ASPHALT REPAIR AND OVERLAY OF CITY STREETS

OCTOBER 2019

CITY OF PASS CHRISTIAN
PUBLIC WORKS DEPARTMENT

CITY OF PASS CHRISTIAN ASPHALT REPAIR AND OVERLAY OF CITY STREETS

OCTOBER 2019

CITY OF PASS CHRISTIAN PUBLIC WORKS DEPARTMENT

TABLE OF CONTENTS

ADVERTISEMENT FOR BIDS
INFORMATION FOR BIDDERS
PROPOSAL
NON-COLLUSION AFFIDAVIT/DEBARMENT CERTIFICATION
BID BOND
CONTRACT
PERFORMANCE BOND
PAYMENT BOND
GENERAL CONDITIONS
SUPPLEMENTAL GENERAL CONDITIONS
SPECIAL CONDITIONS
TECHNICAL SPECIFICATIONS

ADVERTISEMENT FOR BIDS

City of Pass Christian, Mississippi

The City of Pass Christian, Mississippi, will receive bids for:

Asphalt Repair and Overlay of City Streets

at the Office of the City Clerk, City Hall, Pass Christian, Mississippi, during normal office hours at any time prior to the designated bid date, but not later than 3:30 p.m. on the date of the bid opening. Bids will be publicly opened and read aloud at a regular meeting of the Board of Aldermen at 6:00 P.M., November 5, 2019. The meeting will be held at the Board Conference Room at 200 West Scenic Drive, Pass Christian, MS.

Bids are invited for the furnishing of materials, equipment, labor, and incidentals necessary to provide base repair, milling, asphalt leveling and overlay of designated portions of the following streets/locations within the City of Pass Christian: Church Avenue; Redwood Drive; and, Palm Avenue. The intent is to provide a finished asphalt thickness of not less than 2.0 inches, inclusive of leveling, if authorized. The limits of the work will be as directed by the Public Works Director.

The work will include mobilizing to multiple locations, providing a combination leveling course/asphalt overlay of the above-mentioned locations. Some of the work may include sawcutting and milling the existing asphalt surface for repairs to a portion of the travel lanes. Incidental work such as power brooming the existing asphalt to remove any debris and loose gravel; blading the existing asphalt with a motor grader to expose the edge; applying the prime and tack coats in accordance with the MDOT Standard Specifications for Road and Bridges, latest edition.

Contract Documents, including Technical Specifications, are on file at the Office of City Clerk, at City Hall, Pass Christian, Mississippi.

A certified check or bank draft payable to the order of City of Pass Christian, Mississippi, negotiable U. S. Government bonds (at par value), or a satisfactory Bid Bond executed by the Bidder and an acceptable surety licensed under the laws of the State of Mississippi, in an amount equal to five percent (5%) of the total bid for City of Pass Christian, Asphalt Leveling and Overlay of City Streets, shall be submitted with each bid.

For bids exceeding \$50,000 Bidder must indicate his <u>Certificate of Responsibility Number</u> on outside of sealed proposal as required by Mississippi Law. For bids not exceeding \$50,000, Bidder must either indicate his Certificate Number, or else write clearly "Bid does not exceed \$50,000."

The City of Pass Christian, Mississippi, reserves the right to consider the following relevant factors in addition to the contract price in determining the lowest and best bid: bidder's skill and business judgment, his experience and his facilities for carrying out the contract, his previous conduct under other contracts and the quality of previous work, as well as his pecuniary ability, honesty, and integrity. The City also reserves the right to reject any or all bids or to waive any informalities in the bidding.

Awarding public contracts to non-resident Bidders will be on the same basis as the non-resident bidder's state awards contracts to Mississippi Contractors bidding under similar circumstances. In order to ensure that Mississippi's so-called Golden Rule is followed, state law requires a non-resident bidder to attach to his bid a copy of his resident state's current laws pertaining to such state's treatment of non-resident contractors.

Bids may be held by the City of Pass Christian, Mississippi, for a period not to exceed ninety (90) days from the date of the opening of bids for the purpose of reviewing the bids and investigating the qualifications of Bidders, prior to awarding of the Contract.

Done by order of the Mayor and Board of Aldermen, September 17, 2019.

City of Pass Christian, Mississippi

Ву _	Marian Governor
Title	CITY CLERK

Publish dates: October1 and 8, 2019

INFORMATION FOR BIDDERS

(1) RECEIPT AND OPENING OF BIDS

The City of Pass Christian (herein called the "Owner"), invites bids on the form attached hereto, all blanks of which must be appropriately filled in. Bids will be received by the Owner at the office of the City Clerk, 200 West Scenic Drive, Pass Christian, Mississippi, 39571, during normal office hours at any time prior to the designated bid date, but not later than 3:30 p.m. on the date of the bid opening. Bids will be publicly opened and read aloud at a regular meeting of the Board of Aldermen which starts at 6:00 P.M., November 5, 2019; meeting to be held at Pass Christian Public Library. The envelopes containing the bids must be sealed, addressed to City Clerk, City of Pass Christian, at City Hall, Pass Christian, Mississippi, and designated as Bid for:

Asphalt Repair and Overlay of City Streets

The Owner will consider NULL AND VOID any bid not prepared and submitted in accordance with the provisions hereof and such bid <u>will be rejected</u>. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No Bidder may withdraw a bid within 90 days after the actual date of the opening thereof.

(2) METHOD OF BIDDING

The Owner invites the following bid(s):

A unit price bid for the construction of the entire project.

The bidder shall fully understand that the unit prices are independent to the exact quantities involved. The quantities in the bid documents are approximate and the Owner uses them for comparison of Bids only.

The Owner will only pay the Contractor for the actual quantities of work performed and accepted according to the Contract Documents. The Owner may increase, decrease or omit the scheduled quantities of work without invalidating the Bid prices.

(3) TIME OF COMPLETION AND LIQUIDATED DAMAGES

Bidder must agree to commence work on or before a date to be specified in a written "Notice to Proceed" of the Owner and to fully complete the project within 60 consecutive calendar days thereafter. Bidder must agree also to pay as liquidated damages, the sum of \$200.00 for each consecutive calendar day thereafter as hereinafter provided in the General Conditions.

(4) PREPARATION OF BID

Each bid must be submitted on the prescribed form, <u>fully completed and executed by principals of Bidder</u>. All blank spaces for bid prices must be filled in, in ink or typewritten, in both words and figures. Each bid must also include two original fully executed "CERTIFICATION REGARDING DEBARMENT, SUSPENSION, NON-COLLUSION AND OTHER RESPONSIBILITY MATTERS" forms.

Non-resident contractors must enclose in the bid envelope a copy of his resident state's current law pertaining to that State's treatment of non-resident contractors, as required by Miss Code Ann. Section 31-3-21(3).

(5) SUBCONTRACTS

The successful Bidder may subcontract portions of the work subject to the approval of the Owner, but not more than 49% of the contract. The successful bidder will be required to perform at least 51% of the work on the project with his own forces. All Subcontractors being assigned a portion of the Work in the amount of fifty-thousand dollars (\$50,000) or more must possess a current Mississippi Contractor's Certificate of Responsibility.

The Bidder further proposes that a list of subcontractor firms or businesses will be submitted to the Owner within 24-hours following the opening of the Bid. The list will at a minimum include the information shown below. Failure to submit the list of subcontractors within the 24-hour period shall be considered an irregularity in the Bid and will make the Bid subject to rejection by the City of Pass Christian. If the Bidder does not intend to subcontract portions of the work, the Bidder must provide a letter stating the fact that no subcontractors will be used on the project within the 24-hour time period. Failure to submit the letter within the 24-hour period shall be considered an irregularity in the Bid and will make the Bid subject to rejection by the City of Pass Christian.

A.	Work Description Name Street Address City	% of Total Contract
B.	Work Description Name Street Address City	-
C.	Work Description Name Street Address City	-
D.	Work Description Name Street Address City	-
E.	Work Description Name Street Address City	

The Bidder's attention is directed to the fact that it shall be unlawful and illegal for a Primary Contractor, Contractor, Owner, Awarding Authority, Sub-Contractor, or any other person to contract, or sub-contract, all or any portion of a public or private construction project regulat-

ed by Chapter 527, General Laws of Mississippi – 1988 (Sections 31-3-1 through 31-3-23, Miss. Code Ann. (1972, as amended)), exceeding fifty thousand dollars (\$50,000.00) with respect to public projects unless the Contractor, or Subcontractor was duly licensed by the Mississippi State Board of Contractors as of the date fixed for the submission of bids on the work from the Primary Contractor, to the Owner, or Awarding Authority. It is further provided that the Prime Contractor, on or before the date of being awarded the prime contract, shall submit to the awarding agency, a list of all sub-contracts, exceeding fifty thousand dollars (\$50,000.00) with respect to public projects.

Within 10 calendar days following award of the contract, any subcontractor, who is approved by the Owner in writing, to be assigned a portion of the contract shall submit two original fully completed and executed "CERTIFICATION REGARDING DEBARMENT, SUSPENSION, NON-COLLUSION AND OTHER RESPONSIBILITY MATTERS" forms to the Owner.

(6) QUALIFICATIONS OF BIDDER

Each Bidder shall, if requested by the Owner, submit a Statement of Bidder's Qualifications, his experience record in constructing the type of improvements proposed, his organization and equipment available for the work contemplated, and, when specifically requested by the Owner, a detailed financial statement. The Owner shall have the right to take such steps as it deems necessary to determine the ability of the Bidder to perform his obligations under his contract and Bidder shall furnish such information and data for this purpose as may be requested. The right is reserved to reject any bid where an investigation of the available evidence of information does not satisfy the Owner that the Bidder is qualified to carry out properly the terms of the Contract.

(7) BID SECURITY

Each bid must be accompanied by cash, certified check of the Bidder, or a bid bond prepared on the form of bid bond attached hereto, duly executed by the Bidder as principal and having as surety hereon a surety company approved by the Owner, in the amount of five percent (5%) of the bid. Such cash, checks or bid bonds will be returned to all except the three lowest bidders within three days after the opening of bids, and the remaining cash, checks or bid bonds will be returned promptly after the Owner and the accepted bidder have executed the contract, or, if no award has been made within 90 days after the date of the opening of bids, upon demand of the Bidder at any time thereafter, so long as he has not been notified of the acceptance of his bid.

(8) LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT

The successful Bidder, upon his failure or refusal to execute and deliver the contract and bonds required within 10 days after he has received notice of the acceptance of his bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his bid. In the event of the failure of the successful Bidder to enter into the contract, the Owner has the right to rescind the award and award the contract to the next lowest, responsible, responsive bidder.

(9) CONDITIONS OF WORK

Each Bidder must inform himself fully of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of his obligations to furnish all material and labor necessary to carry out the provisions of

his contract. The Contractor, in carrying out his work, must employ such methods or means as will not cause any interruption of or interference with the work of any other contractor or business.

The contractor shall be aware that he shall have to coordinate his work with both the harbor master to ensure the commercial businesses on the west side of the harbor maintain continued operation. With the coordination of the harbor master, it may be possible to limit parking to designated areas while work is ongoing in another portion.

(10)ADDENDA AND INTERPRETATIONS

No interpretation of the meaning of the plans, specifications or other pre-bid documents will be made to any Bidder orally.

Every request for such interpretation should be in writing addressed Russell Holliman, Public Word Director for the City of Pass Christian, and to be given consideration must be received at least five days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be transmitted to all registered plan holders by facsimile transmission with return receipt requested, not later than three days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under this bid as submitted. All addenda so issued shall become part of the Contract Documents.

(11)SECURITY FOR FAITHFUL PERFORMANCE

The successful bidder shall file with the Owner, a performance bond and payment bond on the forms bound herewith, each with the full amount of the Contract price in accordance with the requirements of the Mississippi Code Section 31-5-51, as applicable, as security for the faithful performance of the contract and payment for all persons supplying labor and materials for the construction of the work, and to cover all guarantees against defective workmanship or materials or both for a period of one (1) year after the dated of final payment of the completed project. The surety furnishing the bonds shall have a sound financial standing and a record of service satisfactory to the Owner, and shall be authorized to do business in the State of Mississippi. The Contractor must furnish a surety bond or bonds as security for faithful performance of this contract and for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with his contract, as specified in the General Conditions included herein. The surety on such bond or bonds shall be a duly authorized surety company satisfactory to the Owner.

(12) POWER OF ATTORNEY

Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified (notarized) and effectively dated copy of their power of attorney from the Surety, together with a copy of their license from the State of Mississippi to sign surety bonds for work in the State of Mississippi as evidence of his/her authority to bind the surety on the date of execution of the bond(s).

(13)LAWS AND REGULATIONS

The Bidder's attention is directed to the fact that all applicable State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.

The Bidder shall be required to implement appropriate best management practices to reduce erosion and control sediment discharge to adjacent streams and wetlands as outlined in "Planning and Design Manual for Control of Erosion, Sediment, and Stormwater" (MDEQ, MSWCC, and USDA SCS 1994) and "Field Manual for Erosion and Sediment Control on Construction Sites in Mississippi" (MDEQ, 2002). Noncompliance with this may be cause for delaying or withholding payment applications.

Each Bidder shall inform himself of, and the bidder awarded the Contract shall comply with, federal, state and local laws, statutes, and ordinances relative to the execution of the work. This requirement includes, but is not limited to, applicable regulations concerning minimum wage rates, nondiscrimination in the employment of labor, protection of public and employee safety and health, environmental protection (i.e., Clean Air Act, Clean Water Act, etc.), the protection of natural resources, fire protection, burning and non-burning requirements, permit fees and specifically all of the requirements of 44CFR13.36. Noncompliance with this may be cause for delaying or withholding payment applications.

