

## **SECTION 00 72 00**

### **GENERAL CONDITIONS**

#### **PART 1 REQUIREMENTS**

##### **1.01 DEFINITIONS**

Whenever used in these General Provisions or in the other Contract Documents, the following terms shall have the meanings indicated which are applicable to both the singular and plural thereof:

- A. "Directed", "permitted", "reviewed", "accepted", "approved", or words of similar import mean the direction, requirements, permission, approval, or acceptance of Engineer, or Owner, unless stated otherwise.
- B. "As shown", "as indicated", "as detailed", or words of similar import refer to the Drawings unless stated otherwise.
- C. "Addenda", -- Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Contract Documents.
- D. "Agreement", -- The written agreement between the Owner and Contractor outlining the work to be performed, the Contract Time, and the Contract Price.
- E. "Application for Payment", -- The Periodical Estimate for Partial Payment Form which is to be used by Contractor in requesting progress or final payment and which is to include such supporting documentation as is required by the Contract Documents. A copy of the form is included with these Contract Documents.
- F. "Bid", -- The offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the work to be performed.
- G. "Bonds", -- Bid, performances, and payment bonds and other acceptable instruments of security.
- H. "Change Order", -- A written order to Contractor signed by Owner authorizing an addition, deletion, or revision in the work or an adjustment in the Contract Price or the Contract Time, issued on or after the effective date of the Agreement.
- I. "Contract Price", -- The money payable by Owner to Contractor under the Contract Documents as stated in the Agreement (subject to the approximate quantities provisions in the Instructions to Bidders in the case of Unit Price Work).
- J. "Contract Time", -- The number of days or the date stated in the Agreement for the completion of the Work.

- K. "Contractor", -- The person, firm, or corporation with whom Owner has entered into the Agreement.
- L. "Day", -- A calendar day of twenty-four hours measured from midnight to the next midnight.
- M. "Defective", -- An adjective which when modifying the word Work refers to Work that is unsatisfactory, faulty, or deficient, or does not conform to the Contract Documents or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or has been damaged prior to Engineer's recommendation of final payment.
- N. "Drawings", -- The Drawings which show the character and scope of the work to be performed and which have been prepared or approved by Engineer and are referred to in the Contract Documents.
- O. "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.
- P. "Engineer", -- The Professional Engineer Firm representing the Owner.
- Q. "Field Order", -- A written order issued by Engineer which orders minor changes in the Work but which does not involve a change in the Contract Price or the Contract Time.
- R. "Final Acceptance", -- The date when the construction of the project is complete in accordance with the Contract Documents so that the entire project can be utilized for the purposes for which it is intended and all monies due Contractor have been paid him in the final Application for Payment.
- S. "General Requirements", -- Officially recognized materials and workmanship specifications of the Owner.
- T. "Inspector", -- The Engineer or technical inspector duly authorized or appointed by Engineer or by Owner, limited to the particular duties entrusted to him.
- U. "Major Equipment", -- The major equipment items listed by name in the Contract Documents which are to be furnished and installed under the Contract.
- V. "Modification", -- (a) A written amendment of the Contract Documents signed by both parties, (b) a Change Order, or (c) a Field Order. A modification may only be issued after the effective date of the Agreement.

- W. "Notice of Award", -- The written notice by Owner to the successful Bidder stating that upon compliance with the conditions precedent enumerated therein, and within the time specified, Owner will sign and deliver the Agreement.
- X. "Notice to Proceed", -- A written notice given by Owner to Contractor, (with a copy to Engineer), fixing the date on which the Contract Time will commence to run and on which Contractor shall start to perform Contractor's obligation under the Contract Documents and the date on which all work scheduled under the Contract shall be completed.
- Y. "Owner", -- The City of Myrtle Beach, South Carolina.
- Z. "Project", -- The total construction of which the work to be provided under the Contract Documents may be the whole or a part, as indicated in the Contract Documents.
- AA. "Provide", -- As used in the Specifications means furnish and install.
- BB. "Shop Drawings", -- All drawings, diagrams, illustrations, schedules, and other data which are specifically prepared by or for Contractor to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams, and other information prepared by a supplier and submitted by Contractor to illustrate material or equipment for some portion of the Work.
- CC. "Specifications", -- Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.
- DD. "Sub-Contractor", -- An individual, firm, or corporation having a direct contract with Contractor or with any other Sub-Contractor for the performance of a part of the work.
- EE. "Substantial Completion", -- The Work (or a specified part thereof) which has progressed to the point where, in the written opinion of Engineer, it is sufficiently complete, in accordance with the Contract Documents, so that the Work (or specified part) can utilized for the purpose for which it was intended. The terms "substantially complete" and "substantially completed", as applied to any Work, refer to Substantial Completion thereof.
- FF. "Supplier", -- A manufacturer, fabricator, supplier, distributor, material man, or vendor.
- GG. "Work", -- The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor, and furnishing and incorporating materials and equipment into the construction, all as required by the Contract Documents.

## 1.02 ABBREVIATIONS

Wherever abbreviations are used in this Contract Document, each such abbreviation shall have the following listed meaning:

### UNIT OF MEASURE

CY	Cubic Yard
Ft.	Feet
Lbs.	Pounds
M	One Thousand
MFBM	One Thousand Feet Board Measure
C	Centigrade
F	Fahrenheit
HP	Horsepower
KVA	Kilovolt Ampere
BTU	British Thermal Unit
LF	Linear Feet
SF	Square Feet
UNO	Unless Noted Otherwise
NIC	Not in Contract

### TYPES AND UNITS

DI	Ductile Iron
PVC	Polyvinyl Chloride
HDPE	High Density Polyethylene
MJ	Mechanical Joint
B & S	Beel and Spigot
T & G	Tongue and Groove
SS	Single Strength
DS	Double Strength
VC	Vitrified Clay
RC	Reinforced Concrete
MH	Manhole
CB	Catchbasin
ES	Extra Strength

### ORGANIZATIONS AND PUBLICATIONS

AASHO	American Association of State Highway Officials
ACI	American Concrete Institute
AIEE	American Institute of Electrical Engineers
AISC	American Institute of Steel Construction
ASA	American Standards Association, Inc.
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWWA	American Waterworks Association
AWS	American Welding Society
MISS	Manufacturers Standardization Society of the Valve and Fitting Industry
NBFU	National Board of Fire Underwriters

NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
PCA	Portland Cement Association
UL	Underwriters Laboratory
UBC	Uniform Building Code

### 1.03 CONTRACTOR'S BONDS

- A. Faithful Performance Bond: As a part of the execution of this Contract, the Contractor shall furnish to the Owner, a bond payable to the City of Myrtle Beach in the form of Faithful Performance Bond set forth herein, secured by a surety company acceptable to the Owner, conditioned upon the faithful performance of all covenants and stipulations under this contract. Attorney in fact or Power of Attorney signature on bonds is permissible. The amount of the bond shall be not less than one hundred percent (100%) of the total contract amount as set forth in the Agreement.
- B. Labor and Material Bond: As a part of the execution of this Contract, the Contractor shall furnish to the Owner, a bond of surety company acceptable to the Owner in a sum of one hundred percent (100%) of the total contract amount, as set forth in the Agreement for the payment in full of all persons, companies or corporations who perform labor upon or furnish material to be used in the work under this Contract.
- C. Bid Bond: 5% of total Contract.
- D. Notification of Surety Companies: The Contractor shall advise the surety companies and other signers of the bonds listed above to familiarize themselves with all of the conditions and provisions of this Contract, and they shall waive the right of special notification of any change or modification to this Contract or of extension of time, or of decreased or increased work, or of the cancellation of the Contract or of any other act or acts by the Owner or its authorized employees and agents, under the terms of this Contract and failure to so notify the aforesaid surety companies of changes shall in no way relieve the surety companies of their obligations under this Contract.

### 1.04 CONTRACTOR'S INSURANCE

- A. Public Liability and Property Damage.
  - 1. The Contractor shall purchase and thereafter maintain for the term of this Agreement and any subsequent extensions hereto, public liability insurance to protect Contractor from claims for bodily injury and/or property damage which may result from Contractor's performance of this Agreement. The policy shall provide a combined single limit of liability of \$1,000,000 per occurrence for bodily injury and property damage with an aggregate limit of not less than \$1,000,000.

