinations for Unit Price Work

A. 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, subject to the provisions of paragraph 10.05.

# 9.09 Decisions on Requirements of Contract Documents and Acceptability of Work

- A. ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work, the quantities and classifications of Unit Price Work, the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, and Claims seeking changes in the Contract Price or Contract Times will be referred initially to ENGINEER in writing, in accordance with the provisions of paragraph 10.05, with a request for a formal decision.
- B. When functioning as interpreter and judge under this paragraph 9.09, ENGINEER will not show partiality to OWNER or CONTRACTOR and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity. The rendering of a decision by ENGINEER pursuant to this paragraph 9.09 with respect to any such Claim, dispute, or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.07) will be a condition precedent to any exercise by OWNER or CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any such Claim, dispute, or other matter.

# 9.10 Limitations on ENGINEER's Authority and Responsibilities

- A. Neither ENGINEER's authority or responsibility under this Article 9 or under any other provision of the Contract Documents 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 shall 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 paragraph 14.07.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 9.10 shall also apply to ENGINEER's Consultants, Resident Project Representative, and assistants.

# ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

# 10.01 Authorized Changes in the Work

- A. Without invalidating the Agreement and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Written Amendment, a Change Order, or a Work Change Directive. Upon receipt of any such document, CONTRACTOR shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).
- B. If OWNER and CONTRACTOR are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in paragraph 10.05.

# 10.02 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 as provided in paragraph 3.04, except in the case of an emergency as provided in

paragraph 6.16 or in the case of uncovering Work as provided in paragraph 13.04.B.

#### 10.03 Execution of Change Orders

- A. OWNER and CONTRACTOR shall execute appropriate Change Orders recommended by ENGINEER (or Written Amendments) covering:
  - 1. changes in the Work which are: (i) ordered by OWNER pursuant to paragraph 10.01.A, (ii) required because of acceptance of defective Work under paragraph 13.08.A or OWNER's correction of defective Work under paragraph 13.09, or (iii) agreed to by the parties;
  - 2. changes in the 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; and
  - 3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by ENGINEER pursuant to paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, CONTRACTOR shall carry on the Work and adhere to the progress schedule as provided in paragraph 6.18.A.

#### 10.04 Notification to Surety

A. If notice 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) is required by the provisions of any Bond to be given to a surety, 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.

# 10.05 Claims and Disputes

A. *Notice:* Written notice stating the general nature of each Claim, dispute, or other matter shall be delivered by the claimant to ENGINEER and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. Notice of the amount or extent of the Claim, dispute, or other matter with supporting data shall be delivered to the ENGINEER and the other party to the Contract within 60 days after the start

- of such event (unless ENGINEER allows additional time for claimant to submit additional or more accurate data in support of such Claim, dispute, or other matter). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to ENGINEER and the claimant within 30 days after receipt of the claimant's last submittal (unless ENGINEER allows additional time).
- B. ENGINEER's Decision: ENGINEER will render a formal decision in writing within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any. ENGINEER's written decision on such Claim, dispute, or other matter will be final and binding upon OWNER and CONTRACTOR unless:
  - 1. an appeal from ENGINEER's decision is taken within the time limits and in accordance with the dispute resolution procedures set forth in Article 16; or
  - 2. if no such dispute resolution procedures have been set forth in Article 16, a written notice of intention to appeal from ENGINEER's written decision is delivered by OWNER or CONTRACTOR to the other and to ENGINEER within 30 days after the date of such decision, and a formal proceeding is instituted by the appealing party in a forum of competent jurisdiction within 60 days after the date of such decision or within 60 days after Substantial Completion, whichever is later (unless otherwise agreed in writing by OWNER and CONTRACTOR), to exercise such rights or remedies as the appealing party may have with respect to such Claim, dispute, or other matter in accordance with applicable Laws and Regulations.
- C. If ENGINEER does not render a formal decision in writing within the time stated in paragraph 10.05.B, a decision denying the Claim in its entirety shall be deemed to have been issued 31 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any.
- D. No Claim for an adjustment in Contract Price or Contract Times (or Milestones) will be valid if not submitted in accordance with this paragraph 10.05.

# 11.01 *Cost of the Work*

- A. Costs Included: The term Cost of the Work means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to CONTRACTOR will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in paragraph 11.01.B.
  - 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. Such employees shall include without limitation superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall 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 All cash discounts shall accrue to therewith. CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue All trade discounts, rebates and to OWNER. refunds and returns from sale of surplus materials and equipment shall 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, who 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 shall be determined in the same manner as CONTRACTOR's Cost of the Work and fee as provided in this paragraph 11.01.
- 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
- 5. Supplemental costs including 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, and hand tools not owned by the workers, 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.
- c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by OWNER with the advice of ENGINEER, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
- d. Sales, consumer, use, and other similar taxes related to the Work, and for which CONTRACTOR is liable, 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 property insurance established in accordance with paragraph 5.06.D), 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 shall include settlements made with the written consent and approval of OWNER. No such losses, damages, and expenses shall 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 telegrams, long distance telephone calls, telephone service at the Site, expressage, and similar petty cash items in connection with the Work.
- i. When the Cost of the Work is used to determine the value of a Change Order or of a Claim, the cost of premiums for additional Bonds and insurance required because of the changes in the Work or caused by the event giving rise to the Claim.
- j. When all the Work is performed on the basis of cost-plus, the costs of premiums for all Bonds and insurance CONTRACTOR is required by the Contract Documents to purchase and maintain.
- B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:
  - 1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnerships and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, 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 11.01.A.1 or specifically covered by paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the CONTRACTOR's fee.
- 2. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the Site.
- 3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.
- 4. Costs due to the negligence of CON-TRACTOR, 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.
- 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraphs 11.01.A and 11.01.B.
- C. CONTRACTOR's Fee: When all the Work is performed on the basis of cost-plus, CONTRACTOR's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, CONTRACTOR's fee shall be determined as set forth in paragraph 12.01.C.
- D. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to paragraphs 11.01.A and 11.01.B, CONTRACTOR will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to ENGINEER an itemized cost breakdown together with supporting data.

# 11.02 Cash 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 as may be acceptable to OWNER and ENGINEER. CONTRACTOR agrees that:

- 1. the allowances include the cost to CON-TRACTOR (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 costs, overhead, profit, and other expenses contemplated for the allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- B. Prior to final payment, an appropriate Change Order will be issued as recommended by ENGINEER to reflect actual amounts due CONTRACTOR on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

#### 11.03 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. 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. Determinations of the actual quantities and classifications of Unit Price Work performed by CONTRACTOR will be made by ENGINEER subject to the provisions of paragraph 9.08.
- B. 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.
- C. OWNER or CONTRACTOR may make a Claim for an adjustment in the Contract Price in accordance with paragraph 10.05 if:
  - 1. the quantity of any item of Unit Price Work performed by CONTRACTOR differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
  - 2. there is no corresponding adjustment with respect any other item of Work; and

3. if CONTRACTOR believes that CONTRACTOR is entitled to an increase in Contract Price as a result of having incurred additional expense or OWNER believes that OWNER is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

# ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

# 12.01 Change of Contract Price

- A. The Contract Price may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the ENGINEER and the other party to the Contract in accordance with the provisions of paragraph 10.05.
- B. The value of any Work covered by a Change Order or of any Claim for 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, by application of such unit prices to the quantities of the items involved (subject to the provisions of paragraph 11.03); or
  - 2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with paragraph 12.01.C.2); or
  - 3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in paragraph 11.01) plus a CONTRACTOR's fee for overhead and profit (determined as provided in paragraph 12.01.C).
- C. *CONTRACTOR's Fee:* The CONTRACTOR's fee for overhead and profit shall 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 11.01.A.1 and 11.01.A.2, the CONTRACTOR's fee shall be 15 percent;
- b. for costs incurred under paragraph 11.01.A.3, the CONTRACTOR's fee shall be five 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 paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and CONTRACTOR will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;
- d. no fee shall be payable on the basis of costs itemized under paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;
- e. the amount of credit to be allowed by CONTRACTOR to OWNER for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in CONTRACTOR's fee by an amount equal to five percent of such net decrease; and
- f. when both additions and credits are involved in any one change, the adjustment in CONTRACTOR's fee shall be computed on the basis of the net change in accordance with paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

#### 12.02 Change of Contract Times

- A. The Contract Times (or Milestones) may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Times (or Milestones) shall be based on written notice submitted by the party making the claim to the ENGINEER and the other party to the Contract in accordance with the provisions of paragraph 10.05.
- B. Any adjustment of the Contract Times (or Milestones) covered by a Change Order or of any Claim for an adjustment in the Contract Times (or Milestones) will be

determined in accordance with the provisions of this Article 12.

# 12.03 Delays Beyond CONTRACTOR's Control

A. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of CONTRACTOR, the Contract Times (or Milestones) will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in paragraph 12.02.A. Delays beyond the control of CONTRACTOR shall include, but not be limited to, acts or neglect by OWNER, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

# 12.04 Delays Within CONTRACTOR's Control

A. The Contract Times (or Milestones) will not be extended due to delays within the control of CONTRACTOR. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of CONTRACTOR.

# 12.05 Delays Beyond OWNER's and CONTRACTOR's Control

A. Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of both OWNER and CONTRACTOR, an extension of the Contract Times (or Milestones) in an amount equal to the time lost due to such delay shall be CONTRACTOR's sole and exclusive remedy for such delay.

# 12.06 Delay Damages

A. In no event shall OWNER or ENGINEER be liable to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages arising out of or resulting from:

- 1. delays caused by or within the control of CONTRACTOR; or
- 2. delays beyond the control of both OWNER and CONTRACTOR including but not limited to fires, floods, epidemics, abnormal weather conditions, acts of God, or acts or neglect by utility owners or other contractors performing other work as contemplated by Article 7.

B. Nothing in this paragraph 12.06 bars a change in Contract Price pursuant to this Article 12 to compensate CONTRACTOR due to delay, interference, or disruption directly attributable to actions or inactions of OWNER or anyone for whom OWNER is responsible.

# ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

#### 13.01 Notice of Defects

A. Prompt notice of all defective Work of which OWNER or ENGINEER has actual knowledge will be given to CONTRACTOR. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

#### 13.02 Access to Work

A. OWNER, ENGINEER, ENGINEER's Consultants, other representatives and personnel of OWNER, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. CONTRACTOR shall provide them proper and safe conditions for such access and advise them of CONTRACTOR's Site safety procedures and programs so that they may comply therewith as applicable.

#### 13.03 Tests and Inspections

- A. CONTRACTOR shall give ENGINEER timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- B. OWNER shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:
  - 1. for inspections, tests, or approvals covered by paragraphs 13.03.C and 13.03.D below;
  - 2. that costs incurred in connection with tests or inspections conducted pursuant to paragraph 13.04.B shall be paid as provided in said paragraph 13.04.B; and
  - 3. as otherwise specifically provided in the Contract Documents.

- 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 and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for OWNER's and ENGINEER's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to CONTRACTOR's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to OWNER and ENGINEER.
- E. 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, it must, if requested by ENGINEER, be uncovered for observation.
- F. Uncovering Work as provided in paragraph 13.03.E shall be at CONTRACTOR's expense unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR's intention to cover the same and ENGINEER has not acted with reasonable promptness in response to such notice.

# 13.04 Uncovering Work

- A. If any Work is covered contrary to the written request of ENGINEER, it must, if requested by ENGINEER, be uncovered for ENGINEER's observation and replaced at CONTRACTOR's expense.
- B. If ENGINEER considers it necessary or advisable that covered Work be observed by ENGINEER or inspected or tested by others, 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, furnishing all necessary labor, material, and equipment. If it is found that such Work is defective, CONTRACTOR shall pay 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 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 OWNER

shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefor as provided in paragraph 10.05. If, however, such Work is not found to be defective, CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Times (or Milestones), or both, 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, CONTRACTOR may make a Claim therefor as provided in paragraph 10.05.

# 13.05 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, 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 shall 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.

#### 13.06 Correction or Removal of Defective Work

A. CONTRACTOR shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by ENGINEER, remove it from the Project and replace it with Work that is not defective. CONTRACTOR shall pay 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 correction or removal (including but not limited to all costs of repair or replacement of work of others).

#### 13.07 Correction Period

A. If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for CONTRACTOR's use by OWNER or permitted by Laws and Regulations as contemplated in paragraph 6.11.A is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions: (i) repair such defective

land or areas, or (ii) correct such defective Work or, if the defective Work has been rejected by OWNER, remove it from the Project and replace it with Work that is not defective, and (iii) satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom. CONTRACTOR does not promptly comply with the terms of such 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, and 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 correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by CONTRACTOR.

- B. 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 or by Written Amendment.
- C. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph 13.07, 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.
- D. CONTRACTOR's obligations under this paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

# 13.08 Acceptance of Defective Work

A. If, instead of requiring correction or removal and replacement of defective Work, OWNER (and, prior to ENGINEER's recommendation of final payment, ENGINEER) prefers to accept it, OWNER may do so. CONTRACTOR shall pay 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) attributable to OWNER's evaluation of and determination to accept such defective Work (such costs to be approved by ENGINEER as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by CONTRACTOR pursuant to this sentence. If any such

acceptance occurs prior to ENGINEER's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and OWNER shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, OWNER may make a Claim therefor as provided in paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER.

# 13.09 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 rejected Work as required by ENGINEER in accordance with paragraph 13.06.A, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven days written notice to CONTRACTOR, correct and remedy any such deficiency.

B. In exercising the rights and remedies under this paragraph, OWNER shall proceed expeditiously. connection with such corrective and 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, take possession of CONTRACTOR's tools, appliances, construction equipment and machinery at the Site, 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 (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) incurred or sustained by OWNER in exercising the rights and remedies under this paragraph 13.09 will be charged against CONTRACTOR, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, OWNER may make a Claim therefor as provided in paragraph 10.05. 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 (or Milestones) 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 13.09.

# ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

# 14.01 Schedule of Values

A. The schedule of values established as provided in paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to ENGINEER. Progress payments on account of Unit Price Work will be based on the number of units completed.

# 14.02 Progress Payments

#### A. Applications for Payments

At least 20 days before the date established 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. 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 shall also be accompanied by a bill of sale, invoice, or other documentation warranting that OWNER has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect OWNER's interest therein, all of which must be satisfactory to OWNER.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of CONTRACTOR stating that all previous progress payments received on account of the Work have been applied on account to discharge

CONTRACTOR's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to pro-gress payments will be as stipulated in the Agreement.

# B. Review of Applications

- 1. ENGINEER will, within 10 days after receipt of each Application for Payment, 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 on the Site 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, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under paragraph 9.08, and to 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: (i) 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 Documents; or (ii) that 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.

- ENGINEER's Neither review CONTRACTOR's Work for the purposes of recommending payments nor ENGINEER's recommendation of any payment, including final payment, will impose responsibility on ENGINEER to supervise, direct, or control the Work or for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for CONTRACTOR's failure to comply with Laws and Regulations applicable to CONTRACTOR's performance of the Work. Additionally, said review or recommendation will not impose responsibility on ENGINEER to make any examination to ascertain how or for what purposes CONTRACTOR has used the moneys paid on account of the Contract Price, or 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 referred to in paragraph 14.02.B.2. ENGINEER may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in ENGINEER's opinion to protect OWNER from loss because:
  - a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
  - b. the Contract Price has been reduced by Written Amendment or Change Orders;
  - c. OWNER has been required to correct defective Work or complete Work in accordance with paragraph 13.09; or
  - d. ENGINEER has actual knowledge of the occurrence of any of the events enumerated in paragraph 15.02.A.

# C. Payment Becomes Due

1. Ten days after presentation of the Application for Payment to OWNER with ENGINEER's recommendation, the amount recommended will (subject to the provisions of paragraph 14.02.D) become due, and when due will be paid by OWNER to CONTRACTOR.

#### D. Reduction in Payment

- 1. OWNER may refuse to make payment of the full amount recommended by ENGINEER because:
  - a. claims have been made against OWNER on account of CONTRACTOR's performance or furnishing of the Work;
  - b. Liens have been filed in connection with the Work, except where CONTRACTOR has delivered a specific Bond satisfactory to OWN-ER to secure the satisfaction and discharge of such Liens;
  - c. there are other items entitling OWNER to a set-off against the amount recommended; or
  - d. OWNER has actual knowledge of the occurrence of any of the events enumerated in paragraphs 14.02.B.5.a through 14.02.B.5.c or paragraph 15.02.A.
- 2. If OWNER refuses to make payment of the full amount recommended by ENGINEER, OWNER must give CONTRACTOR immediate written notice (with a copy to ENGINEER) stating the reasons for such action 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, when CONTRACTOR corrects to OWNER's satisfaction the reasons for such action.
- 3. If it is subsequently determined that OWNER's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by paragraph 14.02.C.1.

# 14.03 CONTRACTOR's Warranty of Title

A. CONTRACTOR warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER no later than the time of payment free and clear of all Liens.

#### 14.04 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 (except for items specifically listed by CONTRACTOR as incomplete) and request that ENGINEER issue a certificate of Substantial Completion. Promptly thereafter, 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. If ENGINEER considers the Work substantially complete, ENGINEER will prepare and deliver to OWNER a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. OWNER shall have seven days after receipt of the tentative certificate during which to make written objection to ENGINEER as to any provisions of the certificate or attached list. If, after considering such objections, ENGINEER concludes that the Work is not substantially complete, ENGINEER will within 14 days after submission of the tentative certificate to OWNER notify CONTRACTOR in writing, stating the reasons therefor. If, after consideration of OWNER's objections, ENGINEER considers the Work substantially complete, ENGINEER will within said 14 days execute and deliver to OWNER and CONTRACTOR a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as ENGINEER believes justified after consideration of any objections from OWNER. At the time of delivery of the tentative certificate of Substantial Completion ENGINEER will deliver to OWNER and CONTRACTOR a written recommendation as to division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, warranties and guarantees. Unless OWNER and CONTRACTOR agree otherwise in writing and so inform ENGINEER in writing prior to ENGINEER's issuing the definitive certificate of Substantial Completion, ENGINEER's aforesaid recommendation will be binding on OWNER and CONTRACTOR until final payment.

B. OWNER shall have the right to exclude CONTRACTOR from the Site after the date of Substantial Completion, but OWNER shall allow CONTRACTOR

reasonable access to complete or correct items on the tentative list.

#### 14.05 Partial Utilization

- A. Use by OWNER at OWNER's option of 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, may be accomplished prior to Substantial Completion of all the Work subject to the following conditions.
  - OWNER at any time may request CON-TRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees that such part of the Work is substantially complete, CON-TRACTOR will certify to OWNER and ENGI-NEER that such part of the Work is substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. CONTRACTOR at any time may notify OWNER and ENGINEER in writing that CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time after either such OWNER, CONTRACTOR, 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 14.04 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.
  - 2. No occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of paragraph 5.10 regarding property insurance.

# 14.06 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 is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

# 14.07 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, marked-up record documents (as provided in paragraph 6.12), and other documents, CONTRACTOR may make application for final payment following the procedure for progress payments.
- 2. The final Application for Payment shall be accompanied (except as previously delivered) by: (i) all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by subparagraph 5.04.B.7; (ii) consent of the surety, if any, to final payment; and (iii) complete and legally effective releases or waivers (satisfactory to OWNER) of all Lien rights arising out of or Liens filed in connection with the Work.
- 3. In lieu of the releases or waivers of Liens specified in paragraph 14.07.A.2 and as approved by OWNER, CONTRACTOR may furnish receipts or releases in full and an affidavit of CONTRACTOR that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which OWNER or OWNER's property might in any way be responsible 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.

# B. Review of Application and Acceptance

If, on the basis of ENGINEER's obser-1. vation 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 Documents have been fulfilled, ENGINEER will, within ten days after receipt of the final Application for Payment, indicate in writing ENGINEER's recommendation of payment and present the Application for Payment to OWNER for payment. At the same time ENGINEER will also give written notice to OWNER and CON-TRACTOR that the Work is acceptable subject to the provisions of paragraph 14.09. 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. Payment Becomes Due

1. Thirty days after the presentation to OWNER of the Application for Payment and accompanying documentation, the amount recommended by ENGINEER will become due and, when due, will be paid by OWNER to CONTRACTOR.

# 14.08 Final Completion Delayed

A. If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed, and if ENGINEER so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by OWNER for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by CONTRACTOR to ENGINEER with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

# 14.09 Waiver of Claims

- A. The making and acceptance of final payment will constitute:
  - 1. a waiver of all Claims by OWNER against CONTRACTOR, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from CONTRACTOR's continuing obligations under the Contract Documents; and
  - 2. a waiver of all Claims by CONTRAC-TOR against OWNER other than those previously made in writing which are still unsettled.

# ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

# 15.01 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 notice in writing to CONTRACTOR and ENGINEER which will fix the date on which Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be allowed an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if CONTRACTOR makes a Claim therefor as provided in paragraph 10.05.

