

PROJECT MANUAL

A/E PROJECT NO. 20-2142
PROPOSAL NO. 50-00140980

WILLIAMS PLAYLOT & ADA PARKING
7744 Mistletoe Street
Metairie, LA 70003



MEYER ENGINEERS, LTD.
ENGINEER AND ARCHITECT
4937 Hearst Street, Suite 1B
Metairie, Louisiana 70001



NOVEMBER 14, 2022

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DISCLAIMER: The official and legally recognized set of Bidding and Construction Documents shall be the set of Documents that are on file in the Engineer/Architect's office labeled "Office Set".

ADVERTISEMENT FOR BIDS
BID NO. 50-00140980

Sealed Bids will be received electronically through our E-Procurement site at www.jeffparishbids.net until 2:00 p.m. **March 14, 2023** and publicly opened thereafter. At no charge, bidders may submit via Jefferson Parish's electronic procurement page by visiting www.jeffparishbids.net to register for this free site.

Bids will be accepted and received through Central Bidding until 2 p.m. The public bid opening will be held at the West Bank Purchasing Department at 200 Derbigny Street, Suite 4400, Gretna, LA 70053 beginning at 2:30 p.m. on each bid opening date for the following project:

Williams Playlot & ADA Parking
7744 Mistletoe Street, Metairie, La 70003
Project No 20-2142
Department of Recreation

Purchases for this project shall be exempt from state sales and use tax according to La. R.S. 47:301(8)(c)(i). The successful bidder shall be granted the tax-exempt status of Jefferson Parish via Form R-1020, Designation of Construction Contractor as Agent of a Governmental Entity Sales Tax Exemption Certificate. Form R-1020 is distributed by the Louisiana Department of Revenue.

All bids must be in accordance with the contract documents on file with the Jefferson Parish Purchasing Department, Suite 4400, Jefferson Parish General Government Building, at 200 Derbigny Street, Gretna, Louisiana. **Late bids will not be accepted.**

Each Bid must be accompanied by an electronic bid surety bond in the amount equal to five percent (5%) of the total amount bid, and payable without condition to the owner. Vendors must submit an electronic bid bond through the respective online clearinghouse bond management system(s) as indicated in the electronic bid solicitation on Central Auction House. No scanned paper copies of any bid bond will be accepted as part of the electronic bid submission.

The drawings and specifications are on file and open for inspection in the Jefferson Parish Purchasing Department, Suite 4400, Jefferson Parish General Government Building, at 200 Derbigny Street, Gretna, Louisiana. A complete set of Contract Documents may be secured from **Meyer Engineers, Ltd, 4937 Hearst Street, Suite 1B, Metairie, LA 70001, Phone: 504-885-9892 or Fax: 504-887-5056** by licensed contractors upon receipt of **\$60.00 for a hard copy set and/or a non-refundable fee of \$25.00 for an electronic set on compact disc.** Deposit on the first set of documents furnished bona fide prime bidders will be fully refunded upon return of documents in good condition no later than ten (10) days after receipts of bids.

The successful bidder will be required to furnish a performance bond guaranteeing faithful performance of the contract. Companies providing the bonds shall comply with the requirements of LA-R.S. 38:2218 and R.S. 38:2219 as applicable.

The Jefferson Parish Council reserves the right to reject all bids and to reject bids for just cause, pursuant to the law. Jefferson Parish and its partners as the recipients of federal funds are fully committed to awarding a contract(s) to firm(s) that will provide high quality services and that are dedicated to diversity and to containing costs. Thus, Jefferson Parish strongly encourages the involvement of minority and/or woman-owned business enterprises (DBE's, including MBE's, WBE's and SBE's) to stimulate participation in procurement and assistance programs.

All prospective bidders are invited to attend the non-mandatory pre-bid conference which will be held at 10:30 a.m. on February 16, 2023 at 7744 Mistletoe Street, Metairie, La 70003. However, failure to attend the pre-bid conference shall not relieve the bidder of responsibility for information discussed at the conference. Furthermore, failure to attend the pre-bid conference and inspection does not relieve the successful bidder from the necessity of furnishing materials or performing any work that may be required to complete the work in accordance with the specification with no additional cost to the owner.

Renny Simno
Director
Purchasing Department

Misty A. Camardelle
Assistant Director
Purchasing Department

ADV: The New Orleans Advocate: February 1, 8, & 15, 2023

For additional information, please visit the Purchasing Webpage at <http://purchasing.jeffparish.net> or you may call 504-364-2678.

PUBLIC WORKS BID INSTRUCTIONS

A. LOUISIANA CONTRACTOR'S LICENSE FOR THIS PROJECT

Must be in the following category:

Building Construction

Each bidder shall comply with all rules and regulations of the Louisiana State Licensing Board for Contractors in accordance with existing state laws, and shall comply with the Licensing Requirements of Jefferson Parish Ordinance No. 13574, as amended a copy of which may be obtained from the Office of the Parish Clerk, Suite 6700, Jefferson Parish General Government Building, 200 Derbigny Street, Gretna, Louisiana 70053.

B. PROBABLE CONSTRUCTION RANGES AND PRICES

Range of the Probable Construction Cost for Base Bid: \$250,000 - \$500,00

Range of the Probable Construction Cost for Alternate No. 1: N/A

Range of the Probable Construction Cost for Alternate No. 2: N/A

Range of the Probable Construction Cost for Alternate No. 3: N/A

Range of the Previous Contract Cap
(Public Work Maintenance Contract): N/A

The purpose and intention of this invitation to bid is to afford all suppliers/contractors an equal opportunity to bid on construction, maintenance, repair, operating, services, supplies and/or equipment listed in this bid proposal. Jefferson Parish will accept one bid only from each vendor. Items bid on must meet or exceed specifications. Where brand names, make, manufacturer or stock numbers are specified, it is for the purpose of establishing certain minimum standards of quality. Bidders may submit for products of equal quality, style, type and character, provided brand names and stock numbers are specified. Complete product data may be required prior to award.

The price quoted for the work shall be stated in figures. In the event there is a difference in unit prices and totals, the unit prices shall prevail. In the event there is a difference in unit prices, written unit prices shall prevail over numerical unit prices.

The quantities listed on the bid form are prepared for comparison of bids and may be approximate. Payment to the contractor will be made in accordance with measurement and payment requirements for bid items and other requirements of the project specifications. Bid item quantities may be increased, decreased, or omitted as provided in the specifications.

Jefferson Parish requires all products to be new (current), and all work must be performed according to standard practices for the project. Unless otherwise specified, no after market parts will be accepted. Unless otherwise specified, all workmanship and materials must have at least a one (1) year guaranty, in writing, from the date of delivery/acceptance of the project.

C. MAINTENANCE, REPAIR AND SUPPLY CONTRACTS (ONLY)

In the event that the successful bidder cannot furnish a specific item or material and labor in the required time, Jefferson Parish may purchase on an emergency basis from the next lowest bidder,

or available source, until such time the successful bidder has notified Jefferson Parish in writing that their stock or labor capability has been replenished. The difference in price will be charged against the successful bidder of this contract, and evidence of purchases and prices will be provided. **Contractor by bidding this proposal acknowledges and agrees to these provisions.**

The prices quoted in bid proposals to supply labor and materials to Jefferson Parish shall include all costs necessary for the complete performance of the work in full conformity with the conditions of the Contract Documents, and shall include all licenses and permit fees and all applicable Federal, State, County or Parish, Municipal, or other taxes due by the contractor. If the Contractor is to act as the Parish's Purchasing Agent for tax exempt purposes, the Parish shall specifically state so within this bid specification.