(14)METHOD OF AWARD - LOWEST, RESPONSIVE, RESPONSIBLE, QUALIFIED BIDDER

If at the time the contract is to be awarded, the lowest bid submitted by a responsible Bidder does not exceed the amount of funds then estimated by the Owner as available to finance the contract, the contract will be awarded. The City of Pass Christian, Mississippi, reserves the right to consider the following relevant factors in addition to the contract price in determining the lowest and best bid: bidder's skill and business judgment, his experience and his facilities for carrying out the contract, his previous conduct under other contracts and the quality of previous work, as well as his pecuniary ability, honesty, and integrity. The City also reserves the right to reject any or all bids or to waive any informality in the bidding.

The City also reserves the right to reject any unbalanced bids. An unbalanced bid is one in which each bid item fails to carry its proportionate share of the overhead and profit in addition to the necessary costs for the item, which results in understated prices for some items and overstated prices for others potentially involving the majority of the contract amount to be paid at the beginning of the project (e.g., Front End Loading). A materially unbalanced bid is one in which there is reasonable doubt that award to the bidder submitting an unbalanced bid will result in the lowest ultimate cost to the City of Pass Christian (Owner). The City reserves the right to award the project to the lowest, responsive, responsible, qualified bidder.

In order to be considered responsible with the Advertisement for Bids, a Bid must:

- 1. Be completed, signed and notarized an be in compliance in all aspects to the conditions of the Advertisement for bids and Information to Bidders:
- 2. Be made on the forms provided and submitted intact;
- Acknowledge receipt of any addenda and the Bidder must submit acknowledgement of such receipt of any addenda to the Owner prior to the bid opening;
- 4. Be accompanied by the required bid security; and,
- 5. Contains no alterations to the terms or conditions of these Contract Documents except as specifically directed in these Contract Documents.

In order to be considered responsive, a Bidder must establish to the complete satisfaction of the Owner, as a minimum, that he has:

1. A permanent place of business;

- 2. Adequate financial resources to meet his Contract obligations an will maintain same for the Contract period;
- 3. Adequate equipment to perform the work properly and within the time provided for in the Contract;
- 4. The necessary experience and technical qualifications in the type of work provided for in the Contract;
- 5. Adequately performed his current work to the satisfaction of the Owner;
- 6. Scheduled his current work load in such a manner that he is on time and is scheduled to complete the work within the time period specified; and,
- 7. Performed the type of work contemplated by these documents for the previous five years.

(15)OBLIGATION OF BIDDER

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

(16) CERTIFICATE OF RESPONSIBILITY

Attention of all Bidders is called to the provision of the State Law requiring a Certificate of Responsibility for all Contractors contracting for public work in excess of \$50,000.00. Bidder shall have complied with the requirements of this law and shall state their certificate number on the face of the envelope containing their Bid and in the space provided in the Bid Form. No Bid shall be opened or considered unless such Contractor's current certificate number appears on the outside or exterior of said envelope or container or unless there appears a statement on the outside or exterior of such envelope or container to the effect that the Bid enclosed therein does not exceed fifty thousand dollars (\$50,000.00).

Attention of Bidders is also called to the provision of the State Law requiring that the <u>classification</u> of the Bidders Certificate of Responsibility be proper for the type of work. The particular classification of work must be at least 50 percent of the total cost of the project. Acceptance of any Bid will be subject to review and concurrence by the Mississippi State Board of Contractors for the proper classification.

(17)ASSIGNMENT OF CONTRACT

The Bidder to whom the contract is awarded will not be permitted to assign this contract or any portion thereof without the approval of the Owner in writing.

(18) DEBARMENT

Any contractor or sub-contractor listed on the Federal Debarment List will be excluded from work on this project.

Two original fully completed and executed "CERTIFICATION REGARDING DEBARMENT, SUSPENSION, NON-COLLUSION AND OTHER RESPONSIBILITY MATTERS" forms shall be submitted by the prime contractor with the bid documents.

(20)SUBMITTALS

The successful bidder shall, within 10 calendar days following the Notice to Proceed, submit to the Owner a project schedule demonstrating timely performance of the work within the contract time.

(21) RESPONSIBILITY FOR UTILITY PROPERTIES AND SERVICE

Neither the Owner nor his officers or agents shall be responsible to the Contractor for damages as a result of the Contractor's failure to protect utilities encountered in the work.

The Contractor shall at all times provide unobstructed access to fire hydrants, underground conduit, manholes and water or gas valve boxes.

Where the Contractor's operations could cause damage or inconvenience to railway, telegraph, telephone, television, power, oil, gas, water, sewer, irrigation, or other systems adjacent or near the work, operations shall be suspended until the Contractor has made all arrangements necessary for the protection of these utilities and services and the Owner has been notified of these arrangements.

Notify the Owner and all utility offices that are affected by the construction operation at least 7 days in advance of commencing construction operations. The Contractor shall not expose any utility without first obtaining written permission from the appropriate agency and providing written notification to the Owner of this permission. Once permission has been granted, locate and, if necessary, expose and provide temporary support and/or relocation in advance of operations.

Protect all utility poles from damage. If interfering utility poles, guy wires or anchors are encountered, the Contractor shall notify the Owner and the appropriate utility company as soon as possible and at least 48 hours in advance of construction operations to permit the necessary arrangements for protection or relocation of the interfering poles.

The Contractor shall be solely and directly responsible to the Owner and operators of such utility properties for any damage, injury, expense, loss, inconvenience, delay, suits, actions, or claims of any character brought because of any injuries or damage that may result from the construction operations under his Contract.

In the event of interruption to domestic water, sewer, storm drain, or other utility services as a result of accidental breakage due to construction operations, promptly notify the proper authority. Cooperate with said authority in restoration of service as promptly as possible and bear all costs of repair. In no event shall interruption of any water or utility service be allowed unless prior approval is granted by the Owner of the utility.

The Contractor shall replace, at his own expense, any and all other existing utilities or structures removed or damaged during the performance of this work, unless otherwise provided for in these Contract Documents or ordered by the Owner.

(22) RELOCATIONS REQUIRED BY CONSTRUCTION

Where existing utilities, structures, or other physical obstructions block or impede construction under this Contract, they shall be permanently relocated. Such relocations shall be considered as required by construction. All other relocations shall be treated in accordance with UTILITY INTERFERENCE INCIDENTAL TO CONSTRUCTION below.

The Contractor shall give immediate notice to the Owner of the utility when a physical conflict is determined to exist. The actual relocation will be accomplished by the Owner of the utility, structure or other physical obstruction unless otherwise specified in these Contract Documents. Any delays resulting from the required relocations of the utilities are the responsibility of the Contractor.

(23) UTILITY INTERFERENCE INCIDENTAL TO CONSTRUCTION

Where existing utility lines or structures are so located as to interfere with the Contractor's method of performing the work, but do not reasonably block or impede construction, under the Contract, any modification, alteration, or relocation of interfering utility, either permanent or temporary, shall be accomplished at the expense of the Contractor.

The Contractor shall give immediate notice to the Owner of the utility when an interference is determined to exist and shall obtain approval to relocate such utility or to discontinue service there from the Owner of the utility. The Owner of the utility shall have the right to do all work required to discontinue, relocate, and replace interfering utilities and charge the Contractor for all costs thereof. When approved by the City and the owner of the utility, all work required to discontinue, relocation and replace interfering utilities may be done by, or arranged for, by the Contractor. All such discontinuance, relocation, and replacement shall be accomplished in accordance with all requirements of the owner of the utility.

When notified by the Contractor that an interference or conflict has been determined to exist, the Owner will determine whether such interference shall be considered as required by construction or as incidental to construction.

(24) INTERFERING STRUCTURES

Take necessary precautions to prevent damage to existing structures where on the surface, aboveground, or underground. An attempt has been made to show major structures on the drawings. While the information has been compiled from the best available sources, its completeness and accuracy cannot be guaranteed, and it is presented as a guide to avoid known possible difficulties.

Protect existing structures (i.e., driveways, culverts) from damage, whether or not they lie within the right-of-way or the limits of the easements obtained by the Owner. Where existing structures are damaged during the work, they shall be restored at the Contractor's expense to at least their original condition or better and to the satisfaction of the Owner.

The Contractor may, with the approval of the Owner and adjacent property owner, and without additional compensation, remove and replace in a condition as good as or better than original, any small interfering structures such as fences, mail boxes and signposts that interfere with the Contractor's operations.

(25) NOISE AND DUST CONTROL

The Contractor shall so conduct all his operations that they will cause the least annoyance to the residents in the vicinity of the work, and shall comply with all applicable laws. Vehicles carrying rock, concrete, or other material shall be routed over such streets as will cause the least annoyance to the public and shall not be operated on public streets between the hours of 8 p.m. and 7 a.m. or on Sundays or legal holidays unless the Contractor

obtains written permission from appropriate agencies within the municipality (ies) in which the work is to be conducted.

All unpaved streets, roads, detours, haul roads, or roads used in the construction area shall be given a dust preventive treatment or periodically watered to prevent dust. Applicable environmental regulations for dust prevention shall be strictly enforced.

(26) STREET CLEANUP DURING CONSTRUCTION

Tracking or dropping of dirt or other materials from the site onto any public or private street shall be minimized. The Contractor shall clean all spilled dirt, gravel, or other foreign material caused by the construction operations from all streets and roads at the conclusion of each day's operation.

BID PROPOSAL

Proposal of
(hereinafter called "Bidder"), organized and existing under the laws of the State of
doing business as *.
To City of Pass Christian, Mississippi, (hereinafter called "Owner").
Gentlemen:
The Bidder, in compliance with your invitation for bids for:
ASPHALT REPAIR AND OVERLAY OF CITY STREETS
having examined the specifications with related documents and the site of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed project including the availability of materials and labor, hereby proposes to furnish all labor, materials and supplies, and to construct the project in accordance with the Contract Documents, within the time set forth therein, and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents, of which this proposal is a part.
Bidder hereby agrees to commence work under this contract on or before a date to be specified in written "Notice to Proceed" of the Owner and to fully complete the project within 60 consecutive calendar days thereafter as stated hereafter in this proposal. Bidder further agrees to pay as liquidated damages, the sum of \$200.00 for each consecutive calendar day thereafter as hereinafter provided in Paragraph B of the Supplemental General Conditions.
Bidder acknowledges receipt of the following addendum:
*Insert corporation, partnership or individual as applies
Complete unit price in words and figures under Item Description and the Extension (Unit Price x Quantity) in figures.
Bidder agrees to perform all the work described in the specifications and shown on the plans, for the following unit prices:

BASE BID SCHEDULE				
	ITEM			
NO.	DESCRIPTION	Q	UANTITY	EXTENSION
02334-A	CRUSHED LIMESTONE BASE (FM)		100 SY	
				\$
		(\$)	
02512-A	HOT BITUMINOUS PAVEMENT (SC-1, TYPE 8) (CHURCH AVE.)		40 TON	
				\$
		(\$)	
02512-B	HOT BITUMINOUS PAVEMENT (SC-1, TYPE 8) (REDWOOD DRIVE)		156 TON	
				\$
		(\$)	
02512-C	HOT BITUMINOUS PAVEMENT (SC-1, TYPE 8) (PALM AVE.)		170 TON	
				\$
		(\$)	
02512-D	COLD MILLING		972 SY	
				\$
		(\$)	
TOTAL P	BASE BID :			
IOIAL B	MOL DID .	(\$)
(AMOUNT	TS ARE TO BE IN WORDS AND FIGURES. IN CASE OF DISCREP		THE AMOUNT S	SHOWN IN WORDS

(AMOUNTS ARE TO BE IN WORDS AND FIGURES. IN CASE OF DISCREPANCY, THE AMOUNT SHOWN IN WORDS WILL GOVERN.

ADDITIVE ALTERNATE NO. 1 BID SCHEDULE			
	ITEM		
NO.	DESCRIPTION	QUANTITY	EXTENSION
02512-A1 HOT E	BITUMINOUS PAVEMENT (SC-1, TYPE 8) (EARL STREET)	330 TON	
			\$
		(\$)	
TOTAL ADDITVE ALTERNATE NO. 1 :			
		(\$)

(AMOUNTS ARE TO BE IN WORDS AND FIGURES. IN	N CASE OF DISCREPANCY, THE AMOUNT SHOWN IN WORDS
WILL GOVERN.	
Bidder understands that the Owner reserves the right to	reject any or all bids.

The Bidder agrees that this bid shall be good and may not be withdrawn for a period of 90 calendar days after the scheduled closing time for receiving bids.

Upon receipt of written notice of the acceptance of this bid, bidder will execute the formal contract within 10 days and deliver a Surety Bond or Bonds (if applicable) as required by Article 5 of the General Conditions. The bid security attached in the sum of

in the sum of:		
	(\$)
as liquidated damages for the delay and additional expens	ontract and bond are not executed within the time above set for se to the Owner caused thereby. In the event of the failure of t is the right to rescind the award and award the contract to the	
	Respectfully submitted:	
	Ву	
	Title	
	(SEAL - if bid is by corporation)	
Address:		

Cert. of Resp. No.

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, NON-COLLUSION AND OTHER RESPONSIBILITY MATTERS

Under Executive Order 12549 individuals or organizations debarred from participation in Federal Assistance Programs may not receive an assistance award under a federal program or subagreement there under for \$25,000 or more. Accordingly each recipient of a Federally-Funded contract or subcontract exceeding \$25,000 must complete the following certification (see 40 CFR 32.510). The prime bidder shall attach the copies of this certification to his bid.

The prospective participant certifies to the best of their knowledge and belief that it and its principals:

- (a) Have not either directly or indirectly entered into any agreement, participated in any collusion; or otherwise taken any action in restraint of free competitive bidding in connection with this contract; nor have any of its officials, partners, employees or principal owners.
- (b) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (c) Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (d) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and
- (e) Have not within a three year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 U.S.C. Subsection 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

Title of Project or Subcontract	
Prime or Subcontractor's Name	Signature/Date

() I am unable to certify to the above statements. Attached is my explanation.