# 15.02 OWNER May Terminate for Cause

- A. The occurrence of any one or more of the following events will 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 established under paragraph 2.07 as adjusted from time to time pursuant to paragraph 6.04);
  - 2. CONTRACTOR's disregard of Laws or Regulations of any public body having jurisdiction;

- 3. CONTRACTOR's disregard of the authority of ENGINEER; or
- 4. CONTRACTOR's violation in any substantial way of any provisions of the Contract Documents.
- B. If one or more of the events identified in paragraph 15.02.A occur, OWNER may, after giving CONTRACTOR (and the surety, if any) seven days written notice, terminate the services of CONTRACTOR, exclude CONTRACTOR from the Site, and take possession of the Work and of all CONTRACTOR's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), 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 finish the Work as OWNER may deem expedient. In such case, CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds 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) sustained by OWNER arising out of or relating to completing the Work, such excess will be paid to CONTRACTOR. If such claims, costs, losses, and damages exceed 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.
- C. 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. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

# 15.03 OWNER May Terminate For Convenience

A. Upon seven days written notice to CONTRACTOR and ENGINEER, OWNER may, without cause and without prejudice to any other right or remedy of OWNER, elect to terminate the Contract. In such case, CONTRACTOR shall be paid (without duplication of any items):

- 1. for completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
- 2. for expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;
- 3. for 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) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and
- 4. for reasonable expenses directly attributable to termination.
- B. CONTRACTOR shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

# 15.04 CONTRACTOR May Stop Work or Terminate

A. If, through no act or fault of CONTRACTOR, the Work is suspended for more than 90 consecutive days by OWNER or under an order of court or other public authority, or ENGINEER fails to act on any Application for Payment within 30 days after it is submitted, or OWNER fails for 30 days to pay CONTRACTOR any sum finally determined to be due, then CONTRACTOR may, upon seven 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 15.03. 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, seven 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 15.04 are not intended to preclude CONTRACTOR from making a Claim under paragraph 10.05 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 16 - DISPUTE RESOLUTION

#### 16.01 Methods and Procedures

A. Dispute resolution methods and procedures, if any, shall be as set forth in the Supplementary Conditions. If no method and procedure has been set forth, and subject to the provisions of paragraphs 9.09 and 10.05, OWNER and CONTRACTOR may exercise such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any dispute.

#### ARTICLE 17 - MISCELLANEOUS

# 17.01 Giving Notice

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

# 17.02 Computation of Times

A. When any period of time is referred to in the Contract Documents 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.

#### 17.03 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 Documents, and 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.

# 17.04 Survival of Obligations

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Agreement.

#### 17.05 Controlling Law

A. This Contract is to be governed by the law of the state in which the Project is located.

# **SUPPLEMENTARY CONDITIONS**

# TABLE OF CONTENTS

		Page Number
SC-2.01.A.19	Defined Terms	SC-2
SC-2.01.A.20	Defined Terms	SC-2
SC-2.01.A	Delivery of Bonds	SC-2
SC-2.02.A	Copies of Documents	SC-2
SC-2.03.A	Commencement of Contract Time; Notice to Proceed	SC-2
SC-2.05.C	Evidence of Insurance	SC-2
SC-2.06.A	Preconstruction Conference	SC-2
SC-4.04	Underground Utilities	SC-3
SC-5.01	Performance, Payment and Other Bonds	SC-3
SC-5.04	Contractor's Liability Insurance	SC-3
SC-5.05	Owner's Liability Insurance	SC-4
SC-5.06	Property Insurance	SC-4
SC-5.06.D	Deductibles	SC-5
SC-5.06.E	Special Insurance	SC-5
SC-5.08.A	Receipt and Application of Proceeds	SC-5
SC-5.09.A	Acceptance of Insurance	SC-5
SC-5.11	Insurance Company Rating	SC-5
SC-6.03.B	Materials	SC-5
SC-6.06.B	Subcontractors, Suppliers, and Others	SC-6
SC-6.08	Permits	SC-6
SC-6.09.A	Laws and Regulations	SC-6
SC-6.17.A	Shop Drawing	SC-6
SC-6.17.E.1	Engineer's Review	SC-6
SC-6.19.A	Contractor's General Warranty and Guarantee	SC-7
SC-7.01	Related Work at Site	SC-7
SC-7.03	Claims Between Contractors	SC-7
SC-8.02	Replacement of Engineer	SC-8
SC-9.08.A	Determination for Unit Prices	SC-8
SC-11.02	Cash Allowance	SC-8
SC-11.03	Unit Price Work	SC-8
SC-12.02	Change of Contract Times	SC-8
SC-14.02.A.3	Application for Progress Payment	SC-9
SC-14.0.C.1	Review of Application for Progress Payment	SC-9
	, ,	

# SUPPLEMENTARY CONDITIONS

# Modifications to the STANDARD GENERAL CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract (No. 1910-8, 1996 ed.) and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect. The terms used in these Supplementary Conditions will have the meaning indicated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings indicated below which area applicable to both the singular and plural thereof.

#### SC-1.01.A.19 – Defined Terms

Add the following language at the end of the sentence:

ENGINEER shall mean LANDSCAPE ARCHITECT.

# SC-1.01.A.20 - Defined Terms

Add the following language at the end of the sentence:

ENGINEER'S Consultant shall mean LANDSCAPE ARCHITECT's Consultant.

# SC-2.01.A - Delivery of Bonds

Add the following language at the end of the sentence:

except for the Maintenance Bond. CONTRACTOR shall deliver to Owner the Maintenance Bond upon final acceptance.

# SC.2.02.A – Copies of Documents

Delete the first sentence of 2.02.A in its entirety and insert the following in its place.

Contract Documents are available online and at no cost via the PennBid Program (www.PennBid.net)

# SC-2.03.A – Commencement of Contract Times, Notice to Proceed

Delete Paragraph 2.03.A in its entirety and insert the following in its place:

The contract times will commence to run on the day indicated on the Notice to Proceed.

# SC-2.05.C - Evidence of Insurance

Delete paragraph 2.05.C in its entirety and insert the following in its place:

Before any Work at the site is started, Contractor shall deliver to Owner, with copies to each identified additional insured, certificates of insurance (and other evidence of insurance which Owner or any additional insured may reasonably request) which Contractor is required to purchase and maintain in accordance with Paragraphs 5.04, 5.06.A, and 5.06.B. The certificates shall be submitted with the required bonds and prior to the execution of the Agreement by Owner.

# SC-2.06.A – Preconstruction Conference

Amend the first sentence of paragraph 2.06.A by striking out the following words:

Within 20 days after the contract times start to run, but before any Work at the site is started, and replace with the following words:

Prior to the issuance of the Notice to Proceed,

# SC-4.04 – Underground Utilities

Add the following paragraph immediately after paragraph 4.04.A:

The Contractor shall further be bound by the provisions of the Pennsylvania Underground Utilities Act, Act 287, as amended by Act 187 of 1996.

# SC-5.01 - Performance, Payment, and Other Bonds

Amend the first sentence of paragraph 5.01.B to read as follows:

All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties licensed to transact such business in the state in which the Work is to be performed, acceptable to Owner, and, if federal agencies are participating in the project, named in the current 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 Audit Staff, Bureau of Government Financial Operations, U.S. Treasury Department.

# SC-5.04 – Contractor's Liability Insurance

Add the following language at the end of paragraph 5.04.A:

To the fullest extent permitted by law, CONTRACTOR agrees to indemnify and hold harmless Owner from any and all claims, lawsuits, causes of action, judgments, or awards arising out of any of the categories of claims listed above in this Section 5.04.A filed by or on behalf of any party, arising out of or resulting from the CONTRACTOR's performance of the Work and CONTRACTOR's other obligations under the Contract Documents, whether it is to be performed 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. CONTRACTOR agrees, in addition to the aforesaid, to reimburse Owner all reasonable attorney fees and costs as well as other costs incurred by Owner in the defense of any such claim, lawsuit, or cause of action. The Contractor shall not commence work under this contract until he has obtained all insurance required under this paragraph and such insurance has been approved by Owner, nor shall Contractor allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been so obtained and approved.

The Contractor shall either: require each subcontractor to procure and maintain during the life of his subcontract and two years following completion of his subcontract, insurance of the type and in the same amounts as specified: or insure the activities of his subcontractors in his own policy.

A 30 Day Notice of Cancellation must be provided to the Owner and be so indicated on the Certificate for all policies. Five (5) original copies of all Certificates must be provided. Umbrella Policies shall spell out the primary coverage to which the excess coverage will apply. Only Certificates of insurance from companies licensed to do business in the state where the Owner is located will be approved.

The limits of liability insurance required by Paragraph 5.04 shall provide coverage for not less than the following amounts or greater where required by laws and regulations. The amounts listed below shall apply to this project and shall not apply to, or be limited by, any other project being undertaken by the Contractor.

5.04.A.1. and 5.04.A.2. Worker's Compensation, etc. under Paragraphs 5.04.A.1. and 5.04.A.2:

(1) State: Statutory(2) Applicable Federal Statutory

(3) Employer's Liability \$500,000/\$500,000/\$500,000

5.04.A.3, 5.04.A.4. and 5.04.A.5 Contractor's Liability Insurance under paragraph 5.04.A.3 through 5.04.A.5 which shall also include completed operations and product liability coverages:

(1) Bodily Injury and Personal Injury; \$1,000,000 Each Person \$1,000,000 Each Occurrence

(2) Property Damage:

\$1,000,000 Each Occurrence

(3) Property Damage Liability Insurance will provide Explosion, Collapse and Underground (XCU) coverages in the amount of \$1,000,000 when excavation exceeds twenty-four inches (24") in depth.

5.04.A.6 Automobile Liability including Owned, Hired, and Non-Owned Vehicles.

(1) Bodily Injury and Personal Injury: \$500,000 Each Person

\$1,000,000 Each Occurrence

(2) Property Damage:

\$1,000,000 Each Occurrence

(3) Combined (Bodily Injury and Property Damage) Single Limit.

\$1,000,000 Each Accident

- 5.04.B.1 Comprehensive General Liability Policy shall name both the Owner, Owner's Representative, and Landscape Architect as additional insured parties. The comprehensive general liability insurance shall include completed operation insurance. Contractor shall maintain such completed operations insurance for two (2) years after final payment and furnish Owner with evidence of continuation at final payment.
- 5.04.B.4 The contractual liability required by paragraph 5.04.B.4 shall provide coverage for not less than the following amounts:
  - (1) Bodily Injury:

\$1,000,000 Each Occurrence

(2) Property Damage:

\$500,000 Each Occurrence \$500,000 Annual Aggregate

(3) Contractor shall provide Excess Umbrella Liability Coverage as specified in paragraph 5.04.B.2.

# SC-5.05 – Owner's Liability Insurance

Add the following language to the end of paragraph 5.05:

Independent coverage obtained by the Owner, shall be in addition to the Owner's coverage provided under the Contractor's Liability Insurance policy as required by Paragraph 5.04 as supplemented.

# SC.5.06 - Property Insurance

Delete paragraph 5.06 in its entirety and insert the following in its place:

Contractor shall purchase and maintain until final payment property insurance upon the Work at the site to the full insurable value thereof (subject to such deductible amounts as may be provided in these Supplementary Conditions or required by laws and regulations). This insurance shall include the interests of Owner, Owner's Representative, Contractor, Subcontractors, Landscape Architect, and Landscape Architect's Consultants in the Work (all of whom shall be listed as insured or additional insured parties), shall insure against physical loss and damage including theft, vandalism and malicious mischief, collapse and water damage, and such other perils as may be provided in these Supplementary Conditions, and shall include damages, losses and expenses arising out of or resulting from any insured loss or incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers, landscape architect, architects, attorneys and other professionals). Contractor shall purchase and maintain similar property insurance on portions of the Work stored on and off the site or in transit when such portions of the Work are to be included in an Application for Payment.

# SC-5.06.D - Deductibles

Add the following language at the end of paragraph 5.06.D:

The maximum deductible amount for all property insurance to be provided by Contractor as required for this Contract shall be \$10,000 or such limit as may be acceptable to Owner. Approval of a deductible limit higher than \$10,000 shall be requested in writing and shall be accompanied by a copy of the insurance policy.

# SC-5.06.E – Special Insurance

Delete paragraph 5.06.E in its entirety and insert the following in its place:

- (a) Contractor shall, at its discretion, purchase any special property insurance as necessary.
- (b) All contractors employing mechanical digging devices or requiring blasting must procure and maintain underground and/or blasting liability insurance for the period of time work is in progress. Limits shall be the same as required under Public Liability and Property Damage herein before specified.

# SC-5.08.A – Receipt and Application of Proceeds

Delete all references to Owner and substitute with:

Owner and Contractor.

# SC-5.09.A – Acceptance of Insurance

Delete Paragraph 5.09.A in its entirety and insert the following in its place:

If Owner has any objection to the coverage afforded by or other provisions of the insurance required to be purchased and maintained by Contractor in accordance with Paragraphs 5.04, 5.06.A, and 5.06.B on the basis of its not complying with the Contract Documents, Owner shall notify Contractor in writing thereof within ten days of the date of delivery of such certificates in accordance with Paragraph 2.05.C. Contractor shall provide to the Owner such additional information in respect to insurance provided as the Owner may reasonably request. Failure by Owner to give any such notice of objection within the time provided shall constitute acceptance of such insurance purchased by the Contractor as complying with the Contract Documents.

At the request of Owner, Contractor shall provide a copy of the insurance policy under which the coverage for the contract is provided.

Owner shall review insurance coverage or will assign, at its discretion, a qualified party to review all insurance coverages to be provided. Upon completion of review and in accordance with Paragraph 5.11 in the General Conditions, Contractor and Contractor's property insurer or insurers may be required to sign an Insured Claim Waiver, or Contractor, if required, shall secure similar signatures on such forms from all subcontractors and their property insurers.

Owner's Representative shall have no responsibilities regarding the advising, requiring, or obtaining of any form of insurance.

# SC-5.11 – Insurance Company Rating

Add the following paragraph immediately after paragraph 5.10:

All Property and Liability Insurance to be purchased by Contractor shall be placed with insurance companies which carry a current rating of A- or better from A.M. Best and Company Insurance Rating Service.

# SC-6.03.B - Materials

Add the following paragraph to paragraph 6.03.B:

No asbestos containing materials of any kind shall be used in construction of this project. Upon request of the Owner's Representative the Contractor shall submit Manufacturer's Safety Data Sheets (MSDS) for products to be used in the project.

# SC-6.06.B – Subcontractors, Suppliers, and Others

Add the following language immediately before the first sentence of paragraph 6.06.B.

Upon written request of Owner or Owner's Representative, Contractor shall provide a list of all Subcontractors and Suppliers and the specialties in which they are to be involved with the Work.

# SC-6.08 - Permits

Add the following paragraph immediately after paragraph 6.08:

The Contractor shall be responsible for obtaining building permits from the municipality. The Owner will pay the associated application fees. The Contractor shall coordinate with the Owner for inspections required by the municipal Codes Enforcement Office.

# SC-6.09.A – Laws and Regulations

Add the following language immediately before the first sentence of paragraph 6.09.A:

Public funds will be used in payment of the obligations of this contract. Contractor is therefore required to comply with all laws and regulations that pertain to the use of public funds.

Add the following language at the end of paragraph 6.09, A.

1. This contract is subject to the following: the Pennsylvania Prevailing Wage Act conditions; the Federal Occupational Safety & Health Act of 1970 (OSHA) conditions; the Pennsylvania Act 287 of 1974, as amended by Act 181, of 2006; the Pennsylvania Human Relations Act 222 conditions; the Architectural Barriers Act of 1968 and Section 504 of the Rehabilitation Act of 1973; PA Act 235 of 1965, as amended, Universal Accessibility Act; and Americans with Disabilities Act (ADA) of 1990; Chapter 25, Steel Products Procurement Act of the Unconsolidated Pennsylvania Statutes, Trade and Commerce (Title 73), Act 151 Pennsylvania Child Abuse History Clearance; Act 34 Pennsylvania Criminal Record Check; the non-discrimination in Employment/Contract Compliance Regulations Conditions; and The Public Works Employment Verification Act (Act 127 of 2012).

# SC-6.17.A – Shop Drawings

Add the following language at the end of paragraph 6.17.A:

Shop drawing and manufacturer submittals shall be accompanied by copies of MSDS for each product or material used for information purposes, when requested by the Owner's Representative. A set of all MSDS shall be maintained onsite by the Contractor in accordance with Paragraph 6.15.A.

# SC-6.17.E.1 – Engineer's Review

Delete the first sentence and insert the following language in it's place:

Engineer will review and approve shop drawings and samples within 20 days of receipt from the Contractor.

# SC-6.19.A – Contractor's General Warranty and Guarantee

Add the following language at the end of the first sentence of paragraph 6.19.A:

Without limiting the foregoing warranty and guarantee, and in addition thereto, a general warranty and guarantee period of twelve (12) months, in the form of a Maintenance Bond, from the date of final payment and acceptance shall be required for the Contract in the amount of ten (10%) percent of the Contract price.

#### SC-7.01 - Related Work at Site

Delete paragraphs 7.01 A. in its entirety and insert the following in its place:

The Owner reserves the right to let and execute other Contracts in connection with this work. The Contractor shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work, and shall properly connect and coordinate his work with theirs. It is expected that all Contracts of the Project listed in the Invitation to Bidders will be awarded.

- If any part of the Contractor's work depends for proper execution or results upon the work performed by others, the Contractor shall inspect and promptly report to the Owner's Representative, any defects in such work performed by others that render it unsuitable for such proper execution and results. His failure to so inspect and report shall constitute an acceptance of the work performed by others as fit and proper for the reception of his work, except as to defects which may develop in the work of others during or after the execution of his work.
- 2. To insure the proper execution of his subsequent work, the Contractor shall measure work already in place and shall at once report to the Owner's Representative any discrepancy between the executed work and the Drawings.
- Should the Contractor cause damage to the work of others performed through other Contracts related to or connected with the Project, he agrees upon due notice, to settle for such damages through agreement.

#### SC-7.03 – Claims Between Contractors

Add the following new paragraph immediately after paragraph GC-7.02:

# SC-7.03 Claims Between Contractors

- A. Should Contractor cause damage to the work or property of any separate contractor at the Site, or should any claim arising out of Contractor's performance of the Work at the Site be made by any separate contractor against Contractor, Owner, Owner's Representative, Landscape Architect or Landscape Architect's Consultant, Contractor shall promptly attempt to settle with such separate contractor by agreement, or to otherwise resolve the dispute by arbitration or at law.
- B. Contractor shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner, Owner's Representative, Landscape Architect or Landscape Architect's Consultants, the construction coordinator and the officers, directors, partners, employees, agents and other consultants and subcontractors of each and any of them from and against all claims, costs, losses and damages (including, but not limited to, fees and charges of engineers, architects, attorneys, and other professionals and court and arbitration costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any separate contractor against Owner, Owner's Representative, Landscape Architect, or Landscape Architect's Consultants, or the construction coordinator to the extent said claim is based on or arises out of Contractor's performance of the Work. Should a separate contractor cause damage to the Work or property of Contractor or should the performance of work by any separate contractor at the Site give rise to any other Claim, Contractor shall not institute any action, legal or equitable, against Owner, Owner's Representative, Landscape Architect, or Landscape Architect's consultants, or the construction coordinator or permit any action against any of them to be maintained and continued in its name or for its benefit in any court or before any arbiter which seeks to impose liability on or to recover damages from Owner, Owner's Representative, Landscape Architect, or Landscape Architect's Consultants or the construction coordinator on account of any such damage or Claim.
- C. If Contractor is delayed at any time in performing or furnishing Work by any act or neglect of a separate contractor, and Owner and Contractor are unable to agree as to the extent of any

adjustment in the Contract Times attributable thereto, Contractor may make a Claim for an extension of times in accordance with Article 12. An extension of the Contract Times shall be Contractor's exclusive remedy with respect to Owner, Owner's Representative, Landscape Architect, and Landscape Architect's Consultants, and construction coordinator for any delay, disruption, interference, or hindrance caused by any separate contractor. This paragraph does not prevent recovery from Owner, Owner's Representative, Landscape Architect, Landscape Architect's Consultant, or construction coordinator for activities that are their respective responsibilities.

# SC-8.02-Replacement of Engineer

Delete paragraphs 8.02 in its entirety and insert the following in its place:

In case of termination of the employment of Engineer, Owner, in its sole discretion, shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.

# SC-9.08.A – Determination for Unit Prices

Add the following language at the beginning of 9.08.A:

Where payment for Work is covered by unit prices in the Contract Documents

# SC-11.02 – Cash Allowances

Delete Section 11.02 in its entirety.

# SC-11.03 - Unit Price Work

Delete paragraph 11.03.A in its entirety.

Add the following language to the beginning of paragraph 11.03.C:

Where Payment of Work is covered by unit prices in the contract,

# SC-12.02 – Change of Contract Times

Delete Paragraph 12.02 in its entirety and replace with the following:

- A. The Contract Times (or Milestones) may only be changed by a Change Order or a Written Amendment. Any claim for an adjustment of the Contract Times (or Milestones) shall be based on written notice including notice of the extent of the claim with supporting data delivered by the party making the claim to the other party and to Owner's Representative promptly (but in no event later than fifteen days) after the occurrence of the event giving rise to the claim and stating the nature of the claim (unless Owner's Representative allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the claimant's written statement that the adjustment claimed in the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event.
- B. Add claims for adjustment in the Contract Times (or Milestones) shall be determined by Owner's Representative in accordance with Paragraph 10.05 if Owner and Contractor cannot otherwise agree. No claim for an adjustment in the Contract Time (or Milestones) will be valid if not submitted in accordance with the requirements of this paragraph 12.02. Pendency of the disposition of claims under this paragraph does not absolve the Contractor of his obligation to complete the Work under this Agreement.

# SC-14.02.A.3 – Application for Progress Payment

Delete paragraph 14.02.A.3 in its entirety and insert the following in its place:

Owner may retain 10 percent of the amount of all progress payments due until 50 percent of the Work has been completed. When the Contract is 50 percent completed, one-half of the amount retained by Owner shall be returned to Contractor provided that Owner's Representative approves the Application for Payment, that the Contractor is making satisfactory progress and there is no

specific cause for greater withholding. Owner, after 50 percent of the Work has been completed, may retain 5 percent of the remaining progress payments. After substantial completion, Owner may retain 1-1/2 times such amount as is required to complete any, then remaining, uncompleted items as certified by Owner's Representative.

# SC-14.02.C.1 – Review of Application for Progress Payment

Delete paragraph 14.02.C.1 in its entirety and insert the following in its place:

Ten days after the presentation of the Application for Payment with Engineer's recommendation the amount recommended will (subject to the provisions of the last sentence of paragraph 14.02.B.5) become due and when due will be paid by Owner to Contractor as soon as practicable subject to source of funding restrictions.