Jefferson Parish is exempt from paying sales taxes under LSA-R.S. 47:301(8)(c). All prices for purchases by Jefferson Parish of supplies and materials shall be quoted in the unit of measure specified and unless otherwise specified, shall be exclusive of State and Parish taxes. All quotations shall be based on F.O.B. Agency warehouse, or job site, anywhere within Jefferson Parish, as designated by the Purchasing Department.

D. METHODS OF BID SUBMISSION

All bids shall be submitted electronically through Jefferson Parish's eProcurement System online at no charge via Jefferson Parish's electronic procurement page by visiting www.jeffparishbids.net. Registration and use of this site are free to Jefferson Parish vendors. Additional instructions are included in the text box highlighting electronic procurement.

Only bids properly signed (see more below) will be accepted. **NO LATE BIDS WILL BE ACCEPTED.** The name of the bidder must be legibly shown. If the bidder is an individual, their name and address should be shown. If the bidder is an entity, the name of the person given the requisite authority to submit the bid on behalf of the entity shall be shown and the address of the entity's place of business should be shown.

Evidence of agency, corporate, limited liability or partnership authority of the person submitting and signing the bid is required for submission of bid. A copy of a corporate resolution or other signature authorization shall be required for submission of the bid. Failure to include a copy of the appropriate signature authorization will result in the rejection of the bid unless bidder has complied with LSA-R.S. 38:2212(B)(5). Photostatic or font signatures shall result in the bid being rejected. However, an electronic signature as defined in LSA-R.S. 9:2602(8) is acceptable. Signature must be a secured digital signature. A sample corporate resolution and sample certification of sole proprietorship can be downloaded from the Jefferson Parish Purchasing Department's website <http://purchasing.jeffparish.net>, or you may provide your own document.

E. TIMELINES

1. Prior to the closing time for receipt of scheduled bids

A bid may be withdrawn at any time prior to the scheduled closing time for receipt of bids, provided a request in writing, executed by the bidder or his duly authorized representative, is filed with the Parish prior to that time. When such a request is received, the bid will be returned to the bidder unopened. However, no bid can be modified, corrected or withdrawn after the time set for closing such bid, except as provided by LSA-R.S. 38:2214(C) & (D).

The Parish, its engineers, architects or anyone distributing plans and specifications for Parish public work projects, equal to or over the contract limit as defined in LA-R.S. 38:2212, shall furnish all prime bidders who request bid documents and who are properly licensed by the Louisiana State Licensing Board for Contractors with at least one set of complete bid documents. A deposit or fee may be charged on the documents as authorized by LA-R.S. 38:2212.

Addenda may be issued, as authorized by LA-R.S. 38:2212 (O). All formal Addenda require written acknowledgment on the bid form by the bidder. Failure to acknowledge an Addendum on the bid form shall cause the bid to be rejected. Jefferson Parish reserves the right to award the bid to the next lowest responsive and responsible bidder in this event.

Prior to submitting a bid each bidder shall visit the site of the proposed work and fully acquaint himself with all surface and subsurface conditions as they may exist so that he may fully understand the facilities, difficulties, and restrictions attending the execution of the work under this Contract. Bidders shall also thoroughly examine and be familiar with Drawings, Specifications, and Contract Documents. The failure or omission of any bidder to receive or examine any form, instrument, drawing, or document or to visit the site and acquaint himself with conditions there existing, shall in no way relieve any bidder from any obligation with respect to his bid and the responsibility in the premises rests with him. Submission of a bid shall be considered prima facie evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to requirements of the plans, project specifications, Resolution No. 138482 and Resolution No. 113646, as amended, and contract forms.

Any pre-bid test and boring data in connection with subsurface conditions which have been completed by the Parish or its engineers and furnished to the bidder shall not be considered as fully representative of subsurface conditions existing throughout the area tested nor shall they in any way be binding upon the Parish, it being understood that said data is furnished the bidder for his convenience only and the bidder shall be solely responsible for conducting his own boring explorations he deems necessary in preparing his bid. Any prospective bidder wishing to conduct boring explorations on Parish property must obtain written permission from Jefferson Parish prior to such explorations.

No claims shall be made against the Parish for additional compensation due to unforeseen subsurface conditions arising during progress of the work and which might be in variance with the Parish's pre-bid boring data.

2. Post-closing time for receipt of scheduled bids

Except as where provided by law, bidder agrees that this bid shall be legally binding and may not be withdrawn for a period of forty-five (45) calendar days after the scheduled closing time for receiving bids. In the event the Parish issues the Letter of Award (copy of adopted resolution awarding bid by Jefferson Parish Council) during this period, the bid accepted shall continue to remain binding pending execution of the Contract.

Bidder agrees to execute the ensuing Contract and will deliver applicable Bonds to secure the faithful performance thereof.

The Parish of Jefferson reserves the right to cancel this contract for convenience by issuing a thirty (30) day written notice to contractor.

F. BID REVIEW AND AWARD

1. Rejection of Bids

- a. Jefferson Parish may reject any and all bids for just cause in accordance with LA R.S. 38:2214(B). Just cause, for the purpose of the construction of public works, is defined, but is not limited to, the following circumstances:
 - (1) The public entity's unavailability of funds sufficient for the construction of the proposed public work.
 - (2) The failure of any bidder to submit a bid within an established threshold of the preconstruction estimates for that public work, as part of the bid specifications.
 - (3) A substantial change by the public entity prior to the award in the scope or design of the proposed public work.
 - (4) A determination by the public entity not to build the proposed public work within twelve months of the date for the public opening and reading of bids.
 - (5) The disqualification by the public entity of all bidders.
- b. Additionally, bids may be considered irregular and be rejected for any of the following, but is not limited to the following circumstances:
 - (1) If the bid form is on a form other than that furnished by the Parish or if the form is altered or any part thereof is detached.
 - (2) If affidavits included in bid form and/or required by law are not returned with the bid or are not properly executed and notarized.
 - (3) If there are unauthorized additions, conditional or alternate bids or irregularities which alter the general terms and conditions, the plans or specifications, or make the bid incomplete, indefinite, or ambiguous as to its meaning.
 - (4) If the bidder adds provisions reserving the right to accept or reject the award or to enter into the contract pursuant to the award.
 - (5) If an owner or a principal officer of the bidding firm is an owner or a principal officer of a firm which has been declared by the Parish to be ineligible to bid.
 - (6) If the proposed bid security does not meet the requirements of Section K.
 - (7) If more than one proposal for the same work, services, materials or supplies is received from an individual, partner, firm, corporation, joint venture, other legal entity, or combination thereof under the same or a different name.
 - (8) The bid is not properly signed or the authority of the signature person submitting the bid is deemed insufficient or unacceptable.
 - (9) If the bidder does not possess the proper license(s) required as noted in the specifications.
 - (10) Any other reasons for rejection set forth by State or Parish laws, Ordinances or Resolutions.
- c. In awarding contracts for materials and supplies, Jefferson Parish shall reject the lowest bid if received from a bidder domiciled in a Communist country, or if the materials or supplies are manufactured in a Communist country, including but not limited to China, North Korea and Vietnam, and to award the contract to the next lowest bidder. This Section shall not apply to any country having established trade relations agreements or approvals from the government of the United States. (LSA-R.S. 38:2212.3)