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, NON-COLLUSION AND OTHER RESPONSIBILITY MATTERS

Under Executive Order 12549 individuals or organizations debarred from participation in Federal Assistance Programs may not receive an assistance award under a federal program or subagreement there under for \$25,000 or more. Accordingly each recipient of a Federally-Funded contract or subcontract exceeding \$25,000 must complete the following certification (see 40 CFR 32.510). The prime bidder shall attach the copies of this certification to his bid.

The prospective participant certifies to the best of their knowledge and belief that it and its principals:

- (a) Have not either directly or indirectly entered into any agreement, participated in any collusion; or otherwise taken any action in restraint of free competitive bidding in connection with this contract; nor have any of its officials, partners, employees or principal owners.
- (b) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (c) Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (d) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and
- (e) Have not within a three year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 U.S.C. Subsection 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

Title of Project or Subcontract	
Prime or Subcontractor's Name	Signature/Date

() I am unable to certify to the above statements. Attached is my explanation.

BID BOND

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

BIDDER (Name and Address):				
SURETY (Name and Address of Principal Pla	ace of Business):	:		
OWNER (Name and Address):				
BID Bid Due Date: Project (Brief Description Including Location	n):			
BOND Bond Number: Date (Not later than Bid due date): Penal sum	ords)		(Figures)	
Surety and Bidder, intending to be legally bou	and hereby, subje		e reverse side hereof, do eac	ch
cause this Bid Bond to be duly executed on its	s benan by its au		presentative.	
BIDDER		SURETY		
	(Seal			(Seal)
Bidder's Name and Corporate Seal)	Surety's Name and Corpo	orate Seal	
D		D		
By: Signature and Title		By: Signature and Title (Attach Power of Attorne		
Attest:		Attest:		
Attest: Signature and Title		Attest: Signature and Title		
Note: Above addresses are to be used for giving	ing required noti	ce.		

EJCDC NO. C-430 (2002 Edition)

00430-3

- 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. Payment of the penal sum is the extent of Surety's liability.
- 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 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 of 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.

EJCDC STANDARD FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR ON THE BASIS OF A STIPULATED PRICE

THIS AGREEMENT is dated as of the ____ day of ____ in the year ___ 2019 __ by and between

City of Pass Christian, 200 West Sce	nic Drive, Pass Christian, MS 39571	(hereinafter called
OWNER) and		
(hereinafter called CONTRACTOR).		
OWNER and CONTRACTOR, in con	sideration of the mutual covenants hereinafte	r set forth, agree as follows:
Article 1. WORK.		
CONTRACTOR shall complete all W generally described as follows:	Ork as specified or indicated in the Contract	Documents. The Work is
Asphalt Repair and Overlay o	f City Streets	
The Project for which the Work under scribed as follows:	the contract Documents may be the whole or	only part is generally de-
Entire Project		
A 41 L A DDO HEGT A DLADHGTED	ATOR	
Article 2. PROJECT ADMINISTRA	ATOR.	
The Project has been prepared by:	City of Pass Christian Public Works Department	
	Administrator and who is to act as OWNER's e rights and authority assigned to the Project	•

tract Documents in connection with completion of the Work in accordance with the Contract Documents.

Article 3. CONTRACT TIMES.

- 3.1 The Work will be substantially completed on or before ________, _____, and completed and ready for final payment in accordance with paragraph 14.13 of the General Conditions on or before _______,
- 3.1 The Work will be fully completed within <u>60</u> days after the date when the Contract Times commence to run as provided in paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with paragraph 14.07 of the General Conditions within <u>60</u> days after the date when the Contract Times commence to run.

[Where failure to reach a Milestone on time is of such consequence to OWNER that the assessment of liquidated damages is to be provided, appropriate amending or supplementing language should be inserted here.]

Article 4. CONTRACT PRICE.

OWNER shall pay CONTRACTOR for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to paragraphs 4.1 and 4.2 below:

4.1 for all Work other than Unit Price Work, a Lump Sum of:

N/A

All specific cash allowances are included in the above price and have been computed in accordance with paragraphs 11.02 of the General Conditions;

plus

4.2 for all Unit Price Work, an amount equal to the sum of the established unit price for each separately identified item of Unit Price Work times the estimated quantity of that item as indicated in this paragraph 4.2:

UNIT PRICE WORK

TOTAL OF ALL UNIT PRICES_-

As provided in paragraph 11.03 of the General Conditions estimated quantities are not guaranteed, and determinations of actual quantities and classification are to be made by Project Administrator as provided in paragraph 9.07 of the General Conditions. Unit prices have been computed as provided in paragraph 11.03.C. of the General Conditions.

Article 5. PAYMENT PROCEDURES.

CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by Project Administrator as provided in the General Conditions.

- 5.1. Progress Payments; Retainage. OWNER shall make progress payments on account of the Contract Price on the basis of CONTRACTOR's Applications for Payment as recommended by PROJECT ADMINISTRATOR, within 30 days of approval for payment by the City, as provided in paragraphs 5.1.1. and 5.1.2. below. All such payments will be measured by the schedule of values established in paragraph 2.07 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 Contract 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 PROJECT ADMINISTRATOR shall determine, or OWNER may withhold, in accordance with paragraph 14.02.B.5 of the General Conditions.
 - 95 % of Work completed and materials and equipment delivered and stored per paragraph 14.02 of the General Conditions (with the balance being retainage). If Work has been 50% completed as determined by PROJECT ADMINISTRATOR, and if the character and progress of the Work have been satisfactory to OWNER and PROJECT ADMINISTRATOR, OWNER, on recommendation of PROJECT ADMINISTRATOR, may determine to return 50% of the retainage held to date, and the remaining progress payments prior to Contract Completion will be in an amount equal to 97.5% of the Work completed (with balance being retainage).
 - 5.1.2. Upon Completion of a portion of the project, in an amount sufficient to increase total payments to CONTRACTOR to _____98 ___ % of the Contract Price (with the balance being retainage), less such amounts as PROJECT ADMINISTRATOR shall determine, or OWNER may withhold, in accordance with paragraph 14.02.B.5 of the General Conditions.
 - 5.1.3 Contractors shall submit monthly certification to PROJECT ADMINISTRATOR indicating payments to subcontractors on prior payment requests.
- 5.2. *Final Payment*. Upon final completion and acceptance of the Work in accordance with paragraph 14.07 of the General Conditions, OWNER shall pay the remainder of the Contract Price as recommended by PROJECT ADMINISTRATOR as provided in said paragraph 14.07.

Article 6. INTEREST.

All moneys 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 paragraph 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 has carefully studied all reports of explorations and tests of subsurface conditions at or contiguous to the site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the site (except Underground Facilities) which have been identified in the Supplementary Conditions as provided in paragraph 4.02.A of the General Conditions. CONTRACTOR accepts the determination set forth in paragraph N of the Supplementary Conditions of the extent of the "technical data" contained in such reports and drawings upon which CONTRACTOR is entitled to rely as provided in paragraph 4.02 of the General Conditions. CONTRACTOR acknowledges that such reports and drawings are not Contract Documents and may not be complete for CON-TRACTOR's purposes. CONTRACTOR acknowledges that OWNER and PROJECT ADMINISTRATOR 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 of 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 that relates 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.
- 7.7. CONTRACTOR has given PROJECT ADMINISTRATOR written notice of all conflicts, errors, ambiguities or discrepancies that CONTRACTOR has discovered in the Contract Documents and the written resolution thereof by PROJECT ADMINISTRATOR is acceptable to CONTRACTOR, and the

Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

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 1 to 8, inclusive).
- 8.2. Information to Bidders (pages 1 8, inclusive)
- 8.3. Exhibits to this Agreement. NONE
- 8.4. Performance, Payment, and other Bonds.
- 8.5. Notice of Award
- 8.6. Notice to Proceed.
- 8.7. General Conditions (pages 1 to 41, inclusive), with Exhibit GC-A.
- 8.8. Supplemental Conditions (pages 1 to 19, inclusive).
- 8.9. Special Conditions (pages 1 to 10, inclusive).
- 8.10. Specifications bearing the title *Technical Specifications* and consisting of 24 divisions as listed in the table of contents thereof.
- 8.11. Drawings: N/A
- 8.12. Addenda:
- 8.13. CONTRACTOR's Bid (pages 1 to 2, inclusive).
- 8.14. Documentation submitted by CONTRACTOR prior to Notice of Award: NONE
- 8.15. 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 paragraph 3.04 of the General Conditions.

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 paragraph 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, moneys that may become due and moneys 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 to 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 to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

9.5 OTHER PROVISIONS.

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement in triplicate. One counterpart each has been delivered to OWNER, CONTRACTOR and PROJECT ADMINISTRATOR. All portions of the Contract Documents have been signed, initialed or identified by OWNER and CONTRACTOR or identified by PROJECT ADMINISTRATOR on their behalf.

This Agreement will be effective on of the Agreement).	, 2019 (which is the Effective Date
OWNER City of Pass Christian	CONTRACTOR:
City of Fass Christian	
By: Leo "Chipper" McDermott, Mayor	By:
[CORPORATE SEAL]	[CORPORATE SEAL]
Attest	Attest
Address for giving notices	Address for giving notices
200 West Scenic Drive	
Pass Christian, MS 39571	
(If OWNER is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of Agreement.)	Agency 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 Bond Number: Date (Not earlier than Contract Date): Amount: Modifications to this Bond Form:	
Surety and Contractor, intending to be legally bound hereby, a Performance Bond to be duly executed on its behalf by its aut	subject to the terms printed on the reverse side hereof, do each cause thi horized officer, agent, or representative.
CONTRACTOR AS PRINCIPAL Company:	SURETY
Signature: (Seal) Name and Title:	Surety's Name and Corporate Seal (Seal)
(Space is provided below for signatures of additional	By: Signature and Title (Attach Power of Attorney)
parties, if required.)	Attest: Signature and Title
CONTRACTOR AS PRINCIPAL Company:	SURETY
Signature: (Seal) Name and Title:	Surety's Name and Corporate Seal (Seal)
	By: Signature and Title (Attach Power of Attorney)
	Attest: Signature and Title:

EJCDC No. C-610 (2002 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. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner for the performance of the Contract, which is incorporated herein by reference.
- 2. If Contractor performs the Contract, Surety and 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, Surety's obligation under this Bond shall arise after:
 - 3.1. Owner has notified Contractor and Surety, at the addresses described in Paragraph 10 below, that Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with Contractor and Surety to be held not later than 15 days after receipt of such notice to discuss methods of performing the Contract. If Owner, Contractor and Surety agree, Contractor shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive Owner's right, if any, subsequently to declare a Contractor Default; and
 - 3.2. Owner has declared a Contractor Default and formally terminated Contractor's right to complete the Contract. Such Contractor Default shall not be declared earlier than 20 days after Contractor and Surety have received notice as provided in Paragraph 3.1; and
 - 3.3. Owner has agreed to pay the Balance of the Contract Price to:
 - 1. Surety in accordance with the terms of the Contract;
 - Another contractor selected pursuant to Paragraph 4.3 to perform the Contract.
- 4. When Owner has satisfied the conditions of Paragraph 3, Surety shall promptly and at Surety's expense take one of the following actions:
 - Arrange for Contractor, with consent of 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 Owner for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by Owner and Contractor selected with 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 Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by Owner resulting from 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:
 - After investigation, determine the amount for which it may be liable to Owner and, as soon as practicable after the amount is determined, tender payment therefor to Owner; or
 - 2. Deny liability in whole or in part and notify Owner citing reasons therefor.
- 5. If Surety does not proceed as provided in Paragraph 4 with reasonable promptness, Surety shall be deemed to be in default on this Bond 15 days after receipt of an additional written notice from Owner to Surety demanding that Surety perform its obligations under this Bond, and Owner shall be entitled to enforce any remedy available to Owner. If Surety proceeds as provided in Paragraph 4.4, and Owner refuses the payment tendered or Surety has denied liability, in whole or in part, without further notice Owner shall be entitled to enforce any remedy available to Owner.

- 6. After Owner has terminated Contractor's right to complete the Contract, and if Surety elects to act under Paragraph 4.1, 4.2, or 4.3 above, then the responsibilities of Surety to Owner shall not be greater than those of Contractor under the Contract, and the responsibilities of Owner to Surety shall not be greater than those of Owner under the Contract. To a limit of the amount of this Bond, but subject to commitment by Owner of the Balance of the Contract Price to mitigation of costs and damages on the Contract, Surety is obligated without duplication for:
 - 6.1. The responsibilities of Contractor for correction of defective Work and completion of the Contract;
 - 6.2. Additional legal, design professional, and delay costs resulting from Contractor's Default, and resulting from the actions or failure to act of 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 nonperformance of Contractor.
- 7. Surety shall not be liable to Owner or others for obligations of 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 Owner or its heirs, executors, administrators, or successors.
- 8. Surety hereby waives notice of any change, including changes of time, to 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 Contractor ceased working or within two years after 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 Surety, Owner, or 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 requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory 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 Owner to Contractor under the Contract after all proper adjustments have been made, including allowance to Contractor of any amounts received or to be received by Owner in settlement of insurance or other Claims for damages to which Contractor is entitled, reduced by all valid and proper payments made to or on behalf of Contractor under the Contract.
- 12.2. Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.
- 12.3. Contractor Default: Failure of 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 Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or comply with the other terms thereof.