B. Automobile Liability.

1. The Contractor shall purchase and thereafter maintain for the term of this Agreement and any subsequent extensions hereto, comprehensive automobile liability insurance to protect the Contractor from claims for bodily injury and property damage which may arise from Contractor's use of motor vehicles in the performance of this Agreement. The policy must provide coverage for "ANY AUTO (CODE 1)" and Contractual Liability (endorsement CA 0025). The policy shall provide for a combined single limit of \$1,000,000 per occurrence for bodily injury and property damage.

C. Workers' Compensation Insurance.

1. Prior to beginning the work, the Contractor shall take out full compensation insurance for all persons which may be employed directly or indirectly in the performance of this Agreement. The policy must provide Employers Liability coverage in the amount of \$500,000 each accident; \$500,000 bodily injury by disease each employee and \$500,000 bodily injury by disease policy limit and shall be maintained in full force and effect during the term of this Agreement and any subsequent extensions hereto.

D. Excess Liability Policy.

1. At the option of the Contractor, the limits of the primary general liability, automobile liability and employer's liability policies may be less than stipulated herein, with an excess policy providing the additional limits required. This form of coverage must be approved by the Owner and will only be acceptable when both the primary and excess policies include the coverages and endorsements required herein.

E. Builders Risk Insurance.

1. If applicable, the Owner shall provide and maintain Builders Risk coverage in an amount equal to 100% of the Project's completed value. Coverage shall include but not be limited to, fire, lightning, windstorms, hail, smoke, explosion, riot, riot attending a strike, civil commotion, aircraft, vehicles, vandalism, malicious mischief, glass breakage, falling objects, water damage, collapse, flood and earthquake. The policy shall include coverage, but not be way of limitation, for all damage or loss to the work and to appurtenances, materials and equipment to be used on the Project while same are stored on the work site or approved storage area. Coverage does not extend to any tools, equipment or materials which are not intended to become part of the Project. All losses will be adjusted with and be made payable to the Owner. The Owner shall provide the Contractor with a Certificate of Insurance reflecting the foregoing, and that coverage will remain in effect until the Project has been accepted by the Owner.

The policy shall be endorsed with a "Waiver of Occupancy" to allow the Owner to use the property during the Project.

F. Policy Endorsements.

The following clauses shall be endorsed to the policy(s) indicated below:

1. General Liability and Automobile Liability

- a) "It is understood and agreed that in consideration of the terms and conditions of this policy to which this endorsement is attached, the City of Myrtle Beach, its officials, agents and employees are recognized as additional named insureds under the policy and as such will be provided thirty (30) days written notice of non-renewal, exhaustion of aggregate limit, modifications of coverage or cancellation for any reasons and the company hereby agrees to provide such notice. Failure of the company to provide the required notice shall cause the coverage to continue in force for the benefit of the Owner, its officials, agents, and employees until proper notification as required herein is provided, the provisions of the policy or any certificate of insurance to the contrary notwithstanding."
- b) "Contractor's insurance shall be primary to any insurance or self-insurance maintained by the Owner, its officials, agents or employees, which is considered excess and non-contributing for the purpose of this Agreement".
- c) "The company shall not have recourse against the Owner for payment of any premiums, deductibles or for payment of any premiums, deductibles or for assessments under this policy."
- d) "Failure of any named insured to comply with the reporting requirements of the policy shall not affect the coverage provided to the Owner as an additional insured."
- e) If the Contractor, to meet the obligations of the Contract, obtains any endorsement to its General Liability Policy not specifically required by this Contract, the Contractor shall be required to have the Owner, as an additional insured, covered by the same endorsements or otherwise, including, but not limited to, completed operations coverage.

2. Workers' Compensation

- a) "Underwriters have no right of recovery of subrogation against the Owner for losses which result from work performed under this Agreement."

- b) The cancellation provision is hereby amended to provide that the Owner will be provided thirty (30) days written notice in the event of coverage cancellation.

G. Subcontractors.

- 1. Contractor shall not be required to name Subcontractors as additional insureds in any insurance policy required herein. Contractor will, however, secure certificates of insurance as evidence that each Subcontractor carries insurance to provide coverage under this Agreement in the same form as is required of the Contractor.

H. Notifications of Insurance Companies.

- 1. It is the responsibility of the Contractor to notify all insurance companies to familiarize themselves with all terms and conditions of this Agreement. The insurance companies shall waive their right of notification by the Owner of any change or modification of this contract, or of decreased work or increased work, or of the cancellation of this Agreement or of any other acts by the Owner or its authorized employees or agents under the terms of this Agreement. The waiver by the insurance companies shall in no way relieve them of their obligations under this Agreement.

I. Certificates of Insurance.

- 1. Contractor shall file with the Owner a certificate of insurance for approval by the Owner prior to the inception of any work. Renewal certificates shall be sent to the Owner 30 days prior to the expiration date of any policy required herein. The Owner reserves the right to require submission of certified copies of all insurance policies at its sole discretion.

J. Coverage Cancellation or Unsatisfactory Coverage.

- 1. If at any time any of the foregoing policies shall be or become unsatisfactory to the Owner, as to form or coverage, or if a company issuing any such policy shall be or become unsatisfactory to the Owner, the Contractor shall, upon notice to that effect from the Owner, promptly obtain a new policy and submit the same for approval to the Owner. Upon failure of the Contractor to furnish, deliver and maintain the insurance coverages required herein, this Agreement, at the sole discretion of the Owner, may be forthwith declared suspended, discontinued or terminated. Failure of the Contractor to take out and/or maintain any required insurance shall not relieve the Contractor from any liability under this Agreement, nor shall the insurance requirements be construed to conflict with or otherwise limit the obligations of the Contractor concerning indemnification.



K. Hold Harmless.

1. Contractor agrees to protect, defend, indemnify and hold the Owner, its officers, employees and agents free and harmless from and against any and all claims, losses, fines, penalties, damages, settlements, costs, changes, attorney's fees and costs, professional fees or other expenses and liabilities of every kind and character arising in whole or in part, out of or relating to any and all claims, liens, demands, obligations, actions, proceedings, or causes of action of every kind in connection with or arising out of this Agreement and/or the performance hereof, without regard to fault or negligence of the Contractor or the Owner, that arise in whole or in part from any claim or actual action(s) of, or failure(s) to act by the Contractor, its officers, employees, subcontractors or agents. Contractor further agrees to investigate, handle, respond to, provide to, provide defense for and defend the same, regardless of fault of the Contractor or Owner or whether claims made are directly attributable to actions or inactions of the Contractor, at its sole expense and agrees to bear all other cost and expenses related thereto. The contractor shall protect, indemnify, defend and hold the Owner harmless regardless of any claimed or actual, negligence, breach of warranty of any kind, including warranties related to plans and specifications, against or by the Owner, its officers, employees and agents, professionals or Engineers. The Contractor also agrees to notify all insurers of claims made and demand defense of the Contractor and the Owner.
2. The Contractor also agrees to pay all attorney's fees, court fees, expert fees, and all other cost of litigation which are incurred by the Owner, which relate in whole or in part to any suit, arbitration, mediation, alternative dispute resolution, dispute, enforcement, default, declaratory judgment action, or other action in law or in equity, including appeals between Owner and Contractor, regardless of fault, which arise out of, in whole or in part, this agreement and or the performance hereof.

1.05 LOCATION OF EXISTING UTILITIES AND PIPING

The location of existing piping and underground utilities, as shown on the Drawings have been taken from existing record drawings, and information provided by other utilities. However, the Owner does not assume responsibility for the possibility that during construction utilities other than those shown may be different from the locations designated on the Drawings.

The Contractor shall proceed with caution in any excavation so that the exact location of underground utilities may be determined. Before excavation or boring is commenced, it shall be the duty of the Contractor to contact all utility companies to aid in locating their underground installations. The Contractor shall, at his own expense, furnish all labor and tools to verify and substantiate the indicated locations.