Project Name:	Gods County Village and Farmers Market
General Description:	Site improvements to include aggregate and concrete pavements, unit paver pavement, wood fencing and gate construction, site furniture, landscaping and lawn seeding and restoration.
Project Locality	Coudersport Borough, Potter co
Awarding Agency:	Potter County
Contract Award Date:	12/1/2024
Serial Number:	24-08133
Project Classification:	Heavy/Highway
Determination Date:	9/5/2024
Assigned Field Office:	Altoona
Field Office Phone Number:	(814)940-6224
Toll Free Phone Number:	
Project County:	Potter County

Commonwealth of Pennsylvania Report Date: 9/5/2024

Project: 24-08133 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Asbestos & Insulation Workers	5/1/2022		\$35.50	\$26.79	\$62.29
Boilermaker (Commercial, Institutional, and Minor Repair Work)	3/1/2024		\$36.71	\$19.13	\$55.84
Boilermakers	1/1/2023		\$51.27	\$35.30	\$86.57
Boilermakers	1/1/2024		\$52.10	\$35.72	\$87.82
Bricklayer	12/1/2022		\$31.62	\$23.06	\$54.68
Bricklayer	6/1/2024		\$34.90	\$23.43	\$58.33
Carpenters - Piledriver/Welder	1/1/2023		\$40.63	\$21.22	\$61.85
Carpenters - Piledriver/Welder	1/1/2024		\$42.13	\$21.97	\$64.10
Carpenters - Piledriver/Welder	1/1/2025		\$43.38	\$22.72	\$66.10
Carpenters - Piledriver/Welder	1/1/2026		\$44.63	\$23.47	\$68.10
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2023		\$33.01	\$18.41	\$51.42
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2024		\$33.72	\$19.20	\$52.92
Cement Finishers	6/1/2016		\$28.71	\$17.85	\$46.56
Cement Masons	6/1/2021		\$31.77	\$21.89	\$53.66
Cement Masons	7/1/2024		\$34.57	\$25.09	\$59.66
Drywall Finisher	6/1/2023		\$31.89	\$22.92	\$54.81
Drywall Finisher	6/1/2024		\$33.51	\$23.80	\$57.31
Electricians	6/1/2023		\$38.06	\$25.25	\$63.31
Electricians	6/1/2024		\$38.65	\$26.52	\$65.17
Elevator Constructor	1/1/2023		\$53.93	\$38.34	\$92.27
Elevator Constructor	1/1/2024		\$60.76	\$39.19	\$99.95
Glazier	9/1/2022		\$24.90	\$24.45	\$49.35
Glazier	9/1/2023		\$25.40	\$25.70	\$51.10
Iron Workers	6/1/2023		\$32.29	\$32.85	\$65.14
Iron Workers	6/1/2024		\$32.99	\$34.30	\$67.29
Laborers (Class 01 - See notes)	1/1/2023		\$22.98	\$18.53	\$41.51
Laborers (Class 01 - See notes)	1/1/2024		\$24.48	\$19.03	\$43.51
Laborers (Class 01 - See notes)	1/1/2025		\$25.98	\$19.53	\$45.51
Laborers (Class 02 - See notes)	1/1/2023		\$23.23	\$18.53	\$41.76
Laborers (Class 02 - See notes)	1/1/2024		\$24.73	\$19.03	\$43.76
Laborers (Class 02 - See notes)	1/1/2025		\$26.23	\$19.53	\$45.76
Laborers (Class 03 - See notes)	1/1/2023		\$23.78	\$18.53	\$42.31
Laborers (Class 03 - See notes)	1/1/2024		\$25.28	\$19.03	\$44.31
Laborers (Class 03 - See notes)	1/1/2025		\$26.78	\$19.53	\$46.31
Landscape Laborer (Skilled)	1/1/2023		\$23.79	\$18.28	\$42.07
Landscape Laborer (Skilled)	1/1/2024		\$24.79	\$18.53	\$43.32
Landscape Laborer (Skilled)	1/1/2025		\$25.79	\$18.78	\$44.57
Landscape Laborer (Skilled)	1/1/2026		\$26.79	\$19.03	\$45.82
Landscape Laborer (Tractor Operator)	1/1/2023		\$24.09	\$18.28	\$42.37
Landscape Laborer (Tractor Operator)	1/1/2024		\$25.09	\$18.53	\$43.62
Landscape Laborer (Tractor Operator)	1/1/2025		\$26.09	\$18.78	\$44.87
Landscape Laborer (Tractor Operator)	1/1/2026		\$27.09	\$19.03	\$46.12

Project: 24-08133 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Landscape Laborer	1/1/2023		\$23.37	\$18.28	\$41.65
Landscape Laborer	1/1/2024		\$24.37	\$18.53	\$42.90
Landscape Laborer	1/1/2025		\$25.37	\$18.78	\$44.15
Landscape Laborer	1/1/2026		\$26.37	\$19.03	\$45.40
Millwright	6/1/2020		\$41.68	\$20.32	\$62.00
Operators (Class 01 - see notes)	7/1/2022		\$34.17	\$20.62	\$54.79
Operators (Class 01 - see notes)	7/1/2023		\$35.87	\$20.92	\$56.79
Operators (Class 01 - see notes)	7/1/2024		\$36.87	\$21.42	\$58.29
Operators (Class 02 -see notes)	7/1/2022		\$29.55	\$20.62	\$50.17
Operators (Class 02 -see notes)	7/1/2023		\$31.25	\$20.92	\$52.17
Operators (Class 02 -see notes)	7/1/2024		\$32.87	\$21.42	\$54.29
Operators (Class 03 - See notes)	7/1/2022		\$27.00	\$20.62	\$47.62
Operators (Class 03 - See notes)	7/1/2023		\$28.70	\$20.92	\$49.62
Operators (Class 03 - See notes)	7/1/2024		\$29.70	\$21.42	\$51.12
Operators (Class 04 - Chief of Party (Surveying and Layout))	7/1/2022		\$26.60	\$20.62	\$47.22
Operators (Class 04 - Chief of Party (Surveying and Layout))	7/1/2023		\$28.30	\$20.92	\$49.22
Operators (Class 04 - Chief of Party (Surveying and Layout))	7/1/2024		\$29.30	\$21.42	\$50.72
Operators (Class 04 - Instrument Person (Surveying & Layout))	7/1/2022		\$25.60	\$20.62	\$46.22
Operators (Class 04 - Instrument Person (Surveying & Layout))	7/1/2023		\$27.30	\$20.92	\$48.22
Operators (Class 04 - Instrument Person (Surveying & Layout))	7/1/2024		\$28.30	\$21.42	\$49.72
Operators (Class 04 - Rodman/Chainman (Surveying and Layout))	7/1/2022		\$25.15	\$20.62	\$45.77
Operators (Class 04 - Rodman/Chainman (Surveying and Layout))	7/1/2023		\$26.85	\$20.92	\$47.77
Operators (Class 04 - Rodman/Chainman (Surveying and Layout))	7/1/2024		\$27.85	\$21.42	\$49.27
Painters Class 2 (see notes)	6/1/2022		\$26.11	\$22.14	\$48.25
Painters Class 6 (see notes)	6/1/2023		\$30.56	\$24.01	\$54.57
Painters Class 6 (see notes)	6/1/2024		\$32.14	\$24.93	\$57.07
Painters Class 6 (see notes)	6/1/2025		\$34.16	\$25.81	\$59.97
Pile Driver Divers (Building, Heavy, Highway)	1/1/2023		\$58.70	\$21.22	\$79.92
Pile Driver Divers (Building, Heavy, Highway)	1/1/2024		\$60.95	\$21.97	\$82.92
Pile Driver Divers (Building, Heavy, Highway)	1/1/2025		\$62.82	\$22.72	\$85.54
Pile Driver Divers (Building, Heavy, Highway)	1/1/2026		\$64.70	\$23.47	\$88.17
Piledrivers	1/1/2023		\$39.13	\$21.22	\$60.35
Piledrivers	1/1/2024		\$40.63	\$21.97	\$62.60
Piledrivers	1/1/2025		\$41.88	\$22.72	\$64.60
Piledrivers	1/1/2026		\$43.13	\$23.47	\$66.60
Plasterers	6/1/2022		\$31.44	\$19.74	\$51.18
Plasterers	6/1/2023		\$32.14	\$20.54	\$52.68
Plasterers	6/1/2024		\$33.14	\$21.04	\$54.18

Project: 24-08133 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Plumber/Pipefitter	5/1/2023		\$41.36	\$29.72	\$71.08
Pointers, Caulkers, Cleaners	12/1/2022		\$35.47	\$20.88	\$56.35
Pointers, Caulkers, Cleaners	6/1/2024		\$38.59	\$21.36	\$59.95
Roofers	5/1/2023		\$33.00	\$17.66	\$50.66
Roofers	5/1/2024		\$35.03	\$17.18	\$52.21
Sheet Metal Workers	5/1/2023		\$35.04	\$29.82	\$64.86
Sign Makers and Hangars	7/15/2022		\$30.54	\$24.35	\$54.89
Sign Makers and Hangars	7/15/2023		\$31.76	\$24.63	\$56.39
Sign Makers and Hangars	7/15/2024		\$32.32	\$25.82	\$58.14
Sprinklerfitters	4/1/2023		\$44.33	\$28.04	\$72.37
Sprinklerfitters	4/1/2024		\$46.45	\$28.62	\$75.07
Stone Masons	12/1/2022		\$38.56	\$23.61	\$62.17
Terrazzo Finisher	12/1/2022		\$36.13	\$18.03	\$54.16
Terrazzo Finisher	6/1/2023		\$39.79	\$18.47	\$58.26
Terrazzo Mechanics	12/1/2022		\$35.49	\$20.32	\$55.81
Terrazzo Mechanics	6/1/2024		\$39.14	\$20.77	\$59.91
Tile Finisher	12/1/2022		\$28.76	\$17.34	\$46.10
Tile Finisher	6/1/2024		\$31.56	\$17.74	\$49.30
Tile Setter	12/1/2022		\$35.64	\$21.81	\$57.45
Tile Setter	6/1/2024		\$38.46	\$22.19	\$60.65
Truckdriver class 1(see notes)	1/1/2023		\$33.04	\$22.13	\$55.17
Truckdriver class 1(see notes)	1/1/2024		\$34.79	\$22.63	\$57.42
Truckdriver class 1(see notes)	1/1/2025		\$36.29	\$23.13	\$59.42
Truckdriver class 1(see notes)	1/1/2026		\$37.79	\$23.63	\$61.42
Truckdriver class 2 (see notes)	1/1/2023		\$33.50	\$22.43	\$55.93
Truckdriver class 2 (see notes)	1/1/2024		\$35.25	\$22.93	\$58.18
Truckdriver class 2 (see notes)	1/1/2025		\$36.75	\$23.43	\$60.18
Truckdriver class 2 (see notes)	1/1/2026		\$38.25	\$23.93	\$62.18
Window Film / Tint Installer	10/1/2019		\$25.00	\$2.63	\$27.63

Project: 24-08133 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Carpenter	1/1/2023		\$38.35	\$20.59	\$58.94
Carpenter	1/1/2024		\$39.85	\$21.34	\$61.19
Carpenter	1/1/2025		\$41.10	\$22.09	\$63.19
Carpenter	1/1/2026		\$42.35	\$22.84	\$65.19
Carpenter Welder	1/1/2023		\$39.85	\$20.59	\$60.44
Carpenter Welder	1/1/2024		\$41.35	\$21.34	\$62.69
Carpenter Welder	1/1/2025		\$42.60	\$22.09	\$64.69
Carpenter Welder	1/1/2026		\$43.85	\$22.84	\$66.69
Carpenters - Piledriver/Welder	1/1/2023		\$40.63	\$21.22	\$61.85
Carpenters - Piledriver/Welder	1/1/2024		\$42.13	\$21.97	\$64.10
Carpenters - Piledriver/Welder	1/1/2025		\$43.38	\$22.72	\$66.10
Carpenters - Piledriver/Welder	1/1/2026		\$44.63	\$23.47	\$68.10
Cement Finishers	1/1/2023		\$34.14	\$25.05	\$59.19
Cement Finishers	1/1/2024		\$35.14	\$26.30	\$61.44
Cement Finishers	1/1/2025		\$35.94	\$27.50	\$63.44
Cement Masons	1/1/2020		\$32.84	\$21.10	\$53.94
Electric Lineman	8/29/2022		\$62.66	\$28.08	\$90.74
Electric Lineman	9/4/2023		\$64.68	\$29.01	\$93.69
Electric Lineman	1/1/2024		\$64.46	\$29.23	\$93.69
Electric Lineman	9/2/2024		\$66.56	\$30.17	\$96.73
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	6/1/2023		\$32.29	\$32.85	\$65.14
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	6/1/2024		\$32.99	\$34.30	\$67.29
Laborers (Class 01 - See notes)	1/1/2023		\$29.85	\$25.50	\$55.35
Laborers (Class 01 - See notes)	1/1/2024		\$32.10	\$25.50	\$57.60
Laborers (Class 01 - See notes)	1/1/2025		\$33.60	\$26.00	\$59.60
Laborers (Class 01 - See notes)	1/1/2026		\$34.60	\$27.00	\$61.60
Laborers (Class 02 - See notes)	1/1/2023		\$30.01	\$25.50	\$55.51
Laborers (Class 02 - See notes)	1/1/2024		\$32.26	\$25.50	\$57.76
Laborers (Class 02 - See notes)	1/1/2025		\$33.76	\$26.00	\$59.76
Laborers (Class 02 - See notes)	1/1/2026		\$34.76	\$27.00	\$61.76
Laborers (Class 03 - See notes)	1/1/2023		\$30.50	\$25.50	\$56.00
Laborers (Class 03 - See notes)	1/1/2024		\$32.75	\$25.50	\$58.25
Laborers (Class 03 - See notes)	1/1/2025		\$34.25	\$26.00	\$60.25
Laborers (Class 03 - See notes)	1/1/2026		\$35.25	\$27.00	\$62.25
Laborers (Class 04 - See notes)	1/1/2023		\$30.95	\$25.50	\$56.45
Laborers (Class 04 - See notes)	1/1/2024		\$33.20	\$25.50	\$58.70
Laborers (Class 04 - See notes)	1/1/2025		\$34.70	\$26.00	\$60.70
Laborers (Class 04 - See notes)	1/1/2026		\$35.70	\$27.00	\$62.70
Laborers (Class 05 - See notes)	1/1/2023		\$31.36	\$25.50	\$56.86
Laborers (Class 05 - See notes)	1/1/2024		\$33.61	\$25.50	\$59.11
Laborers (Class 05 - See notes)	1/1/2025		\$35.11	\$26.00	\$61.11
Laborers (Class 05 - See notes)	1/1/2026		\$36.11	\$27.00	\$63.11
Laborers (Class 06 - See notes)	1/1/2023		\$28.20	\$25.50	\$53.70

Commonwealth of Pennsylvania Report Date: 9/5/2024

Department of Labor & Industry Page 5 of 7

Project: 24-08133 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Laborers (Class 06 - See notes)	1/1/2024		\$30.45	\$25.50	\$55.95
Laborers (Class 06 - See notes)	1/1/2025		\$31.95	\$26.00	\$57.95
Laborers (Class 06 - See notes)	1/1/2026		\$32.95	\$27.00	\$59.95
Laborers (Class 07 - See notes)	1/1/2023		\$30.85	\$25.50	\$56.35
Laborers (Class 07 - See notes)	1/1/2024		\$33.10	\$25.50	\$58.60
Laborers (Class 07 - See notes)	1/1/2025		\$34.60	\$26.00	\$60.60
Laborers (Class 07 - See notes)	1/1/2026		\$35.60	\$27.00	\$62.60
Laborers (Class 08 - See notes)	1/1/2023		\$32.35	\$25.50	\$57.85
Laborers (Class 08 - See notes)	1/1/2024		\$34.60	\$25.50	\$60.10
Laborers (Class 08 - See notes)	1/1/2025		\$36.10	\$26.00	\$62.10
Laborers (Class 08 - See notes)	1/1/2026		\$37.10	\$27.00	\$64.10
Millwright	6/1/2020		\$41.68	\$20.32	\$62.00
Millwright	6/1/2023		\$45.50	\$23.72	\$69.22
Millwright	6/1/2024		\$47.59	\$23.72	\$71.31
Millwright	6/1/2025		\$49.72	\$23.72	\$73.44
Operators (Class 01 - see notes)	1/1/2023		\$36.50	\$23.58	\$60.08
Operators (Class 01 - see notes)	1/1/2024		\$38.30	\$24.03	\$62.33
Operators (Class 01 - see notes)	1/1/2025		\$40.10	\$24.23	\$64.33
Operators (Class 02 -see notes)	1/1/2023		\$36.22	\$23.58	\$59.80
Operators (Class 02 -see notes)	1/1/2024		\$38.02	\$24.03	\$62.05
Operators (Class 02 -see notes)	1/1/2025		\$39.82	\$24.23	\$64.05
Operators (Class 03 - See notes)	1/1/2023		\$32.58	\$23.58	\$56.16
Operators (Class 03 - See notes)	1/1/2024		\$34.38	\$24.03	\$58.41
Operators (Class 03 - See notes)	1/1/2025		\$36.18	\$24.23	\$60.41
Operators (Class 04 - See notes)	1/1/2023		\$32.09	\$23.58	\$55.67
Operators (Class 04 - See notes)	1/1/2024		\$33.89	\$24.03	\$57.92
Operators (Class 04 - See notes)	1/1/2025		\$35.69	\$24.23	\$59.92
Operators (Class 05 - See notes)	1/1/2023		\$31.88	\$23.58	\$55.46
Operators (Class 05 - See notes)	1/1/2024		\$33.68	\$24.03	\$57.71
Operators (Class 05 - See notes)	1/1/2025		\$35.48	\$24.23	\$59.71
Operators Class 1-A	1/1/2023		\$39.50	\$23.58	\$63.08
Operators Class 1-A	1/1/2024		\$41.30	\$24.03	\$65.33
Operators Class 1-A	1/1/2025		\$43.10	\$24.23	\$67.33
Operators Class 1-B	1/1/2023		\$38.50	\$23.58	\$62.08
Operators Class 1-B	1/1/2024		\$40.30	\$24.03	\$64.33
Operators Class 1-B	1/1/2025		\$42.10	\$24.23	\$66.33
Painters Class 1 (see notes)	6/1/2022		\$30.06	\$22.14	\$52.20
Painters Class 2 (see notes)	6/1/2023		\$36.01	\$24.01	\$60.02
Painters Class 2 (see notes)	6/1/2024		\$38.09	\$24.93	\$63.02
Painters Class 2 (see notes)	6/1/2025		\$40.36	\$25.81	\$66.17
Painters Class 3 (see notes)	6/1/2023		\$38.33	\$24.01	\$62.34
Painters Class 3 (see notes)	6/1/2024		\$40.66	\$24.93	\$65.59
Painters Class 3 (see notes)	6/1/2025		\$43.69	\$25.81	\$69.50
Pile Driver Divers (Building, Heavy, Highway)	1/1/2023		\$58.70	\$21.22	\$79.92

Project: 24-08133 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Pile Driver Divers (Building, Heavy, Highway)	1/1/2024		\$60.95	\$21.97	\$82.92
Pile Driver Divers (Building, Heavy, Highway)	1/1/2025		\$62.82	\$22.72	\$85.54
Pile Driver Divers (Building, Heavy, Highway)	1/1/2026		\$64.70	\$23.47	\$88.17
Piledrivers	1/1/2023		\$39.13	\$21.22	\$60.35
Piledrivers	1/1/2024		\$40.63	\$21.97	\$62.60
Piledrivers	1/1/2025		\$41.88	\$22.72	\$64.60
Piledrivers	1/1/2026		\$43.13	\$23.47	\$66.60
Steamfitters (Heavy and Highway - Gas Distribution)	5/1/2022		\$48.43	\$40.28	\$88.71
Truckdriver class 1(see notes)	1/1/2023		\$33.04	\$22.13	\$55.17
Truckdriver class 1(see notes)	1/1/2024		\$34.79	\$22.63	\$57.42
Truckdriver class 1(see notes)	1/1/2025		\$36.29	\$23.13	\$59.42
Truckdriver class 1(see notes)	1/1/2026		\$37.79	\$23.63	\$61.42
Truckdriver class 2 (see notes)	1/1/2023		\$33.50	\$22.43	\$55.93
Truckdriver class 2 (see notes)	1/1/2024		\$35.25	\$22.93	\$58.18
Truckdriver class 2 (see notes)	1/1/2025		\$36.75	\$23.43	\$60.18
Truckdriver class 2 (see notes)	1/1/2026		\$38.25	\$23.93	\$62.18

# **CHANGE ORDER**

		No
DATE OF ISSUANCE		EFFECTIVE DATE
Contract: Project: OWNER's Contract No ENGINEER _		ENGINEER's Contract No
You are directed to make the following Description:	changes in the Co	intract Documents:
Reason for Change Order:		
Attachments: (List documents supporti	ng change)	
CHANGE IN CONTRACT I	PRICE:	CHANGE IN CONTRACT TIMES:
Original Contract Price \$		Original Contract Times: Substantial Completion: Ready for final payment: (days or dates)
Net Increase (Decrease) from previous (No to:  \$	Thange Orders	Net change from previous Change Orders No to No: Substantial Completion: Ready for final payment: (days)
Contract Price prior to this Change Orde	er:	Contract Times prior to this Change Order: Substantial Completion: Ready for final payment: (days or dates)
Net increase (decrease) of this Change C	Order:	Net increase (decrease) this Change Order: Substantial Completion: Ready for final payment: (days)
Contract Price with all approved Change	Orders:	Contract Times with all approved Change Orders: Substantial Completion: Ready for final payment: (days or dates)
RECOMMENDED:	APPROVE	ED: ACCEPTED:
By: By ENGINEER (Authorized Signature)	': WNER (Authorized	By: CONTRACTOR(Authorized Signature)
-	nte:	

EJCDC 1910-8-B (1996 Edition)

Prepared by the Engineers Joint Contract Documents Committee and endorsed by The Associated General Contractors of America and the Construction Specifications Institute.