FOR INFORMATION ONLY – Name, Address and Telephone Surety Agency or Broker Owner's Respresentative (engineer or other party)

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 Principal Place of Business):
OWNER (Name and Address):	
CONTRACT Date:	
Amount: Description (Name and Location):	
BOND Bond Number: Date (Not earlier than Contract Date): Amount:	
Modifications to this Bond Form:	
Surety and Contractor, intending to be legally bound h Payment Bond to be duly executed on its behalf by its	nereby, subject to the terms printed on the reverse side hereof, do each cause this authorized officer, agent, or representative.
CONTRACTOR AS PRINCIPAL Company:	SURETY
Signature: (So Name and Title:	eal) Surety's Name and Corporate Seal (Seal)
Name and Title.	By:
	Signature and Title
(Space is provided below for signatures of add parties, if required.)	(Attach Power of Attorney) itional
	Attest: Signature and Title
CONTRACTOR AS PRINCIPAL Company:	SURETY
	eal) (Seal)
Name and Title:	Surety's Name and Corporate Seal
	By:
	Signature and Title (Attach Power of Attorney)
	Attest:
	Signature and Title:

EJCDC No. C-615 (2002 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. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner to pay for labor, materials, and equipment furnished by Claimants for use in the performance of the Contract, which is incorporated herein by reference.
- 2. With respect to Owner, this obligation shall be null and void if Contractor:
 - Promptly makes payment, directly or indirectly, for all sums due Claimants, and
 - 2.2. Defends, indemnifies, and holds harmless Owner from all claims, demands, liens, or suits alleging non-payment by Contractor by any person or entity who furnished labor, materials, or equipment for use in the performance of the Contract, provided Owner has promptly notified Contractor and 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 Contractor and Surety, and provided there is no Owner Default.
- 3. With respect to Claimants, this obligation shall be null and void if Contractor promptly makes payment, directly or indirectly, for all sums due.
- 4. Surety shall have no obligation to Claimants under this Bond until:
 - 4.1. Claimants who are employed by or have a direct contract with Contractor have given notice to Surety (at the addresses described in Paragraph 12) and sent a copy, or notice thereof, to 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 Contractor:
 - Have furnished written notice to Contractor and sent a copy, or notice thereof, to 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 or equipment were furnished or supplied, or for whom the labor was done or performed; and
 - Have either received a rejection in whole or in part from Contractor, or not received within 30 days of furnishing the above notice any communication from Contractor by which 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 Surety and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to Contractor.
- 5. If a notice by a Claimant required by Paragraph 4 is provided by Owner to Contractor or to Surety, that is sufficient compliance.
- 6. When a Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at Surety's expense take the following actions:
 - 6.1. Send an answer to that Claimant, with a copy to 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.
- 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 Surety.

- 8. Amounts owed by Owner to Contractor under the Contract shall be used for the performance of the Contract and to satisfy claims, if any, under any performance bond. By Contractor furnishing and Owner accepting this Bond, they agree that all funds earned by Contractor in the performance of the Contract are dedicated to satisfy obligations of Contractor and Surety under this Bond, subject to Owner's priority to use the funds for the completion of the Work.
- 9. Surety shall not be liable to Owner, Claimants, or others for obligations of Contractor that are unrelated to the Contract. 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. 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 Surety, Owner, or Contractor shall be mailed or delivered to the addresses shown on the signature page. Actual receipt of notice by Surety, Owner, or 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 requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory 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, 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 Contractor, or with a first-tier subcontractor of 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 Contractor and 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 Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.
- 15.3. Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or comply with the other terms thereof.

FOR INFORMATION ONLY – Name, Address and Telephone Surety Agency or Broker:
Owner's Representative (engineer or other party):

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







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

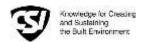
AMERICAN COUNCIL OF ENGINEERING COMPANIES

AMERICAN SOCIETY OF CIVIL ENGINEERS

This document has been approved and endorsed by



The Associated General Contractors of America



Construction Specifications Institute

Copyright ©2002

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

American Council of Engineering Companies 1015 15th Street, N.W., Washington, DC 20005

American Society of Civil Engineers 1801 Alexander Bell Drive, Reston, VA 20191-4400

These General Conditions have been prepared for use with the Suggested Forms of Agreement Between Owner and Contractor Nos. C-520 or C-525 (2002 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 Construction Documents, General and Instructions (No. C-001) (2002 Edition). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. C-800) (2002 Edition).

TABLE OF CONTENTS

Page

A DELCI	E 1. DEFINITIONS AND TERMINOLOGY.	
	E 1 - DEFINITIONS AND TERMINOLOGY	
1.01	Defined Terms	
1.02	Terminology	
	E 2 - PRELIMINARY MATTERS	
2.01	Delivery of Bonds and Evidence of Insurance	
2.02	Copies of Documents	
2.03	Commencement of Contract Times; Notice to Proceed	
2.04	Starting the Work	
2.05	Before Starting Construction	
2.06	Preconstruction Conference	
2.07	Initial Acceptance of Schedules	
	E 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE	
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	
3.06	Electronic Data	11
	E 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS	
	NMENTAL CONDITIONS; REFERENCE POINTS	
4.01	Availability of Lands	
4.02	Subsurface and Physical Conditions	
4.03	Differing Subsurface or Physical Conditions	
4.04	Underground Facilities	
4.05	Reference Points	
4.06	Hazardous Environmental Condition at Site	
	E 5 - BONDS AND INSURANCE	
5.01	Performance, Payment, and Other Bonds	
5.02	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	
	E 6 - CONTRACTOR'S RESPONSIBILITIES	
6.01	Supervision and Superintendence	
6.02	Labor; Working Hours	
6.03	Services, Materials, and Equipment	
6.04	Progress Schedule	
6.05	Substitutes and "Or-Equals"	
6.06	Concerning Subcontractors, Suppliers, and Others	
6.07	Patent Fees and Royalties	
6.08	Permits	
6.09	Laws and Regulations	
6.10	Taxes	
6.11	Use of Site and Other Areas	
6.12	Record Documents	
6.13	Safety and Protection	
6.14	Safety Representative	
6 1 5	Hazard Communication Programs	23

6.16	Emergencies	23		
6.17	Shop Drawings and Samples			
6.18	Continuing the Work			
6.19	Contractor's General Warranty and Guarantee			
6.20	Indemnification			
6.21	Delegation of Professional Design Services			
ARTICLE 7	7 - OTHER WORK AT THE SITE			
7.01	Related Work at Site			
7.02	Coordination			
7.03	Legal Relationships			
ARTICLE 8	3 - OWNER'S RESPONSIBILITIES			
8.01	Communications to Contractor	26		
8.02	Replacement of Engineer	26		
8.03	Furnish Data	26		
8.04	Pay When Due	26		
8.05	Lands and Easements; Reports and Tests	26		
8.06	Insurance	26		
8.07	Change Orders			
8.08	Inspections, Tests, and Approvals	26		
8.09	Limitations on Owner's Responsibilities			
8.10	Undisclosed Hazardous Environmental Condition			
8.11	Evidence of Financial Arrangements			
ARTICLE 9	- ENGINEER'S STATUS DURING CONSTRUCTION			
9.01	Owner's Representative			
9.02	Visits to Site			
9.03	Project Representative			
9.04	Authorized Variations in Work			
9.05	Rejecting Defective Work			
9.06	Shop Drawings, Change Orders and Payments			
9.07	Determinations for Unit Price Work			
9.08	Decisions on Requirements of Contract Documents and Acceptability of Work			
9.09	Limitations on Engineer's Authority and Responsibilities			
	0 - CHANGES IN THE WORK; CLAIMS			
10.01	Authorized Changes in the Work			
10.02	Unauthorized Changes in the Work			
10.03	Execution of Change Orders			
10.04	Notification to Surety			
10.05	Claims			
	1 - COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK			
11.01 11.02	Cost of the Work			
11.02				
	Unit Price Work2 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES			
12.01	Change of Contract Price			
12.01	Change of Contract Times			
12.02	Delays			
	3 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK			
13.01	Notice of Defects			
13.01	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			
13.09	Owner May Correct Defective Work			
	ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION			
14.01	Schedule of Values			
14.02	Progress Payments			
14.03	Contractor's Warranty of Title			
14.04	Substantial Completion			

14.05	Partial Utilization	38
14.06	Final Inspection	38
14.07	Final Payment	38
14.08	Final Completion Delayed	39
14.09	Waiver of Claims	39
ARTICLE	15 - SUSPENSION OF WORK AND TERMINATION	
15.01	Owner May Suspend Work	39
15.02	Owner May Terminate for Cause	39
15.03	Owner May Terminate For Convenience	
15.04	Contractor May Stop Work or Terminate	40
ARTICLE	16 - DISPUTE RESOLUTION	41
16.01	Methods and Procedures	41
ARTICLE	17 - MISCELLANEOUS	41
17.01	Giving Notice	41
17.02	Computation of Times	41
17.03	Cumulative Remedies	41
17.04	Survival of Ohligations	41
17.05	Controlling Law	41
17.06	Controlling Law	41

GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

- A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
- 1. Addenda--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
- 2. *Agreement*--The written instrument 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 Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
- 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. *Bidder*--The individual or entity who submits a Bid directly to Owner.
- 7. Bidding Documents--The Bidding Requirements and the proposed Contract Documents (including all Addenda).
- 8. Bidding Requirements--The Advertisement or Invitation to Bid, Instructions to Bidders, bid security of acceptable form, if any, and the Bid Form with any supplements.

- 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-- Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions 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 Milestones, if any, (ii) achieve Substantial Completion; and (iii) 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. *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.
- 21. *General Requirements*--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.
- 22. 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.
- 23. *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.
- 24. 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.
- 25. *Liens*--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.
- 26. *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.
- 27. *Notice of Award--*The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.
- 28. *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.
- 29. *Owner*--The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.
 - 30. *PCBs*--Polychlorinated biphenyls.
- 31. 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.

- 32. *Progress Schedule*--A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
- 33. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.
- 34. *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.
- 35. *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.
- 36. *Related Entity* -- An officer, director, partner, employee, agent, consultant, or subcontractor.
- 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. Schedule of Submittals--A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.
- 40. Schedule of Values--A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
- 41. 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.
- 42. *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.
- 43. Specifications--That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain

administrative requirements and procedural matters applicable thereto.

- 44. *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.
- 45. 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.
- 46. *Successful Bidder*--The Bidder submitting a responsive Bid to whom Owner makes an award.
- 47. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements these General Conditions.
- 48. *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.
- 49. 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.
- 50. *Unit Price Work*--Work to be paid for on the basis of unit prices.
- 51. Work--The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.
- 52. 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.

1.02 Terminology

A. The following words or terms are not defined but, when used in the Bidding Requirements or Contract Documents, have the following meaning.

B. Intent of Certain Terms or Adjectives

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered", "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action or determination will be solely to evaluate, in general, the Work for compliance with the 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 is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

C. Day

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

D. Defective

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

E. 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.
- F. 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 and Evidence of Insurance

- A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. 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.

2.02 Copies of Documents

- A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. 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. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:
- 1. a preliminary Progress Schedule; indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;
 - 2. a preliminary Schedule of Submittals; and
- 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.06 Preconstruction Conference

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 Initial Acceptance of Schedules

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 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 the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
- 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
- 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 Intent

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. 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

- A. Standards, Specifications, Codes, Laws, and Regulations
- 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. No such provision or instruction shall be effective to assign to Owner, or Engineer, or any of, their Related Entities, 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

- 1. Contractor's Review of Contract Documents Before Starting Work: 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.
- 2. Contractor's Review of Contract Documents During Performance of Work: 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 promptly report it to Engineer in writing. 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.
- 3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor 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 by either a Change Order or 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:

1. A Field Order;

- 2. Engineer's approval of a Shop Drawing or Sample; (Subject to the provisions of Paragraph 6.17.D.3); or
- 3. 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 all of the Work under a direct or indirect contract with Contractor, shall not:
- 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's consultants, including electronic media editions; or
- 2. 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.
- B. The prohibition of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

3.06 Electronic Data

A. Copies of data furnished by Owner or Engineer to Contractor or Contractor to Owner or Engineer that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's

sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

- B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party..
- C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL 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 or a part thereof, 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.

- 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 or Engineer, or any of their Related Entities 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 Conditions

- 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 9.07 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 with respect to 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 as required by Paragraph 4.03.A.
- 3. 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 and Engineer, and any of their Related Entities 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 by 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.

2. 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 or 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 or Engineer, or any of their Related Entities 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.A); 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, and Engineer, and the officers, directors, partners, employees, 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. G 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 and Engineer, and the officers, directors, employees. consultants. agents. 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.H 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 do not 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 of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified

in Paragraph 13.07, whichever is later, 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 the agent's authority to act.
- C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of 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.
- B. 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:
 - a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or
 - b. 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 required by this Paragraph 5.04 shall:
- 1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insured (subject to any customary exclusion regarding professional liability) Owner and Engineer, 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 employees, officers, directors, partners, agents, 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 6.11 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 30 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 claimsmade basis, remain in effect for at least two years after final payment.
 - a. 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, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, 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 insured or 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, (other than caused by flood) 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, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, 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 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. 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, and Engineer, 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, 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. consultants 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, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insured or additional insured (and the officers, directors, partners. employees. agents, consultants 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, and Engineer, and the officers, directors, partners, employees, agents, 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 perils 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, or Engineer, and the officers, directors, partners, employees, agents, 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 .

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 2.01.B. 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.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

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. 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.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent 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 and lay out the Work and perform construction 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. Contractor will not permit the performance of Work on a 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 Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.
- 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 special warranties and guarantees required 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.
- C. 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. Such adjustments will comply with any provisions of the General Requirements applicable thereto.
- 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

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:
 - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole,
 - 3) it has a proven record of performance and availability of responsive service; and
 - b. Contractor certifies that, if approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times, and

2) it will conform substantially 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 requirements for review by Engineer 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 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:
- 1) shall certify that the proposed substitute item will:
 - a) perform adequately the functions and achieve the results called for by the general design,
 - b) be similar in substance to that specified, and
 - c) be suited to the same use as that specified;
 - 2) will state:
 - a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time;
 - b) 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 other work on the Project) to adapt the design to the proposed substitute item; and

- c) 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;
- 3) will identify:
- a) all variations of the proposed substitute item from that specified, and
- b) available engineering, sales, maintenance, repair, and replacement services:
- 4) and shall 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,
- B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is 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 requirements for review by Engineer will be similar to those provided in Paragraph 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 may require Contractor to furnish additional data about the proposed substitute item. 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 Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B Whether or not Engineer approves a substitute item so proposed or submitted by Contractor, Contractor shall reimburse Owner for the charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the charges of Engineer for making changes in the Contract

Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

- 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 . 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:
- 1. 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
- 2. shall anything in the Contract Documents 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 approagreement between Contractor and 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 Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, and Engineer,, 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, 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.

B. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, employees, agents, consultants subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

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. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

6.09 Laws and Regulations

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. 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 shall 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.

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.
- 3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, employees, agents, consultants partners, subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any 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 the Work 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, 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.
- C. 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 Draw-

ings or Specifications or to the acts or omissions of Owner or Engineer or , 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).

D. 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 and Samples to Engineer for review and approval in accordance with the acceptable Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

1. Shop Drawings

a. Submit number of copies specified in the General Requirements.

- b. 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.D.
- 2. Samples: Contractor shall also submit Samples to Engineer for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals.
 - a. Submit number of Samples specified in the Specifications.
 - b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.
- B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals , any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. Submittal Procedures

- 1. Before submitting each Shop Drawing or Sample, Contractor shall have determined and verified:
 - a. all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - b. the suitability of 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 Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto; and
 - d. 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 certification that Contractor has satisfied Contractor's obligations under the Contract Documents

with respect to Contractor's review and approval of that submittal.

3. With each submittal, Contractor shall give Engineer specific written notice of any variations, that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawing's or Sample Submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.

D. Engineer's Review

- 1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of 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 shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1.

E. 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 that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its Related Entities shall be entitled to rely on representation of Contractor's warranty and guarantee.
- B. 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.
- C. 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 review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;
 - 6. any inspection, test, or approval by others; or
 - 7. 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 and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or

arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage 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 but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable .

- B. In any and all claims against Owner or Engineer or any of their 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 Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, partners, employees, agents, consultants and subcontractors 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.

6.21 Delegation of Professional Design Services

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.
- B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal

shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

ARTICLE 7 - OTHER WORK AT THE SITE

7.01 Related Work at Site

- A. Owner may perform other work related to the Project at the Site with Owner's employees, or via 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, each utility owner and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, 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. 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 will be affected. The duties and responsibilities of 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.

7.03 *Legal Relationships*

- A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.
- B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's actions or inactions.
- C. Contractor shall be liable to Owner and any other contractor for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's action or inactions.

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 When Due

A. Owner shall make payments to Contractor 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.

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 Condition

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 9.09. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

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 authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 9.09. 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 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 or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties 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.

9.05 Rejecting Defective Work

A. Engineer will have authority to 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.

- A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.
- B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.
- C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.
- D. In connection with Engineer's authority as to Applications for Payment, see Article 14.

9.07 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.

9.08 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. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question
- B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believe that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.
- C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.
- D. When functioning as interpreter and judge under this Paragraph 9.08, 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.

9.09 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 9.09 shall also apply to, the Resident Project Representative, if any, and assistants, if any.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

10.01 Authorized Changes in the Work

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work by 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 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*

- A. Engineer's Decision Required: All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.
- B. Notice: Written notice stating the general nature of each Claim, 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. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, 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). 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).
- C. Engineer's Action: Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:
 - 1. deny the Claim in whole or in part,
 - 2. approve the Claim, or
- 3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.
- D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.
- E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.

F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

ARTICLE 11 - COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

11.01 Cost of the Work

- A. Costs Included: The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, 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 therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and 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, expresses, and similar petty cash items in connection with the Work.
- i. 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, safety 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 Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 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 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. Cash Allowances

- 1. Contractor agrees that:
- a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
- b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

C. Contingency Allowance

- 1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor 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.

- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. 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 9.07.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. 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. 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. 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 may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times 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 covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

12.03 Delays

- A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times 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.
- B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times , or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- C If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.
- D. Owner, Engineer and the Related Entities of each of them 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 by Contractor on or in connection with any other project or anticipated project.
- E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for 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.

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, their consultants and 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.C; 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.
- C. If it is found that the uncovered 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.
- D. If, the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, 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. Promptly after receipt of notice, 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).
- B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

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 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:

- 1. repair such defective land or areas; or
- 2. correct such defective Work; or
- 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
- 4. 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.

- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. 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.
- C. 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 .
- D. 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.
- E. 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 or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, 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 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

- 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. 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 progress 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 9.07, 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:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or
 - b. 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.
- 4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work, or
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
 - d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
- 5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 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 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 Owner 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 will 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.
- B. Promptly after Contractor's notification, , Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a 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.
- D. 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, and 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.

E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to complete or correct items on the tentative list.

14.05 Partial Utilization

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions.
- 1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor will certify to Owner and Engineer 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.
- 2. 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.
- 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 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.
- 4. No use or 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:
 - a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.7;
 - b. consent of the surety, if any, to final payment;
 - c. a list of all Claims against Owner that Contractor believes are unsettled; and
 - d. 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. Engineer's Review of Application and Acceptance
- 1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations

under the Contract 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 Contractor 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, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and , 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 (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, 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 Contractor against Owner other than those previously made in accordance

with the requirements herein and expressly acknowledged by Owner in writing as 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 granted 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 surety) seven days written notice of its intent to terminate the services of Contractor:
- 1. 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),
- 2. 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

- 3. complete the Work as Owner may deem expedient.
- C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds 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.
- D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.
- E. 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.
- F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B, and 15.02.C.

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, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
- 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

- 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;
- 3. 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. 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, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) 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.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, 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. Either Owner or Contractor may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The mediation will be

governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement. The request for mediation shall be submitted in writing to the American Arbitration Association and the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.

- B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.
- C. If the Claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:
- 1. elects in writing to invoke any dispute resolution process provided for in the Supplementary Conditions, or
- 2. agrees with the other party to submit the Claim to another dispute resolution process, or
- 3. gives written notice to the other party of their intent to submit the Claim to a court of competent jurisdiction.

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:
- 1. 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

2. 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. 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 Contract or termination of the services of Contractor.

17.05 Controlling Law

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

17.06 *Headings*

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

SUPPLEMENTAL GENERAL CONDITIONS

A. INSURANCE

1) Contractor's Liability Insurance

As required under Article 5.04 of the General Conditions, Contractor shall purchase and maintain insurance coverage of the types required. In conformance with State Law, policy limits for General Liability, Automobile Liability, and Property Damage shall be not less than \$1,000,000 aggregate.

2) Worker's Compensation Insurance

Contractor and each subcontractor must submit evidence of coverage per Mississippi State Law.

3) Property Insurance

The Owner hereby gives notice to the Contractor that the property insurance specified under Article 5.06 of the General Conditions will <u>NOT</u> be purchased and maintained by the Owner.

DELETE Paragraph 5.06A in its entirety and INSERT the following in its place:

5.06. Contractor shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof.

1. This insurance shall:

- a. include the interests of Owner, Contractor, Subcontractors, and any other individuals or entities identified herein, and the officers, directors, partners, employees, agents and other consultants and subcontractors of any of them each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured:
- b. in addition to the individuals and entities specified, include additional insured per Paragraph (4), below.
- c. 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 and damage to the Work, temporary buildings, falsework, 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 (other than that caused by flood), and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;

- d. include expenses incurred in the repair or replacement of any insured property;
- e. 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 Project Administrator or Public Works Director;
- f. allow for partial utilization of the Work by Owner;
- g. include testing and startup; and
- h. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner and Contractor with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.
- 2. Contractor shall be responsible for any deductible or self-insured retention.
- 3. The policies of insurance required to be purchased and maintained by Contractor in accordance with this Paragraph shall comply with the requirements of paragraph 5.06C of the General Conditions.
- 4) Property Insurance

The City of Pass Christian shall be listed as additional insured's on all policies.

- 5) Marine Insurance N/A
 - Contractor's insurance coverage shall include coverage against risks to his own employees in a marine environment, and coverage against injury or damage to persons and property caused by Contractor in a marine environment (\$1,000,000 aggregate limit).
- 6) A Certificate of Insurance with the appropriate modifications required for acceptance is provided as Figure 5.03.C

FIGURE 5.03.C SAMPLE CERTIFICATE OF INSURANCE

ACORD, CERTIFICATE OF LIABILITY INSURANCE						
00000	ONLY AND HOLDER	THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.				
			INSURERS AFFORDING COVERAGE			
NISURED		INSURER A: N	INSURER A: NAME OF INSURANCE COMPANY			
		INSURER B	INSURER B.			
		INSURER C				
	INSURER D	all occurred as				
	INBURER E	INSURER E				
WERAGES THE POLICIES OF INSURANCE LISTED BELO ANY REQUIREMENT, TERM OR CONDITION MAY PERTAIN, THE INSURANCE AFFORDED POLICIES, AGGREGATE LIMITS SHOWN MAY	OF ANY CONTRACT OR OTH BY THE POLICES DESCRIB	HER DOCUMENT WITH ED HEREIN IS SUBJECT PAID CLAIMS:	RESPECT TO WHI T TO ALL THE TERM	CH THIS CERTIFICATE MA	AY BE ISSUED OF	
NSPD TYPE OF INSURANCE	POLICYNAMBER	DATE (MWODYY)	DATE (MANDOYY)	UMS		
GENERAL LIABILITY				BACH COCURRENCE	4	
COMMERCIAL GENERAL LIABILITY				DAMAGE TO RENTED PREMISES (Sa occurence)	1	
GLAIMS MADE OCCUR				MED EXP (Any one person)	1	
				PERSONAL & ADV INJURY GENERAL A GGREGATE	4	
GENLAGGREGATE UNIT APPLIES PER	CAMPLES	COTICIOAT	-	PRODUCTS - COMPOPAGO	1	
POUCY ACT LOC	SAMPLE C	EKTIFICAT	E	Production - Schedule 1999	-	
AUTOMOBILE LIABRITY ANY AUTO				COMBRNED SINGLE LINIT (Sa accident)	ŧ	
ALL OWNED AUTOS SCHEDULED AUTOS				BODEN INJURY (Per person)		
HIRED AUTOS NON-OWNED AUTOS				BODILY INJURY (Per accident)		
				PROPERTY DAMAGE Per accident	£):	
GARAGE LIABILITY				AUTO ONLY-EA ACCIDENT	4	
ANVALITO				OTHER THAN EA ACC	-	
		_	-	3633	ric .	
OCCUR CLAIMS MADE				EACH COOURRENCE	1	
				AGGREGATE	1	
DEDUCTIBLE				-	1	
RETENTION \$					1	
WORKER'S COMPENSATION AND				TORY LIMITS OF		
EMPLOYERS: LIABILITY ANY PROPRIETOR PARTNER/EXECUTIVE				EL EACHACOIDENT	3	
OF RICERMENBER EXCLUDED?				EL DISEASE - EA EMPLOYEE	1	
Hyps, describe sider SPS, GAL, PROVISIONS below				EL DISEASE - POLICY LIMIT	1	
OTHER.						
			n.	Ĭ		
CERTIFICATE HOLDER			CANCELLATION			
		DATE THEREOF, NOTICE TO THE C	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE GANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUMS INSURER WILLXAXXXXXX TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
		XXXXXXXX	with the same of t			
		AUTHORIZED REPR	desentative.			

B. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

- 1) It is hereby understood and mutually agreed, by and between the Contractor and the Owner, that the date of beginning and the time for completion as specified in the Contract of the work to be done hereunder are ESSENTIAL CONDITIONS of this contract; and it is further mutually understood and agreed that the work embraced in this contract shall be commenced on a date to be specified in the Notice to Proceed.
- 2) The Contractor agrees that said work shall be prosecuted regularly, diligently and uninterruptedly at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and the Owner, that the time for the completion of the work described herein is a reasonable time for the completion of the same, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.
- 3) If the said Contractor shall neglect, fail or refuse to complete the work within the time herein specified, or any proper extensions thereof granted by the Owner, then the Contractor does hereby agree, as a part consideration for the awarding of this contract, to pay to the Owner the amount specified for such breach of contract as hereinafter set forth, for each and every calendar day that the Contractor shall be in default after the time stipulated in the contract for completing the work. The said amount is fixed and agreed upon by and between the Contractor and the Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain, and said amount is agreed to be the amount of damages which the Owner would sustain and said amount shall be retained from time to time by the Owner from current periodical estimates.
- 4) It is further agreed that time is of the essence of each and every portion of this contract and of the specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and whereunder the contract any additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence of this contract. Provided, that the Contractor shall not be charged with liquidated damages or any excess cost when the Owner determines that the Contractor is without fault and the Contractor's reasons for the time extension are acceptable to the Owner; provided further, that the Contractor shall not be charged with liquidated damages of any excess when the delay in completion of the work is due:
 - i. To the failure of the Owner to deliver to the Contractor, on or before the date for the work to be commenced as specified in the NOTICE TO PROCEED, all of the materials and equipment which the Owner is to furnish to the Contractor as provided in the Contract Documents. Any such delay shall constitute an automatic extension of the Contract Time by an amount of time corresponding to the delay.
 - ii. To any preference, priority or allocation order duly issued by the Government.

- iii. To unforeseeable cause beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God, or of the public enemy, acts of the Owner, acts of another Contractor in the performance of a contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and severe weather, and
- iv. To any delays of subcontractors or suppliers occasioned by any of the causes specified in sub-sections (i), (ii) and (iii) of this article.
- 5) Provided, further, that the Contractor shall, within ten (10) days from the beginning of such delay, unless the Owner shall grant a further period of time prior to the date of final settlement of the contract, notify the Owner, in writing, of the causes of the delay, who shall ascertain the facts and extent of the delay and notify the Contractor within a reasonable time of its decision in the matter.
- 6) If at any time during the project, the Contractor fails to complete any activity by its latest completion date as indicated on the project schedule, he will be required, within 7 days, to submit to the Owner, a written statement as to how and when he plans to reorganize his work force to return to the Current Overall Schedule.
- 7) Whenever it becomes apparent from the current monthly progress evaluation and updated schedule data that the Contract completion date will not be met, the Contractor shall be required take some or all of the following actions:
 - Increase construction manpower in such quantities and crafts as shall substantially eliminate the backlog of work.
 - Increase the number of working hours per shift, shifts per work day, work days per week, or the amount of construction or any combination of the foregoing sufficient to substantially eliminate the backlog of work.
 - Reschedule work items to achieve concurrency of the accomplishment
- 8) The addition of equipment or construction forces, increasing the working hours or any other method, manner or procedure to return to the current Overall Schedule shall not be considered a justification for a Change Order or shall be treated as an acceleration order.