Any utility lines, services, poles or other structures which are damaged shall be repaired or replaced by the Contractor at his expense and the Contractor shall indemnify the Owner from any claims resulting from such damage.

Due to the nature of the work, adjustments may be required in new construction to meet existing conditions. Such adjustments shall be made by the Contractor without additional cost to the Owner unless the scope of such adjustment(s) is approved by the Owner in the form of a Change Order.

#### 1.06 LABOR PROVISIONS

The Contractor shall employ only competent and skilled workers and forepersons in the conduct of the Project. The Owner shall have the authority to order the Contractor to remove from the Project any of Contractor's employees who refuse to obey instructions relating to the carrying out of the provisions and intent of the provisions of the Contract, or who are incompetent, unfaithful, abusive, threatening or disorderly in their conduct, and any such person shall not again be employed on the Project.

#### 1.07 NOTICE OF STARTING WORK

The Contractor shall notify the Engineer and Owner in writing forty-eight (48) hours before starting work at the Project Site. In case of a temporary suspension of work, he shall give reasonable notice before resuming work.

#### 1.08 EFFECT OF EXTENSION OF TIME

The granting of any extension of time on account of delays which in the judgment of the Owner are avoidable delays shall in no way operate as a waiver on the part of the Owner of its rights under this Contract.

#### 1.09 EXTRA WORK

If extra work is assigned in accordance with the provisions of this contract, such work shall be considered a part hereof and subject to all its terms and requirements. Any such extra work shall be in the form of a Change Order to the Contract.

#### 1.10 ASSIGNMENT OF CONTRACT

The Contract may not be assigned in whole or in part except upon the written consent of the Owner.

#### 1.11 AMOUNT OF WORK PERFORMED BY PRIME CONTRACTOR

The Prime Contractor shall perform, under his direct supervision and with individuals in his immediate employ, a minimum of 50% of the contracted work value, unless otherwise approved in writing by the Owner.

#### 1.12 DISCREPANCIES

Anything called for by one of the Contract Documents and not called for by others shall be of like effect as if required or called for by all. Any discrepancies between any parts of the Contract Documents shall be called to the attention of the Engineer by the Contractor, in writing, for a decision before proceeding with the work affected thereby.

#### 1.13 LIABILITY OF OWNER'S REPRESENTATIVES AND OFFICIALS

No official or employee of the Owner, nor the Engineer, nor any authorized assistant or agent of either, shall be responsible for construction means, methods, techniques, sequences or procedures, time of performance or for safety precautions and programs in connection with the work. The Engineer shall not be responsible for the failure of the Contractor to carry out the work in accordance with the Contract Documents. The Engineer shall not be responsible for acts or omissions of the Contractor, any Subcontractor(s), or any of their agents or employees, or any other persons performing the work.

#### 1.14 EFFECT OF INSPECTION AND PAYMENT

Neither the inspection by the Engineer nor by any of his agents, nor by an inspector, nor any order, measurements, approved modification, certificate or payment of money, nor acceptance of any part or whole of work, nor any extension of time, nor any possession by the Owner or its agents, shall operate as a waiver of any provision of this Contract or of any power reserved therein to the Owner or any right to damages thereunder; nor shall the waiver of any breach of this Contract be held to be a waiver of any other or subsequent breach. All remedies shall be construed as cumulative.

### PART 2 LEGAL RELATIONS AND RESPONSIBILITY

#### 2.01 LAWS TO BE OBSERVED

The Contractor shall keep himself fully informed of all applicable Federal, State, County, and City laws, ordinances and regulations which in any manner affect those engaged or employed in the work or the materials used in the work or the conduct of the work or the rights, duties, powers, or obligations of the Owner or of the Contractor or which otherwise affect the Contract, and of all orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. He shall at all times observe and comply with, and shall cause all his agents, subcontractors and employees to observe and comply with, all such laws, ordinances, regulations, orders and decrees; and shall protect and indemnify the Owner, the Engineer and all of their officers, agents and employees, against any claim, loss or liability arising or resulting from or based upon the violation of any such laws, ordinance, regulation, order or decree, whether by himself or by his agents, subcontractor or employees. If any discrepancy or inconsistency is discovered in the Contract Documents for the work in relation to such laws, ordinance, regulation, orders or decree, the Contractor shall forthwith report the same to the Engineer and the Owner.

## 2.02 PROVISIONS OF LAW

It is specifically provided that this Contract is subject to all applicable laws and that the rules of law shall prevail over any provision contained in any of the Contract Documents which may be in conflict thereto or inconsistent therewith.

## PART 3 RESPONSIBILITIES AND RIGHTS OF CONTRACTORS

### 3.01 ATTENTION TO WORK

The Contractor shall direct the work using his best skill and judgment and shall give his personal attention to and shall supervise the work to the end that it shall be performed faithfully, and when he is not personally present on the work, he shall at all times be represented by a competent superintendent or foreman who shall be present at the work and who shall receive and obey all instructions or orders given under this Contract, and who shall have full authority to execute the same, and to supply materials, tools and labor without delay and who shall be the legal representative of the Contractor. The Contractor shall be solely responsible for all construction means, methods, techniques, sequences and procedures, time of performance and for safety precautions and programs and for coordinating all portions of the construction. The Contractor shall be liable for the faithful observance of any instructions delivered to him or to his authorized representative.

### 3.02 ACCESS TO WORK

The Contractor shall at all times provide facilities for access and inspection of the work by representatives of the Owner and of such official governmental agencies having jurisdictional rights to inspect the work.

### 3.03 WORK SITE

- A. Use of Work Site. The Contractor shall confine his equipment, apparatus, the storage of materials, and operations of his workers to limits indicated by the law, ordinance, permit, Contract Documents or directions of the Owner.
- B. The Contractors shall not load or permit any part of a structure to be loaded with weight that will endanger its safety. The Contractor shall observe and enforce the Owner's instructions regarding signs, advertisements, fires and smoke, unless such instructions are non-permissible in accordance within the jurisdiction of another authority.
- C. Use of Private Land. The Contractor shall not use any vacant lot or private land as a plant site, depository for materials, or as a spill site, or for any other purpose without the written authorization of the person(s) owning the property and the written approval of the Owner for the use of such property. A copy of the written Agreement between the property owner and the Contractor shall be provided to the Owner.

### 3.04 SIGNS

The Contractor may place and maintain one sign board on the Project site. No other commercial or advertising signs will be allowed on the work site or on public property in the vicinity of the work. The layout and content of the sign shall be approved by the Owner prior to installation.

### 3.05 LIABILITY OF CONTRACTOR

The Contractor shall do all of the work and furnish all labor, materials, tools and appliances, except as otherwise herein expressly stipulated, necessary or proper for performing and completing the work herein required in the manner and within the time specified in the Contract Documents. The mention of any duty or liability imposed upon the Contractor shall not be construed as a limitation or restriction or any general duty or other liability imposed upon the Contractor by this Contract, said reference to any specific duty or liability being made merely for the purpose of explanation. The Contractor shall provide all items, materials, articles, operations or methods listed, noted, mentioned or scheduled on the drawings or in any of the Contract Documents, including all labor, materials, plant, equipment, transportation and incidentals required and necessary for the completion of the work, and unless specifically shown otherwise herein, all plant, equipment and other works shall be completed in place and approved for operation. The Contractor shall be responsible to the Owner for the acts and omissions of all his employees, and all other persons performing any of the work under a contract with the Contractor.

### 3.06 ASSUMPTION OF RISKS

The Contractor shall rebuild, replace, repair, restore, and make good all injuries, damages, re-erection, and repairs occasioned or rendered necessary by causes of any nature whatsoever, to all or any portions of the work, except as otherwise stipulated, until completion and acceptance by the Owner.

### 3.07 RESPONSIBILITY FOR DAMAGE

The Contractor shall indemnify and save harmless the Owner, its officers, employees, and agents and the Engineer from any and all loss, liability or damage and from all suits, actions, damages, or claims, of every name and description arising from the acts and omission of the Contractor, its employees, agents, representatives, or subcontractors.