#### **CHANGE ORDER**

#### INSTRUCTIONS

# A. GENERAL INFORMATION

This document was developed to provide a uniform format for handling contract changes that affect Contract Price or Contract Times. Changes that have been initiated by a Work Change Directive must be incorporated into a subsequent Change Order if they affect Price or Times.

Changes that affect Contract Price or Contract Times should be promptly covered by a Change Order. The practice of accumulating Change Orders to reduce the administrative burden may lead to unnecessary disputes.

If Milestones have been listed in the Agreement, any effect of a Change Order thereon should be addressed.

For supplemental instructions and minor changes not involving a change in the Contract Price or Contract Times, a Field Order should be used.

# B. COMPLETING THE CHANGE ORDER FORM

Engineer normally initiates the form, including a description of the changes involved and attachments based upon documents and proposals submitted by Contractor, or requests from Owner, or both.

Once Engineer has completed and signed the form, all copies should be sent to Owner or Contractor for approval, depending on whether the Change Order is a true order to the Contractor or the formalization of a negotiated agreement for a previously performed change. After approval by one contracting party, all copies should be sent to the other party for approval. Engineer should make distribution of executed copies after approval by both parties.

If a change only applies to price or to times, cross out the part of the tabulation that does not apply.

# APPLICATION FOR PAYMENT NO. \_\_\_\_\_

To: _		(OWNER)
	n:	
Proie	ract:ect:	
OWN	NER's Contract No E	NGINEER's Project No
For V	Work accomplished through the date of:	
1.	Original Contract Price:	\$
2.	Net change by Change Orders and Written Amendments (+ or -)	
3.	Current Contract Price (1 plus 2):	\$
4.	Total completed and stored to date:	\$
5.	Retainage (per Agreement):	
	% of completed Work: \$	
	% of stored material: \$	
	Total Retainage:	\$
6.	Total completed and stored to date less retainage (4 minus 5):	\$
7.	Less previous Application for Payments:	\$
8.	DUE THIS APPLICATION (6 MINUS 7):	\$
CON Payn Worl free a OWN by th	undersigned CONTRACTOR certifies that (1) all previous progress put of Work done under the Contract referred to above have been applitractor of the contract referred in connection with Woment numbered 1 through inclusive; (2) title of all Work, material to otherwise listed in or covered by this Application for Payment wand clear of all Liens, security interests and encumbrances (except sun NER indemnifying OWNER against any such Lien, security interests as Application for Payment is in accordance with the Contract Document	plied on account to discharge rk covered by prior Applications for rials and equipment incorporated in said rill pass to OWNER at time of payment ich as are covered by a Bond acceptable to or encumbrance); and (3) all Work covered
Date	u	CONTRACTOR
Cour Subs	tof  nty of cribed and sworn to before me this of,	y:
Му	ry Public Commission expires: nent of the above AMOUNT DUE THIS APPLICATION is recomm	ended
•		
Date	d	ENGINEER
	В	V:

EJCDC No. 1910-8-E (1996 Edition)
Prepared by the Engineers Joint Contract Documents Committee and endorsed by The Associated General Contractors of America and the Construction Specification Institute.

# APPLICATION FOR PAYMENT

# **INSTRUCTIONS**

#### A. GENERAL INFORMATION

The sample form of Schedule of Values is intended as a guide only. Many projects require a more extensive form with space for numerous items, descriptions of Change Orders, identification of variable quantity adjustments, summary of materials and equipment stored at the site and other information. It is expected that a separate form will be developed by Engineer and Contractor at the time Contractor's Schedule of Values is finalized. Note also that the format for retainage must be changed if the Contract permits (or the law provides), and Contractor elects to deposit securities in lieu of retainage. Refer to Article 14 of the General Conditions for provisions concerning payments to Contractor.

# **B. COMPLETING THE FORM**

The Schedule of Values, submitted and approved as provided in paragraphs 2.05.B.3 and 2.07 of the General Conditions, should be reproduced as appropriate in the space indicated on the Application for Payment form. Note that the cost of materials and equipment is often listed separately from the cost of installation. Also, note that each Unit Price is deemed to include Contractor's overhead and profit.

All Change Orders affecting the Contract Price should be identified and included in the Schedule of Values as required for progress payments.

The form is suitable for use in the Final Application for Payment as well as for Progress Payments; however, the required accompanying documentation is usually more extensive for final payment. All accompanying documentation should be identified in the space provided on the form.

# C. LEGAL REVIEW

All accompanying documentation of a legal nature, such as Lien waivers, should be reviewed by an attorney, and Engineer should so advise Owner.

Application No.\_ Date: **ESTIMATED ITEM** UNIT **SCHEDULE QUANTITY AMOUNT** MATERIAL **AMOUNT** QUANTITY OF VALUES **STORED PRICE COMPLETED** % COMPLETED **AMOUNT** AND STORED \$ \$ \$ \$ 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26.

\$

\$

\$

Note: Total Schedule of Values Amount should equal the current Contract Price.

**TOTAL** 

27.28.29.30.

# CERTIFICATE OF SUBSTANTIAL COMPLETION

DATE OF ISSUANCE
OWNER
Contract: Project:
OWNER's Contract No ENGINEER's Project No
This Certificate of Substantial Completion applies to all Work under the Contract Documents or to the following specified parts thereof:
To_
OWNER
And To
CONTRACTOR
The Work to which this Certificate applies has been inspected by authorized representatives of OWNER, CONTRACTOR and ENGINEER, and that Work is hereby declared to be substantially complete in accordance with the Contract Documents on
DATE OF SUBSTANTIAL COMPLETION
A tentative list of items to be completed or corrected is attached hereto. This list may not be all-inclusive, and the failure to include an item in it does not alter the responsibility of CONTRACTOR to complete all the Work in accordance with the Contract Documents. The items in the tentative list shall be completed or corrected by CONTRACTOR within days of the above date of Substantial Completion.

EJCDC No. 1910-8-D (1996 Edition)
Prepared by the Engineers' Joint Contract Documents Committee and endorsed by The Associated General Contractors of America and the Construction Specifications Institute.

	s between OWNER and CONTRACTOR for se rance and warranties and guarantees shall be as	
OWNER:		
CONTRACTOR:_		
The following docu	uments are attached to and made a part of this C	ertificate:
	tached see definition of Substantial Completion recedent to achieving Substantial Completion a	
	es not constitute an acceptance of Work not in a f CONTRACTOR's obligation to complete the	
Executed by ENGI	NEER on Date	
	ENGINEER	
Ву:	(Authorized Signature)	
CONTRACTOR a	ccepts this Certificate of Substantial Completion	n on Date
	CONTRACTOR	
Ву:	(Authorized Signature)	
OWNER accepts the	nis Certificate of Substantial Completion on	Date
_	OWNER	
Ву:	(Authorized Signature)	

#### SECTION 01010 - GENERAL PROVISIONS

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

A. General requirements for work conduct and Contractor responsibilities as an incidental part of the project.

#### 1.2 MEASUREMENT OF QUANTITIES

- A. Where unit prices are specified the quantities of work performed will be computed by the Owner's Representative on the basis of measurements taken by the Owner's Representative, and these measurements shall be final and binding subject to General Conditions Section 9.08.
- B. Measurement of quantities for unit price linear footage payment shall be based on horizontal measurements.

### 1.3 NIGHT AND SUNDAY WORK

- A. No work shall be done between the hours of 5:00 p.m. and 7:00 a.m. or on Sunday, except as is necessary for the proper care and protection of work already performed or except in case of an emergency and then only with the permission of the Owner's Representative.
- B. Provide 24 hours written notice of Saturday work for approval by the County.

### 1.4 FIRE

A. Take every precaution to prevent fire. Open burning on the site is not permitted.

### 1.5 CLEARING

A. Clear areas required for access to site and execution of work. Designate trees and shrubs to be removed. Remove and dispose of debris, tree branches, limbs and shrubs including trees less than 4-inch in diameter.

### 1.6 RESPONSIBILITY REGARDING EXISTING UTILITIES AND STRUCTURES

- A. The existence and location of underground utilities, process piping or plant conduits indicated on the Drawings are not guaranteed and shall be investigated and verified in the field by the Contractor before starting work. The Contractor's attention is directed to the existing local, State and Federal regulations. Excavation in vicinity of structures and utilities shall be carefully completed by hand.
- B. The Contractor shall be held liable for any damage done by reason of breaking any water, sewer, gas, telephone, communications, electric, process piping, plant conduits, or other utility service. The Contractor shall notify all utility companies and the Owner's operation personnel in advance of construction and cooperate with agents of these companies and the Owner during the progress of the work. When any lines or services become broken or damaged during the progress of the work, the Contractor shall cause them to be repaired at once at his own expense. Delays which would result in adjoining residences or businesses having to go overnight or for needlessly long periods during the day without utilities, or the plant operation to be adversely effected, will not be tolerated. The Owner reserves the right to remedy such delays or neglect by ordering outside parties to make repairs at the expense of the Contractor without written notice.
- C. Care shall be taken not to move, without the consent of the Owner's Representative, any sewers, culverts, water, gas, electric, telephone, or other pipes or poles or structures. In crossing, or in running parallel with or near utility lines, process piping or plant conduits, they shall be securely hung, braced, or supported in place until the work is completed. Whenever it

22PTC / 2-25 01010-1 General Provisions

- is necessary to interfere with said structures, the Contractor, at his own expense, shall maintain their respective services, and if necessary, lay temporary lines or structures.
- D. Repair all damage done to any structures on property and shall keep them in repair in like kind for a period of one year after the completion of the work.
- E. Before ordering any material or doing any work, the Contractor shall verify all measurements at the site and shall be responsible for the correctness of the same. The Contractor shall, without extra charge, make slight alterations as may be required to make adjustable parts fit to fixed parts, leaving all materials and work complete and in proper order.
- F. All dimensions given on the Drawings are to be field checked and verified, and any error inconsistencies are to be communicated to the Owner's Representative before commencing work.
- G. Water mains, storm drains, sanitary sewers, gas mains, process piping, plant conduits, and other utilities are shown on the drawings in accordance with the best information available for the information of the Contractor. The Owner assumes no responsibility for accuracy or completeness of information shown. Existing pipe, conduits, mains and services shall be carefully protected and any damage to them caused by the work shall be immediately repaired to the satisfaction of the Owner's Representative by the Contractor at his expense, using materials of the kinds damaged.
- H. All valve boxes, covers, grates, frames, and surface appurtenances shall be adjusted flush with finished grades. The Contractor shall coordinate with each respective utility such adjustment. Coordination and adjustment shall be included in the Bid Price.

#### 1.7 MAINTENANCE CREW DURING NON-WORKING HOURS

- A. Make available during the normal non-working hours a maintenance crew which shall be available on two (2) hours notice from the Owner's Representative or Owner for the repairs and maintenance of trenches or other work which have become hazardous to the public or site operations as a result of trench settlement or other reasons. If the Contractor fails to make the repairs within a reasonable period of time after being directed by the Owner's Representative, the necessary repairs or maintenance shall be performed by others and the full costs of the work charged to the Contractor.
- B. Names, addresses and telephone numbers of responsible maintenance personnel shall be made available to the Owner's Representative at all times. If the maintenance personnel so assigned fail to respond, the Contractor shall immediately reassign new maintenance personnel.

# 1.8 FITTING AND COORDINATION OF THE WORK

A. The Contractor shall be responsible for the proper fitting of all work and for the coordination of the operations of all trades, subcontractors, or materialmen engaged upon this Contract. He shall be prepared to guarantee to each of his subcontractors the locations and measurements which they may require for the fitting of their work to all surrounding work.

# 1.9 PROJECT SAFETY

A. Nothing contained in the Drawings and Specifications or in any other document relating to this project shall be construed to require or authorize the Owner's Representative to supervise or be in any way responsible for the Contractor's compliance with any applicable safety regulations or codes or the like. The Owner's Representative shall have no duty to inform the Contractor of any safety violations, and should the Owner's Representative voluntarily point out safety violations, such actions shall not be construed to mean that the Owner's Representative has assumed any responsibility for the Contractor's compliance with any applicable safety regulations, codes or the like. The Contractor is solely responsible for project safety.

22PTC / 2-25 01010-2 General Provisions

### 1.10 COMPLIANCE WITH LAWS, ORDINANCES CURRENTLY IN EFFECT

- A. Comply with all applicable laws, ordinances, and codes of the appropriate jurisdiction having control and effect upon the work of this Contract. Before installing any work, the Contractor shall inform himself on any law, ordinance or code affecting the work; and, where this law, ordinance or code is at variance with these specifications or drawings, the Contractor shall report the discrepancy to the Owner's Representative in writing for his resolution to remove the discrepancy.
- B. Comply with applicable laws and ordinances governing the disposal of surplus excavation, materials, debris and rubbish on or off the project and commit no trespass on any public or private property in any operation due to or connected with the work.

### **PART 2 PRODUCTS**

Not Used

### PART 3 EXECUTION

#### 3.1 CONTRACTOR'S USE OF PREMISES

- A. Confine construction equipment, the storage of materials and equipment, and operations of workmen to within the limits of construction as shown on the Drawings.
- B. Assume full responsibility for materials stored on site including materials for which the Owner has made payment. Purchase and maintain such additional amounts of insurance as are necessary to provide coverage against loss or damage to the materials.
- C. Transport materials remaining at the completion of the project for which the Owner has made payment, to a storage area designated on site by the Owner.
- D. Perform work in a neat manner and upon completion remove from the site all excess materials, trash and appurtenances not required to be incorporated in the finish work. Effectively protect the portions of the existing facilities to remain; any resultant damage to existing remaining portions of structures, piping systems or equipment thereof shall be restore to conditions existing prior to execution of work.

#### 3.2 CLEANING UP

- A. At the completion of the work, or each major portion thereof, the Contractor shall remove surplus materials, tools, construction equipment and machinery and leave the site clean and ready for Owner occupancy. Upon completion of construction, clean and flush storm drains in area of construction.
- B. Maintain areas of work in a clean manner. If clean up is not completed, 10 percent of the succeeding progress payments, in addition to the normal contract retainage, will be withheld from the responsible Contractor until such clean up is performed.
- C. The General Contractor shall be responsible for providing dumpsters for the collection and disposal of waste and debris, except for hazardous or unsanitary waster materials which shall be handled by Contractor producing such waste. Comply with regulations and appropriate authorities having jurisdiction for removal of combustible and hazardous materials.
- D. Final cleaning shall be as specified in Section 01700 Contract Closeout.

### 3.3 HISTORICAL/ARCHAEOLOGICAL FINDS

A. If during the course of construction evidence of deposits of historical or archaeological interest is found, cease work affecting find and notify the Owner's Representative. Do not disturb deposits until written notice from Owner's Representative is given to proceed. Compensation for changes in construction to avoid the find will be made based upon normal change order procedures.

22PTC / 2-25 01010-3 General Provisions

#### SECTION 01040 - PROJECT MANAGEMENT AND COORDINATION

### PART 1 - GENERAL

### 1.1 SECTION INCLUDES

A. Coordination of Work of each Contract.

#### 1.2 DESCRIPTION

- A. Administrative provisions for coordinating construction operations on the project including but are not limited to the following:
  - 1. General project coordination procedures
  - 2. Coordination Drawings
  - 3. Administrative and supervisory personnel
  - 4. Project meetings.
- B. Each Contractor shall participate in coordination requirements. Certain areas of responsibility will be assigned to a specific Contractor.
- C. Related Sections include the following:
  - 1. Division 1 Section 01120 Multiple Contract Summary

#### 1.3 COORDINATION

- A. Coordination: Each contractor shall coordinate its construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the Work. Each Contractor shall coordinate its operations with operations, included in different Sections, that depend on each other for proper installation, connection, and operation.
  - Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
  - 2. Coordinate installation of different components with other Contractors to ensure maximum accessibility for required maintenance, service, and repair.
  - 3. Make adequate provisions to accommodate items scheduled for later installation.
- C. Each Contractor shall, as necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
  - 1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- D. Administrative Procedures: Each Contractor shall coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other Contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
  - 1. Preparation of Contractor's Construction Schedule
  - 2. Preparation of the Schedule of Values
  - 3. Installation and removal of temporary facilities and controls
  - 4. Delivery and processing of submittals.
  - 5. Progress meetings.
  - 6. Preinstallation conferences.
  - 7. Project closeout activities.

### 1.4 SUBMITTALS

A. Coordination Drawings: Each Contractor shall prepare Coordination Drawings if limited space availability necessitates maximum utilization of space for efficient installation of different

components or if coordination is required for installation of products and materials fabricated by separate entities.

- 1. Indicate relationship of components shown on separate Shop Drawings.
- 2. Indicate required installation sequences.
- 3. Refer to Sheets SE1 for specific Coordination Drawing requirements for electrical installations.
- B. Staff Names: Within (15) days of starting construction operations, each contractor shall submit a list of principal staff assignments, including superintendent and other personnel in attendance at project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home and office telephone numbers. Provide names, addresses, and telephone numbers of individuals assigned as stand bys in the absence of individuals assigned to project.
  - 1. Post copies of list in project meeting room, in temporary field office, and by each temporary telephone.

### 1.5 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

- A. General: In addition to project superintendent, provide other administrative and supervisory personnel as required for proper performance of the Work.
  - 1. Include special personnel required for coordination of operations with other Contractors.

### 1.6 PROJECT MEETINGS

- A. General: The Project Coordinator shall schedule and conduct meetings and conferences at project site, unless otherwise indicated.
  - 1. Attendees: Inform participants and others involved, and individuals whose presence is required of date and time of each meeting. Notify Owner and Owner's Representative of scheduled meeting dates and times.
  - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
  - 3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Owner's Representative, within three (3) days of the meeting.
- B. Preconstruction Conference: The Project Coordinator shall schedule a preconstruction conference before starting construction, at a time convenient to Owner, Owner's Representative, and Landscape Architect, but no later than fifteen (15) days after execution of the Agreement. Hold the conference at project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
  - 1. Attendees: Authorized representatives of Owner, Owner's Representative, and Landscape Architect, and Landscape Architect's Consultants; Contractors for each contract and their superintendent; major subcontractors; manufacturers; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with project and authorized to conclude matters relation to the Work.
  - 2. Agenda: Discuss items of significance that could affect progress, including the following:
    - a. Tentative construction schedule.
    - b. Phasing
    - c. Critical work sequencing
    - d. Designation of responsible personnel
    - e. Procedures for processing field decisions and Change Orders
    - f. Procedures for processing Applications for Payment
    - g. Distribution of the Contract Documents
    - h. Submittal procedures
    - i. Preparation of Record Documents
    - j. Use of the premises
    - k. Responsibility for temporary facilities and controls

- I. Parking availability
- m. Office, work, and storage areas
- n. Equipment deliveries and priorities
- o. First aid
- p. Security
- q. Progress cleaning
- r. Work hours
- C. Preinstallation Conferences: Each Contractor shall, as necessary, conduct a preinstallation conference at project site before each construction activity that requires coordination with other construction.
  - Attendees: Installer and representative of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Owner and Owner's Representative of scheduled meeting dates.
  - 2. Adenda: Review progress of other construction activities and preparation for the particular activity under consideration, including requirements for the following:
    - a. Contract Documents
    - b. Options
    - c. Related Change Orders
    - d. Purchases
    - e. Deliveries
    - f. Submittals
    - g. Review of mockups
    - h. Possible conflicts
    - i. Compatibility problems
    - j. Time schedules
    - k. Weather limitation
    - I. Manufacturer's written recommendations
    - m. Warranty requirements
    - n. Compatibility of materials
    - o. Acceptability of substrates
    - p. Temporary facilities and controls
    - q. Space and access limitations
    - r. Regulations of authorities having jurisdiction
    - s. Testing and inspecting requirements
    - t. Required performance results
    - u. Protection of construction and personnel
  - 3. Record significant conference discussions agreements, and disagreements.
  - 4. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
- D. Progress Meetings: The Project Coordinator shall conduct progress meetings at bi-weekly intervals or as required, coordinate dates of meetings with preparation of payment requests.
  - Attendees: In addition to representatives of Owner and Landscape Architect, each Contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with project and authorized to conclude matters relating to the Work.
  - 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of project.

- a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead or schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the contract time.
- b. Review present and future needs of each entity present, including the following:
  - 1) Interface requirements
  - 2) Sequence of operations
  - 3) Status of submittals
  - 4) Deliveries
  - 5) Off-site fabrication
  - 6) Access
  - 7) Site utilization
  - 8) Temporary facilities and controls
  - 9) Work hours
  - 10) Hazards and risks
  - 11) Progress cleaning
  - 12) Quality and work standards
  - 13) Change Orders
  - 14) Documentation of information for payment requests
- 3. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present. Include a brief summary, in narrative form, of progress since the previous meeting and report.
  - a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.
- E. Coordination Meetings: The Project Coordinator shall conduct project coordination meetings at weekly intervals. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.
  - 1. Attendees: Each Contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with project and authorized to conclude matters relating to the Work.
  - Agenda: Review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of project.
    - a. Combined Contractor's Construction Schedule: Review progress since the last coordination meeting. Determine whether each contract is on time, ahead of schedule, or behind schedule, in relation to Combined Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
    - b. Schedule Updating: Revise Combined Contractor's Construction Schedule after each coordination meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with report of each meeting.
    - c. Review present and future needs of each Contractor present, including the following:
      - 1) Interface requirements
      - 2) Sequence of operations
      - 3) Status of submittals
      - 4) Deliveries

- 5) Off-site fabrication
- 6) Access
- 7) Site utilization
- 8) Temporary facilities and controls
- 9) Work hours
- 10) Hazards and risks
- 11) Progress cleaning
- 12) Quality and work standards
- 13) Change Orders
- 3. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

PART 2 - PRODUCTS Not Used

PART 3 - EXECUTION Not Used

#### SECTION 01120 - MULTIPLE CONTRACT SUMMARY

### PART 1 - GENERAL

### 1.1 SUMMARY

- A. Two (2) contracts are defined for God's Country Village and Farmers Market.
  - 1. Contract No. 1 Site Improvement Contract (General Contract)
  - 2. Contract No. 2 Electric Contract
- B. This Section includes a summary of each contract, including responsibilities for coordination and temporary facilities and controls.
- C. Specific requirements of each contract are also indicated in individual Specification Sections and on Drawings.
- D. Related Sections include the following:
  - 1. Division 1 Section 01040 Project Management and Coordination

### 1.2 DEFINITIONS

A. Permanent enclosure: As determined by Owner's Representative, permanent or temporary roofing is complete, insulated, and weather-tight; exterior walls are insulated and weather-tight; and all openings are closed with permanent construction or substantial temporary closures.