C. RETAINAGE

A certificate of deposit in lieu of retainage withheld will not be acceptable on this project.

D. <u>APPLICATION FOR PROGRESS PAYMENT</u>

The contractor shall be required to submit updated record drawings and an updated Overall Schedule with each application for progress payment. Failure to do so will result in the delay of processing the payment application. As required by Article 14.02.A.2, of the General Conditions, each application for progress payment shall contain the following notarized affidavit, or some version thereof, regarding payment of debts and claims.

CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS AND WAIVER OF LIENS

TO: (Owner)			
City o	of Pass Christian	PROJECT NO.	
		CONTRACT FOR: CONTRACT DATE:	Entire Project
PROJECT:	Asphalt Repair and Overlay of City Streets		
=========	=======================================		========
State of:			
County of: The undersigne he has paid in fu	d, pursuant to Article 14 of the General Conditions, hall or has otherwise satisfied all obligations for all mate	erials and equipment furnished, fo	
County of: The undersigne he has paid in full labor, and servi arising in any material or his property needs	all or has otherwise satisfied all obligations for all mate ces performed, and for all known indebtedness and anner in connection with the performance of the Contaight be held responsible.	erials and equipment furnished, fo claims against the Contractor fo	or damages
County of: The undersigne he has paid in fullabor, and servi arising in any material or his property numbers.	all or has otherwise satisfied all obligations for all mate ces performed, and for all known indebtedness and anner in connection with the performance of the Contaight be held responsible.	erials and equipment furnished, fo claims against the Contractor fo	or damages
County of: The undersigne he has paid in fullabor, and serving in any material or his property in the contraction of the contraction (Address)	all or has otherwise satisfied all obligations for all mate ces performed, and for all known indebtedness and anner in connection with the performance of the Contaight be held responsible.	erials and equipment furnished, fo claims against the Contractor fo	or damages
County of: The undersigne he has paid in fullabor, and serving in any major his property in the contract of t	all or has otherwise satisfied all obligations for all mate ces performed, and for all known indebtedness and anner in connection with the performance of the Contaight be held responsible.	erials and equipment furnished, fo claims against the Contractor fo	or damages
County of: The undersigne he has paid in fulabor, and servi arising in any major his property in CONTRACTOR (Address)	all or has otherwise satisfied all obligations for all mate ces performed, and for all known indebtedness and anner in connection with the performance of the Continight be held responsible.	erials and equipment furnished, fo claims against the Contractor for ract referenced above for which the	or damages ne Owner

E. STORED MATERIALS

In the General Conditions, Article 14.02, add the following paragraph 14.02.A.4 related to payment of stored materials:

- (1) Payment for stored materials may be allowed on progress payments, subject to the approval of the Owner.
- (2) Stored materials which may be considered will be major items of materials only. Such materials may include pilings, timber, decking, light fixtures, pier electrical boxes, etc.
- (3) Materials that will not be considered for payment as stored materials will include, but not limited to water service pipe, water service saddles and fittings, electrical components, nails, fasteners, rip rap, fencing, handrail, fill material, etc.

F. <u>UNIT PRICE WORK</u>

Delete Article 11.03.D of the General Conditions in its entirety and add the following:

"The bidder shall fully understand that the unit prices are independent to the exact quantities involved. The quantities in the bid documents are approximate and the Owner uses them for comparison of Bids only.

The Owner will only pay the Contractor for the actual quantities of work performed and accepted according to the Contract Documents. The Owner may increase, decrease or omit the scheduled quantities of work without invalidating the Bid prices."

G. CONTRACTORS GENERAL WARRANTY AND GUARANTEE

ADD the following new paragraph immediately after paragraph 6.19.C.7 of the General Conditions:

6.19.C.8 Unless additional warranties are included in the technical specifications, the contractor shall guarantee the Work for a period of one-year following Final Payment.

H. SUBSTANTIAL COMPLETION

In the General Conditions, Substantial Completion, Article 14.04 Delete the following and any reference thereto:

- 1. "(except for items specifically listed by CONTRACTOR as incomplete)"
- 2. "(with a revised tentative list of items to be completed or corrected)"

I. <u>DEFINITIONS</u>

In the General Conditions, Article 1 Definitions, Paragraph 1.01.A.45, replace the paragraph with the following:

"Substantial Completion- The entire Work included in the project and as specified on the bid form has progressed to the point where, in the opinion of the Project Administrator as evidenced by Project Administrator's definitive certificate of Substantial Completion, it is sufficiently complete, in accordance with the Contract Documents, so that the entire Work, including restoration items, can be utilized for the purposes for which it is intended and no pay items on the bid form remain to be completed. The term "substantially complete" as applied to all of the Work refers to Substantial Completion thereof."

In the General Conditions, Article 1 Definitions, Paragraph 1.01.A.51, replace the paragraph with the following:

"Work- The entire construction, including restoration, 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."

J. PARTIAL UTILIZATION

In the General Conditions, Partial Utilization, Article 14.05: Replace the first paragraph with the following:

"Use by OWNER at OWNER's option of any completed part of the Work which OWNER 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 of the Work."

In the General Conditions, Partial Utilization, Paragraph 14.05.A.1-3. Delete these paragraphs in their entirety.

K. TESTS AND INSPECTIONS

In the General Conditions, Section 13.03. Delete paragraphs 13.03.B.1, through 13.03.B.3 and revise the first paragraph of this section to read as follows:

13.03.B Contractor shall employ and pay for the services of an independent testing laboratory, subject to the approval of the Owner, to perform all inspections, tests, or approvals as required to demonstrate compliance with the Contract Documents. The Owner will not be responsible for compensation of or scheduling the services of an independent testing laboratory.

L. REPORTING AND RESOLVING DISCREPANCIES

In the General Conditions, Paragraph 3.03.B. Add the following new language at the end of this section:

3.03.B.1.c Whenever the Contract Documents contain contradictions or discrepancies within the document, the most stringent means or methods, as determined by the Owner, shall be applied.

M. COPIES OF DOCUMENTS

In the General Conditions, Article 2.02. Amend the language in the first sentence of Paragraph 2.02.A to read as follows:

Change the language to read from "up to ten" to "up to three".

N. SUBSURFACE AND PHYSICAL CONDITIONS

In the General Conditions, Section 4.02.A.1. Delete this paragraph and replace with the following:

No reports or explorations or tests of subsurface conditions at or contiguous to the Site are known to the Owner.

O. REVIEW OF APPLICATIONS FOR PROGRESS PAYMENT

In the General Conditions, Article 14.02, paragraph 14.02.C.1. Change the language from:

"Ten days after presentation of the Application for Payment to Owner" to "Thirty days after approval of the Application for Payment by Owner".

P. ENUMERATION OF PLANS, SPECIFICATIONS AND ADDENDA

Following are the Plans, Specifications and Addenda which form a part of this contract.

SPECIFICATIONS

Advertisement Page 1 to 2, incl Information for Bidders Pages 1 to 8, incl. Bid Proposal Pages 1 to 2, incl. Non-Collusion Affidavit/Debarment Certification Pages 1 to 1, incl. Bid Bond Pages 1 to 2, incl. Contract Pages 1 to 8, incl. Performance Bond Pages 1 to 2, incl. Payment Bond Pages 1 to 2, incl. **General Conditions** Pages 1 to 41, incl. Supplemental General Conditions Pages 1 to 9, incl. **Special Conditions** Pages 1 to 10, incl. **Technical Specifications** Pages 02512-1 to 02512-2, incl.

Appendices:

None

<u>ADDENDA</u>

None

SPECIAL CONDITIONS

(A) SCOPE OF WORK

- (1) This contract consists of furnishing all labor, materials, tools, materials and performance testing, equipment and incidentals necessary to construct the project herein specified and to demonstrate compliance with the contract documents.
- (2) It is the intent of the Contract Documents that the Contractor shall furnish to the Owner a complete job with all necessary items of work completed as set forth in the Contract Documents.
- (3) The contractor shall be required to mobilize and begin work within 10 calendar days of receipt of the Notice to Proceed. The demonstration of work must be sufficient to satisfy the Owner that the work is being performed in an expeditious manner otherwise the City may put the contractor on notice, in accordance with the general conditions, to cancel the contract.

(B) LOCATION OF WORK

(1) The area of work is on the City Streets and at the Public Works Facility within the City of Pass Christian, Mississippi.

(C) ACCESS & SEQUENCE OF CONSTRUCTION

Each Bidder must inform himself fully of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of his obligations to furnish all material and labor necessary to carry out the provisions of his contract. The Contractor, in carrying out his work, must employ such methods or means as will not cause any interruption of or interference with the work of any other contractor or business.

The following sequence of the work is suggested but not required: Palm Avenue; Church Avenue, and Redwood Drive. All work will be coordinate through and directed by the Public Works Director.

The existing city streets near the project area(s) will remain in use by the public throughout the project period. Contractor shall be fully responsible for his own security and the protection of the public from safety hazards.

Contractor shall provide suitable barricades, signs, and warning devices to keep the public away from unsafe areas.

(D) EXISTING UTILITIES

- (1) The Contractor will be required to coordinate with the various utility owners to obtain field location of utility lines in the project area and must allow a reasonable time to accomplish unforeseen needed adjustments which may prove necessary as the construction progresses.
- (2) Damage caused by the Contractor to City owned water and sewer facilities which are currently in service shall be repaired by the Contractor at his expense, subject to the inspection and approval of the Superintendent of the Water and Sewer Department.

- (3) Power, telephone, fiber optics, gas, TV cable and other facilities in the project area are owned by private utility companies. The Contractor will be required to coordinate with the various utility owners to obtain field location of utility lines in the project area in advance of construction, and must allow a reasonable time to accomplish unforeseen needed adjustments. Contractor is responsible for repairs or costs incurred by others for repair of any utility lines damaged by Contractor.
- (4) Contractor shall properly locate and expose all underground facilities in advance of construction and determine if any conflicts exist with the alignment or grade of the proposed facility. Contractor shall notify Owner of all potential conflicts prior to construction.
- (5) Contractor shall be familiar with the policy adopted by Mississippi Power Company regarding the assessment of fees to contractors for safety related services, including, but not limited to loaning line trucks to hold poles during excavation in proximity to poles and sending crews to cover power lines with specially designed rubber blankets or hoses. Any such costs incurred shall be the responsibility of the Contractor, at no additional compensation by the Owner. Contractor shall not commence work in the vicinity of poles, lines or other electrical equipment until mutually satisfactory arrangements have been made with Mississippi Power Company.
- (6) For the Contractor's reference, the following is a list of utility owners believed to have facilities in the project area:
 - (a) Bell South 800-227-6477
 - (b) Cable One 228-864-1506
 - (c) City of Pass Christian Water and Sewer 228- 452-2031
 - (d) Mississippi Power Company 228-864-1211
 - (e) Reliant Energy Entex 228-896-7500
 - (f) Mississippi One Call System 800-227-6477
- (7) Per Mississippi law, contractor shall call the Mississippi One Call system at least 48 hours prior to any excavation, and complete the work within the required amount of time after the issuance of a locate number. Locate numbers must be renewed if the work is not complete within the required time.

(E) ABBREVIATIONS

(1) Wherever the following abbreviations are used, with or without periods, in these specifications or other contract documents, they are to be construed the same as the respective expressions represented:

A.A.S.H.T.O. -American Association of State Highway and

Transportation Officials

A.C.I. -American Concrete Institute

ANSI -American National Standards Institute

A.S.A. -American Standards Association

A.S.T.M. -American Society for Testing and Materials

A.W.W.A. -American Water Works Association

E.P.A. -Environmental Protection Agency

Modified Procter Density -ASTM D1557, Modified AASHTO

M.D.O.T. -Mississippi State Highway Department Standard

(Formerly M.S.H.D.) Specifications, 1990 Edition

M.S.D.H.

-Mississippi State Department of Health
O.S.H.A.

-Occupational Safety & Health Administration

(F) <u>SUPERVISION</u> <u>& EMERGENCY RESPONSE</u>

(1) The Contractor shall designate an individual as Project Superintendent who is responsible for all construction operations of the entire project and is authorized to make minor field decisions and commitments on Contractor's behalf. He, or an authorized agent, shall be present at all times when the work is in progress. Readily accessible copies of both the contract documents and the latest approved working drawings shall be kept on the job site at all times.

(2) The Contractor shall arrange for and pay all costs to ensure that one or more responsible individuals are available at all times to respond to emergencies within the project area such as water leaks or needed road / driveway maintenance. This individual or individuals shall be reachable 24 hours per day and 7 days per week by cell phone or pager, shall be authorized by Contractor to operate equipment and expend money to mitigate emergencies, and shall reside within ten miles of the project area.

(G) CLEANING UP

- (1) The Contractor shall keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the work, and at the completion of the work he shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, construction equipment and machinery, and all surplus materials, and shall leave the site clean and ready for occupancy by Owner.
- (2) Contractor shall restore to their original condition those portions of the site not designated for alterations by the contract documents.
- (3) Contractor shall restore to their original condition all disturbed facilities, including various types of pavements, pavement markings, driveways, curbs, sidewalks, drainage facilities, fences, grassed areas, etc., in a prompt manner during the course of construction.

(H) TRAFFIC CONTROL

(1) Maintenance of traffic in the project area is the responsibility of Contractor.