### 3.08 PROTECTION OF PERSONS AND PROPERTY

The Contractor will be solely and completely responsible for conditions of the work site, including safety of all persons and property during performance of the work. This requirement will apply continuously and not be limited to normal working hours.

The Contractor shall furnish such watchmen, guards, fences, warning signs, lights and walkways, and shall take all other precautions as shall be necessary to prevent damage to persons or property. All structures and improvements in the vicinity of the work shall be protected by the Contractor, and if such property is

damaged, injured or destroyed by the Contractor, his employees, Subcontractors, or agents, it shall be restored to a condition as good as when he entered upon the work.

The safety provisions of applicable laws, including but not limited to building and construction codes, shall be observed. Machinery, equipment, and all hazards shall be eliminated or guarded in accordance with OSHA standards.

Any construction inspection conducted by the Owner and/or Engineer of the contractor's performance is not intended to include review of the adequacy of the Contractor's safety measures.

### 3.09 PROTECTION OF CONTRACTOR'S WORK AND PROPERTY

The Contractor shall protect his work, supplies, and materials from damage due to the nature of the work, the action of the elements, trespassers or any cause whatsoever, until the completion and acceptance of the work.

Neither the Owner nor any of its officers, employees or agents nor the Engineer assumes any responsibility for collecting indemnity from any person or persons causing damage to the work of the Contractor.

### 3.10 PROTECTION OF EXISTING STRUCTURES

Unless otherwise indicated in the Contract Documents or unless otherwise taken care of by the Owner thereof, all utilities and all structures of any nature, whether below or above ground, that may be affected by the work shall be protected and maintained by the Contractor and shall not be disturbed or damaged by him during the progress of the work; provided that should the Contractor disturb, disconnect, or damage any utility or any structure, all expenses of whatever nature arising from such disturbance or the replacement or repair thereof shall be borne by the Contractor.

### 3.11 MAINTENANCE OF TRAFFIC

Throughout the performance of the work or in connection with this Contract, the Contractor shall construct and adequately maintain suitable and safe crossing over the trenches and such detours as are necessary to care for public and private traffic. The material excavated from trenches shall be compactly deposited along the side of the trench or elsewhere in such manner as shall give as little inconvenience as possible to the traveling public, to adjoining property owners, to other contractors or to the Owner. Where necessary or required, road detours must be approved by the Owner or other appropriate authorities at least 24 hours in advance of the proposed rerouting. MUTCD standards must be adhered to at all times.

### 3.12 PRESERVATION OF STAKES AND MARKS

The Contractor shall carefully preserve all bench marks, reference points, stakes, property pins, survey monuments and like items. In case he causes damage or disturbance, he will be charged with the resulting expense of replacement and shall be responsible for any mistakes that may be caused by their loss or disturbance.

### 3.13 APPROVAL OF CONTRACTOR'S PLAN

The approval by the Engineer or the Owner of any drawing or any method of work proposed by the Contractor shall not relieve the Contractor of any of his responsibility for any errors therein and shall not be regarded as any assumption of risk of liability by the Owner or any officer or employee thereof, and the Contractor shall have no claim under the Contract due to the failure or inefficiency of any plan or method approved. Such approval shall be considered to mean merely that the Engineer or Owner has no objection to the Contractor's using, upon his own full responsibility, the plans or methods proposed.

### 3.14 SUGGESTIONS TO CONTRACTOR

Any plan or method of work suggested by the Engineer or Owner to the Contractor, but not specified or required, if adopted or followed by the Contractor in whole or in part, shall be used at the risk and responsibility of the Contractor. The Engineer and the Owner shall assume no responsibility therefore.

### 3.15 LICENSES, PERMITS AND REGULATIONS

The Contractor shall secure all Federal, State, County and City licenses required by law. He shall obtain and pay for all necessary permits. He shall give all notices and comply with all laws, ordinances and regulations bearing on the conduct of the work as drawn and specified.

### 3.16 TAXES

Contractor shall, without additional expenses to the Owner, pay all applicable Federal, State and Local sales and other taxes, except taxes and assessments on the real property comprising the site of the Project.

### 3.17 CONSTRUCTION UTILITIES

The Contractor shall provide and maintain all necessary utilities, including but not limited to water, electricity, telephones, roads, fences, sanitary facilities, suitable storage places, except as may be otherwise specifically stipulated in the Contract Documents. Sanitary facilities shall be suitable for those employed on this Contract and of a type that will not create a public nuisance. He shall provide and maintain an adequate potable water supply for use of employees at the site of the work. Sanitary facilities and potable water supply shall be subject to approval of Local and State regulatory agencies.

### 3.18 COORDINATION

The Contractor shall coordinate his schedule with all other contractors or employees of the Owner who may be working in the vicinity of the work site. He shall conduct his operation as to interfere to the least possible extent with the work of such contractors or employees.

### 3.19 SUBCONTRACTORS

The Contractor shall notify the Owner in writing of the names of all Subcontractors he proposed to employ on the Contract and shall not employ any Subcontractors until the Owner's approval in writing covering such Subcontractors has been obtained. Such approval shall not be unreasonably withheld.

The Contractor agrees to be fully and directly responsible to the Owner for all acts and omissions of his Subcontractors and of any other person employed directly or indirectly by the Contractor or Subcontractors, and this Contract obligation shall be in addition to the liability imposed by law upon the Contractor.

Nothing contained in the Contract Documents shall create any contractual relationship between Subcontractor and the Owner. It shall be further understood that the Owner will have no direct relations with any Subcontractor. Any such necessary relations between the Owner and the Subcontractor shall be handled through the Contractor.

The Contractor agrees to bind every Subcontractor by all terms of the Contract Documents as far as applicable to the Subcontractor's work.

### 3.20 UNSATISFACTORY SUBCONTRACTORS

Should any Subcontractor fail to perform in accordance with the provisions of this Contract, the Contractor shall be notified in writing to take proper corrective action, or the Owner may require that the Contractor terminate the Subcontractor.

### 3.21 REMOVAL OF CONDEMNED MATERIALS AND STRUCTURES

The Contractor shall remove from the work site all rejected or condemned materials or structures of any kind brought to the work site or incorporated in the work. Upon his failure to do so, or to make satisfactory progress in so doing within forty-eight (48) hours after the service of a written notice from the Engineer or Owner, the rejected or condemned material or work may be removed by the Owner and the cost of such removal shall be subtracted from monies that may be due or may become due to the Contractor on account of or by virtue of this Contract. No such rejected or condemned material shall again be offered for use by the Contractor under this Contract.

### 3.22 ERRORS AND OMISSIONS

If the Contractor, in the course of the work, finds any errors or omissions in the Contract Documents or in the layout as given by survey points and instructions,



or if he finds any discrepancy between the Contract Documents and physical conditions of the work site he shall immediately notify the Engineer, in writing for correction. Any work done after such discovery, until authorized, will be done at the Contractor's risk.

### 3.23 PROOF OF COMPLIANCE WITH CONTRACT

In order that the Engineer and the Owner may determine whether the Contractor has complied with the requirements of the Contract Documents, compliance with which is not readily ascertainable through inspection and tests of the work and materials, the Contractor shall, at any time requested, submit to the Engineer and the Owner properly authenticated documents or other satisfactory proof as to his compliance with such requirements.

### 3.24 CLEANING UP

The Contractor shall not allow the work site to become littered with trash and waste materials, but shall maintain the same in a neat and orderly condition throughout the term of the Contract. The Contractor shall dispose of any such materials in accordance with all applicable laws. On or before completion of the work, the Contractor shall thoroughly clean all pits, pipes, chambers, or conduits which are a part of the work or premises which he has entered upon, shall bear down and remove all temporary structures built by him and shall remove rubbish of all kinds from any of the grounds he has occupied and leave them in a neat and clean condition.

### 3.25 FINAL GUARANTY

All workmanship and materials shall be guaranteed by the Contractor for a period of one year from the date of final acceptance by the Owner, unless otherwise stipulated in the Contract Documents.