### 1.3 COORDINATION

- A. Project Coordinator shall be responsible for coordination between the Site Improvement Contract (General Contract) and Electrical Contract.
  - 1. Site Improvement and Building Contract (General Contract) shall act as Project Coordinator.

### 1.4 PROJECT COORDINATOR

- A. Project Coordinator: Full-time Project Coordinator shall be experienced in administration and supervision of site and building construction, including HVAC, plumbing, and electrical work.
  - 1. Coordination activities of Project Coordinator include, but are not limited to the following:
    - a. Provide overall coordination of the Work.
    - b. Coordinate shared access to work spaces.
    - c. Coordinate product selections for compatibility.
    - d. Provide overall coordination of temporary facilities and controls
    - e. Coordinate, schedule, and approve interruptions of permanent and temporary utilities, including those necessary to make connections for temporary service.
    - f. Coordinate construction and operations of the Work with work performed by each contract.
    - g. Prepare Coordination Drawings to coordinate work by more than one contract.
    - h. Coordinate sequencing and scheduling of the Work. Include the following:
      - Initial Coordination Meeting: At earliest possible date, arrange and conduct a meeting with separate contractors for sequencing and coordinating the Work; negotiate reasonable adjustments to schedules.
      - 2) Prepare a combined Contractor's Construction Schedule for entire Project. Secure time commitments for performing critical construction activities from separate contractors. Show activities of each contract on a separate sheet. Prepare a simplified summary sheet indicating combined construction activities of contracts.

- 3) Distribute copies of schedules to Owner, Owner's Representative, and separate contractors.
- i. Provide construction photography.
- Provide quality-control services specified in Division 1 Section 01400 Quality Control.
- k. Coordinate sequence of activities to accommodate tests and inspections, and coordinate schedule of tests and inspections.
- I. Provide information necessary to adjust, move, or relocate existing utility structures affected by construction.
- m. Locate existing permanent benchmarks, control points, and similar reference points, and establish permanent benchmarks on project site.
- n. Provide field surveys of in-progress construction and site work.
- o. Provide progress cleaning of common areas and coordinate progress cleaning of areas or pieces of equipment where more than one Contractor has worked.
- p. Coordinate cutting and patching.
- q. Coordinate protection of the Work.
- r. Coordinate firestopping.
- s. Coordinate preparation of Project Record documents is information from more than one Contractor is to be integrated with information from other Contractors to form one combined record.
- t. Print and submit Record Drawings if installations by more than one Contractor is indicated on the same Contract Drawing or Shop Drawing.
- u. Collect Record specification Sections from other Contractors, collate Sections into numeric order, and submit complete set.
- v. Coordinate preparation of operation and maintenance manuals if information from more than one Contractor is to be integrated with information from other contractors to form one combined record.
- 2. Responsibilities of Project Coordinator for temporary facilities and controls include, but are not limited to the following:
  - a. Provide common-use field office for use by all personnel engaged in construction activities.
  - b. Provide telephone service for common-use facilities.
  - c. Provide toilet facilities for use during construction.
- B. Mechanical/Electrical Coordinator: full-time Mechanical/Electrical Coordinator shall be experienced in coordination of mechanical and electrical construction, including coordination of type of operations required for this project.
  - 1. Coordination activities of Mechanical/Electrical Coordinator include, but are not limited to the following:
    - a. Schedule and sequence mechanical and electrical activities.
    - b. Coordinate sharing access to work space by HVAC/plumbing and electrical contractors.
    - c. Coordinate integration of HVAC/plumbing and electrical work into limited spaces.
    - d. Coordinate protection of HVAC/plumbing and electrical Contractors' work.
    - e. Coordinate cutting and patching for mechanical and electrical work.
    - f. Prepare mechanical and electrical Coordination Drawings.
    - g. Coordinate tests and inspections for HVAC/plumbing and electrical work.
    - h. Coordinate mechanical and electrical temporary services and facilities.

## 1.5 CONTRACTS, GENERAL

A. Extent of Contract: Unless the Contract Documents contain a more specific description of the Work, names and terminology on Drawings and in Specification Sections determine which contract includes a specific element of project.

- 1. Unless otherwise indicated, the Work described in this Section for each contract shall be complete systems and assemblies, including product, components, accessories, and installation required by the Contract Documents.
- Local custom and trade-union jurisdictional settlements do not control the scope of the Work of each contract. When a potential jurisdictional dispute or similar interruption of work is first identified or threatened, affected Contractors shall negotiate a reasonable settlement to avoid or minimize interruption and delays.
- 3. Each Contractor shall be responsible for excavation in performance of their Contract except as noted in the specifications.
- 4. Cutting and patching for the Work of each contract shall be provided by the Site Improvement and Building Contract.
- 5. Firestopping for the Work of each contract shall be provided by each contract for its own Work.
- 6. Within five (5) working days after preliminary horizontal bar-chart-type construction schedule submittal has been received from Project Coordinator, submit a matching preliminary horizontal bar-chart schedule showing construction operations sequenced and coordinated with overall construction.
- B. Substitutions: Each Contractor shall cooperate with other Contractors involved to coordinate approved substitutions with remainder of Work.

### 1.6 CONTRACT NO. 1 – SITE IMPROVEMENT CONTRACT (GENERAL CONTRACT)

- A. Base Bid includes, but is not limited to providing all labor, materials, equipment, superintendence and appurtenances for the construction of the following:
  - 1. Site preparation, including, clearing, and earthwork.
  - 2. Site improvements including concrete pavements, cobblestone edging, wood fencing and gate, ADA signage and pavement markings.
  - 3. Finishing and delivery of aggregate.
  - 4. Pollinator garden, erosion control measures, landscaping, and lawn seeding.
  - 5. Other work as described on the Drawings, sheets S1 through S4 and the specifications contained herein.

### B. Unit Prices include:

- 1. Drive Surface Aggregate
- 2. Trail Surface Aggregate
- 3. 2A Aggregate
- C. Alternates include:
  - 1. Landscaping.

## 1.5 CONTRACT NO. 2 – ELECTRIC CONTRACT

- A. Base Bid includes, but is not limited to providing:
  - Construction, furnishing, and installation of electric facilities to include a utility pole and electric appurtenances as described on Drawings, sheet S1 and SE1 and the specifications contained herein.

# 1.5 ITEMS RELATED TO CONSTRUCTION

- A. The Contract includes the furnishing of all labor, materials, equipment, and appurtenances to complete all work in accordance with the Contract Documents.
- B. Refer to Paragraph SC-7.02 of the Supplementary Conditions and Section 01040 for coordination information.
- C. All excavation for all contracts shall be unclassified.
- D. Safety is the sole responsibility of the Contractor.
- E. Contractor shall take precautions to prevent interference of construction vehicles with traffic on local streets.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

#### PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Submittal procedures.
- B. Proposed products list.
- C. Shop drawings.
- D. Product data.
- E. Material certificates
- F. Manufacturer's instruction.
- G. Manufacturer's certificates.
- H. Sample

## 1.2 ELECTRONIC SUBMITTAL PROCEDURES

- A. Assemble complete submittal package into a single file incorporating submittal requirements of a single Specification Section.
- B. Name file with project name and submittal sequential number.
- C. Transmit electronic file to Owner's Representative. Use transmittal form that contains the following information:
  - 1. Project name
  - 2. Date
  - 3. Contractor name
  - 4. Name of firm or entity that prepared submittal
  - 5. Name of subcontractor, manufacturer, and supplier
  - 6. Specification Section number
  - 7. Drawing number and detail reference.
  - 8. Identify deviations from Contract Documents.
- D. Provide Contractor's name and indication of Contractor's review and approval.
- E. Provide Items A-D, above electronically and attach paper copies for hard samples, color selectors, and field samples.
- F. Comply with progress schedule for submittals related to Work progress. Coordinate submittal of related items.
- G. After Owner's Representative review of submittal, revise and resubmit as required, identifying changes made since previous submittal. Identify resubmittals with sequential alphabetic suffix.
- H. Distribute copies of reviewed submittals to concerned persons. Instruct recipients to promptly report any inability to comply with provisions.
- I. Retain complete copies of submittals on project site. Use only final action submittal marked with approved notation by Owner's Representative.
- J. Provide Manufacturers Safety Data Sheets (MSDS) for products and materials as requested by Owner's Representative.

#### 1.3 CONSTRUCTION PROGRESS SCHEDULES

- A. The Project Coordinator shall submit a preliminary combined Contractor's Construction Schedule for the entire project which incorporates the progress schedule of each subcontractor. Submit in duplicate within 15 days after Notice of Award to be discussed at the preconstruction meeting. After review by Owner's Representative revise as required.
- B. The Project Coordinator shall submit the Contractor's Construction Schedule for the entire project incorporating the Owner's Representatives revisions. Submit in duplicate within 15 days after the date established in Notice to Proceed. Each Contractor shall indicate their concurrence with the schedule by signing the signature line provided.
- C. The Project Coordinator shall submit horizontal bar chart to include:

- 1. Separate bar for each trade and operation
- 2. Identify the first workday of each week
- 3. No activity greater than 14 calendar days unless approved by the Owner's Representative
- 4. Activities performed by others (reviews, outages, etc.)
- 5. Activity broken down by building and/or major area of work
- 6. Activity broken down in sufficient detail to fully describe the work. Owner's Representative reserves the right to require additional breakdown of activities.
- D. Contractor shall submit a schedule of values in duplicate within 15 days after date established in Notice to Proceed. After review by Owner's Representative revise and resubmit as required. Submit revised schedules with each Application for Payment, reflecting changes since previous submittal.
- E. Show projected percentage of completion for each item of Work as of Time of each Application for Payment.
- F. Show submittal dates required for shop drawings, product data, and samples, and product delivery dates.

### 1.4 SHOP DRAWINGS

- A. Contractor shall submit shop drawings to the Owner's Representative with such promptness as to avoid delay in the work.
- B. At the time of submission, the Contractor shall call to the Owner's Representative's attention, in writing, deviations that the shop drawings may have from the requirements of the Drawings and Specifications.
- C. The Contractor shall submit the shop drawings marked as either "Submitted as Specified" or "Submitted as Equal to Specified."
  - 1. Where any article is specified by trade name or name of manufacturer with the clause "or equal," it is intended to establish the quality of the article. If the Contractor proposes to use material or equipment of another manufacturer as an "or equal" to the specified material or equipment, all shop drawings shall conform to the following requirements, conditions, and procedures:
    - a. Substitution of equipment or materials other than those specified will be permitted, providing, in the opinion of the Owner's Representative, such equipment or material is equal to or better than that specified. The decision of the Owner's Representative with respect to approval or disapproval of any material or equipment proposed to be substituted as an "or equal" is final. The Contractor shall have no claim of any sort by reason of such decision.
    - b. If the Contractor proposes to substitute materials or equipment as "or equal" to those specified, it shall be his responsibility to furnish complete, specific, detailed information from the manufacturer or supplier of the material or equipment he proposes to furnish, in which the requirements of the Contract Specifications are shown to be met. This shall consist of a point by point comparison of the Specification requirements with the material or equipment proposed to be furnished. In the event the Specifications mention a model number or other designation and manufacturer in lieu of the detailed description and manufacturer, a point-by-point comparison of the equipment specified under the Contract and that proposed to be substituted shall be furnished. The burden of responsibility to furnish this information is with the Contractor. If incomplete or irrelevant data is submitted as evidence or compliance with the Specifications, the data will be returned and the request for approval will be denied.
- D. After review of shop drawings the Owner's Representative will stamp each submittal with a uniform, self explanatory action stamp. The stamp will be marked, as follows, to indicate the action taken:
  - 1. "Reviewed": Work covered by submittals receiving this stamp may proceed provided it complies with the Contract Documents.

- 2. "Revise/Resubmit": Submittal receiving this stamp must be corrected and resubmitted.
- 3. "Rejected/Resubmit": Submittals receiving this stamp are rejected in their entirety and must be resubmitted.
- 4. "Submit Specified Item": Submittal receiving this stamp must resubmit with item specified in the Contract Documents.
- 5. "Furnish as Corrected": Work covered by submittals receiving this stamp may proceed with incorporation of corrected items provided it complies with the Contract Documents.
- E. The shop drawing submittal information must comply totally with the specifications, or else it will be stamped "Make Corrections Noted and Return." The Contractor is therefore responsible for thoroughly reviewing the shop drawing information before forwarding it to the Owner's Representative. The shop drawing information submitted must clearly indicate compliance with the specifications by enumerating the specified performance, materials of construction, protective coatings, size, etc. If compliance with the specification is not clearly defined or ambiguous, the shop drawing information will have to be resubmitted in its entirety.
- F. No work may proceed unless submittals have received a stamp indicating "No Exceptions Taken."

### 1.4 PRODUCT DATA

- A. Contractor shall submit only pages that are pertinent; mark each copy of standard printed data to identify pertinent products, referenced to Specification Section and article number. Show reference standards, performance characteristics and capacities, wiring and piping diagrams and controls, component parts, finishes, dimensions, and required clearances.
- B. Modify manufacturers' standard schematic drawings and diagrams to supplement standard information and to provide information specifically applicable to the work. Delete information not applicable

### 1.5 MATERIALS CERTIFICATES

A. Contractor shall provide copies of material certificates, as required by individual Specification section, signed by material producer and Contractor certifying that each material item complies with or exceeds specified requirements.

# 1.6 MANUFACTURER'S INSTRUCTIONS

- A. When required in individual Specification Section, Contractor shall submit manufacturer's printed instructions for delivery, storage assembly, installation start-up, adjusting, and finishing, in quantities specified for product data.
- B. Identify conflicts between manufacturer's instructions and Contract Documents.

## 1.7 SAMPLES

- A. Contractor shall submit full range of manufacturer's standard colors, textures, and patterns for Owners/Owner's Representative's selection. Allow four (4) weeks for selection of finishes from time of submission.
- B. Submit samples to illustrate functional characteristics of the Product, with integral parts and attachment devices. Coordinate submittal of different categories for interfacing work.
- C. Include identification of each sample, with full Project information.
- D. Submit the number of samples specified in respective Specification section; one will be retained by Owner. Review samples which may be used in the Work are indicated in the Specification Section.

PART 2 - PRODUCT Not Used

### SECTION 01400 - QUALITY CONTROL

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. General Quality Control
- B. Workmanship
- C. Manufacturers' Instructions
- D. Manufacturers' Certificates
- E. Mock-up
- F. Manufacturers' Field Services
- G. Testing Laboratory Services

### 1.2 QUALITY ASSURANCE

- A. Referenced standards shall include but not limited to the following:
- B. PennDOT Publication 408 Specifications
- C. PennDOT Bulletin 15 Approved Construction Materials
- D. PennDOT Bulletin 14 Aggregate Producers
- E. PennDOT Bulletin 41 Producers of Bituminous Mixtures
- F. PennDOT Bulletin 42 Producers of Redi-mixed Concrete
- G. American Association of State Highway and Transportation Officials (AASHTO)
- H. Associated General Contractors of America (AGC): "Manual of Accident Prevention in Construction."

## 1.3 QUALITY CONTROL, GENERAL

- A. Each Contractor is responsible for verifying and enforcing compliance with requirements of the contract documents. Contractor's responsibility includes but is not limited to the following:
  - 1. Supervision of field work to enforce contract compliance of construction activity.
  - 2. Performance of necessary field testing to verify compliance with requirements of the plans or specifications requiring adherence to measurable standards of field performance.
  - 3. Engaging (except as noted in 1.9, below) an independent testing laboratory to perform tests as required by each specification section.
  - 4. Providing support services for all Quality Control Testing, including cutting and patching and repair or replacement as required.
  - 5. Verification of compliance with plans and specifications of all manufactured materials or equipment. Provide certificates of compliance, or other approved proof of compliance, by the manufacturers of same and submit to the professional as requested.
  - 6. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship to produce work of specified quality.
- B. All material incorporated into a project utilizing the PennDOT Publication 408 Specifications must meet preliminary acceptance requirements as stated in Section 106.02(a), Pub. 408, latest edition.
- C. The Project Coordinator shall submit a written plan which describes how he will monitor quality control.

### 1.4 WORKMANSHIP

- A. Comply with industry standards except when more restrictive tolerances or specified requirements indicate more rigid standards or more precise workmanship.
- B. Perform work by persons qualified to produce workmanship of specified quality.
- C. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, and racking.

22PTC-01 / 2-25 01400-1 Quality Control

#### 1.5 MANUFACTURERS' INSTRUCTIONS

A. Comply with instructions in full detail, including each step in sequence. Should instructions conflict with the contract documents, request clarification from Owner's Representative before proceeding.

#### 1.6 MANUFACTURERS' CERTIFICATES:

- A. When required by individual specifications section, submit manufacturers' certificate, in duplicate, that products meet or exceed specified requirements.
- B. PennDOT Form CS-4171 must be submitted for all materials incorporated into a project utilizing PennDOT Publication 408, Specifications. Failure to provide the required certifications shall result in payment being withheld for the items.

#### 1.8 MANUFACTURERS' FIELD SERVICES:

- A. When specified in respective specification sections, require supplier or manufacturer to provide qualified personnel to observe field conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment performance testing as applicable, and to make appropriate recommendations.
- B. Representative shall submit written report in duplicate to Owner's Representative within 30 days of observation listing observations and recommendations.

#### 1.9 **TESTING LABORATORY SERVICES:**

- A. The Owner shall engage and pay a licensed Pennsylvania Professional Engineer to perform soil testing and inspection service to test soil material and soil compaction. Other testing laboratory services shall be the obtained and paid by the Contractor.
- B. The Contractor is responsible for retesting where results of required inspections, tests or similar services prove unsatisfactory and indicate non-compliance with contract document requirements.
- C. Services to be performed in accordance with requirements of governing authorities and with specified standards.
- D. Reports shall be submitted to Owner's Representative in duplicate giving observations and results of tests, indicating compliance or noncompliance with specified standards and with contract documents.
- E. Contractor shall cooperate with testing laboratory personnel; furnish tools, samples of materials design mix equipment storage and assistance as requested
- r

	materials, design mix, equipment, storage and assistance as requested.			
	F.	Notify Owner's Representative and testing laboratory 48 hours prior to expected time fo operations requiring services.		
PART 2	- M	ATERIALS		
Not use	d.			
PART 3	- CO	ONSTRUCTION		
Not use	d.			

**END OF SECTION** 

22PTC-01 / 2-25 01400-2 **Quality Control** 

#### SECTION 01500 - TEMPORARY FACILITIES AND CONTROLS

### PART 1 GENERAL

### 1.1 SECTION INCLUDES

- A. Electricity, Lighting.
- B. Heat, Ventilation.
- C. Sanitary Facilities.
- D. Enclosures.
- E. Protection of Installed Work.
- F. Cleaning During Construction.
- G. Project Identification.

### 1.2 GENERAL

- A. Each Contractor is responsible for the following temporary facilities and controls:
  - 1. Installation, operation, maintenance, and removal of each temporary facility usually considered as its own normal construction activity, and costs and use charges associated with each facility.
  - 2. Special or unusual hoisting requirements for its own construction activities, including hoisting loads in excess of 2 tons (2,000kg), hoisting material or equipments into spaces below grade, and hoisting requirements outside building enclosure.
  - 3. Waste disposal facilities for disposal of own hazardous, dangerous, unsanitary, or other harmful waste materials.
  - 4. Construction aids and miscellaneous services and facilities necessary exclusively for its own construction activities.
  - 5. Restoration of Owner's existing facilities used as temporary facilities necessary exclusively for its own construction activities.
- B. The Site Improvement Contractor (General Contract) is responsible for the following temporary facilities and controls:
  - 1. Temporary roads and paved areas.
  - 2. Dewatering facilities and drains.
  - 3. Temporary signs.
  - 4. Pest control.
  - 5. Environmental protection.
  - 6. Dumpster for disposal of general waste and debris.

## 1.3 ELECTRICITY, LIGHTING

- A. The General Contractor shall bear cost and complete installation and removal of the temporary electrical service to the staging area for all Contracts.
- B. Where a service of a type other than that herein mentioned is required, each Contractor requiring it shall provide such service and the necessary equipment at his own expense.
- C. Each Contractor shall provide portable generators, plug-in electric power cords and extension cords, supplementary plug-in task lighting, and special lighting necessary exclusively for its own activities.
- D. Electric Power Service: The General Contractor shall include the cost for electric power service, whether metered or otherwise for electricity used by all entities engaged in construction activities at project staging site.

# 1.4 RESTROOM FACILITIES

A. Restroom facilities are not available at the park site for use by the Contractor. The General Contractor shall provide temporary facilities during construction.