(I) PROTECTION OF AREAS

- (1) The Contractor shall keep his operations within those areas bounded by easement and/or property lines and designated for the construction of the project. All resources of the site shall be protected at all times and altered and removed only as designated in the Contract Documents.
- (2) Contractor will be responsible for the preservation of all public and private property and will use every precaution necessary to prevent damage thereto. If any direct or indirect

damage is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work on the part of the contractor, such property will be restored by the contractor, at the contractor's expense, to a condition similar or equal to that existing before the damage was done, or contractor will make good the damage in other manner acceptable to the Owner.

(J) RESTORATION OF AREAS

- (1) Features and resources of the landscape, such as trees that have been damaged during construction of the project, shall be restored by the Contractor as nearly as good as the original, so that after project completion the appearance will be natural and not distracting.
- (2) The Contractor shall obliterate all signs of temporary work areas, access or haul roads, waste materials and do grading, seeding, etc. that is necessary to blend in with adjacent features. All such disturbed areas are to be restored at the very earliest time practical during construction.

(K) CONSTRUCTION LAYOUT

- (1) Contractor shall be responsible for surveying and laying out the work, shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of the Owner. He shall report to the Owner whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations. The Contractor shall replace and accurately relocate all reference points so lost, destroyed or moved.
- (2) The Drawings indicate the required dimensions and elevations of the work. Contractor shall be solely responsible for the detailed horizontal and vertical stakeout of the work.

(L) **EROSION CONTROL**

- (1) The Contractor shall, at all times, employ "Best Management Practices" (BMP's) for environmental protection while completing the work required by the contract documents.
- (2) The Contractor's work plan must cover his proposals for controlling and minimizing erosion and siltation damages during construction. Where appropriate, or required, certain temporary sediment control measures such as berms, dikes, drains, basins, etc. shall be provided and maintained until permanent facilities are provided. All temporary bridges or culverts must be removed when the work is completed. The extent of the area exposed by clearing, grubbing, or grading at any one time, shall be kept to a reasonable minimum.

(M) DAMAGE TO TREES

(1) Reasonable care shall be taken during construction to avoid damage to vegetation. Ornamental shrubbery and tree branches shall be temporarily tied back, where appropriate, to minimize damage. Trees which receive damage to branches shall be trimmed of those branches to improve the appearance of the tree. Tree trunks receiving damage from equipment shall be treated with a tree dressing.

(N) <u>CERTIFIED CHEMICALS</u>

(1) All chemical of whatever nature used during project construction or furnished for project operation must show EPA or USDA approval certification. Their use and disposal of all residues shall be in strict compliance with instructions.

(O) SANITARY FACILITY

(1) Contractor shall provide a portable toilet facility (Port-O-Let or other) on each job site for the duration of the job and remove the facility upon completion of the project.

(P) <u>SEPARATION BETWEEN SEWER & WATER LINES - N/A</u>

- (1) Horizontal and Vertical Separation
 - (1) Water mains shall be laid at least 10 feet horizontally and 18 inches vertically from any existing or proposed sanitary sewer or manhole (including force mains). The distance shall be measured edge to edge. Water lines should always be installed above sewer lines and the bottom of the water line should be at least 18 inches from the top of the sewer line.

(2) Special Conditions

Where local conditions prevent adequate horizontal and vertical separation, the appropriate reviewing agency may allow the water line to be laid closer to the sewer line if supported by adequate data from the Owner. Each situation will be reviewed on a case by case basis. In this situation, all three of the following conditions must be met:

- If the 10 foot horizontal separation between water and sewer lines cannot be maintained then the water line should be ductile iron with water joints located at the maximum distance possible from sewer line joints. PVC pipe may be used if it is protected by a steel casing. Also the water and sewer lines must be in separate trenches with adequate space for maintenance. In some cases, special sewer line construction procedures may be required.
- 2. Where the 10 foot horizontal and 18 inch vertical separation cannot be maintained, condition 1. must be met and the sewer line shall be constructed according to water main standards.
- The water and sewer mains should maintain a 10' horizontal and 18" vertical separation with the water main located above the sewer. The water main should never be installed below the sewer main."

(Q) SAFETY

(1) Contractor shall at all times provide for the safety of his own workers, Owner's operating personnel, and the public.

(R) USE OF PUBLIC WATER SUPPLY

- (1) Contractor will be permitted to obtain without charge a reasonable amount of water from the existing city water mains for the purpose of filling, testing, and flushing of the new water mains being constructed under this contract.
- (2) This use will be subject to regulation by the City of Pass Christian Water and Sewer Department (Department). Contractor shall notify Department personnel every time that water is to be withdrawn from the City water system, and shall not proceed until permission is granted. The work plan must include the measures which Contractor will use to absolutely prevent the backflow of water from the new untested mains into existing city water mains.
- (3) Use of City water for filling and flushing of new water mains may be limited or prohibited during periods of high-water use, to prevent the depletion of City water supplies.

(S) PUBLIC NOTIFICATIONS

- (1) Contractor shall provide a minimum of 48 hours advance notification to the general public in the form of publication in the local newspaper and/or media for: 1) interruption of the normal flow of traffic; and 2) interruption of water service; 3) interruption of sewer service.
- (2) Contractor shall notify all local emergency services, including, police, fire and ambulance, in advance, and, also upon completion of any interruption of the normal flow of traffic.
- (3) Contractor shall notify the City of Pass Christian Water and Sewer Department and City of Pass Christian Fire Department, in advance, and, also upon completion of any interruption of water service, including loss of water due to flushing of new water mains.
- (4) Contractor shall deliver a written notice to each customer that may be affected by a planned interruption of water service, at least one day prior to the interruption of service. The notice should at a minimum state the date and duration times of the interruption. When a planned interruption of service takes longer than originally scheduled, the contractor shall notify each customer of the new time in which service will be restored. In the event of an accidental or unplanned interruption of service, the contractor shall notify each affected customer of the time in which service will be restored.

(T) COORDINATION WITH OWNER

- (1) Contractor shall coordinate his operations with the Owner's Water and Sewer Department and their operating contractor and shall keep Owner fully advised of his schedule for interruption of service and shutdowns of the water or sewer systems. Contractor will not schedule work requiring the services of Owner's operating personnel for other than normal working hours (7:00 to 3:30 p.m., 5 days per week) except for valid reason, in which case Contractor shall reimburse Owner for overtime costs.
- (2) Contractor shall provide a minimum of 24 hours advance request to Owner for assistance of their personnel, where required for scheduled shutdowns of the water or sewer systems.

(U) SUBMITTALS

- (1) The successful bidder shall, within 10 calendar days following the Notice to Proceed, submit to the Owner a project schedule demonstrating timely performance of the work within the contract time.
- (2)Within 10 days after receipt of the Notice to Proceed, the contractor shall provide the Owner with two (2), preconstruction videotaped copies of the project area in sufficient detail, with landmarks (i.e., street signs at cross streets, addresses, etc.) to show all existing features associated with the scope of work (i.e., driveways, existing condition of streets, mailboxes, fences, signs, etc.), including all existing facilities and/or structures which are adjacent to and along these routes which might be damaged by the Contractor's operations. Provide an audio description of the route and approximated locations on stated points at 100-foot intervals. The video shall be in DVD format. The preconstruction video will be subject to review and/or rejection by the Owner. If sufficient detail is not observed in the video, the contractor shall be required to resubmit. Failure to provide sufficient detail in the video shall be cause for withholding or delaying progress payments.
- (3) Prior to project closeout and submittal of the final application for payment, the contractor shall submit detailed record drawings of the project, illustrating the locations of all pertinent aspects of the project including, but not limited to, valves, water and sewer services, hydrants, manholes, connections to existing mains, etc. The record drawings shall illustrate distances of these features measured from known or identifiable reference points within the project limits, such as cross streets. The contractor shall also submit two (2) post construction DVD copies of the project area demonstrating the same physical features provided in the preconstruction video. The video shall be in DVD format. The preconstruction video will be subject to review and/or rejection by the Owner. If sufficient detail is not observed in the video, the contractor shall be required to resubmit. The above records are intended for use as evidence in ascertaining the extent of any damage which may occur as a result of the Contractor's operations and are for the protection of adjacent property owners, the Contractor, and the Owner. Failure to provide sufficient detail shall be cause for withholding or delaying final payment.
- (4) Requirements of this section are in addition to any specific requirements for submittals specified in other sections of these Contract Documents.
- (5) Data submitted shall have sufficient detail for determination of compliance with the Contract Documents.
- (6) Review of substitutions, schedules and lists of materials submitted or requested by the Contractor shall not add to the Contract amount, and any additional costs that may result therefrom shall be solely the obligation of the Contractor.
- (7) The Owner shall not be responsible for providing other services to protect the Contractor from additional costs from accruing from such approvals.
- (8) The Owner is not precluded by virtue of review, acceptance, or approval, from obtaining a credit for construction savings resulting from allowed concessions in the work or materials therefor.
- (9) No equipment or material for which listings, drawings, or descriptive material are required shall be fabricated, purchased, or installed until the Owner has on hand, copies of such approved lists and appropriately stamped shop drawings.

(10) Submittals will be acted upon by the Owner as promptly as possible, and in all cases within 20 days of receipt and returned to the Contractor. Delays caused by the need for resubmittals shall not constitute reason for an extension of Contract time.

(V) RECORD DRAWINGS - N/A

- (1) The Contractor shall maintain two sets of full-size prints on the job site, one set designated "Job Progress Drawings" and the second set designated "Record Drawings". The Contractor shall contemporaneously maintain both sets in a condition which reflects the current status of the construction work. Both sets shall be available to the Owner for inspection and copying during the progress of the work. All markings shall be neatly preformed with red pencil.
- (2) The Record Drawings will be marked up as required to show all deviations from the original contract drawings including changes resulting from minor field adjustments, field orders, and Contract modifications. Changes should be drawn after the construction is completed and all new locations, dimensions, and elevation shall be shown. Where larger scale presentation is required, the Contractor shall prepare additional drawings and attach them to the appropriate Contract drawings.
- (3) Each month, with each request for progress payment, the Contractor shall submit to the Owner, a current listing and description of each deviation incorporated into the work, and a copy of the current record drawings to date, since the preceding submittal. Failure to submit record drawings and related information shall be cause for withholding any partial payment due the Contractor.
- (4) The Job Progress Drawings shall be marked up to show all work complete in weekly intervals, and the week the work is performed shall be shown.
- (5) At the completion of the work, but before substantial completion, both the Job Progress Drawings and the Record Drawings shall be submitted to the Owner for review.

(W) OVERALL CONSTRUCTION SCHEDULE

- (1) The Contractor shall prepare and submit to the Owner within 10 days after the Notice to Proceed and before starting construction, his Overall Construction Schedule (Overall Schedule). The Overall Schedule shall be comprised of preparatory and construction to operations covering all work to be done in connection with the Contract including submittal dates, equipment delivery, testing, etc.
- (2) The original of the Overall Schedule shall be drawn on 11"x17" media. The Overall Schedule shall be in the form of a time-scaled bar showing bid items and other activities identified herein. Each activity shall be labeled with a complete description and the estimated duration in days. The Contractor shall sign and provide the Owner for his review and/or rejection as appropriate, three copies of the initial and each revision of the Overall Schedule. Any revisions to the Overall Schedule shall be submitted with each payment request.
- (3) Failure to submit the Overall Schedule or subsequent updates shall be considered cause for withholding any partial payments due or that may become due under the Contract in accordance with the General Conditions.

(X) CASH FLOW

- (1) With the initial Overall Schedule submittal and each monthly update, the Contractor shall also submit a cash flow summary. The cash flow summary shall be based on the submitted Overall Schedule and equal in total to the Contractor's bid plus approved Change Orders. Excepted payment requests for each month shall be included, as well as the cumulative payment requests to date for each month of the project. The net monthly payment request and cumulative payment requests shall also be shown after deducting retainage.
- (2) Failure to submit an acceptable cash flow summary shall be cause for withholding any partial payments due or that may become due under the Contract.

(Y) PROGRESS REVIEW MEETING

- (1) Once each month on a date established by the Owner, a meeting will be held at which time the schedule will be reviewed. The meeting shall be attended by the Contractor's project manager and superintendent and those major subcontractors as determined by the Owner to be necessary at the time.
- (2) Prior to the meeting, the Contractor shall obtain information to update the Overall Schedule to reflect the progress to date. The updated schedule shall be available at the meeting for review. To update the Overall Schedule, the Contractor shall:

Enter actual start and completion dates, days, number of shifts used for those activities started and/or completed during the previous reporting period;

For activities in progress, indicate the percentage complete to date. Review and revise as necessary, the remaining duration of the work from the update to the estimated completion date;

For activities not yet started, review and revise as necessary, the durations and estimated start and completion dates;

Add authorized Change Orders;

Updated status information shall be annotated on the Overall Schedule in a manner that the Overall Schedule shall graphically depict the current status of the work.

(3) The monthly submittal to the Owner shall be accompanied by a written report. The report shall be brief and shall include, but not be limited to the following information and the information described in the Narrative Report Outline contained in Section (7) provided below:

Activities completed this reporting period

Activities in progress this reporting period

Activities scheduled for the next reporting period

Description of problem areas

Current and anticipated delays including causes, corrective action and schedule adjustments and the impact of the delay on the Overall Schedule and completion dates;

Changes in construction sequence

Pending items and their status, including: change orders, permits, contract extensions, etc.