2. Disqualification of Bids

- a. The causes for disqualification from consideration for award of a contract with Jefferson Parish are as follows (Jefferson Parish Code of Ordinances, Section 2-912):
 - (1) Conviction for commission of a criminal offense as an incident to obtaining or attempting to obtain a public or private contract or subcontract, or in the performance of such contract or subcontract;
 - (2) Conviction under state or federal statutes of embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, or any other offense indicating a lack of business integrity or business honesty which currently, seriously, and directly affects responsibility as a Parish contractor;
 - (3) Conviction under state or federal antitrust statutes arising out of the submission of bids or proposals;
 - (4) Violation of contract provisions, as set forth below, of a character which is regarded by the Purchasing Director or his designee for Jefferson Parish to be serious as to justify disqualification:
 - i. Deliberate failure without good cause to perform in accordance with the specifications or within the time limit provided in the contract; or
 - ii. A recent record of failure to perform or of unsatisfactory performance in accordance with the terms of one or more contracts; provided that failure to perform or unsatisfactory performance caused by acts beyond the control of the contractor shall not be considered to be a basis for disqualification; or
 - iii. Failure to timely pay, without cause, a subcontractor for work performed under a construction contract as required under Section 2-976 in Chapter 2, Article VII, of the Jefferson Parish Code of Ordinances, provided disqualification on such basis shall not exceed a period of one (1) year from the deadline to pay the subcontractor.
 - (5) Any other cause the Purchasing Director determines to be so serious and compelling as to affect responsibility as a Parish contractor, including debarment by another governmental entity for any cause;
 - (6) Violation of the State Code of Ethics or the ethical standards set forth in the Jefferson Parish Code of Ordinances;
 - (7) Failure to secure and/or maintain necessary licenses and/or permits;
 - (8) Failure to comply with the Jefferson Parish Code of Ordinances and/or the Jefferson Parish Comprehensive Zoning Ordinance; or failure to comply with or meet bid specifications and/or failure to be a responsible bidder.
 - (9) A bid which is not responsive to, or does not meet bid specifications, will be rejected as being non-responsive, but that bidder will not be disqualified from future Parish bids, nor will that bidder be given a hearing pursuant to procedure listed below.
- b. The procedures for disqualification from consideration for award of a contract with Jefferson Parish are set forth in Sec. 2- 912 (b).

3. Award of Contract

The award of the contract, if it be awarded, will be by the Parish to the lowest responsive and responsible bidder whose proposal shall have complied with all the bid requirements. The successful bidder will be notified via the e-Procurement site that his bid has been accepted. No contract shall be executed with any contractor until their certificates of insurance, performance bonds, labor and materials payment bonds, or any other bonds required are made satisfactory to the Parish.

Jefferson Parish reserves the right to award contracts or place orders on a lump sum or individual item basis, or such combination as shall, in its judgment, be in the best interest of Jefferson Parish. Every contract or order shall be awarded to the lowest responsible bidder, taking into consideration the conformity with the specifications, and the delivery and/or completion date.

Preference will be given to bidders requesting a preference in their bid in accordance with LSA-R.S. 38:2251-2261 for materials, supplies, and provisions, produced, manufactured or grown in Louisiana, quality being equal to articles offered by competitors outside the State of Louisiana, unless federal funding is directly spent by Jefferson Parish on this project.

The successful bidder shall execute the contract with the Parish in the form of the contract included in the specifications, a copy of which is annexed hereto, in such number of counterparts as the Parish may request within twelve (12) days after receipt of notice of award of the contract by the Parish. One copy of the executed contract with all documents forming a part thereof shall be filed at the expense of the contractor, with the Recorder of Mortgages in Jefferson Parish.

PROTESTS: Only those vendors that submit bids in response to this solicitation may protest any element of the procurement, in writing to the Director of the Purchasing Department. Written protest must be received within 48 hours of the release of the bid tabulation by the Purchasing Department. After consultation, the Parish Attorney's Office will then respond to protests in writing. (For more information, please see Chapter 2, Article VII, Division 2, Sec. 2-913 of the Jefferson Parish Code of Ordinances.)

Upon full execution of the contract and receiving a written notice to proceed, the bidder agrees that all work shall be completed as follows:

The work shall be substantially complete within 180 calendar days of the written notice to proceed and completed and shall be ready for final acceptance no more than 30 calendar days after substantial completion.

G. SALES TAX EXEMPTION

For this project, the contractor shall not pay any state or local sales or use taxes on materials and equipment which are affixed and made part of the immovable property of the project or which is permanently incorporated in the project (hereinafter referred to as "applicable materials and equipment"). All purchases of applicable materials or equipment shall be made by the contractor on behalf of and as the agent of Jefferson Parish (Parish), a political subdivision of the State of Louisiana. No state and local sales and use taxes are owed on applicable materials and equipment under the provisions of Act 1029 of the 1991 Regular Session – Louisiana Revised Statute 47:301(8)(c). Parish will furnish to contractor a certificate form which certifies that Parish is not required to pay such state or local sales and use taxes, and contractor shall furnish a copy of such certificate to all vendors or suppliers of the applicable materials and equipment, and report to Parish the amount of taxes not incurred.

H. LIQUIDATED DAMAGES

In accordance with Resolution No. 113646, as amended, and Resolution No. 138482, Bidder agrees to pay, as liquidated damages, the sum of \$250.00 for: (1) each consecutive calendar day after the agreed date of substantial completion that the work remains substantially incomplete, and (2) each consecutive calendar day after the 30th day following the actual date of substantial completion that the work has not been finally completed.

In addition to, but not in lieu of the per diem liquidated damages, Parish shall also be entitled to recover from the contractor or the contractor's surety additional liquidated damages as detailed in Resolution No. 113646, as amended, and Resolution No. 138482. These additional liquidated damages may include, but are not limited to the following, in the amounts and for each of the items identified in the Supplementary Conditions:

- | | | |
|-----|---|----------------------|
| (1) | Extended Architectural and/or Engineering Fees | <u>\$190.68/hour</u> |
| (2) | Extended Resident Project Representative Fee | <u>\$81.57/hour</u> |
| (3) | Extended Construction Management Fees | <u>\$149.75/day</u> |
| (4) | Extended Parish's Overhead and Personnel Expenses | <u>\$265.00/hour</u> |
| (5) | Parish's Other Costs Directly Related to the Delay in Completion Beyond the Contract Times. | |

Whenever contractor's work requires inspections in excess of the budgeted amount for inspection, the contractor shall reimburse the Parish for the additional costs incurred by the Parish attributable to inspection of the contracted project in excess of the budgeted amount for inspections.