### 1.5 ENCLOSURES

- A. Each Contractor shall provide its own storage and fabrication sheds.
- B. Each Contractor shall provide temporary enclosures for its own construction activities.
- C. Each contractor shall provide secure lockup of its own tools, materials, and equipment.
- D. The Owner shall not be responsible for stored materials of the Contractor.

#### 1.6 PROTECTION OF INSTALLED WORK

- A. Each Contractor shall provide temporary protection for installed products. Control traffic in immediate area to minimize damage.
- B. The Site Improvement Contractor shall provide protective coverings at walls, projections, jambs, sills, and soffits of openings. Protect finished floors and stairs from traffic, movement of heavy objects, and storage.
- C. Each Contractor shall be responsible for providing for protection of work completed under his contract.
- D. Each Contractor shall provide temporary fencing as specified in Section 02230 at excavations. Other work areas shall be protected as necessary to provide a safe work site at all times. The fence may be removed to avoid interference with daily operation; however, the fence shall be fully maintained when the project site is unattended.

#### 1.7 CLEANING DURING CONSTRUCTION

- A. Each Contractor is responsible for the following:
  - 1. Progress cleaning of its own areas on a daily basis.
  - 2. Control accumulation of waste materials and rubbish; periodically dispose of off-site.
  - 3. Clean interior areas prior to start of finish work, maintain areas free of dust and other contaminants during finishing operations.

# 1.8 REMOVAL

- A. Remove temporary materials, equipment, services, and construction prior to Substantial Completion inspection.
- B. Clean and repair damage caused by installation or use of temporary facilities. Remove underground installations to a depth of 2 feet; grade site as indicated. Restore existing facilities used during construction to specified, or to original, conditions.

### 1.9 WATER

A. Each Contractor shall provide water for his use and the use of his subcontractors. No water shall be assumed to be available at the site.

### 1.10 FIELD OFFICE

A. Each Contractor shall provide field office, if he so desires, for his use and the use of his subcontractors, complete with necessary furniture, utilities, and telephone service.

### 1.11 TEMPORARY HEATING, COOLING, AND VENTILATION

A. The General Contract is responsible for temporary heating, cooling, and ventilation, including utility-use charges.

### PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

#### SECTION 01700 - CONTRACT CLOSEOUT

#### PART 1 - GENERAL

#### 1.1 SECTION INCLUDES

- A. Closeout Procedures.
- B. Final Cleaning.
- C. Project Record Documents.
- D. Operation and Maintenance Data.
- E. Warranties and Bonds.
- F. Spare Parts and Maintenance Materials.

#### 1.2 CLOSEOUT PROCEDURES

- A. Comply with procedures stated in General Conditions of the contract for issuance of Certificate of Substantial Completion.
- B. When Contractor considers work has reached final completion, submit written certification the Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Owner's Representative's inspection.
- C. In addition to submittals required by the conditions of the Contract, provide submittals required by governing authorities, and submit a final statement of accounting giving total adjusted contract Sum, previous payments, and sum remaining due.
- D. Owner's Representative will issue a final Change Order reflecting approved adjustments to Contract Sum not previously made by Change Order.

### 1.3 FINAL CLEANING

- A. Execute prior to final inspection.
- B. Clean interior and exterior surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces. Clean equipment and fixtures to a sanitary condition, clean or replace filters of mechanical equipment. Clean roofs, gutters, downspout, and drainage systems.
- C. Clean site; sweep paved areas, rake clean other surfaces.
- D. Remove waste and surplus materials, rubbish, and construction facilities from the site.
- E. Remove all construction debris from tanks, manholes, pits, etc. Do not allow debris to be washed into treatment process or stream.

### 1.4 RECORD DOCUMENT SUBMITTALS

- A. General: Do not use record documents for construction purposes. Protect record documents from deterioration and loss in a secure, fire resistant location. Provide access to record documents for the Landscape Architect's reference during normal working hours.
- B. Record Drawings: Maintain a clean, undamaged set of blue or black line white prints of contract drawings and shop drawings. Mark the set to show the actual installation where the installation varies substantially from the work as originally shown. Mark which Drawing is most capable of showing conditions fully and accurately. Where shop drawings are used, record a cross reference at the corresponding location on the contract drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date.
  - 1. Mark record sets with red erasable pencil. Use other colors to distinguish between variations in separate categories of the work.
  - 2. Mark new information that is important to the Owner but was not shown on the Contract Documents or the Shop Drawings.
  - 3. Note related change order numbers where applicable.
  - 4. Organize record drawing sheets into manageable sets. Bind sets with durable-paper cover sheets; print suitable titles, dates, and other identification on the cover of each set.

- C. Record Specifications: Maintain one complete copy of the Project Manual, including addenda. Include with the Project Manual one copy of other written construction documents, such as Change Orders and modifications issued in printed form during construction.
  - 1. Mark these documents to show substantial variations in actual work performed in comparison with the text of the specifications and modifications.
  - 2. Give particular attention to substitutions and selection of options and information on concealed construction that cannot otherwise be readily discerned later by direct observation.
  - 3. Note related record drawing information and Product Data.
  - 4. Upon completion of the work, submit record Specifications to the Landscape Architect for the Owners record.
- D. Record Product Data: Maintain one copy of each record data submittal. Note related change orders and mark up of record drawings and specifications.
  - 1. Mark these documents to show significant variations in actual Work performed in comparison with information submitted. Include variations in products delivered to the site and from the manufacturer's installation instructions and recommendations.
  - 2. Give particular attention to concealed products and portions of work that cannot otherwise be readily discerned later by direct observation.
  - 3. Upon completion of mark up, submit complete set of record Product Data to the Landscape Architect for the Owners record.
- E. Maintenance Manuals: Organize operation and maintenance data into suitable sets of manageable size. Bind properly indexed data in individual, heavy duty, 2-inch, 3-ring, vinyl covered binders, with pocket folders for folded sheet information. Mark appropriate identification on front of spine of each binder. Include the following types of information:
  - 1. Emergency instructions
  - 2. Spare parts list
  - 3. Copies of warranties
  - 4. Inspection Procedures
  - 5. Shop Drawings and Product Data

### 1.5 OPERATION AND MAINTENANCE DATA

A. Submit three sets of all operation and maintenance data prior to final inspection, bound in 8 1/2 x 11-inch three-ring binders with durable plastic covers labeled with specification section number and title. Operation and maintenance data shall have been previously approved by the Owner's Representative as part of the acceptance of the equipment.

### 1.6 WARRANTIES AND BONDS

- A. Provide duplicate, notarized copies. Execute Contractor's submittals and assemble documents executed by subcontractors, suppliers, and manufacturers. Provide table of contents and assemble in binder with durable plastic cover.
- B. Submit material prior to final application for payment. For equipment put into use with Owner's permission during construction, submit within 10 days after first operation. For items of work delayed materially beyond Date of Substantial completion, provide updated submittal within ten days after acceptance, listing date of acceptance as start of warranty period.

# 1.7 PRODUCTS, SPARE PARTS AND MAINTENANCE MATERIALS

A. Provide products, spare parts, and maintenance materials in quantities specified in each section, in addition to that used for construction of work. Coordinate with Owner, deliver to Project site, and obtain receipt prior to final payment.

PART 2 PRODUCTS Not Used

## SECTION 02700 - BASES, BALLASTS, PAVEMENTS, AND APPURTENANCES

### PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Trail surface Aggregate
- B. Drive Surface Aggregate
- C. Traffic line paint

#### 1.2 RELATED SECTIONS

- A. Section 02800 Site Improvements and Amenities
- B. Section 02750 Concrete Pavement

### 1.3 REFERENCES

A. Materials, equipment and performance of the work of this Section, unless otherwise specified, shall comply with Pennsylvania Department of Transportation Specifications, Pub. 408, latest edition, (PennDOT Pub. 408).

#### 1.4 SUBMITTALS

A. Provide copies of materials certificates signed by material producer and Contractor certifying that each material item complies with or exceeds specified requirements.

### 1.5 PROJECT CONDITIONS

- A. All project conditions in Section 02300 Earthwork apply.
- B. Weather Limitations: Apply prime and tack coats when ambient temperature is above fifty (50) degrees Fahrenheit and when temperature has not been below thirty-five (35) degrees Fahrenheit for twelve (12) hours immediately prior to application. Do not apply when base is wet or contains an excess of moisture.
  - Construct bituminous surface course when atmospheric temperature is above forty (40) degrees Fahrenheit and when base is dry. Base course may be placed when air temperature is above thirty (30) degrees Fahrenheit and rising. Apply color surfacing on courts to meet weather limitations recommended by manufacturer.
- C. Grade Control: Establish by use of laser and maintain required lines and elevations.

#### PART 2 - PRODUCTS

# 2.1 PAVEMENT TYPES

- A. Aggregate pavement shall consist of:
  - 1. Aggregate pavement walk
    - a. Four-inch (4") depth trail surface aggregate surface course
    - b. Five-inch (5") depth #2A coarse aggregate base course
  - 2. Aggregate pavement Parking
    - c. Six-inch (6") depth drive surface aggregate surface course
    - d. Eight-inch (8") depth #2A coarse aggregate base course

# 2.2 TRAIL SURFACE AGGREGATE (TSA)

- A. TSA shall consist of combining the following aggregates and water in the ratio:
  - 1. One-part AASJTO #8
  - 2. Four-parts unwashed AASHTO #10 (or B3 sand)
  - 3. One-part minus #200 fines (collector fines)

B. TSA optional gradation in lieu of the ratio shall use traditional sieve gradations:

Sieve Size	TSA Percent Passing
1/2"	100%
3/8"	96-100%
#4	75-90%
#8	55-75%
#16	35-50%
#200	12-20%

### 2.3 DRIVE SURFACE AGGREGATE (DSA)

A. DSA gradation shall use traditional sieve gradations as follows:

Sieve Size	DSA Percent Passing
1-1/2"	100%
3/4"	65-97%
#4	30-65%
#16	15-30%
#200	10-15%

### 2.4 COARSE AGGREGATE BASE COURSE

A. Coarse aggregate, #2A, conforming to PennDOT Pub 408, Section 703.2(c).

### 2.5 TRAFFIC LINE PAINT

A. Solvent based acrylic traffic line-marking paint factory-mixed quick-drying, and non-bleeding White color shall be required for all markings, except handicap symbol which shall be blue.

### **PART 3 - EXECUTION**

### 3.1 COARSE AGGREGATE BASE COURSE

- A. The coarse aggregate base course construction shall conform to PennDOT Pub. 408, Section 350.
- B. Prior to any base course material being placed, but after development of proper subgrade, the subgrade shall be rolled with an approved roller for the purpose of obtaining a uniform compaction of the subgrade. This operation shall also serve as a proof-rolling and any area where subgrade creeps in front of the roller shall be re-rolled. If rolling does not correct the movement situation, the area shall be excavated in its entirety. The excavated material shall be removed from the site and the excavation filled with base material and compacted in eight-inch (8") lifts. The Contract price shall be adjusted, when approved by the Owner's Representative, for any such correction of unstable subgrade.
- C. Spread the base course material uniformly over a thoroughly-compacted subgrade by approved stone spreaders or directly from trucks in areas inaccessible to spreaders, providing the material is handled satisfactorily without segregation of coarse and fine materials.
- D. After each layer of material has been placed and spread, check with templates and straightedges and satisfactorily corrected irregularities prior to rolling.
- E. Compacted the coarse material by rolling with an approved power roller. Begin rolling at the sides and progress to the center. Roll parallel with the longest dimension of the area, uniformly lapping each preceding track, covering the entire surface with the rear wheels and continuing until the material does not creep or wave ahead of the roller wheels.
- F. Satisfactory compaction will be determined by the stability of the material under the roller. If the material used does not contain sufficient fines to properly lock under the roller, additional fines of the same material or limestone fines shall be added as required to secure the required compaction and stability.

G. Remove excess mat of fine material remaining on top of the bonded base course before the bituminous surface is applied. In removing the excess mat, care shall be taken not to disturb the coarse aggregate and that the fine material is not removed below the top of the coarse aggregate. The finished surface shall be roughened, slightly exposing the aggregates, but not deep enough to break the bond of the aggregates in the surface.

# 3.2 TRAIL SURFACE AGGREGATE (TSA)

- A. TSA material shall be delivered and placed at optimum moisture content. The optimum percentage moisture is to be identified by the supplier using Proctor Test AST< D698, procedure C, Standard.
- B. TSA material shall be transported to site using tarps that cover 100% of the load's exposed surface from the time of loading until immediately before dumping, including standing time waiting to dump.
- C. TSA shall be placed from the furthest point working back towards the source to avoid running equipment on the final trail.
- D. When possible a small paver should be used to place TSA.
- E. Place TSA at 4-inch loose depth, 3-inch compacted depth over the thoroughly compacted coarse aggregate base course as specified in 3.1.C above.
- F. Check surface course as specified in 3.4.A. below.
- G. Compact the material using a 3-ton vibratory roller, The initial pass of the roller shall be in static mode and compacted while at optimum moisture to achieve maximum density. If TSA sticks to the drum of the roller, stop and wait for the surface to dry further.

## 3.3 DRIVE SURFACE AGGREGATE (DSA)

- A. DSA material shall be well mixed, delivered and placed at optimum moisture content. The optimum percentage moisture is to be identified by the supplier using Proctor Test AST< D698, procedure C, Standard.
- B. DSA material shall be transported to site using tarps that cover 100% of the load's exposed surface from the time of loading until immediately before dumping, including standing time waiting to dump.
- C. Place DSA in a single lift over the thoroughly compacted coarse aggregate base course as specified in 3.1.C above.
- D. Check surface course as specified in 3.4.A. below.
- E. Compact the material using a minimum 10-ton vibratory roller. DSA must be placed at optimum moisture to achieve compaction. Allow drying time before rolling. Do not use vibratory rolling mode if that action brings water to the surface of the aggregate.
- F. If edge of placed aggregate is supported by an existing bank or berm: First pass: Roll slowly in static mode on the outside edge of placed aggregate. If edge of the placed aggregate is not supported: First Pass: Roll slowly in static mode near, but not over, unsupported outside edge. Once that path is firm, move progressively closer to the outside edge with static passes until the unsupported edge is firm.
- G. Compact by making overlapping lengthwise passes working toward the crown or top edge.
- H. The initial pass over uncompacted aggregate shall be in static mode. All successive passes should be made in vibratory mode. The final pass over each area should be made in static mode to remove all roller edge marks. Vibration should be turned off during steep down grade passes to prevent creating a "wave" of aggregate movement in front of the roller.
- I. Compact DSA to be between 95% and 100% of the maximum dry-mass (dry-weight) density determined according to ASTM D698.

### 3.4 PAVING TOLERANCES

A. In-place compacted bituminous paving will not be acceptable in exceeding the following tolerances:

1. Trail Surface Aggregate and Drive Surface Aggregate Course: Permissible variation from specified grade, not more than one-eight (1/8") variation when measured with a ten foot (10') straight edge.

# 3.5 TRAFFIC LINE PAINTING

A. Traffic line painting and handicap symbols shall be accomplished as depicted on the accompanying drawings and in accordance with manufacturer's instructions. Parking stalls shall be pained with 4-inch wide lines.

#### SECTION 02750 - CONCRETE PAVEMENT

#### PART 1 - GENERAL

#### 1.1 SECTION INCLUDES

- A. Footings
- B. Concrete pavement
- C. Miscellaneous construction concrete

#### 1.2 RELATED SECTIONS

A. Section 02800 - Site Improvements and Amenities

### 1.3 QUALITY ASSURANCE

- A. Mix designs may be adjusted when material characteristics, job conditions, weather, test results or other circumstances warrant. Do not use revised concrete mixes until submitted to and accepted by the Owner's Representative. Use air-entraining admixture in all concrete, six percent (6%) plus or minus one percent (1%) for concrete exposed to weather.
- B. All matters in connection with concrete work not otherwise specified shall conform to the applicable Sections of the PennDOT Specification Pub. 408, latest edition.
- C. Concrete shall not be placed when air temperature is forecast to descend to 40°F or lower, at any time during the day or night of the 24-hour period following the placing of concrete.
- D. Obtain concrete from a Pennsylvania Department of Transportation approved batch plant.

## 1.4 REFERENCES

- A. Codes and Standards: Except as herein qualified, matters pertaining to measuring, mixing, placing and testing of concrete, construction of formwork, detailing, fabricating and placing of reinforcing and accessories shall be governed by the following codes and regulations:
  - 1. ACI 315, Details and Detailing of Concrete Reinforcement.
  - 2. ACI 301, Specifications for Structural Concrete
  - 3. ACI 117, Standard Specifications for Tolerance for Concrete Construction and Materials
  - 4. Concrete Reinforcing Steel Institute (CRSI), "Manual of Standard Practice".
  - 5. Pennsylvania Department of Transportation, Publication 408 Specifications, 2000 Edition (PennDOT Pub. 408)

# 1.5 SUBMITTALS

- A. Submit a written report to the Owner's Representative for each proposed concrete mix at least fifteen (15) days prior to start of work. Do not begin concrete production until mixes have been reviewed and are acceptable to the Owner's Representative.
- B. Submit two (2) copies of laboratory reports or evaluation reports for concrete materials.
- C. Submit manufacturer's product data with installation instructions for proprietary materials including reinforcement and forming accessories, admixtures, joint materials, curing materials and others as may be required by the Owner's Representative.
- D. Samples: Submit samples of materials as requested by the Owner's Representative including names, source and descriptions.

### 1.6 PROJECT CONDITIONS

- A. Furnish and install all sleeves, forms, reinforcing steel, welded wire fabric, dowels, ties, all reinforcing accessories, concrete, aggregate and other miscellaneous concrete and concrete processing materials to enable performance of all operations in connection with placing, finishing and curing concrete in accordance with these Specifications and the applicable Drawings and standards.
- B. Install items to be built into concrete but furnished by others.

- C. Install items necessary to fasten and hold reinforcement in place.
- D. Coordinate this work with the work of other trades requiring anchor bolts, sleeves, conduits, and other items that must be installed prior to placing of concrete.
- E. All project conditions in Section 02300-Earthwork apply.
- F. Protection of footings against freezing, cover completed work at footing level with sufficient temporary or permanent cover as required to protect footings and adjacent subgrade against possibility of freezing; maintain cover for time period as necessary.

### 1.7 CLASSES OF CONCRETE

- A. Concrete for pavement shall have a minimum compressive strength of 3750 psi at 28 days, shall be air-entrained and shall meet PennDOT Pub. 408 Section 704.1(b) for Class "AA" concrete.
- B. Concrete for curb and general concrete footings shall develop a minimum compressive strength of 3300 psi at 28 days and shall be air-entrained and shall meet PennDOT Pub. Form 408 Section 704.1(b) for Class "A" concrete.
- C. Ready-mix concrete shall be mixed and delivered in accordance with ASTM C92.

#### PART 2 - PRODUCTS

- 2.1 PORTLAND CEMENT for all items shall be one (1) of the following types:
  - A. Normal strength air-entraining Portland cement, Type IA or Type IIA, conforming to ASTM Designation C175.
  - B. Normal strength air-entraining Portland blast furnace slag cement, Type IS-A, conforming to ASTM Designation C595.

### 2.2 CONCRETE ADMIXTURES

A. Separate mixtures shall be designed to produce the rate of hardening for the climatic conditions. The setting characteristics of concrete shall be changed by substituting water-reducing accelerator or water-reducing retarder for the water-reducing admixture affecting rates of hardening as follows:

CLIMATIC CONDITION REQUIRED RATE OF HARDENING
Over 90 degrees F. and Retarded

low humidity

Under 50 degrees F. Accelerated

Maintain specified minimum cement content for each class of concrete. Refer to ASTM C494-92, Type A, C, and/or E, as applicable.

# 2.3 QUALITY CONTROL TESTING DURING CONSTRUCTION

- A. Employ a testing laboratory to perform tests and submit test reports. Sampling and testing for quality control during placement of concrete may include the following, as directed by the Owner's Representative.
  - Sampling Fresh Concrete: ASTM C172 97 except modified for slump to comply with ASTM C94-92.
  - 2. Slump: ASTM C143-90a: one test at point of discharge for each day's pour of each type of concrete; additional tests when concrete consistency seems to have changed.
  - 3. Air Content: ASTM C173, volumetric method for lightweight or normal weight concrete; ASTM C231-97 pressure method for normal weight concrete; one for each day's pour of each type of air-entrained concrete.
  - 4. Concrete Temperature: Test hourly when air temperature is 50°F and below, and when 80°F and above; and each time a set of compression test specimens made.

- 5. Compression Test Specimen: ASTM C31-96; one set of four standard cylinders for each compressive strength test, unless otherwise directed. Mold and store cylinders for laboratory cured test specimens except when field-cure test specimens are required.
- 6. Compressive Strength Tests: ASTM C39-96; one set for each day's pour exceeding 5 cubic yards plus additional sets for each 50 cubic yards over and above the first 25 cubic yards of each concrete class placed in any one day; one specimen tested at 7 days, two specimens tested at 28 days, and one specimen retained in reserve for later testing if required.

When frequency of testing will provide less than five strength tests for a given class of concrete, conduct testing from at least five randomly selected batches or from each batch if fewer than five are used.

When strength of field-cured cylinders is less than 85% of companion laboratory-cured cylinders, evaluate current operations and provide corrective procedures for protecting and curing the in-place concrete.

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.

Report test results in writing to Owner's Representative within 24 hours of tests. Reports of compressive strength tests shall contain the project identification name and number, date of concrete placement, name of concrete testing service, concrete type and class, location of concrete batch in structure, design compressive strength at 28 days, concrete mix proportions and materials; compressive breaking strength and type of break for both 7-day tests and 28-day tests.

- 7. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted but shall not be used as the sole basis for acceptance or rejection.
- 8. Additional Tests: The testing service will make additional tests of in-place concrete when test results indicate specified concrete strengths and other characteristics have not been attained in the structure, as directed by the Owner's Representative. Testing service may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C42-90, or by other methods as directed. Contractor shall pay for such tests when unacceptable concrete is verified.