Status of contract completion dates including: number of days ahead or behind of schedule

Revised cash flow information

- (4) If at any time during the project, the Contractor fails to complete any activity by its latest completion date, he will be required, within 7 days, to submit to the Owner a written statement as to how and when he plans to reorganize his work force to return to the Current Overall Schedule.
- (5) Whenever it becomes apparent from the current monthly progress evaluation and updated schedule data that the Contract completion date will not be met, the Contractor shall take some or all of the following actions:
 - Increase construction manpower in such quantities and crafts as shall substantially eliminate the backlog of work.
 - Increase the number of working hours per shift, shifts per work day, work days per week, or the amount of construction or any combination of the foregoing sufficient to substantially eliminate the backlog of work.
 - Reschedule work items to achieve concurrency of the accomplishment
- (6) The addition of equipment or construction forces, increasing the working hours or any other method, manner or procedure to return to the current Overall Schedule shall not be considered a justification for a Change Order or treated as an acceleration order.
- (7) Narrative Report Outline
 - 1. Contractor's transmittal letter
 - 2. Schedule narrative referring to each activity on the Overall Schedule including:
 - a. Activities completed this reporting period
 - b. Activities in progress this reporting period
 - Activities schedule next reporting period
 - 3. Description of any problem areas
 - 4. Current and anticipated delays
 - a. Cause of the delay
 - b. Corrective action and schedule adjustments to correct the delay
 - c. Impact of the delay on other activities, milestones and completion dates
 - 5. Change in construction sequence
 - 6. Pending items and status thereof
 - a. Permits
 - b. Change Orders
 - c. Time extensions
 - d. Other
 - 7. Contract completion date status
 - a. Ahead of schedule and number of days
 - b. Behind schedule and number of days
 - 8. Other project or scheduling concerns
 - 9. Including reviewed and updated Overall Schedule
 - 10. Progress Quality Chart (if required)
 - 11. Revised cash flow information
 - 12. Other

(Z) REASONABLY IMPLIED PARTS OF THE WORK SHALL BE DONE THOUGH ABSENT FROM SPECIFICATIONS

(1) Any part or item of the work which is reasonably implied or normally required to make the project satisfactorily operable and functional shall be performed by the Contractor and the expense thereof shall be included in the applicable unit prices or lump sum prices bid for the work. It is the intent of these specifications to provide the Owner with complete operable systems, subsystems, and other items of work. All miscellaneous appurtenances and other items of work that are incidental to meeting the intent of these specifications shall be considered as having been included in the applicable unit prices or lump sum prices bid for the work even though these appurtenances and items may not be specifically called for in the specifications.

(AA) <u>SPECIAL PROVISIONS FOR CONTRACTORS AND SUB-CONTRACTORS WORKING</u> FOR THE CITY OF PASS CHRISTIAN

- 1.) All contractors hired to work on projects located in Pass Christian, Mississippi shall complete their work as specified, while making an unrestrained effort to preserve the health and integrity of all trees (significant and otherwise) on and adjacent to the construction site.
- 2.) During the course of the project, appropriate actions shall be employed while performing any excavation or trenching activities, to inflict minimal damage upon both exposed and unexposed tree root systems. As stated in the specifications, and as appropriate for the project, the Contractor shall install water mains by tunneling or boring underneath tree roots, with no additional compensation. Such potential damage may include, but not be limited to grubbing or raking of surface and sub-surface roots. Also, roots may be torn or fractured by these processes. Additionally, damage to low-lying or overhanging limbs may occur. It shall be required of the contractor to afford existing and exposed roots a measure of protection by installing four inches of mulch and utilizing plywood mats while working in close proximity to same. Also low-lying or overhanging limbs shall be marked with high-visibility flagging or a bio-degradable paint to provide a measure of visibility.
- 3.) In order to insure that damage remain at a minimum, it is highly recommended that all excavation be carried out with special attention given to trees on the site. When excavating, it is recommended that the blade or backhoe rake or grub only at the depth necessary to remove the existing asphalt surface and the hard sub-surface material as needed to achieve the desired finish grade. It is also recommended that low weight equipment with rubber tires be utilized as opposed to tracked equipment so as to minimize compaction and damage to any exposed roots. In any areas where excavating or trenching will be occurring beneath the drip line of any trees, such as locations proposed for the new water and sewer mains, the contractor shall secure the services of a licensed arborist to trim the roots of the trees cleanly with the use of a stump grinder to a minimum depth of two feet below the original ground surface.
- 4.) In the event any tree damage has occurred. Steps will be taken by the contractor(s) to remediate said damage. Roots that have been raked or grubbed shall have the bark traced to insure a minimal recovery time. A soluble root growth stimulant will be added to the soil. Mulch will be installed to cover damaged roots to prevent desiccation. Roots that have been fractured or torn shall be pruned, as would a limb in the canopy, back to a lateral root (if available). A clean cut shall be made to insure rapid compartmentalization of severed root portion. Also, structural and other limbs within the canopy of the trees that may be damaged shall be pruned and repaired in a timely manner by a licensed arborist.
- 5.) In the event that there is no alternative but to remove a substantial portion of a tree's root system, the tree will first be inspected by the contractor's arborist, and a representative of the City of Pass Christian. It will then be determined if the tree should be removed or whether the tree has sufficient means to recover and prosper. If a tree is found to be salvageable, every attempt will be made to afford said tree with the needed materials to substantiate such recovery. A hardwood mulch shall be added to the site not to exceed four inches in depth.
- 6.) Trees that must be removed will be replaced at no cost to the City of Pass Christian or the property owner, with a tree that is suited to the site, subject to the approval of the prop-

erty owner and the City of Pass Christian. The tree will be planted post-construction; furthermore, the tree will be planted in such a manner that it will have a minimum impact on both overhead and underground utilities.

- 7.) Trenching shall be performed to minimize impact on the tree's critical buttress roots (Structural root plate) of trees on the site. All measures shall be taken to employ alternative measures of passage. Tunneling and boring utilized by both manual and mechanical means will have the least impact on the site. Trees that have obviously incurred substantial damage to buttress roots prior to this project shall be noted and reported for evaluation and documentation. In any areas where excavating or trenching will be occurring beneath the drip line of any trees, such as locations proposed for the new water and sewer mains, the contractor shall secure the services of a licensed arborist to trim the roots of the trees cleanly with the use of a stump grinder to a minimum depth of 2' below the original ground surface.
- 8.) Any and all tree work shall be completed by a business or individual that is licensed by the State of Mississippi to engage in Tree Surgery. It is also highly recommended that this individual or business also carry a certification by the International Society of Arboriculture.
- 9.) Should there be any questions as to how best proceed without compromising the integrity of any tree on this site the contractor shall first notify his arborist, who shall them notify the Owner. These specifications have been established as a guideline to be used by both the Owner and its contractors to ensure that a reasonable effort has been made by both to preserve the integrity of trees and green space within the construction site boundaries.
- 10.) Failure, by any contractor on the site to comply with all of the above specifications may result in a monetary or remedial penalty as set forth by the City of Pass Christian.
- 11.) All work to be coordinated with the City of Pass Christian and/or their representatives.

(AB) DISPOSAL OF DEBRIS AND UNUSABLE EQUIPMENT

The contractor shall be responsible for the disposal of unusable equipment, debris, including material generated as a result of manhole and sewer main cleaning, sewer pipes, manholes, etc., in an approved manner and location in accordance with the requirements of the Mississippi Department of Environmental Quality (MDEQ) Emergency Order No. 506205 dated 9-13-05 and to the satisfaction of the governing local, state and federal agencies. All sites must be approved by the Mississippi Department of Environmental Quality for the use intended. Upon completion of the work, the Contractor shall provide Owner with documentation proving that all sand, debris, including sewer pipe and manholes removed as a part of this contract was satisfactorily disposed of at the approved site in accordance with all applicable local, state, and federal laws.

TECHNICAL SPECIFICATIONS

ITEM NO. 02334 GRANULAR BASE COURSE

ITEM NO. 02512 HOT BITUMINOUS PAVEMENT

02234......GRANULAR BASE COURSE (LIMESTONE)

1.0 SCOPE OF WORK

1.1 This work shall consist of the furnishing of labor, equipment and materials for the construction/repair of one (1) course of 8" compacted base on an existing foundation in reasonably close conformity with the existing lines, grades, and cross sections. The work may include but will not be limited to removal and disposal of contaminated limestone base material as well as installing and compacting material to form a prepared surface on which to receive asphalt surface course.

2.0 MATERIALS

- 2.1 The granular material shall be dense-graded crushed domestic limestone, plant mixed to conform to Size No. 610 or 825B, MDOT Specifications.
- 2.2 The soft, red-colored "Red Limestone" commonly imported from Mexico is not acceptable due to its poor performance in wet conditions.

3.0 CONSTRUCTION REQUIREMENTS

- 3.1 <u>PREPARATION OF GRADE</u>. The foundation on which granular material will be laid shall be prepared by Contractor to the lines and grades established in the plans and compacted to ninety-five percent (95%) standard Proctor density.
- 3.2 <u>MOISTURE CONTENT</u>. All materials shall contain moisture content sufficient to ensure that the design density requirements will be obtained when the materials are compacted.

3.3 SHAPING, COMPACTING, AND FINISHING

- 3.3.1 Contractor shall ensure that each course or layer of material is shaped to the required section, watered or aerated as necessary to produce the required moisture content, and compacted. Throughout the compaction operation, the shape of the course or layer shall be maintained by blading and rolling so that the aggregates are uniformly distributed and firmly keyed.
- 3.3.2 Shaping and compaction shall be carried out by Contractor in such a manner that will prevent lamination and shall continue until the entire depth and width of the course or layer has reached the required density. Surface compaction and finishing shall be performed so as to produce a smooth, closely knit surface that is free from lamination, cracks, ridges, or loose material. The finished surface shall conform (within allowable tolerances) to the required section at established lines and grades.
- 3.3.3 Prior to subsequent construction or final acceptance, all irregularities, depressions, soft spots, and other deficiencies found by Project Engineer shall be corrected by Contractor to meet the requirements of these specifications, without additional compensation to Contractor.

3.3.4 After compaction and finishing, Contractor shall make at least one (1) complete coverage with a steel wheel tandem roller. The resulting surface shall then be sprinkled as necessary to maintain the required moisture content and shall be thoroughly compacted and sealed with a pneumatic roller. 3.3.5 Contractor shall be responsible for constructing and maintaining a course which will remain firm and stable under construction equipment and other traffic to which the course will be subjected. 3.3.6 The specified density shall be ninety-five percent (95%) standard Proctor density. 3.3.7 Unless pavement is to follow immediately after preparation of base course, the surface shall be primed in conformity with Section 408, MDOT Specifications. 4.0 METHOD OF MEASUREMENT 4.1 Accepted quantities of granular base course (limestone) will be measured by the square yard, 8" thickness, field measure. 5.0 **PAYMENT** 5.1 Payment will be made under Pay Item No. 02234-A Crushed Limestone Base

WARNING

\$ per square yard (FM)

AVOID BREATHING DUST FROM LIMESTONE

- This product contains crystalline silica. Prolonged and repeated breathing of crystalline silica dust can cause a progressive lung disease called silicosis.
- Some researchers have also reported that there is evidence that prolonged and repeated breathing of crystalline silica dust might cause lung cancer.
- Either silicosis or lung cancer can result in permanent injury or death.
- For detailed information, see the Material Safety Data Sheet before using or handling this product.

02512	HOT BITUMINOUS	PAVEMENTS
-------	----------------	-----------

1.0 SCOPE OF WORK

- 1.1 This work shall consist of constructing one or more courses of bituminous pavement on an existing prepared foundation in accordance with the requirements of these specifications and in reasonably close conformity with the lines, grades, thicknesses, and typical sections shown on the plans. It is the intent to provide not less than 2" of compacted asphalt for overlay locations and not less than 2.5" of compacted asphalt for areas requiring leveling. Also included is the cold milling of designated portions of asphalt pavement prior to installing new pavement to provide a smooth transition with existing surfaces.
- 1.2 The bituminous pavement shall be composed of mineral aggregates, filler or other material, if required and bituminous material, mixed in a central plant and placed hot.
- 1.3 The work shall be in general accordance with Sections 401 and 403, Mississippi Standard Specifications for Road and Bridge Construction, latest edition.
- 1.4 The locations and extent of the work will be as designated by the Public Works Director for the City of Pass Christian.

2.0 MATERIALS

2.1 Materials and their use shall meet the applicable requirements of Section 401 and all other referenced sections of the Mississippi Standard Specifications for Road and Bridge Construction, latest edition.

3.0 CONSTRUCTION REQUIREMENTS

- 3.1 The construction requirements shall be as prescribed in Sections 401 and 403, Mississippi Standard Specifications for Road and Bridge Construction, latest edition, and/or all current Special Provisions.
- 3.2 Leveling and surface course thicknesses in excess of three (3) inches shall be constructed in two (2) lifts. The minimum overall thickness for two-lift surfaces shall not be less than 3 inches. Acceptable thickness of the specified lift shall be in accordance with Section 401.02.04 of the Mississippi Standard Specifications for Road and Bridge Construction, latest edition, by mixture.
- The Contractor shall perform a subgrade proof roll test on all city streets prior to pavement application in the presence of the Public Works Director or his duly authorized representative. This test must be coordinated through the Public Works Department at least 48 to 72 hours prior to the proof roll inspection.

3.3.1 Proof rolling shall be performed by the utilization of a tandem-axle twelve (12)cubic yard 3/4-loaded dump truck or equivalent load, as approved by the Public Works Director. Asphalt shall be rolled and compacted per MDOT Standards. When paving on new 3.3.2 surfaces (i.e., compacted limestone) a prime coat shall be applied at a rate of 0.25 gal/ per square yard. 4.0 METHOD OF MEASUREMENT 4.1 Accepted quantities of hot bituminous pavement, SC-1, Type 8, of a specified thickness, will be measured by the ton, as provided for by scale tickets. 4.2 Milling of existing asphalt pavement will be measured per square yards, in-place. 5.0 **PAYMENT** 5.1 Payment will be made under Pay Item No. Hot Bituminous Pavement (SC-1, Type 8) (Church Ave.) 02512-A per ton Hot Bituminous Pavement (SC-1, Type 8) (Redwood Drive) 02512-B per ton 02512-C Hot Bituminous Pavement (SC-1, Type 8) (Palm Ave.) per ton 02512-D Cold Milling per square yard 02512-A1 Hot Bituminous Pavement (SC-1, Type 8) (Earl Street) per ton