The reasonable budget for such inspections is \$15,138.00. Resident Project Representative overtime rates shall be calculated at 1.2 times the hourly rate. The cost of inspection in excess of this budgeted amount shall be assessed against Contractor's progress payments, all in accordance with Louisiana Public Bid Law.

I. ETHICAL STANDARDS AND COOPERATION WITH THE OFFICE OF THE INSPECTOR GENERAL, INCLUDING CONFLICTS OF INTEREST

Vendor agrees by bid submission to comply with all provisions of Louisiana Law as well as compliance with the Jefferson Parish Code of Ordinances, Louisiana Code of Ethics, as published on <http://ethics.la.gov> and applicable Jefferson Parish ethical standards and Jefferson Parish Terms and Conditions.

Inspector General: It shall be the duty of every Parish officer, employee, department, agency, special district, board, and commission; and the duty of every contractor, subcontractor, and licensee of the Parish, and the duty of every applicant for certification of eligibility for a Parish contract or program, to cooperate with the Inspector General in any investigation, audit, inspection, performance review, or hearing pursuant to JPCO 2-155.10(19). Every Parish contract and every bid, proposal, application or solicitation for a Parish contract, and every application for certification of eligibility for a Parish contract or program shall contain a statement that the corporation, partnership, or person understands and will abide by all provisions of JPCO 2-155.10. By submitting a bid, Bidder acknowledges this and will abide by all provisions of the referenced JPCO.

Conflicts of Interest: Jefferson Parish adheres to the Louisiana Code of Governmental Ethics, contained in Louisiana Revised Statutes Annotated, R.S. 42:1101, et seq. Vendor/Proposer by this submission warrants that there are no "conflicts of interest" related to this procurement that would violate applicable Louisiana Law. Violation of the Louisiana Code of Governmental Ethics may result in rescission of contract, permit or licenses, and the imposition of fines and/or penalties, without contractual liability to the public in accordance with applicable law.

J. REQUIRED AFFIDAVITS

For convenience, all legally mandated affidavits have been combined into one form, entitled **Public Works Bid Affidavit**. All bidders must submit with their bid submission, a completed, signed and properly notarized affidavit in its original format and without alteration in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid; however, the successful bidder must submit the original affidavit in its original format and without material alteration prior to, or at contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.

The person submitting the bid, and whose authority to submit has been evidenced on the Corporate Resolution is the proper party to execute the **Public Works Bid Affidavit**.

K. BID REQUIREMENTS (BID DOCUMENTS, SPECIFICATIONS, BONDS, W-9 AND PAYMENT INFO)

Bidders must review the bid specifications and include any required documentation including but not limited to the LA Public Works Uniform Bid Form, Bid Security, Corporate Resolution or written evidence of signature authority, and the Public Works Affidavit. Pursuant to LA R.S. 38:2212(B)(3)(b), bidders shall also be responsible for providing any other documentation as required, i.e. federal grant documentation, etc. Please note that the payment and performance bonds must be supplied by the successful bidder at contract signing.

No oral interpretation will be made to any bidder as to the meaning of the drawings, specifications, or contract documents. Every request for such interpretation shall be made in writing and addressed and forwarded to the Engineer, Architect or person distributing plans and specifications. No inquiry received within five (5) days prior to the day fixed for opening of the bids will be given consideration. Every interpretation made to the bidder shall be in the form of an addendum to the specifications and shall be issued as authorized by LA-R.S. 38:2212(O).

All such addenda shall become a part of the contract documents. Failure of any bidder to receive any such interpretation shall not relieve any bidder from any obligation under his bid as submitted without modification.

The specifications and plans are complementary of each other and all work called for or reasonably implied by either shall be performed as if called for by both. In case of conflict between the requirements of the specifications and plans, the specifications shall take precedence. Figured dimensions shall take precedence over scale dimensions, and larger scale details shall take precedence over smaller scale details in the general work drawings.

All vendors submitting bids shall register as a Jefferson Parish vendor, if not already registered. Registration forms may be downloaded from <http://purchasing.jeffparish.net> and click on Vendor Information. Current W-9 forms with respective Tax Identification numbers and vendor applications may be submitted at any time; however, if your company is not registered and/or a current W-9 form is not on file, vendor registration is mandatory. Vendors may experience a delay in payment if your company is not a registered vendor with Jefferson Parish.

Bidders must comply with all provisions of this Notice, the Standard General Conditions of the Construction Contract and any special conditions and specifications contained herein, all of which

are made part of this bid proposal. Resolution No. 113646, as amended, and Resolution No. 138482 will be considered a part of the bid whether attached or not. A copy of these terms and resolutions may be obtained from the Office of the Parish Clerk, Suite 6700, Jefferson Parish General Government Building, 200 Derbigny Street, Gretna, Louisiana 70053. Bidders may also obtain a copy by visiting the Purchasing Department's webpage at <http://purchasing.jeffparish.net> and clicking on online forms.

Bid Security: Bidders shall provide bid security in the form of an electronic bid bond in the amount of five percent (5%) of the total bid price (Base Bid and any Alternates) (as per R.S. 38:2218). The Bid Security shall remain valid until the contract is executed or until final disposition is made of the bids submitted. Such security will become the property of the Parish in the event the successful bidder fails or refuses to execute the contract or fails to produce performance and payment bonds upon contract signing. Bids shall remain binding for at least forty-five (45) days after the date set for the Bid Opening. In the event the Parish issues the Letter of Award during this period, the bid accepted shall continue to remain binding until the execution of contract. Jefferson Parish and the lowest responsible bidder, by mutual written consent, may agree to extend the deadline for award by one or more extensions of thirty (30) calendar days.

When submitting online, bidders must submit an electronic bid bond through the respective online clearinghouse bond management system(s) as indicated in the electronic bid solicitation on Central Auction House. No scanned paper copies of any bid bond will be accepted as part of the electronic bid submission.

Performance Bond: A performance bond is required in 100% of the contract amount and is due at the signing of the formal contract, unless another percentage is required in the bid specifications. In the event of a conflict between these instructions and the bid specifications, the bid specifications shall control.

Payment Bond: A payment bond is required in 100% of the contract amount and is due at the signing of the formal contract, unless another percentage is required in the bid specifications. In the event of a conflict between these instructions and the bid specifications, the bid specifications shall control.

To the extent permitted by law, the bond requirements as set forth herein are waived insofar as Community Development Housing Rehabilitation Construction Contracts are concerned for single family, owner-occupied dwellings. The Parish Attorney's Office will omit the requirements in connection with Community Development Housing Rehabilitation Construction Contracts for single family, owner-occupied dwellings.

L. INSURANCE REQUIREMENTS

All bidders must submit with bid submission a current (valid) insurance certificate evidencing required coverages. Failure to comply will cause the bid to be rejected. The current insurance certificate will be used for proof of insurance at time of evaluation. Thereafter, and prior to contract execution, the low bidder will be required to provide final insurance certificates to the Parish which shall name the **Jefferson Parish, its Districts, Departments and Agencies under the direction of the Parish President and the Parish Council** as additional insureds regarding negligence by the contractor for the Commercial General Liability and the Comprehensive Automobile Liability policies. **Additionally, said certificates should reflect the name of the Parish Department receiving goods and services and reference the respective Jefferson Parish bid number.**

JEFFERSON PARISH REQUIRED STANDARD INSURANCE

☒ **WORKER'S COMPENSATION INSURANCE**

As required by Louisiana State Statute, exception; Employer's Liability, Section B shall be \$1,000,000 per occurrence when Work is to be over water and involves maritime exposures to cover all employees not covered under the State Worker's Compensation Act, otherwise this limit shall be no less than \$500,000 per occurrence.