### 2.4 WATER

A. Water clean and free of injurious amounts of oil, acid, alkali, organic matter or other impurity and generally suitable for domestic consumption.

### 2.5 STEEL REINFORCEMENT

- A. Bars: Shall be Grade 60 and shall conform to ASTM A615.
- B. Welded Wire Fabric: Shall be electrically welded of cold-drawn wire (70,000 psi yieldpoint) and shall conform to ASTM A-185 and A-82.
- C. Accessories: Bolsters, ties, chairs, etc., shall conform to ACI SP 66 (88).

### 2.6 PREMOLDED EXPANSION JOINT FILLER

A. Expansion joint filler, where required, shall be 1/2" premolded for use in concrete and shall be of cork, cork and rubber, or bituminous impregnated fiber. Refer to PennDOT, Section 705.1.

### 2.7 CURING COMPOUND

A. Sonneborn Kure-N-Seal, Symons Cure or Seal, Day-Chem J-20 or approved equal. Shall conform to ASTM C-309, Type 1.

### 2.8 CURING AND PROTECTION COVERS

A. Impermeable sheet material of paper or white polyethylene. Refer to PennDOT Section 711.1.

#### 2.9 FORM MATERIALS

A. Provide form material of wood or metal with sufficient stability to withstand pressure of placed concrete without bow or deflection. Furnish in largest practicable sizes to minimize number of joints and to conform to joint system shown on drawings.

#### 2.10 CONCRETE HARDENER

A. Magic Kote spray hardener by Symons or approved equal.

#### 2.11 COARSE AGGREGATE

A. #57 coarse aggregate conforming to PennDOT Pub. 408, Section 703.2 (c).

### 2.12 ANTI-SPALLING COMPOUND

A. Anti-Spalling Compound shall be Spencer-Kellog or approved equal.

### 2.13 PAVING JOINT SEALANT

A. #883, limestone as manufactured by Sonneborn Building Products, Minneapolis, MN 55435, (800) 433-9517.

### PART 3 - EXECUTION

#### 3.1 REINFORCEMENT

- A. Comply with the design as detailed.
- B. Position, support and secure reinforcement against displacement. Locate and support with metal chairs, runners, bolsters, spacers, and hangers as required.
- C. Remove scale and rust before placing reinforcing steel. Place and secure accurately.
- D. Install welded wire fabric in as long lengths as practicable, lapping at least one (1) mesh.

### 3.2 ANCHORAGE ITEMS

A. Inserts, bolts, dowels, hangers and similar items shall be of number and size and so-located as to insure sufficient anchorage for the purpose intended. Anchorage items shall suit job conditions and shall be of standard commercial quality. All items shall be zinc-coated.

### 3.3 CONCRETE PAVEMENT

- A. Surface Preparation: Remove loose material from the compacted subgrade surface immediately before placing concrete.
- B. Proof-roll prepared subgrade surface to check for unstable areas and the need for additional compaction. Do not begin paving work until such conditions have been corrected and are ready to receive paving.
- C. Form construction: Construct to required size and shape, braced and secured to maintain alignment, elevation and position.
- D. Check completed formwork for grade and alignment to following tolerances.
  - 1. Top of forms not more than 1/8-inch in 10 feet variance.
  - 2. Vertical face on longitudinal axis, not more than 1/4-inch in 10 feet variance.
- E. Clean forms after each use and coat with form release agent as required to ensure separation from concrete without damage.
- F. Place coarse aggregate base course.
- G. Provide reinforcement as indicated on the accompanying Drawings.
- H. Do not place concrete until subgrade, forms, and reinforcement have been checked for line and grade. Moisten subgrade as required to provide a uniform dampened condition at the time

- concrete is placed. Do not place concrete around manholes or other structures until they have been brought to the required grade and alignment.
- I. Spread concrete as soon as it is deposited on the subgrade, using methods that prevents segregation of the mix, and with as little rehandling as possible. Consolidate concrete along the face of forms. Consolidate with care to prevent dislocation of reinforcing and joint materials.
- J. Use bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
- K. Deposit and spread concrete in a continuous operation between transverse joints as far as possible. If interrupted for more than 1/2 hour, place a construction joint.

### L. Pavement Joints

- 1. Construct expansion joints as detailed.
- 2. Scoring Pattern: Break pad into individual slabs 5'0" length maximum with jointing tool, round all edges. Saw cut scoring pattern to 1 1/2" depth with new, sharp concrete sawblade one day after pour. All joints cut to be clean, sharp uniformly made cuts to achieve scoring pattern as shown and detailed.
- 3. Expansion Joints: Provide premolded joint filler for expansion joints and isolation joints abutting concrete paving, structures, walks and other fixed objects.
- 4. Locate expansion joints at maximum length of 30' o.c. for each walkway lane, unless otherwise shown.
- 5. Extend joint fillers full width and depth of the joint, and not less than 1/2" or more than 1" below the finished pavement surface. Protect joints while hardening up, minimum of 48 hours, from all traffic.
- 6. Install paving joint sealant as specified by manufacturer.

### M. Concrete Finishing

- 1. Perform concrete finishing using machine or hand methods as required or detailed.
- After striking off and consolidating concrete, smooth the surface by screening and floating.
  Use hand methods only where mechanical floating is not possible. Adjust the floating to
  compact the surface and produce a uniform texture.
- 3. After floating, test surface for trueness with a 10' straight-edge. Distribute concrete as required to remove surface irregularities, and refloat repaired areas to provide a continuous, smooth finish.
- 4. Work edges of slabs and joints with a 1/8" radius edging tool, two inches (2") wide, unless otherwise shown.
- 5. After completion of floating and when excess moisture or surface sheen has disappeared, complete surface finishing as follows:
- 6. Broom finish, by drawing a medium-hair broom across the concrete surface, perpendicular to the flow of traffic, unless otherwise indicated on the plan. Repeat operation if required to provide a fine line texture acceptable to the Owner's Representative.
- 7. Immediately after finishing, the sprayed membrane or sheet curing material shall be applied. Selected method shall be implemented as outlined in PennDOT Pub. Section 501.3(n).
- 8. Side forms shall not be removed within twelve (12) hours after the concrete has been placed. After removal of the forms, minor honeycombed areas shall be filled with mortar composed of one (1) part cement and two (2) parts fine aggregate. Major honeycombed areas shall be considered as defective work, and shall be removed and replaced at no expense to the owner.
- 9. Seal expansion joints, and scoring cracks where required with joint sealing material.
- 10. After the concrete has cured for a period of not less than 72 hours, the spaces adjacent to the slab shall be backfilled with approved material in layers of not more than four inches (4") in depth, which shall be thoroughly compacted mechanically to the required elevation and cross-section.

N. Apply two (2) coats anti-spalling material after 28 days of curing. The first coat at 450 s.f. per gallon and the second coat at 600 s.f. per gallon. Do not apply when temperature is below 50 degrees F. After each coat, any free liquid on the surface should be removed with a squeegee.

### 3.4 REINFORCEMENT

- A. Reinforcement shall comply exactly with the design as detailed.
- B. Position support and secure reinforcement against displacement. Locate and support with metal chairs, runners, bolsters, spacers, and hangers as required.
- C. Remove scale and rust before placing reinforcing steel. Place and secure accurately.
- D. Install welded wire fabric in as long lengths as practicable, lapping at least one (1) mesh.

### 3.5 INSERTS AND EMBEDDED ITEMS

A. Notify all trades when construction is ready for the setting of anchor bolts, inserts, sleeves, and other built-in equipment, in order that such material shall be set at the proper time. Before placing concrete, care shall be taken to determine that all items to be embedded in concrete are accurately located, firmly secured in place and protected from damage or displacement until securely held by the concrete. All items shall be thoroughly dampened before concrete is poured against the wood. The Contractor shall be responsible for any displacement of the items caused by his workmen. Anchor bolts and/or sleeves of the size and number required will be furnished under other section of this specification and installed under this Section.

### 3.6 DEFECTIVE CONCRETE AND PROTECTION

- A. Concrete work not formed as shown on the Drawings, out of alignment or level, or showing a defective surface, shall be removed and completely replaced, if directed by the Owner's Representative. Slight imperfections may be patched, provided the permission of the Owner's Representative is obtained prior to patching.
- B. Protect concrete from damage until acceptance of work. Exclude traffic form pavement for at least 14 days after placement. When construction traffic is permitted, maintain pavement as clean as possible by removing surface stains and spillage of materials as they occur.
- C. Sweep concrete pavement and wash free of stains, discolorations, dirt, and other foreign material just before final inspection.

#### SECTION 02800 - SITE IMPROVEMENTS AND AMENITIES

#### PART 1 - GENERAL

## 1.1 SECTION INCLUDES

- A. Stone Paver
- B. Wood Privacy Fence and Gate

#### 1.2 RELATED SECTIONS

A. Section 02750 – Concrete Pavement

## 1.3 PROJECT CONDITIONS

- A. Job conditions in Section 02300 Earthwork apply.
- B. The extent of site improvements is shown on the drawings. The drawings are generally diagrammatic and are indicative of the work to be performed; however it is not intended that they show every pipe, fitting hardware or apparatus required for a completed installation.
- C. The Drawings shall be followed as closely as circumstances will permit; Contractor will be held responsible for the proper installation of all materials and equipment required for a complete installation within the intent and meaning of the Contract Documents.
- D. Excavation, backfilling and compacting operation shall comply with Section 02300 Earthwork requirements.
- E. Manufacturer: Specified items shall be products of manufacturers listed or other manufacturers as approved by the Owner's Representative during the bidding period. Items specified in the singular shall be interpreted to apply to all such items as indicated on the Drawings.

## 1.4 SUBMITTALS

- A. Manufacturers' literature: Furnish five (5) copies of manufacturers' literature showing details of components, layouts, methods of erection or installation, etc., to the Owner's Representative for review and approval prior to ordering and delivery to the project site.
- B. Submit shop drawings or other descriptive literature that comprehensively describes items of equipment with installation requirements to the Owner's Representative for approval prior to delivery of any such equipment. Shop drawings are required for the following site improvements:
  - 1. Paver edging
- C. Submit the following samples:
  - 1. Color samples of stone paver.
- D. Maintenance Data and Operating Instructions: Supply detailed maintenance instructions for equipment. Operating instructions and manufacturers' addresses shall be provided to the Owner.

## 1.5 QUALITY ASSURANCE

A. Inspect items that are furnished in factory finishes for abrasions resulting from shipping, handling or installation and such abrasions shall be touched-up with matching finish material. Unfinished materials shall be field finished by the Contractor. Finishes shall be as specified and/or as selected by the Owner.

# 1.6 DELIVERY AND PROTECTION OF MATERIALS AND EQUIPMENT

- A. Materials purchased by Owner for installation by the Contractor will be delivered to the project site by the Owner.
- B. Deliver materials and equipment with manufacturer's labels intact. Protect materials and equipment during delivery against damage and weather conditions. Deliver materials and

- equipment as shipped by the product source. Damaged materials and equipment and incomplete orders shall not be accepted.
- C. Schedule the delivery, storage, fabrication, and erection of equipment in both time and space aspects. Coordinate with affected trades to keep the job progressing in an orderly manner.

## 1.7 ENVIRONMENTAL CONDITIONS

- A. Do not pour concrete footings when the excavations/forms contain standing water, frost or mud
- B. Erect wood members free of standing water, frost, mud or waterlogged conditions.

## 1.8 FACTORY AND FIELD FINISHES

A. All items that are furnished in factory finishes shall be inspected for abrasions resulting from shipping, handling or installation and such abrasions shall be touched-up with matching finish material. All unfinished materials shall be field finished by the installer. Finishes shall be as specified and/or as selected by the Owner.

# 1.9 STORAGE OF MATERIALS AND EQUIPMENT

A. Materials and equipment shall be stored off the ground and protected against weather, damage due to surrounding activity and vandalism. The Contractor is responsible for damage and subsequent repairs or replacement.

#### 1.10 PROTECTION

- A. The Contractor shall protect stored and erected material and equipment during the Contract period. Barriers, lights and signs shall be erected to protect the public and workmen on the site.
- B. Recreation equipment shall be protected or arranged that it may not be used during the construction period.

#### 1.11 SCHEDULING

A. The Contractor is responsible for scheduling the delivery, storage, fabrication and erection of equipment in both time and space aspects. The Contractor shall coordinate with all affected trades to keep the job progressing in an orderly manner.

#### 1.12 INSPECTION

- A. Inspection of the work to determine the completion of contract, exclusive of the possible repair and replacement of equipment under the normal one (1) year guarantee of the project, will be made by the Owner upon written notice requesting such inspection submitted by the Contractor at least ten (10) days prior to the anticipated date.
- B. After inspection the Contractor will be notified in writing by the Owner of acceptance of all work in this Section, exclusive of possible repair or replacement of equipment subject to the one (1) year guarantee or if there are any deficiencies in fulfilling the requirements for completion of the work.
- C. The work of this Section will not be accepted in part by the Owner.

## PART 2 - PRODUCTS

## 2.1 STONE PAVER

A. Stone Pavers: Stone pavers shall be granite cobblestone blocks, hand split, dressed and tumbled. Size shall be "Regulation" 4" x 5" x 9" as supplied by Stoneyard.com 2 Spectacle Pond Road, Littleton, MA 01460, 1-800-231-2200, or approved equal.

B. Color shall be Gray.

#### 2.2 ACCESSORIES

- A. Plastic Edge Restraints: Triangular PVC extrusions 1-7/8 inches high by 2-7/8 inches wide designed to serve as edge restraints for unit pavers; rigid type for straight edges and flexible type for curved edges, with overlap and spike connectors and 3/8-inch diameter by 10-inch- long steel spikes.
  - 1. Manufacturer: Subject to compliance with requirements, provide products by one of the following:
    - a. SEK-Surebond
    - b. Pave Tech Inc.
    - c. Brickstop Corporation.
  - 2. Color shall be black.

#### 2.3 SAND BEDDING COURSE

A. Sand bedding course shall meet PennDOT Pub. 408, Section 703.1(c) for Bituminous Concrete Sand, Type B, #3.

#### 2.4 WOOD PRIVACY FENCE AND GATE

- A. Lumber: Lumber for all members except sign face shall be Southern Yellow Pine, Select No. 2, commercial grade or better, pressure treated with wood preservative for ground and soil contact, free from checks, splits, and cracks, S4S.
- B. Adhesive: Adhesive shall be exterior grade.
- C. Hardware: Hardware, including all fasteners, brackets, nails, bolts, etc., shall be hot dipped galvanized. For pressure treated wood, use ACQ compatible or stainless steel fasteners.
- D. Gate hinges, gate latch, and gate drop rod shall be heavy duty steel strap hinges powder coated black. Gate drop rod and gate latch shall have provisions for a padlock.
- E. Paint: Paint/stain for lumber shall be standard of quality of Pratt and Lambert for exterior use on wood. Apply 2 coats. Color and finish shall be specified by Owner.

# 2.5 CONCRETE

A. All poured-in-place concrete to be utilized for the installation of items in this Section shall be not less than 3300 psi at 28 days unless otherwise specified and shall meet PennDOT Pub. 408 Specifications for Class 'AA' concrete.

#### 2.6 MISCELLANEOUS HARDWARE

A. All hardware and fasteners shall be ACQ compatible, hot-dipped, galvanized steel, unless otherwise specified.

# **PART 3 - EXECUTION**

# 3.1 STONE PAVER INSTALLATION, GENERAL

- A. Do not use unit pavers or stone blocks with chips, cracks, voids, discolorations, and other defects that might be visible in finished work.
- B. Mix pavers from several pallets or cubes, as they are placed, to produce uniform blend of colors and textures.
- C. Cut unit pavers with motor-driven masonry saw equipment to provide clean, sharp, unchipped edges. Cut units to provide pattern indicated and to fit adjoining work neatly. Use full units without cutting where possible. Hammer cutting is not acceptable.
- D. Provide edge restraints as indicated. Install edge restraints before placing unit pavers.

Install edge restraints to comply with manufacturer's written instructions. Install stakes at intervals required to hold edge restraints in place during and after unit paver installation.

# 3.2 WOOD PRIVACY FENCE AND GATE

- A. Locate fence and gate as shown on accompanying drawings, adjust as required by Landscape Architect.
- B. Construct fence and gate as shown and dimensioned on drawings.
- C. All cuts shall be clean, sharp and straight.
- D. Make tight connections between members.
- E. Sand smooth all surfaces, remove all sharp or rough edges and splinters.
- F. Brush application of two (2) coats wood preservative to all field cuts of all post wood.
- G. Place concrete footing as detailed.

**END OF SECTION** 

#### PART 1 - GENERAL

## 1.1 SECTION INCLUDES

- A. Furnishing and planting of shrubs, trees and any other woody or herbaceous plants as hereinafter specified or as indicated on the drawings.
- B. Selective pruning, mulching, fertilizing and watering of plants.
- C. Adequate protection and maintenance of all plant material and plants covered under this section of the specifications until accepted by Owner.
- D. Guarantee all plant material for a period of one year from final acceptance with replacement of unacceptable planting.
- E. Maintenance of plant materials and beds.

# 1.2 RELATED DOCUMENTS

A. Section 02920 – Fine Grading, Soil Preparation, and Seeding

#### 1.3 QUALITY ASSURANCE

- A. Subcontract landscape work to a single firm specializing in landscape work.
- B. Source Quality Control
  - 1. At least 10 days prior to the expected use of any material the Owner's Representative shall be notified of the source of the materials proposed for incorporation into the project.
  - 2. All planting stock shall be available for inspection in the nursery before it is dug. The Contractor shall furnish complete and detailed information concerning the source of supply for each item of plant materials, including the planting list with species, variety and size, not less than four days in advance of digging operations. However, final inspection and acceptance will be made at the planting site prior to placing plants in their permanent position.
  - 3. All planting stock shall conform to the laws of Pennsylvania and the American Standard for Nursery Stock, ANSI Z60.1 amended to date, and shall be inspected before removal from the nursery. Each shipment, invoice or order of plants shall be declared and certified free of disease and insect pests of all kinds. All necessary inspection certificates shall accompany each shipment, invoice or order of plants and shall be given to the Owner upon arrival at the points of delivery.
- C. Do Not Make Substitutions: If specified landscape material is not obtainable, submit to Owner's Representative proof of non-availability and proposal for equivalent materials. When prior authorized, adjustment of contract amount will be made.
- D. Sizes: Provide trees and shrubs of sizes shown or specified. Trees and shrubs of larger size may be used if acceptable to the Owner's Representative and if sizes of root ball are increased proportionately.
- E. Obtain adequate representative soil samples from the site, submit samples to an experienced laboratory and obtain test results and recommendations for soil nutrient amendments and plant fertilizer.

## 1.4 SUBMITTALS

- A. Certification: Submit certificates of inspection as required by governmental authorities, and manufacturer's or vendor's certified analysis for soil amendments and fertilizer materials. Submit other data substantiating that materials comply with specified requirements.
- B. Submit sample of landscaping geotextile fabric.

22PTC-01 / 2-25 02900-1 Planting

## 1.5 DELIVERY, STORAGE AND HANDLING

A. Package Materials: Deliver packaged materials in containers showing weight, analysis and name of manufacturer. Protect material from deterioration during delivery and while stored at site.

## 1.6 PROJECT CONDITIONS

- A. All project conditions in Section 02300 Earthwork apply.
- B. Proceed with and complete landscape work as rapidly as portions of site become available, working within seasonal limitations for each kind of landscape work required.
- C. Utilities: Determine locations of underground utilities and perform work in a manner that will avoid possible damage. Hand excavate as required.
- D. Excavation: When conditions detrimental to plant growth are encountered such as rubble fill, adverse drainage conditions or obstructions, notify the Owner's Representative before planting.
- E. Coordinating with Lawns: Plant trees and shrubs after final grades are established and prior to planting of lawns unless otherwise acceptable to the Owner's Representative. If planting of trees and shrubs occurs after lawn work, protect lawn areas and promptly repair damage to lawns resulting from planting operations.
- F. Water for plant and seed maintenance is the responsibility of the Contractor; no water is available at the site. The Contractor shall provide all hoses, sprinklers, and water equipment.

#### 1.7 PREPARATION FOR SHIPMENT

A. Handle and pack each species or variety in an approved manner as required by soil and climatic conditions at the time of digging and with due regard to conditions of shipment and time consumed in transit and delivery.

## **PART 2-PRODUCTS**

## 2.1 PLANT STOCK

- A. Plant materials shall be of types, sizes, quantities and varieties as listed hereinafter in the List of Plant Materials.
- B. Plants shall be true to type and name in accordance with the latest edition of Standardized Plant Names, American Joint Committee on Horticultural Nomenclature, and each plant shall be properly labeled.
- C. Plants shall have a well-branched, vigorous and balanced root and top growth, and, unless otherwise specified, shall be No. 1 grade. They shall be free form disease, injurious insects, mechanical wounds, broken branches, decay, or any other defects. Deciduous trees shall have straight trunks with well-branched tops and single leader. Each species shall conform to "American Standard of Nursery Stock" as developed by the American Association of Nurseryman Inc., and approved by the American Standards Association, Inc. (ASA).
- D. Stock shall be nursery grown unless otherwise indicated or specified. The plants shall have been growing at least two (2) years in a climate comparable to that of Pennsylvania. Plants shall be freshly dug at time of delivery.
- E. Plants indicated either on the accompanying plans as "B&B" shall be balled and burlapped. These plants shall have a ball formed of firm earth from the original and undisturbed soil in which the plant grew. The ball shall be wrapped with burlap or similar approved material and tightly laced to hold the ball firm and intact. B&B plants arriving with broken or loose balls, or of "Manufactured" earth, will be rejected.
- F. The diameter and depths of ball on "B&B" plants shall be in accordance with A.S.A. "Standard for Nursery Stock" and shall be sufficiently large to include the necessary root system.
- G. When containers are indicated or specified, plants shall be furnished and planted in approved decomposable containers. Remove non-decomposable containers as plant is placed in ground.