If, within said guaranty period, repair or changes are required in connection with the work, which, in the opinion of the owner, is rendered necessary as the result of use of materials, equipment or workmanship which are inferior, defective or not in accordance with the terms of the Contract, the Contractor shall promptly upon receipt of written notice from the Owner, and without expense to the Owner: (a) place in satisfactory condition all of such work, correct all defects therein; and (b) make good all damage to the building, site, equipment or contents thereof, which in the opinion of the Owner, is the result of the use of materials, equipment or workmanship which are inferior, defective, or not in accordance with the terms of the Contract; and (c) make good any work or material, or the equipment and contents of building structure or site disturbed in fulfilling any such guarantee.

If the Contractor fails to comply within ten (10) days after receipt of written notice with the terms of this guaranty, the Owner may have the defects corrected, and the Contractor shall be liable for all expenses incurred; provided, however, that in case of an emergency where in the opinion of the Owner, delay would cause serious loss or damage, repairs may be made without notice being given to the Contractor and the Contractor shall pay the cost thereof.

### 3.26 PATENTS

- A. Except as otherwise provided in these Contract Documents, Contractor shall assume all costs arising from the use of patented materials, equipment, devices, or processes used on or incorporated in the work, and agrees to indemnify and save harmless Owner, Engineer, and their duly authorized representatives or employees, from all suits at law, or actions of every nature for, or on account of the use of, any patented materials, equipment, devices, or processes.
- B. Should Contractor, his agents, servants, or employees, be enjoined from furnishing or using any invention, article, material, or appliance supplied or required to be supplied or used under this Contract, Contractor shall promptly offer other articles, materials, or appliances in lieu thereof, of equal efficiency, quality, finish, suitability, and market value, for review by Engineer. If Engineer should disapprove the offered substitutes and should elect, in lieu of a substitution, to have supplied, and to retain and use, any such invention, article, material, or appliance as may by this Contract be required to be supplied, Contractor shall pay such royalties and secure such valid licenses as may be requisite and necessary for Owner and officers, agents, and employees, or any of them, to use such invention, article, material, or appliance without being disturbed or in any way interfered with by any proceeding in law or equity on account thereof. Should Contractor neglect or refuse to make any approved substitution promptly, or to pay such royalties and secure such licenses as may be necessary, then in that event Engineer shall have the right to make such substitution, or Owner may pay such royalties and secure such licenses and charge the cost thereof against any money due Contractor from Owner, or recover the amount thereof from him and his sureties notwithstanding that final payment under this Contract may have been made.

### 3.27 LEGAL RESPONSIBILITY OF CONTRACTOR IN PERFORMING WORK

The Contractor shall be required to comply with all Local, State, and Federal laws or regulatory requirements applicable to the performance of this Contract, to include any laws promulgated or enacted during the Contract Time. Lack of knowledge of such laws or regulations shall not relieve the Contractor of this duty. Any losses resulting to the Owner because of the failure of the Contractor to comply with this duty shall be borne by the Contractor.

### 3.28 WARRANTY OF TITLE

No material, supplies, or equipment to be installed or furnished under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale, lease-purchase or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. The Contractor shall warrant good title to all materials supplied and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed thereon by him to the Owner free from any claims, liens or charges. Neither the Contractor nor any person, firm or corporation furnishing any material or labor for

any work covered by this Contract shall have any right to a lien upon any improvement or appurtenance thereon. Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any bond given by the Contractor for their protection or any rights under any law permitting such persons to look to funds due the Contractor in the hands of the Owner. The provisions of this paragraph shall be inserted in all subcontracts and material contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

#### PART 4 RESPONSIBILITIES AND RIGHTS OF OWNER

##### 4.01 SURVEYS AND STAKING

The Owner, through the Engineer, will survey and place control stakes for general layout and control grades for the construction work. The protection and care of such stakes shall thereafter be the responsibility of the Contractor, and any stakes lost or destroyed will be replaced at the Contractor's expense.

##### 4.02 RIGHTS-OF-WAY

The Owner will provide all necessary rights-of-way and easements.

##### 4.03 AUTHORITY OF THE ENGINEER

All work performed under this Contract shall be in accordance with the Contract Documents and in a good workmanlike manner. To prevent disputes and determine acceptability and fitness of the several kinds of work and materials which are to be paid for under this Contract the Engineer shall: (a) decide all questions relative to the true construction meaning, and intent of the Contract Documents; (b) decide all questions which may arise relative to the classifications and measurements of quantities and materials and the fulfillment of this Contract; (c) and have the authority to reject or condemn all work or material which does not conform to the terms of this Contract. The Engineer's estimate and decision in all matters shall be a condition precedent to an appeal to the Owner for other compensation under this Contract, and a condition precedent to any liability on the part of the Owner to the Contractor on account of this Contract.

##### 4.04 INSPECTION

The Engineer, Owner, and their representatives shall at all times have access to the work whenever it is in preparation or progress, and the Contractor shall provide proper facilities for such access and for inspection.

If the Contract Documents, the Engineer's instructions, laws, or ordinances require any work to be specifically tested or approved, the Contractor shall give the Engineer and the Owner timely notice of the date and time fixed for the inspection or test.

If any work for which inspection is required in accordance with the Contract is

covered without the approval and consent of the Engineer, the work shall be uncovered for inspection and restored at the Contractor's expense. Any work for which inspection is not specifically required by the Contract may be uncovered for inspection by the Engineer. If such work is found to be in accordance with the Contract Documents, the Owner will pay the cost of re-examination and replacement. If such work is not in accordance with the Contract Documents, the Contractor shall pay such cost.

Properly authorized inspectors shall be considered to be the representatives of the Owner, limited to the duties and power entrusted to them. Inspectors shall be authorized to inspect materials and workmanship of those portions of the work to which they are assigned, either individually or collectively, and under instructions of the Engineer and Owner are to report any and all deviations from the Contract Documents which may come to their notice. Any inspector shall have the right to order the work stopped if, in his judgment, such action is necessary to (a) allow proper inspection, (b) avoid irreparable damage to the work, or (c) avoid subsequent condemnation of work which could not be readily replaced or restored to an acceptable condition. Such stoppage shall be for a period reasonably necessary for a determination by the Engineer that the work will in fact proceed in due fulfillment of all Contract requirements.

#### 4.05 RETENTION OF DEFECTIVE WORK

If any portion of the work performed or material furnished under this Contract shall prove defective, and if the imperfection in the same shall not be of sufficient magnitude or importance to make the work dangerous or wholly undesirable, or if the removal of such work is impracticable or will create conditions which are dangerous or undesirable, the Engineer, with the approval of the Owner, shall have the right and authority to retain such work instead of requiring the defective work to be removed and reconstructed. The Engineer shall recommend to the Owner such deductions therefore in the payments due or to become due the Contractor as may be just and reasonable, and the Owner may make such deductions as are reasonable.

#### 4.06 CHANGES IN WORK

The Owner shall have the right to order additions to, omissions from, or corrections, alterations and modifications in the line, grade, form dimensions, plan or kind or amount of work or materials herein contemplated, or any part thereof, either before or after the beginning of construction. Changes involving an increase or decrease in the cost of the work, the time permitted for the work, or inconsistencies within the Contract Documents, shall be approved in accordance with terms set forth in "Alterations, Omissions and Extra Work" of these General Provisions, and such order will be binding upon the Contractor. Such alterations shall in no way affect, vitiate, or make void this Contract or any part thereof, except that which is necessarily affected by such alterations.

In any case of neglect or refusal by the Contractor to perform any extra work which may be authorized by the Owner or to make satisfactory progress in the execution of the same, the Owner may employ any person or persons to perform such work and the Contractor shall not in any way interfere with the person or persons so employed.

#### 4.07 ADDITIONAL DRAWINGS

The Owner may furnish, through the Engineer, additional drawings during the progress of the work as are necessary to make clear or to define in greater detail the intent of the Contract Documents. The Contractor shall make his work conform to all such drawings.