☒ **COMMERCIAL GENERAL LIABILITY**

Shall provide limits not less than the following: \$1,000,000 Combined Single Limit per Occurrence for bodily injury and property damage.

☒ **COMPREHENSIVE AUTOMOBILE LIABILITY**

Bodily injury liability \$1,000,000 each person; \$1,000,000 each occurrence. Property Damage Liability \$1,000,000 each occurrence.

UMBRELLA LIABILITY COVERAGE

An umbrella policy or excess may be used to meet minimum requirements.

FOR CONSTRUCTION AND RENOVATION PROJECTS:

The following are required if selected. Such insurance is due upon contract execution.

☒ **OWNER'S PROTECTIVE LIABILITY**

To be for the same limits of liability for bodily injury and property damage liability established for commercial general liability.

☒ **BUILDER'S RISK INSURANCE**

The contractor shall maintain Builder's Risk Insurance at his own expense to insure both the Parish of Jefferson and contractor as their interest may appear.

INSURANCE DEDUCTIBLES - The Parish Attorney with concurrence of the Director of Risk Management have waived the deductible section of the Terms and Conditions for all Invitations to Bid, until further notice.

M. INDEMNIFICATION

Bidder acknowledges that bidder recovered the cost of any required insurance in the contract price as required by LA R.S. 9:2780.1(l) and that bidder recovered any such cost for the purposes of insuring an obligation to indemnify Jefferson Parish, defend Jefferson Parish, or hold Jefferson Parish harmless and that bidder's indemnity liability is limited to the amount of the proceeds that are payable under the insurance policy or policies that bidder has obtained.

N. FAMILIARITY WITH LAWS AND ORDINANCES

Bidders shall familiarize themselves with and shall comply with all applicable Federal and State Laws, Parish/Municipal Ordinances, Resolutions, and the rules and regulations of all authorities having jurisdiction over construction of the project, which may directly or indirectly affect the work or its prosecution.

These laws and/or ordinances will be deemed to be included in the contract, the same as though herein written in full.

In case of conflict between the requirements of these specifications and any State and/or Federal Regulations or Laws, the State and/or Federal Regulations or Laws shall take precedence in all cases in which State and/or Federal Funding of the contract, in whole or in part, depends upon compliance with said State and/or Federal Regulations or Laws.

O. MISCELLANEOUS

The successful bidder may be required to furnish a statement of the origin, composition, and manufacture of materials to be used in construction of the work together with samples, which samples may be subjected to testing to determine their quality and fitness for the work, as specified.

Bidders are not to exclude from participation in, deny the benefits of, or subject to discrimination under any program or activity, any person in the United States on the grounds of race, color, national origin, sex or religion except that any exemption from such prohibition against discrimination on the basis of religion as provided in the Civil Rights Acts of 1964, or Title VI and VII of the Act of April 11, 1968 shall also apply, as amended; nor discriminate on the basis of age under the Age Discrimination Act of 1975, as amended; nor with respect to an otherwise qualified handicapped individual as provided in Section 504 of the Rehabilitation Act of 1973, as amended. This assurance includes compliance with the administrative requirements of the Revenue Sharing final handicapped discrimination provisions contained in Section 51.55 (c), (d), (e), and (k) (5) of the Regulations.

Non-negotiable contract terms include but are not limited to taxes, assignment of contract, audit of records, EEOC and ADA compliance, record retention, content of contract/order of precedence, contract changes, force majeure, governing law, including ethics statements, claims or controversies, and termination based on contingency of appropriation of funds, as applicable.



**Designation of Construction Contractor
as Agent of a Governmental Entity
Sales Tax Exemption Certificate**

Jefferson Parish State of Louisiana

_____, an agency of the United States government, or an agency, board, commission, or instrumentality of the State of Louisiana or its political subdivisions, including parishes, municipalities and school boards, does hereby designate the following contractor as its agent for the purpose of making sales tax exempt purchases on behalf of the governmental body:

Name of Contractor Garden Environments, INC. DBA Wolf Group Construction		
Address 4433 Ligustrum Street		
City Metairie	State LA	ZIP 70001

This designation of agency shall be effective for purchases of component construction materials, taxable services and leases and rentals of tangible personal property for the following named construction project:


Construction Project Williams Playlot & ADA Parking	Contract Number 20-2142
---	-----------------------------------

This designation and acceptance of agency is effective for the period

Beginning Date (mm/dd/yyyy)	End Date (mm/dd/yyyy)
-----------------------------	-----------------------

Purchases for the named project during this period by the designated contractor shall be considered as the legal equivalent of purchases directly by the governmental body. Any materials purchased by this agent shall immediately, upon the vendor's delivery to the agent, become the property of this government entity. This government entity, as principal, assumes direct liability to the vendor for the payment of any property, services, leases, or rentals made by this designated agent. This agreement does not void or supersede the obligations of any party created under any construction contract related to this project, including specifically any contractual obligation of the construction contractor to submit payment to the vendors of materials or services for the project.

This contractor-agent is not authorized to delegate this purchasing agency to others; separate designations of agency by this governmental entity are required for each contractor or sub-contractor who is to purchase on behalf of this governmental entity. The undersigned hereby certify that this designation is the entirety of the agency designation agreement between them. In order for a purchase for an eligible governmental entity through a designated agent to be eligible for sales tax exemption, the designation of agency must be made, accepted, and disclosed to the vendor before or at the time of the purchase transaction.

Designation of Agency			Acceptance of Agency		
Signature of Authorized Designator		Date (mm/dd/yyyy)	Signature of Contractor or Subcontractor Authorized Acceptor		Date (mm/dd/yyyy)
					03/13/23
Name of Authorized Designator			Name of Contractor's or Subcontractor's Acceptor		
			Ethan Vuljoin		
Name of Governmental Entity			Name of Contractor		
			Garden Environments, INC. DBA Wolf Group Construction		
Address			Address		
			4433 Ligustrum Street		
City	State	ZIP	City	State	ZIP
			Metairie	LA	70001

This designation of agency form, when properly executed by both the contractor and the governmental entity, shall serve as evidence of the sales tax exempt status that has been conferred onto the contractor. No other exemption certificate form is necessary to claim exemption from sales taxes. The agency agreement evidenced by this sales tax exemption certificate must be implemented at the time of contract execution with the governmental entity. The contract between the governmental entity and his agent must contain provisions to authenticate the conferment of agency.