22PTC-01 / 2-25 02900-2 Planting

- H. Provide freshly dug trees and shrubs. Do not prune prior to delivery. Do not bend or bind-tie trees or shrubs in such a manner as to damage bark, break branches or destroy natural shape. Provide protective covering during delivery.
- I. Deliver trees and shrubs after preparations for planting have been completed and plant immediately. If planting is delayed more than six (6) hours after delivery, set trees and shrubs in shade, protect from weather and mechanical damage, and keep roots moist.

# 2.2 TOPSOIL

A. On-site topsoil may be used for planting operation. Additional topsoil for planting backfill must be furnished by Contractor from an approved off-site source.

#### 2.3 FERTILIZER

- A. Commercial fertilizer shall be a complete formula and shall conform to all requirements of the Pennsylvania Fertilizer Act of 1965, governing their compositions and manufacture. It shall be uniform in composition, dry and free-flowing, and shall be delivered to the site in the original, unopened container, each bearing the manufacturer's guaranteed analysis. Any fertilizer that becomes caked or otherwise damaged, making it unsuitable for use, will not be accepted.
- B. Commercial fertilizer, a portion of which is derived from organic sources, shall contain in available form a minimum N-P-K as established from soil testing recommendations. Chemical analysis shall be guaranteed and clearly shown on each bag.

#### 2.4 BARK MULCH

A. Mulch shall be brown in color, acid reaction of four to five of shredded oak tree bark and free of mineral matter that is harmful to plant life, have a moisture content of 15-40% natural, and be of coarse texture. Particle size may range from one-half inch (1/2") to two-inch (2") diameter and shall be double shredded. Bark shall be considered processors "premium".

# 2.5 ANTIDESICCANT SPRAY

A. Anti-desiccant spray shall be "Wilt Pruf", as manufactured by Nursery Specialty Products, Greenwich, Connecticut, or approved equal.

# 2.6 PEAT

A. Peat shall be sphagnum peat moss. It shall be finely shredded, consist of 100% organic peat, with a Ph factor of not less than 5.3, be brown in color, shall not exceed one-fourth inch (1/4") in diameter, Peat shall be measured in air dry conditions, containing not more than thirty-five percent (35%) moisture by weight.

# 2.7 WOODEN GUY STAKES

A. Wooden stakes shall be  $2\,1/4$ "x  $2\,1/2$ " x 8' length, minimum for trees less than 3" caliper and 3" x 3" x 10' length minimum for trees 3" caliper and greater. Stakes shall be hardwood free of knots or other structural defects that would cause breakage while pounding in place. Any stake with a broken or jagged top shall be replaced or pounded flush with the top of the soil.

## 2.8 GUY WIRE

A. Wire to be used for the purpose of guying plants shall be minimum of twelve-gauge, multistranded, galvanized steel wire. Wire shall not come in contact with the plant. It shall be covered with rubber hose as shown in the accompanying Drawings where such points occur.

## 2.9 PLANTING BED MIX

A. Backfill shall consist of eighty percent (80%) or four (4) parts topsoil and twenty percent (20%) or one (1) part sphagnum peat moss and hereafter specified.

22PTC-01 / 2-25 02900-3 Planting

## 3.1 PREPARATION FOR SHIPMENT

A. Each species or variety shall be handled and packed in an approved manner as required by soil and climatic conditions at the time of digging and with due regard to conditions of shipment and time to be consumed in transit and delivery. All evergreen trees shall have anti-desiccant applied prior to digging.

## 3.2 DIGGING

A. Digging operations shall be planned in order that actual planting operations will follow within a period of not more than one week, unless otherwise approved by the Owner's Representative.

## 3.3 TEMPORARY STORAGE:

- A. Where temporary storage or healing-in is required, the Contractor, prior to the shipping of planting stock, shall provide and prepare a suitable healing-in ground or a well ventilated and cool storage shed located near the planting site.
- B. All accepted planting stock, if not planted immediately shall be healed-in or stored. Stock left out of the ground unprotected overnight, left with roots exposed to bend or freezing or otherwise unprotected during transit, unloading, healing-in or planting will be rejected.

#### 3.4 SHRUB BED PREPARATION

A. All shrub masses shown on the Drawings shall be contained within a continuous bed for each mass planting. As such, the bed shall be stripped of turf and the entire bed cultivated by rototilling or plowing and discing so that the entire surface is tilled.

## 3.5 PREPARATION OF PLANT PITS

- A. Pits for planting shrubs perennials and grasses shall be dug large enough to accommodate the roots and plants without crowding and shall be of correct depth to allow placement of plant at proper depth on subgrade before backfilling.
- B. Further, the diameter of the plant pit shall be at least twice the diameter of the of the plant root ball with at least six inches (6") of open excavation between the root ball and the vertical wall of the pit in all directions. Refer to the planting details for further information.
- C. Pits for larger plants, such as deciduous shade and flowering trees and large shrubs shall be of sufficient depth to allow the placing of root ball on subgrade prior to backfilling. Further, the diameter of the plant pit shall be at least twice the diameter of the plant root ball with at least twelve inches (12") of open excavation between the root ball and the vertical wall of the pit in all directions. Refer to planting details for further information.
- D. Digging operations, particularly on slopes, shall be planned in order that actual planting operations will follow within twenty-four (24) hours. In the case of winter season planting, the plant pit shall not be excavated and allowed to freeze; digging operations in this case shall take place so that plant can be properly installed and backfilled before the pit or the excavated material freeze. In this case, the mulch shall be replaced immediately to further protect the pit and root ball from freezing.

#### 3.6 TOPSOIL PLACEMENT

A. Planting area shall be considered to have sufficient topsoil for the bed preparation. However, topsoil required within each plant pit for the backfill mix shall be furnished and placed by the Contractor.

## 3.7 PLACING PLANTS

- A. Plants shall be set no shallower or deeper than they stood in the nursery, with excavation for pits to correct depth as previously outlined to set the plants at their proper height.
- B. Balled and burlapped plants shall be handled by the earth ball and not by the plant itself and shall be placed in the pits without removing the burlap, after which the burlap shall be laid back from the ball. Planting operations shall conform to planting details set forth on accompanying Drawings.
- C. On steep slopes, the soil on the lower side of the plant shall be graded in such a manner that it will catch and hold water as shown on the plans or as directed by the Owner's Representative.

# 3.8 BACKFILLING

- A. Backfilling of plant pits and shrub beds shall use the planting bed mix which shall be mixed in bulk in a preparation area and shall not be individually placed and mixed within the plant pit. The backfill mix shall be worked around the ball and be firmly tamped and/or puddled as backfilling progresses. Care shall be taken to fill all voids in order to eliminate air pockets. Where necessary, and always in the case of shade trees, each plant shall be held in a vertical position while the soil is being placed. Sticks, sod, clods or other material which would decompose and form air pockets in the planting media shall be removed. Place backfill in sixinch (6") increments of depth.
- B. On level ground and on relatively gentle slopes, a shallow basin, the diameter of the plant pit, shall be let around each plant. On steep slopes, sufficient soil shall be pulled to the lower side of the plant to form a shallow basin to catch and hold water.

## 3.9 FERTILIZATION OF PLANT MATERIAL

A. After placing backfill, prior to final watering and before mulching, apply fertilizer to all plants at rate determined by the soil testing as appropriate to each species.

#### 3.10 ROOT PRUNING

A. All damaged or broken main roots shall be pruned with a clean oblique cut immediately above the point of damage.

## 3.11 PRUNING

A. The tops of all deciduous stock shall be pruned at the time of planting or immediately thereafter. Pruning operations shall conform to the best horticultural practices with due regard to natural or desired form and growth characteristics of the individual species. A single terminal leader shall be preserved when pruning deciduous shade trees. Unless otherwise directed by the Owner's Representative all deciduous plants shall have 1/3 of the potential leaf-baring surface mounted. All cut surfaces 3/4 of an inch or more in diameter shall be painted, with approved tree wound paint.

## 3.12 STAKING AND GUYING TREES

A. All deciduous trees shall be guyed by means of cables spaced evenly around the tree as shown on drawings. Each cable shall consist of No. 12 gauge standard galvanized twisted steel wire, free from bends and kinks, and fastened around the trunk immediately above a substantial limb, wherever possible. Cables shall be fastened around the trunk at a distance from the ground of approximately three and one-half feet and shall be secured to wood stakes driven

22PTC-01 / 2-25 02900-5 Planting

three (3) feet into the ground. Care should be taken to keep stakes clear of the tree balls and root systems. Hose shall be of sufficient length to clear the trunk three (3) inches at the ends.

## 3.13 WATERING

A. All planting shall be thoroughly watered and maintained in a satisfactory manner during the construction until acceptance for the work by the Owner.

## 3.14 BARK MULCH APPLICATION

- A. All plant beds and pits shall be mulched as follows:
- B. All plants shall be mulched with tanbark to a uniform depth of three inches (3"), settled depth, placed after planting. Tree pits shall be mulched to the outer edge of the earth berm. All shrub plantings are masses and shall be mulched as such with mulch covering the entire area within the limits of the plant mass.
- C. Removal all weeds and deleterious materials from the area before mulch is spread.
- D. Apply mulch within two (2) days after planting, except in the case of winter planting when mulch shall be placed immediately.
- E. Adjust grades allowing for thickness of mulch by cutting or filling. Rake surface smooth and even over prepared surface. After leveling mulch, soak full depth of mulch thoroughly with water.
- F. Secure mulch on sloped landscape areas.

## 3.15 WOUND TREATMENT

A. All cuts or wounds measuring three-fourths inch (3/4") or more in diameter shall be painted with approved tree wound paint.

# 3.16 MAINTENANCE

- A. Maintenance shall begin immediately following the last operation of installation for each plant.
- B. All plants shall be protected and maintained until accepted by the Owner and until installation of planting is complete.
- C. Maintenance shall include watering, weeding, cultivating, mulching, tightening and repairing of guys, removal of dead materials, resetting plants to proper grades or upright position and restoration of the planting saucer, and other necessary operations. If planting is done after lawn preparation, proper protection to lawn areas shall be provided and any damage resulting from planting operations repaired promptly.

# 3.17 PLANT GUARANTEE

- A. The Contractor shall guarantee all plants for a period of one (1) year form date of acceptance. Date of acceptance is defined as the inspection requested by the Contractor after the last of the total planting is installed.
- B. Although periodic requests for payment will be accepted, their individual approval and subsequent payment shall not activate the guarantee period until all plants are in place and inspected by the Owner's Representative/Owner.
- C. If a plant dies after total acceptance, it shall be removed immediately and replaced immediately or, in the case of plants requiring proper seasonal planting, replacement in the next appropriate season, even if that season falls beyond the one-year guarantee period.
- D. Where a large portion of a plant dies back causing a permanent or long-term deformity, it shall be replaced.
- E. Any delay on the part of the Contractor to remove and replace unsatisfactory materials shall cause the Owner to have such work performed and the Contractor shall be backcharged for that work.
- F. Plant replacement shall be performed as many times as necessary in a single location; the guarantee does not limit replacement to "one time".

22PTC-01 / 2-25 02900-6 Planting

- G. Replacement shall be of exact type, species and size as originally specified. Plants shall be furnished, planted, and guaranteed as herein before specified.
- H. The Contractor shall maintain all mulched landscaped areas as specified throughout the guarantee period, including re-securing and replacement of mulch that has sloughed off mulched areas.
- I. The Contractor shall, in addition to replacement of unsatisfactory plant materials, make good all damage to the structures and ground or equipment and contents thereof if such unsatisfactory condition or damage develops within the stipulated period and is due to the use of materials or workmanship which are inferior, defective or not in accordance with this Contract, and must make good any work or materials or grounds which are disturbed in fulfilling the requirements of this guarantee.
- J. At the end of the one-year guarantee period, the Contractor shall remove all guying materials.

**END OF SECTION** 

22PTC-01 / 2-25 02900-7 Planting

## SECTION 02920 - FINE GRADING, SOIL PREPARATION, AND SEEDING

#### PART 1 - GENERAL

## 1.1 SECTION INCLUDES

- A. Soil preparation to include tilling, incorporation of soil supplements.
- B. Obtain and place additional topsoil required to develop seedbed.
- C. Preparation of seedbed
- D. Furnishing and application of grass seed mix on lawn areas
- E. Mulching of all seeded areas
- F. Repair of erosion areas and maintenance until seeded areas are accepted
- G. Maintenance of lawns

## 1.2 RELATED SECTIONS

A. Section 02300 - Earthwork

## 1.3 SUBMITTALS

A. The materials in these specifications shall be obtained from a dealer or manufacturer whose product is shown by analysis to fulfill the guarantee claimed by the producer. Samples of all materials are required by the Engineer. Upon approval of samples, delivery of materials may begin. Approved samples shall be stored on site and protected until furnishing of materials is completed.

## 1.4 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are familiar with the specified requirements and the method needed for proper performance of the work of this section.
- B. Use equipment adequate in size, capacity, and numbers to accomplish the work of this section in a timely manner.
- C. Seeding maybe performed between the following dates depending upon the seasonal weather conditions:
  - 1. Lawn: Late Summer or early Fall, between September 1 and October 15; and where Spring seeding is necessary, seed no later than April 30, but not before the sponginess is out of the ground.
- D. Packaged products shall indicate the manufacturers guaranteed analysis on each package and arrive on site as originally packaged and unopened.
- E. The materials and performance of the work of this Section shall comply with the requirements of those industry standards hereinafter mentioned and the applicable provisions of PennDOT Pub. 408, except as may be amended herein.
- F. Obtain adequate representative soil samples from the site, submit samples to an experienced laboratory and obtain test results and recommendations for soil nutrient amendments for permanent seeding.

#### 1.5 PROJECT CONDITIONS

- A. All project conditions in Section III Excavation, Backfill and Earthwork apply.
- B. Proceed with and complete seeding work as rapidly as portions of the site become available, working within the seasonal limitations for each kind of seeding work required.
- C. Perform seeding after planting, fine grading and all other work affecting the ground surfaces in the work areas have been completed satisfactorily.
- D. Cooperate with other Contractors and trades working in and adjacent to seeding location. Examine drawings and specifications for the entire site and become familiar with the scope of other work required.

- E. Provide lawn seed as specified. Substitutions not permitted, unless approved in writing by the Engineer.
- F. Water shall be the responsibility of the contractor; no water is available at the site. The Contractor shall provide all hoses, sprinklers, and water equipment.

## **PART 2 - PRODUCTS**

## 2.1 TOPSOIL

A. Topsoil for the purposes of developing proper seedbed shall be from on-site sources. If quantity of stockpiled topsoil is insufficient, provide additional topsoil as required to complete the seeding work. Additional topsoil shall be as specified in Section 02300 –Earthwork.

## 2.2 PULVERIZED LIMESTONE

- A. Pulverized limestone shall be for agricultural use and shall contain not less than eight-five percent (85%) of calcium carbonate or calcium carbonate equivalent. Ninety-eight percent (98%) shall pass a 20-mesh sieve, 55% a 60-mesh sieve, and 40% a 100-mesh sieve. Deliver limestone in original unopened containers with identifying mark and analysis meeting specification requirements.
- B. Pulverized limestone shall meet the requirements of the latest Commonwealth of Pennsylvania Specification L-36 for Group 1, Class B, Type MO.

#### 2.3 COMMERCIAL FERTILIZER

A. Starter and basic fertilizer shall be a complete commercial fertilizer, a portion of which are derived form organic sources and shall contain in available form a minimum N-P-K as established from soil testing recommendations. Chemical analysis shall be guaranteed and clearly shown on each bag.

## 2.4 SEED

- A. Seed shall conform to the Pennsylvania Seed Act of 1965, as amended, and regulations of the Pennsylvania Department of Agriculture, Bureau of Plant Industry.
- B. The percentage of pure seed present shall represent the freedom of such agricultural seeds from inert matter and from other seeds distinguishable by their appearance. The percentage of germination shown shall be actual sprouts and shall not include "hard seeds" unless specifically permitted. No seed shall be accepted with a date of test of more than six months prior to the date of sowing and shall be of the most recent crop.
- C. Lawn and specialty seeds shall be furnished to the project site in mix prepared by the seed processor. Lawn seed mixtures shall be as supplied by Pennington Seed, (800) 732-3332, or approved equal. The mix shall have a certification tag which shall be presented to the Owner's Representative. Seed mixture shall be as follows.
  - 1. General Mixture: This mix shall be used on all areas to be seeded lawn areas.

Mix	% Mix	Purity	<u>Germination</u>
Creeping Red Fescue	34%	97%	80%
Perennial Ryegrass	33%	98%	90%
Kentucky Bluegrass	33%	85%	80%

## 2.5 MULCH

A. Mulch shall consist of native or agricultural grasses such as wheat or oats straw.

## PART 3 - EXECUTION

## 3.1 SOIL PREPARATION AND FINE GRADING FOR LAWNS

- A. Place topsoil and spread over the prepared subgrade to obtain the required depth and grade elevation. Cultivate and conditioned to a depth of 4 to 6 inches with lime added at the rate determined by soil testing. Final compacted thickness of topsoil not less than 4 inches. Exercise extreme care to prevent damage to items of construction. All work shall be done by hand immediately adjacent to these installations.
- B. Do not place topsoil when the subgrade is frozen, excessively wet, or extremely dry, do not handle topsoil when frozen or excessively wet.
- C. Broadcast and work into a four-to-six inch (4-6") depth, fifty pounds (50 lbs.) of ground limestone per one thousand square feet of all areas of the site to be seeded.
- D. Immediately after cultivating, uniformly spread the basic fertilizer and work in deeply (four to six inches), at the rate determined by soil testing. The areas shall then be carefully dragged and brought to an even, smooth grade, ready for seeding.
- E. Remove stones one-inch (1") or larger in any dimension, vegetation, or debris brought to the surface during these operations from the site. The final grade shall be even, smooth and free of lumps or water-collecting pockets.
- F. Apply starter fertilizer immediately before seeding by broadcasting and raking into a depth of one-inch (1") at the rate determined by soil testing.
- G. Provide smooth finish grades with uniform flow without depressions or arises, with gradual and uniform transition at slopes and embankments. Maximum allowable tolerance in finish grades shall be not more than one inch (1") in ten feet (10') or three inches (3") in one hundred feet (100') when measured.
- H. Place topsoil adjacent to all paved surfaces to meet finish grade of pavement and provide a smooth transition to surrounding finish grade.

# 3.2 SEEDING OF GRASS FOR LAWNS

- A. The prepared areas shall then be seeded with the specified seed by means of a mechanical hopper type seeder at the following rate recommended by seed supplier.
- B. The seed shall be sown evenly in two directions, with 1/2 of the seed being shown in a direction at right angles to the other half. Seeding shall be done on a day when there is no wind.
- C. After sowing the seed, the area shall be lightly raked to cover seed to an average depth of one-fourth inch (1/4") and rolled with a 200-pound roller. The completed areas shall present a smooth and finished appearance. The seeding and compacting of the large areas may be accomplished by the use of a "Gill Seeder" or other mechanical seeder.

# 3.3 MULCHING

- A. Mulch shall be placed over lawn areas within forty-eight (48) hours after raking and seeding or planting has been performed. Salt hay or other saline marsh grasses are not acceptable. The material shall be applied at an average minimum depth of two inches (2") loose measurement. Care shall be taken when placing the mulch so as not to disturb the seeded surfaces. The mulch shall be secured by one of the following methods, acceptable to the Engineer.
  - 1. Emulsified asphalt may be utilized to secure mulch. Emulsion shall conform to requirements of AASHTO Grade RS-1 or Pennsylvania Department of Transportation Bulletin No. 25 for Class E-1 or E-6. Emulsion shall be homogeneous and shall be miscible with water. It shall contain no solvents or other dilative agents toxic to plant life and not more than 0.75 percent of saponifiable acids. Apply uniformly at the rate of twenty-eight (28) gallons per one thousand square yards (1,000 sy).
  - 2. Terra Tack II may be used to secure mulch. Terra Tack II is produced by Grass Growers of Plainfield, New Jersey, and shall be applied by a hydroseeder as an overspray to straw mulch. Terra Tack II shall be mixed as per the manufacturer's instructions and shall be applied at the rate of forty-five pounds (45 lbs.) of Terra Tack II (Parts A & B), seven hundred fifty (750) gallons of water and one hundred fifty pounds (150 lbs.) of wood

- cellulose fiber per acre. Terra Tack II in the previous mix is an overspray to straw only and is not meant as a mulch in itself.
- B. During the life of the Contract, properly care for all areas and mulches, performing such mulching as necessary to provide protection for established growth on the treated areas.

# 3.4 MAINTENANCE OF SEEDED AREAS

- A. Maintenance includes watering, weeding, two initial mowings, cleanup, edging, and repair of washouts or gullies.
- B. All areas and spots that do not show a prompt catch of grass within 24 days shall be re-seeded, and this operation repeated until a complete coverage is obtained.
- C. Water seeded areas as necessary to promote healthy growth of lawn.
- D. When the lawn surface has become gullied or otherwise damaged following seeding within the maintenance period, the affected area shall be repaired at the expense of the Contractor to reestablish the condition and grade of the lawn. Repaired areas shall be reseeded as specified above.
- E. The Contractor shall be responsible for the proper maintenance of the seeded areas until the work under the entire contract or designated portions thereof have developed a satisfactory growth and the lawn areas have been mowed two (2) time and clippings removed.
- F. In the case of seeded areas adjacent to pedestrian or vehicular ways, it shall be the responsibility of the Contractor to barricade or fence to repel traffic from seeded areas until the maintenance mowing is completed.

**END OF SECTION**