#### 4.08 EMERGENCY PROTECTION

In the event of any emergency which threatens loss, damage or injury to persons or property, and which requires immediate action to remedy, the Owner, with or without notice to the Contractor, may provide suitable protection to the said property and persons by causing such work to be performed and such material to be furnished as shall provide such protection as the Owner may consider necessary and adequate. The cost and expense of such work and material so furnished shall be borne by the Contractor, and if the same shall not be paid on presentation of the bills therefore, such costs shall be deducted from any amounts due or to become due the Contractor.

The performance of such emergency work under the direction of the Owner shall in no way relieve the Contractor from any damages or liability which may arise during or after such precautions have been taken by the Owner.

#### 4.09 SUSPENSION OF WORK

The Owner may at any time suspend the work, or any part thereof by giving written notice to the Contractor. The work shall resume by the Contractor on a date fixed in a written notice from the Owner to the Contractor. If such stoppage is due to no fault of the Contractor, and not otherwise authorized by other provisions of the Contract Documents, the Owner shall reimburse the Contractor for reasonable expenses and adjust the time allowed for Contract completion; provided that there shall be no reimbursement if the period of suspension occurs after expiration of the time allowed for completion of the work, exclusive of any extension of time.

#### 4.10 RIGHT OF OWNER TO TERMINATE CONTRACT

In the event that any of the provisions of the Contract Documents are violated by the Contractor or by any of his Subcontractors, the Owner may serve written notice upon the Contractor and the Surety of its intention to terminate this Contract. Such notice shall contain the reasons for intention to terminate this Contract. Unless within ten (10) days after the serving of such notice upon the Contractor, such violation shall cease or satisfactory arrangements for correction be made in writing, the Contract shall cease and terminate. In event of such termination, the Owner shall immediately serve notice thereof upon the Surety and the Contractor, and the Surety shall have the right to perform the Contract. If the Surety does not commence performance thereof within thirty (30) days from the date of the mailing to such Surety of said notice of termination, the Owner may take over the work and prosecute the same to completion by contract or force account at the expense of the Contractor, and his Surety shall be liable to the Owner for any excess cost to the Owner.

Where the Contractor has failed to complete minor items of work within the time set for completion of the Contract, but limited to cases where the value of such minor work does not exceed five percent (5%) of the total construction cost of the work, the Owner shall have the right, without terminating this Contract, of completing said items of work and then deducting from the sums due the Contractor under this Contract, the total cost incurred in completing such minor items of work. In such cases, the Owner may complete such minor items of work by force account or by employing some other Contractor. If the Owner adopts this procedure, it shall deliver to the Contractor a written statement, describing the items not completed, or imperfectly completed, and shall in such statement, demand that the Contractor complete the work in conformity with the Contract and within a time to be fixed by the Owner. If the Contractor neglects to comply within the time stated, the Owner may proceed, as herein above set forth. The time within which the Contractor shall be required to complete the items set forth in such statement will depend on the amount of time required for the performance of said work, but shall not in any event be less than ten (10) days, nor more than thirty (30) days.

#### 4.11 PLACING PORTIONS OF WORK IN SERVICE

If desired by the Owner, portions of the work may be placed in service as completed, and the Contractor shall give proper access to the work for this purpose. Use and operation shall not constitute an acceptance of the total Project.

### PART 5 WORKMANSHIP, MATERIALS AND EQUIPMENT

#### 5.01 WORKMANSHIP

All workmanship shall be of the highest quality, performed by persons skilled in the applicable trades, and shall be subject to the inspection, approval, or rejection by the Owner in accordance with the requirements and intent of the Contract Documents. The Owner or Engineer shall have the right to order the Contractor to correct or replace unacceptable workmanship. Any other portions of the work disturbed or damaged by such correction or replacement shall be made good at the Contractor's expense.

#### 5.02 INTERPRETATION OF SPECIFICATIONS AND DRAWINGS

The Technical Specifications and the Drawings are intended to be explanatory of each other. Any work indicated on the Drawings and not in the Technical Specifications, or vice versa, shall be brought to the attention of the Engineer for verification of the actual intent. Contradictions of this nature not brought to the attention of the Engineer for correction or verification, and acted upon by the Contractor shall be considered "At the Contractor's Risk", and if necessary, corrected by the Contractor at his expense. All work shown on the Drawings, the dimensions of which are not labeled, shall be determined by the Engineer. Should it appear that the work to be done, or any of the matters relative thereto, is not sufficiently detailed or explained in these Contract Documents, including the Drawings, the Contractor shall apply to the Engineer for such further

explanations as may be necessary and shall conform thereto as part of this Contract. In the event of any doubt or question arising respecting the true meaning of the Contract Documents, reference shall be made to the Owner and the decisions thereon shall be final.

#### 5.03 GENERAL QUALITY OF MATERIALS

Materials and equipment shall be new and of a quality equal to that specified or approved. Whenever under this Contract it is provided that the Contractor shall furnish materials or manufactured articles, or shall do work for which no detailed specifications are set forth, the materials or manufactured articles shall be approved by the Owner upon recommendation of the Engineer. In general, the work performed shall be in full conformity and harmony with the intent to secure the best standard of construction and equipment of the work as a whole or in part.

#### 5.04 MATERIALS AND EQUIPMENT SPECIFIED BY NAME

Except as hereinafter otherwise provided, whenever any material or equipment is indicated or specified by patent or proprietary name, or by the name of the manufacturer, such specification shall be considered as used for the purpose of describing the material or equipment desired and shall be considered as followed by the words, "or approved equal", and the Contractor may offer any material or equipment which shall be approved by the Owner and Engineer and be equal in every respect to that specified; provided, that written approval is obtained from the Owner prior to incorporation into the work.

#### 5.05 APPROVAL OF MATERIALS AND EQUIPMENT

All materials and equipment offered to be furnished for the work are subject to inspection and approval or rejection by the Engineer or Owner. Approval shall be obtained prior to purchase and delivery of materials and equipment to the work site.

#### 5.06 DRAWINGS OF EQUIPMENT AND FABRICATED MATERIALS

As soon as possible after execution of the Contract, the Contractor shall submit to the Engineer a complete listing of the manufacturers of each item of equipment or assembly fabricated off the site which he proposes to furnish on the Project, together with sufficient information, including shop assembly and detail drawings, manufacturers' specifications and performance data to demonstrate clearly that the materials and equipment to be furnished comply with the provisions and intent of the Contract Documents. If the information shows any deviation from the Contract Documents, the Contractor shall, by a statement in writing accompanying the submittal, advise the Engineer of the deviation and reason. The Contractor shall also submit to the Engineer shop drawings showing details of structural steel and concrete reinforcing steel, banding details, piping details, and of other items necessary for the proper installation of material into the completed work.

All drawings and details described herein, when submitted, shall bear the stamp of the Contractor and initials of his authorized representative indicating that the

Contractor has reviewed and approved such drawings as meeting his interpretation of the requirements of the Contract.

The Submittal shall be made in triplicate plus the number of copies that the Contractor desires to be returned to him. Upon review, the Engineer will return all but three copies, which will be stamped or marked either approved, approved subject to minor designated changes, or disapproved. In the latter case an explanation will be given as to why the material or equipment is unsatisfactory.

The Contractor shall make any indicated corrections on the drawings returned and shall resubmit corrected drawings until final approval. Approval by the Engineer of shop drawings and other data submitted by the Contractor shall not relieve the Contractor from responsibility for errors or omissions therein, or for furnishing the materials and equipment of proper dimension, size, quantity, quality, and all performance characteristics to meet the requirements and intent of the Contract Documents.

The Contractor shall have no claim for damages or extension of time on account of any delay in the work resulting from the reasonable and timely rejection of material, revision and resubmittal of drawings and other data for approval.

#### 5.07 SUBSTITUTIONS

If the Contractor proposes to substitute any equipment, facilities or processes in place of those specified in the Contract Documents, the Contractor shall prepare and submit to the Engineer detailed drawings showing any modifications, including, but not limited to structures, reinforcing steel, piping, electrical and mechanical work, to adapt the Drawings to the alternate equipment or facilities. The Engineer, with the Owner, will review such Drawings and may approve, reject, or indicate thereon changes necessary to comply with the project requirements.