LOUISIANA UNIFORM PUBLIC WORK BID FORM

TO: JEFFERSON PARISH PURCHASING
200 DERBIGNY STREET, SUITE 4400
GRETNA, LA 70053

(Owner to provide name and address of owner)

BID FOR: WILLIAMS PLAYLOT & ADA PARKING
BID NO. 50-00140980
A/E PROJECT NO. 20-2142

(Owner to provide name of project and other identifying information)

The undersigned bidder hereby declares and represents that she/he: a) has carefully examined and understands the Bidding Documents, b) has not received, relied on, or based his bid on any verbal instructions contrary to the Bidding Documents or any addenda, c) has personally inspected and is familiar with the project site, and hereby proposes to provide all labor, materials, tools, appliances and facilities as required to perform, in a workmanlike manner, all work and services for the construction and completion of the referenced project, all in strict accordance with the Bidding Documents prepared by: MEYER ENGINEERS, LTD. and dated: NOVEMBER 14, 2022.

(Owner to provide name of entity preparing bidding documents.)

Bidders must acknowledge all addenda. The Bidder acknowledges receipt of the following **ADDENDA:** (Enter the number the Designer has assigned to each of the addenda that the Bidder is acknowledging) 1 and 2. All addendums.

TOTAL BASE BID: For all work required by the Bidding Documents (including any and all unit prices designated "Base Bid" * but not alternates) the sum of:

Three Hundred and Fifty Four Thousand, Four Hundred and Twelve Dollars and Eight Cents Dollars (\$354,412.08)

ALTERNATES: For any and all work required by the Bidding Documents for Alternates including any and all unit prices designated as alternates in the unit price description.

Alternate No. 1 (Owner to provide description of alternate and state whether add or deduct) for the lump sum of:

N/A Dollars (\$)

Alternate No. 2 (Owner to provide description of alternate and state whether add or deduct) for the lump sum of:

N/A Dollars (\$)

Alternate No. 3 (Owner to provide description of alternate and state whether add or deduct) for the lump sum of:

N/A Dollars (\$)

NAME OF BIDDER: Garden Environments, INC. DBA Wolf Group Construction

ADDRESS OF BIDDER: 4433 Ligustrum Street Metairie, LA 70001

LOUISIANA CONTRACTOR'S LICENSE NUMBER: CL.59207

NAME OF AUTHORIZED SIGNATORY OF BIDDER: Ethan Vuljoin

TITLE OF AUTHORIZED SIGNATORY OF BIDDER: Owner

SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER **: Ethan J. Vuljoin

DATE: 03/13/23

THE FOLLOWING ITEMS ARE TO BE INCLUDED WITH THE SUBMISSION OF THIS LOUISIANA UNIFORM PUBLIC WORK BID FORM:

* The Unit Price Form shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed.

** **A CORPORATE RESOLUTION OR WRITTEN EVIDENCE** of the authority of the person signing the bid for the public work as prescribed by LA R.S. 38:2212(B)(5).

BID SECURITY in the form of a bid bond, certified check or cashier's check as prescribed by LA R.S. 38:2218(A) attached to and made a part of this bid.

Bid Bond

An Electronic Bid Bond must be submitted with this bid, through one of the respective clearing houses at www.jeffparish.net or www.centralbidding.com. To access the bonding companies on Central Bidding, hover over the "Central Bidding" link at the top of the page and select the "Bid Bonds" link.

The electronic bid bond number is to be placed in the required section listed on the standard envelope. Scanned copies of bid bonds will not be accepted with your submission.

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Public Works Bid Affidavit Instructions

- **Affidavit is supplied as a courtesy to Affiants, but it is the responsibility of the affiant to insure the affidavit they submit to Jefferson Parish complies, in both form and content, with federal, state and parish laws.**
- **Affidavit must be signed by an authorized representative of the entity or the affidavit will not be accepted.**
- **Affidavit must be notarized or the affidavit will not be accepted.**
- **Notary must sign name, print name, and include bar/notary number, or the affidavit will not be accepted.**
- **Affiant MUST select either A or B when required or the affidavit will not be accepted.**
- **Affiants who select choice A must include an attachment or the affidavit will not be accepted.**
- **If both choice A and B are selected, the affidavit will not be accepted.**
- **Affidavit marked N/A will not be accepted.**
- **It is the responsibility of the Affiant to submit a new affidavit if any additional campaign contributions are made after the affidavit is executed but prior to the time the council acts on the matter.**

Instruction sheet may be omitted when submitting the affidavit

Public Works Bid

AFFIDAVIT

STATE OF Louisiana

PARISH/COUNTY OF East Baton Rouge

BEFORE ME, the undersigned authority, personally came and appeared: Ethan
Vuljoin, (Affiant) who after being by me duly sworn, deposed and said that
he/she is the fully authorized Owner Garden Environments, INC.
of DBA Wolf Group Construction (Entity),
the party who submitted a bid in response to Bid Number 20-2142, to the Parish of
Jefferson.

Affiant further said:

Campaign Contribution Disclosures

(Choose A or B, if option A is indicated please include the required attachment):

Choice A _____ Attached hereto is a list of all campaign contributions, including the date and amount of each contribution, made to current or former elected officials of the Parish of Jefferson by Entity, Affiant, and/or officers, directors and owners, including employees, owning 25% or more of the Entity during the two-year period immediately preceding the date of this affidavit or the current term of the elected official, whichever is greater. Further, Entity, Affiant, and/or Entity Owners have not made any contributions to or in support of current or former members of the Jefferson Parish Council or the Jefferson Parish President through or in the name of another person or legal entity, either directly or indirectly.

Choice B X there are **NO** campaign contributions made which would require disclosure under Choice A of this section.

Affiant further said:

Debt Disclosures

(Choose A or B, if option A is indicated please include the required attachment):

Choice A _____ Attached hereto is a list of all debts owed by the affiant to any elected or appointed official of the Parish of Jefferson, and any and all debts owed by any elected or appointed official of the parish to the Affiant.

Choice B X There are **NO** debts which would require disclosure under Choice A of this section.

Affiant further said:

That Affiant has employed no person, corporation, firm, association, or other organization, either directly or indirectly, to secure the public contract under which he received payment, other than persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project or in securing the public contract were in the regular course of their duties for Affiant; and

That no part of the contract price received by Affiant was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project were in the regular course of their duties for Affiant.

Affiant further said:

Affiant personally has not been convicted of, nor has he/she entered into a plea of guilty or nolo contendere to any of the crimes or equivalent federal crimes listed below. No individual partner, incorporator, director, manager, officer, organizer, or member, who has a minimum of a ten percent ownership in the Bidding Entity, has been convicted of, or has entered a plea of guilty or nolo contendere to any of the crimes or equivalent federal crimes listed below. A conviction of or plea of guilty or nolo contendere to the following state crimes or equivalent federal crimes shall permanently bar any person or the bidding entity from bidding on public projects:

- (a) Public bribery (R.S. 14:118)
- (b) Corrupt influencing (R.S. 14:120)
- (c) Extortion (R.S. 14:66)
- (d) Money laundering (R.S. 14:230)

A conviction of or plea of guilty or nolo contendere to the following state crimes or equivalent federal crimes shall bar any person or the bidding entity from bidding on public projects for a period of five years from the date of conviction or from the date of the entrance of the plea of guilty or nolo contendere:

- (a) Theft (R.S. 14:67)
- (b) Identity Theft (R.S. 14:67, 16)
- (c) Theft of a business record (R.S. 14:67.20)
- (d) False accounting (R.S. 14:70)
- (e) Issuing worthless checks (R.S. 14:71)
- (f) Bank fraud (R.S. 14:71.1)
- (g) Forgery (R.S. 14:72)
- (h) Contractors; misapplication of payments (R.S. 14:202)
- (i) Malfeasance in office (R.S. 14:134)

The five-year prohibition provided for in this section shall apply only if the crime was committed during the solicitation or execution of a contract or bid awarded pursuant to these provisions. If evidence is submitted substantiating that a false attestation has been made and the project must be readvertised or the contract cancelled, the awarded entity making the false attestation shall be responsible to the public entity for the costs of rebidding, additional costs due to increased costs of bids and any and all delay costs due to the rebid or cancellation of this project.