#### 5.08 SAMPLES

Whenever requested by the Engineer or Owner, or when called for by the Contract Documents, sample or test specimens of the materials to be used or offered for use in the work shall be obtained or prepared by and at the expense of the Contractor. The samples shall be representative in all respects of the material offered or intended to be used, shall be supplied in such quantities and sizes as may be required for proper examination and tests, and shall be delivered to the Engineer freight prepaid along with identification as to their sources and types or grades. All samples shall be submitted and approved before shipment of the material to the work site.

No materials or equipment of which samples are required to be submitted for approval shall be incorporated into the work until such approval has been given by the Engineer.



## 5.09 TESTS

Unless otherwise stipulated in the Contract Documents, all testing required shall be provided by and at the sole expense of the Contractor. All laboratory tests required shall be made by a testing laboratory approved by the Owner.

All tests shall be performed in accordance with specific procedures identified in the Contract Documents, or if not therein specified, they shall be performed in accordance with applicable recognized standard practice. Reports of tests provided by the Contractor shall be promptly submitted to the Engineer and the Owner, or if provided by the Engineer, copies shall be promptly submitted to the Contractor.

The Contractor shall give the Engineer and the Owner sufficient notice of the time and place of any test to be made at the point of manufacture, assembly, or fabrication in order that the Engineer or the Owner may witness the test.

## 5.10 MATERIAL TESTS

All materials incorporated in the work shall be subject to inspection and test as follows: All tests, except as noted, shall be made by a laboratory, employed and paid for by the Contractor. The laboratory shall be approved by the Owner prior to being retained by the Contractor. Samples at the place of manufacture shall be taken by a representative of the laboratory. Samples of construction materials from the site of the work, such as sand, gravel, concrete cylinders, and pipes for which laboratory tests are required, shall be taken, assembled or prepared on the site of the work by representatives of the laboratory or Owner. Signed copies of test reports on laboratory forms or letterheads shall be delivered to the Engineer as soon as available.

## 5.11 STORAGE OF MATERIALS & EQUIPMENT

Materials shall be stored so as to ensure the preservation of their quality and fitness for the work and to allow access for proper inspection. Store materials so as to protect materials from damage from the general public, and so as to protect the general public from injury.

## 5.12 OPERATING AND MAINTENANCE DOCUMENTATION

Before final acceptance of the work, the Contractor shall deliver to the Engineer a complete set of suitable operating and maintenance instructions and parts list documentation for each piece of equipment or equipment assembly. These instructions and lists shall be assembled in an orderly arrangement and shall be accompanied by a tabulation of the information provided for each item of equipment.

## 5.13 COMPLIANCE WITH STATE SAFETY CODE

All necessary machinery guards, railings, and other protective devices and equipment shall be provided as specified by the OSHA, or other regulatory agencies or departments.

## PART 6 EXECUTION OF WORK

### 6.01 EQUIPMENT AND METHODS

The work under the Contract shall be execution with all materials, tools, machinery, apparatus and labor, and by such methods as are necessary to complete the work. If at any time, any part of the Contractor's plant or equipment or any of his methods of execution of the work appear to the Owner or the Engineer to be unsafe, inefficient or inadequate to insure the required quality or rate of progress of the work, he may order the Contractor to increase or improve his facilities or methods and the Contractor shall comply promptly with such orders; but neither compliance with such orders nor failure of the Engineer or Owner to issue such orders shall relieve the Contractor from his obligation to secure the degree of safety, the quality of the work and the rate of progress required. The Contractor alone shall be responsible for the safety, adequacy and efficiency of his plant, equipment and methods.

If the Contractor fails to promptly comply with the order of the Owner or Engineer issued in accordance with this Paragraph, the Owner shall have the right to terminate the Contract.

### 6.02 TIME OF COMPLETION

The Contractor shall promptly begin the work under the Contract, and all portions of the project made the subject of this Contract shall begin and be so prosecuted that they shall be completed and ready for full use within the time specified elsewhere in the Contract Documents.

### 6.03 AVOIDABLE DELAYS

Avoidable delays in the execution or completion of the work shall include all delays which might have been avoided by the exercise of care, prudence, foresight or diligence on the part of the Contractor.

Delays in the execution of parts of the work, which may in themselves be unavoidable but do not necessarily prevent or delay the execution of other parts of the work nor the whole work within the time herein specified, will be deemed avoidable delays within the meaning of this Contract.

### 6.04 UNAVOIDABLE DELAYS

Unavoidable delays in the execution or completion of the work under this Contract shall include all delays which may result through causes beyond the control of the Contractor and which he could not have prevented by the exercise of care, prudence, foresight or diligence. Orders issued by the Owner changing the amount of work to be done, the quantity of materials to be furnished, or the manner in which the work is to be prosecuted, failure of the Owner to provide rights-of-way and unforeseen delays in the completion of other contractors under contract with the Owner will be considered unavoidable delays, so far as they necessarily interfere with the Contractor's completion of the whole of the work. Delays due to adverse weather conditions, unless of an extreme nature such as

hurricanes, floods, or tornados will not be regarded as unavoidable delays as the Contractor should understand that such conditions are to be expected and plan his work accordingly.

#### 6.05 NOTICE OF DELAYS

Whenever the Contractor anticipates or experiences any delay in the execution of the work he shall immediately notify the Owner and Engineer, in writing, of such delay and its cause in order that the Owner may take immediate steps to prevent, if possible, the occurrence or continuance of the delay, or, if this cannot be done, may determine whether the delay is to be considered avoidable or unavoidable, how long it continues, and to what extent the execution and completion of the work is to be delayed thereby.

After the completion of any part or the whole of the work, the Owner, in approving the amount due the Contractor, will assume that any and all delays which have occurred in its execution and completion have been avoidable delays, except such delays as shall have been called to the attention of the Owner at the time of their occurrence and later found by the Owner to have been unavoidable. The Contractor will make no claims that any delay not called to the attention of the Owner at the time of its occurrence has been an unavoidable delay.

#### 6.06 EXTENSION OF TIME

- A. UNAVOIDABLE DELAYS: For delays which are unavoidable, as determined by the Owner, the Contractor will be allowed, upon Contractor application, an extension of time beyond the time specified for completion elsewhere in the Contract Documents, proportionate to the length of such unavoidable delay. No liquidation damages or Engineering and inspection costs as are charged in the case of extensions of time for avoidable delays, will be assessed for unavoidable delays.
- B. AVOIDABLE DELAYS: If the work called for under this Contract is not finished and completed in all parts and in accordance with all requirements, within the time specified for completion in the Contract Documents (including extensions of time granted because of unavoidable delay), or if at any time it shall appear to the Owner that the Contractor will be unable to finish and complete the work, the Owner may grant the Contractor such extensions of time as the Owner deems in its best interest.
  - 1. If such extension of time for Avoidable Delay is not granted, the provisions of the Contract Document, at the discretion of Owner, may be followed. However, at the option of the Owner and where the delay may be of such a duration not to inflict serious injury to the operations of the Owner in regard to the project, the Owner may assess liquidated damages for each calendar day delay exceeding the contract completion date. The sum of liquidated damages on a per day basis will be stipulated in the Contract Documents.

#### 6.07 UNFAVORABLE WEATHER AND OTHER CONDITIONS

During unfavorable weather and other unfavorable conditions, the Contractor shall pursue only such portions of the work as shall not be damaged thereby. No portions of the work whose satisfactory quality or efficiency will be affected by an unfavorable condition shall be constructed while these conditions exist unless by special means or precautions approved by the Owner and Engineer.

## PART 7 PAYMENTS AND CONTRACT COMPLETION

### 7.01 PROGRESS ESTIMATES AND PAYMENTS

Immediately upon execution and delivery of the Contract and before the first partial payment is made, the Contractor shall deliver to the Owner an estimated construction progress schedule in form satisfactory to the Owner, showing the proposed dates of commencement and completion of each of the various subdivisions of work required under the Contract Documents and the anticipated amount of each monthly payment that will become due the Contractor in accordance with the progress schedule.