[The remainder of this page is intentionally left blank.]

Affiant further said:

- (1) Entity is registered and participates in a status verification system to verify that all employees in the State of Louisiana are legal citizens of the United States or are legal aliens.
- (2) Entity shall continue, during the term of the contract, to utilize a status verification system to verify the legal status of all new employees in the State of Louisiana.
- (3) Entity shall require all subcontractors to submit to the Entity a sworn affidavit verifying compliance with statements (1) and (2).



Signature of Affiant

Ethan Vuljoin

Printed Name of Affiant

SWORN AND SUBSCRIBED TO BEFORE ME

ON THE 13th DAY OF March, 2023.



Notary Public

Sarah Vuljoin

Printed Name of Notary

149128

Notary/Bar Roll Number

My commission expires At Death.

CORPORATE RESOLUTION

EXCERPT FROM MINUTES OF MEETING OF THE BOARD OF DIRECTORS OF
Garden Environments, INC. DBA Wolf Group Construction
INCORPORATED.

AT THE MEETING OF DIRECTORS OF Garden Environments, INC. DBA Wolf Group Construction
INCORPORATED, DULY NOTICED AND HELD ON March 13, 2023,
A QUORUM BEING THERE PRESENT, ON MOTION DULY MADE AND SECONDED. IT
WAS:

RESOLVED THAT Ethan Vuljoin, BE AND IS HEREBY
APPOINTED, CONSTITUTED AND DESIGNATED AS AGENT AND ATTORNEY-IN-
FACT OF THE CORPORATION WITH FULL POWER AND AUTHORITY TO ACT ON
BEHALF OF THIS CORPORATION IN ALL NEGOTIATIONS, BIDDING, CONCERNS
AND TRANSACTIONS WITH THE PARISH OF JEFFERSON OR ANY OF ITS AGENCIES,
DEPARTMENTS, EMPLOYEES OR AGENTS, INCLUDING BUT NOT LIMITED TO, THE
EXECUTION OF ALL BIDS, PAPERS, DOCUMENTS, AFFIDAVITS, BONDS, SURETIES,
CONTRACTS AND ACTS AND TO RECEIVE ALL PURCHASE ORDERS AND NOTICES
ISSUED PURSUANT TO THE PROVISIONS OF ANY SUCH BID OR CONTRACT, THIS
CORPORATION HEREBY RATIFYING, APPROVING, CONFIRMING, AND ACCEPTING
EACH AND EVERY SUCH ACT PERFORMED BY SAID AGENT AND ATTORNEY-IN-
FACT.

I HEREBY CERTIFY THE FOREGOING TO BE
A TRUE AND CORRECT COPY OF AN
EXCERPT OF THE MINUTES OF THE ABOVE
DATED MEETING OF THE BOARD OF
DIRECTORS OF SAID CORPORATION, AND
THE SAME HAS NOT BEEN REVOKED OR
RESCINDED.



SECRETARY-TREASURER

03/13/2023

DATE

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, _____,
(Name of Contractor)

a _____, hereinafter called "Principal", and _____, (Surety)

duly authorized to transact business in the State of Louisiana, hereinafter called "Surety", are held and firmly bound unto the Jefferson Parish Council, hereinafter called "Owner", in the penal sum of _____ Dollars (\$_____) in lawful money of United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that Whereas, the Principal entered into a certain contract with the Owner, dated the _____ day of _____, 20__, a copy of which is hereto attached and made a part hereof for the construction of:

WILLIAMS PLAYLOT & ADA PARKING

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the Owner, with or without notice to the Surety, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the Owner from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the Owner all outlay and expense which the Owner may incur in making good any default in connection with the construction of such work, and all insurance premiums on said work, whether by subcontractor or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in _____ counter-parts, each one of which shall be deemed an original, this the _____ day of _____, 20____.

(SEAL)

(Principal)

BY: _____

(Witness to Principal)

(Title)

(Address)

(Address)

(SEAL)

(Surety)

BY: _____

(Attorney-in-fact)

(Witness to Surety)

(Address)

(Address)

NOTE: Date of Bond must not be prior to date of Contract.

1. Correct name of Contractor
2. A Corporation, A Partnership, or an Individual
3. Correct Name of Surety
4. Authorization to Sign Must be Attached.

* * *

LABOR AND MATERIALS PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, _____,
(Name of Contractor)

a _____,
(Corporation, partnership, etc.)

called "Principal", and _____,
(Surety)

duly authorized to transact business in the State of Louisiana, hereinafter called "Surety", are held and firmly bound unto the Jefferson Parish Council, hereinafter called "Owner", in the penal sum of _____ dollars (\$_____) in lawful money of United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that Whereas, the Principal entered into a certain contract with the Owner, dated the ____ date of ____ 20____, a copy of which is hereto attached and made a part hereof for the construction of:

WILLIAMS PLAYLOT & ADA PARKING

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, subcontractors, and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such contract, and any authorized extension of modification thereof, including all amount due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such work, and all insurance premiums on said work, and for all labor, performed in such work whether by subcontractor or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specification accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED, FURTHER, it is expressly understood and agreed that this Bond is given in accordance with and limited to claims and claimants expressly covered by LSA-R.S. 38:2241 to 2248 inclusive. Final settlement between Owner and the Contractor shall not abridge the right of any beneficiary hereunder, whose-claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in _____ counter-parts, each one of which shall be deemed an original, this the _____ day of _____, 20____.

(SEAL)

(Principal)

BY: _____

(Witness to Principal)

(Title)

(Address)

(Address)

(SEAL)

(Surety)

BY: _____

(Attorney-in-fact)

(Witness to Surety)

(Address)

(Address)

NOTE: Date of Bond must not be prior to date of Contract.

1. Correct name of Contractor
2. A Corporation, A Partnership, or an Individual
3. Correct Name of Surety
4. Authorization to Sign Must be Attached.

* * *

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 Laws and Regulations.

**RESOLUTION 141125
STANDARD GENERAL CONDITIONS
OF THE CONSTRUCTION CONTRACT**

Prepared By



Endorsed By



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National Society of Professional Engineers
1420 King Street, Alexandria, VA 22314-2794
(703) 684-2882
www.nspe.org

American Council of Engineering Companies
1015 15th Street N.W., Washington, DC 20005
(202) 347-7474
www.acec.org

American Society of Civil Engineers
1801 Alexander Bell Drive, Reston, VA 20191-4400
(800) 548-2723
www.asce.org

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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The document prepared by Contractor, in a form acceptable to Engineer, to request progress or final payments, and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The Advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. Bonds—Performance and payment bonds and other instruments of security.
 9. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 10. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.