No payments under the Contract will be made except upon the presentation by the Contractor of a Periodical Estimate for Payment approved by the Engineer. Payment forms, supplied by the Owner, shall show that the work covered by the payments has been completed and the payments therefore are due in accordance with the Contract. Such payment forms shall be submitted to the Engineer, by the Contractor, by the 25th day of a calendar month to permit review. Upon presentation of certified copies of purchase bills and freight bills, the Owner will include in such monthly estimate, payments for materials that will eventually be incorporated in the work, providing that such material is suitably stored on the work site or other Owner approved site, at the time of submission of the estimate. Such materials, when so paid for by the Owner, will become the property of the Owner and, in case of default on the part of the Contractor, the Owner may use or cause to be used by others these materials in construction of the work. However, the Contractor shall be responsible for safeguarding such materials against loss or damage of any nature whatsoever, and in case of any loss or damage, the Contractor shall replace such lost or damaged materials at no cost to the Owner.

Except as otherwise provided, the first estimate shall be of the value of the work performed and materials delivered and suitably and safely stored at the work site or other Owner approved site. Every subsequent estimate, except the final estimate, shall be for the value of the work performed and materials delivered and suitably stored since the preceding estimate was made; and provided, also, that materials delivered for the Project for which payment is included in the estimate, shall not be removed from the work site or approved storage site without the written consent of the Owner.

The estimates shall be signed by the Engineer and approved by the Owner, and after such approval, the Owner, subject to the foregoing provisions, will pay or cause to be paid to the Contractor, in the manner provided by law, an amount equal to ninety percent (90%) of the estimated value of the work performed and the full value of the materials furnished, delivered, unused and suitably and safely stored as provided above.

## 7.02 ALTERATIONS, OMISSIONS AND EXTRA WORK

The Owner reserves the right to increase or decrease by 15% the quantity of any item or portion of the work, or to omit portions of the work as may be deemed necessary or advisable by the Owner and, also, to make such alterations or deviations, additions to, or omissions as may be deemed necessary during the progress of the work. Upon written order of the Owner, the Contractor shall proceed with the work as increased, decreased or altered.

The Engineer is authorized to order, on behalf of the Owner, minor changes in the work which do not involve extra cost or an extension of time to the Contract and which does not change the character of the work. The Engineer is not authorized to order any other changes, alterations, omissions, additions, or extra work unless the same is approved by a written Change Order properly authorized in writing by the Owner. No claim of Contractor for extra compensation because of any change, alteration, omission, addition or extra work shall be paid or be payable unless a written order to the same change is signed by the Owner.

All adjustments, if any, in the Contract Price to be paid to Contractor because of any such change, alteration, deletion, addition, or extra work shall be made only to the extent and in the manner provided in the Contract Documents. Such alteration shall in no way affect, vitiate, or make void this Contract or any part thereof, except that such is necessarily affected by such alterations and is clearly the evident intention of the parties to this Contract. Any such work performed by the Contractor prior to execution of the Change Order by the Owner shall be at the risk of the Contractor. In case of neglect or refusal by the Contractor to perform any extra work which may be authorized by the Owner, the Owner may employ any person or persons to perform such work and the Contractor shall not in any way interfere with the person or persons so employed.

When any changes decrease the amount of work to be done, such changes shall not constitute a basis or reason for any claim by Contractor for extra compensation or damages on account of any anticipated profits which he thereby loses on the omitted work, and Contractor shall not be entitled to any compensation or damages therefore.

## 7.03 OWNER'S RIGHT TO WITHHOLD CERTAIN AMOUNTS

The Owner may withhold from payments to the Contractor, in addition to the retained percentage, such an amount or amounts as may be necessary to cover:

- A. Payments that may be earned or due for just claims for labor or materials furnished in and about the work.
- B. Defective work not remedied.
- C. Failure of the Contractor to make proper payments to a subcontractor.
- D. Reasonable doubt that this Contract can be completed for the balance then unpaid.

- E. Damage to another Contractor, where there is evidence thereof.
- F. The Contractor's failure to resolve bodily injury or property damage claims of any person or entity.

The Owner will have the right to act as agent for the Contractor in disbursing such funds as have been withheld, pursuant to this Paragraph, to the party or parties who are entitled to payment there from. The Owner shall render to the Contractor a proper accounting of all such funds disbursed in behalf of the Contractor.

The Owner also reserves the right to refuse payment of the final estimate due to the Contractor until it is satisfied that all subcontractors, material suppliers, and employees of the Contractor have been paid in full.

#### 7.04 UNIT PRICE CONSTRUCTION ITEMS

No work shall be performed by the Contractor on any unit price items beyond the quantity as set forth in the Contract, unless specifically approved by the Owner and directed by the Engineer in writing to do so. It is anticipated that the quantities as set forth for such unit price items are reasonable and that said quantities will not be exceeded by more than 10%. The Contractor shall carefully study the Contract Documents to determine the extent and scope of the work included under lump sum items in the Contract. It may be that work under some of such unit price items is in addition to similar work to be performed under lump sum items and paid for thereunder.

#### 7.05 COMPENSATION FOR EXTRA WORK AND WORK OMITTED

Whenever corrections, additions, or modifications in the work under this Contract change the amount of work to be performed or the amount of compensation due the Contractor, the Owner will have prepared a written Change Order, setting forth the extra work to be performed or work omitted. Such a Change Order will also set forth the method of computing the added or reduced compensation to be due the Contractor. The method of computing the added or reduced compensation to be due the Contractor will be determined under one or more of the following methods as selected by the Owner:

- A. By Unit Price contained in the Contractor's original Proposal and incorporated in the Contract with a change in quantity.
- B. By a supplemental schedule of prices contained in the Contractor's original Proposal and incorporated in the Contract.
- C. By an acceptable lump sum of the following five items as full and proper compensation:
  - 1. The necessary reasonable cost to the Contractor of the material required for the work as furnished and delivered by the Contractor at the site of the work.

2. The necessary cost to the Contractor of the labor required to incorporate all of said material into the work and to finish the work in accordance with directions.
3. The necessary reasonable cost to the Contractor for the use of equipment used for the work.
4. The cost of Workers' Compensation, insurance premiums, State Unemployment and Federal Social Security payments on the labor included in Item 2.
5. Fifteen percent (15%) of the sum of items 1, 2, 3, and 4, which shall be considered as covering all other expenses and profit.

Under method C. described above, in order that a proper determination may be made by the Engineer of the cost of labor and materials incorporated into extra work, the Contractor shall furnish weekly an itemized statement of material and labor supplied, together with the cost vouchers for quantities and prices of such labor, materials or work. In the event the Contractor fails to comply with the above provisions, no claim for compensation shall be made against the Owner.

#### 7.06 ACCEPTANCE OF WORK

The work will be accepted in writing by the Owner when completed in accordance with the terms of the Contract Documents as verified by the Engineer. Such acceptance, however, will be predicated upon the approval of State and/or Federal regulatory agencies having concurrent jurisdiction on the work or worksite.

#### 7.07 FINAL ESTIMATE AND PAYMENT

The Contractor shall, as soon as practicable after the final acceptance of the work under this Contract, submit a final estimate for payment.

Such final estimate shall be checked, approved and signed by the Engineer and the Owner. After such approval, the Owner shall pay or cause to be paid to the Contractor the entire sum found to be due after deducting therefrom all previous payments and amounts as the terms of the Contract prescribe.

Neither the final payment nor any part of the retained percentage shall become due until the Contractor shall deliver to the Owner a complete release of all claims or liens arising out of this Contract and an affidavit that, so far as he has knowledge or information, the release includes all the labor and materials for which a lien or claim could be filed. The Contractor may, if a Subcontractor refuses to furnish a release in full, furnish a bond satisfactory for the full amount of the Subcontractor's lien to the Owner indemnifying the Owner against any claim or lien. If any claim or lien remains unsatisfied after all payments are made, the Contractor shall reimburse the Owner all money that it may be compelled to pay in discharging such lien, including all costs and reasonable attorney's fees.

#### END OF SECTION