11. *Claim*

- a. A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment of Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract.
- b. A demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal, or seeking resolution of a contractual issue that Engineer has declined to address.
- c. A demand or assertion by Owner or Contractor, duly submitted in compliance with the procedural requirements set forth herein, made pursuant to Paragraph 12.01.A.4, concerning disputes arising after Engineer has issued a recommendation of final payment.
- d. A demand for money or services by a third party is not a Claim.

12. *Constituent of Concern*—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), 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), radioactive materials (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), polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous waste (as defined in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time), and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
13. *Contract*—The entire and integrated written contract between Owner and Contractor concerning the Work.
14. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
15. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
16. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
17. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
18. *Cost of the Work*—See Paragraph 13.01 for definition.

19. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
20. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
21. *Electronic Document*—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital format.
22. *Electronic Means*—Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by the recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.
23. *Engineer*—The individual or entity named as such in the Agreement.
24. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
25. *Force Account*—Payment for directed construction work based on the cost of labor, equipment, materials furnished, overhead, and profit.
26. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto.
 - a. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated into the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, is not a Hazardous Environmental Condition.
 - b. The presence of Constituents of Concern that are to be removed or remediated as part of the Work is not a Hazardous Environmental Condition.
 - c. The presence of Constituents of Concern as part of the routine, anticipated, and obvious working conditions at the Site, is not a Hazardous Environmental Condition.
27. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and binding decrees, resolutions, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
28. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
29. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date, or by a time prior to Substantial Completion of all the Work.

30. *Notice of Award*— ~~The written notice by Owner to a Bidder of Owner's acceptance of the Bid.~~ The written notice by Owner to the apparent successful bidder stating that upon timely compliance by the apparent successful bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement to the successful bidder. However, the Notice of Award shall not be construed as an agreement, meeting of the minds, contract, or any other legal obligation between the Owner and Contractor. Until the Contractor receives a Notice to Proceed from the Owner, the Contractor has no right or remedy against the Owner.
31. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
32. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
33. *Partial Utilization*--Use by Owner of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work.
34. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising Contractor's plan to accomplish the Work within the Contract Times.
35. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
36. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative (RPR) includes any assistants or field staff of Resident Project Representative.
37. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
38. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals.
39. *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.
40. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
41. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands or areas furnished by Owner which are designated for the use of Contractor.

42. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
43. *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.
44. *Submittal*—A written or graphic document, prepared by or for Contractor, which the Contract Documents require Contractor to submit to Engineer, or that is indicated as a Submittal in the Schedule of Submittals accepted by Engineer. Submittals may include Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers' instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether or not approved or accepted by Engineer, are not Contract Documents. Change Proposals, Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals.
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, as evidenced by Engineer's issued and signed final Certificate of Substantial Completion as provided in Paragraph 15.03.C and confirmed by Owner pursuant to a resolution adopted by the Jefferson Parish Council as provided in Paragraph 15.03.G, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion of such Work.
46. *Successful Bidder*—The Bidder to which the Owner makes an award of contract.
47. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
48. *Supplier*—A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
49. *Technical Data*
- a. Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (1) existing subsurface conditions at or adjacent to the Site, or existing physical conditions at or adjacent to the Site including existing surface or subsurface structures (except Underground Facilities) or (2) Hazardous Environmental Conditions at the Site.
 - b. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then Technical Data is defined, with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06, as the data contained in boring logs, recorded measurements of subsurface water levels, assessments of the condition of subsurface facilities, laboratory test results, and other factual, objective information

regarding conditions at the Site that are set forth in any geotechnical, environmental, or other Site or facilities conditions report prepared for the Project and made available to Contractor.

- c. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data, and instead Underground Facilities are shown or indicated on the Drawings.
- 50. *Underground Facilities*—All active or not-in-service underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including but not limited to those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water, other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.
- 51. *Unit Price Work*—Work to be paid for on the basis of unit prices.
- 52. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
- 53. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work, 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. Contractor shall not be entitled to any change in the Contract Price or the Contract Times related to a Work Change Directive unless and until a valid Change Order is approved by the Jefferson Parish Council.

1.02 Terminology

- A. The words and terms discussed in Paragraphs 1.02.B, C, D, and E are not defined terms that require initial capital letters, but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives*: The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract

Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.

- C. *Day*: The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective*: The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - 1. does not conform to the Contract Documents;
 - 2. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - 3. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or Paragraph 15.04).
- E. *Furnish, Install, Perform, Provide*
 - 1. The word “furnish,” when used in connection with services, materials, or equipment, means to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 - 2. The word “install,” when used in connection with services, materials, or equipment, means to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 - 3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, means to furnish and install said services, materials, or equipment complete and ready for intended use.
 - 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.
- F. *Contract Price or Contract Times*: References to a change in “Contract Price or Contract Times” or “Contract Times or Contract Price” or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term “or both” is not expressed.
- G. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Performance and Payment Bonds; Evidence of Insurance; Recordation of Contract Documents*

- A. *Performance and Payment Bonds:* When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner the performance bond and payment bond (if the Contract requires Contractor to furnish such bonds).
- B. *Evidence of Contractor's Insurance:* When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each additional insured (as identified in the Contract), the certificates, endorsements, and other evidence of insurance required to be provided by Contractor in accordance with Article 6, except to the extent the Supplementary Conditions expressly establish other dates for delivery of specific insurance policies.
- ~~C. *Evidence of Owner's Insurance:* After receipt of the signed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each additional insured (as identified in the Contract), the certificates and other evidence of insurance required to be provided by Owner under Article 6.~~
- C. Contractor shall not start any Work at the Site unless and until Contractor has in place and in full force and effect all of the insurance and Bonds which the Contractor is required to obtain by the Agreement, the Contract, or the Supplementary Conditions. Any delay in obtaining confirmation of the existence of the insurance, Bonds, and other security required by this Contract and compliance with the terms of the Contract therefor shall be counted as workdays if the start of Work is delayed beyond the time set forth in paragraphs 4.01 and 4.02. The Contract shall not be in force or binding on Owner until satisfactory Bonds and insurance have been provided in accordance with the Contract Documents.
- D. In accordance with the Instructions to Bidders, one complete copy of the executed Contract Documents, including Specifications and Drawings, shall be filed with the Clerk of Court and Ex-Officio Recorder of Mortgages for Jefferson Parish promptly, but in any event before starting any Work, at Contractor's expense, which expense may be deducted from any application for payment if not paid for directly by Contractor.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor one ~~four~~ printed copy ~~copies~~ of the Contract (including one fully signed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- ~~B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.~~

2.03 *Before Starting Construction*

- A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Contract (or as otherwise required by the Contract Documents), Contractor shall submit to Engineer for timely review:
1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 2. a preliminary Schedule of Submittals; and
 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.
 4. The construction schedule shall be in a detailed precedence-style critical path method (CPM) or prima vera type format satisfactory to the Owner and the Engineer, and shall also: (1) provide a graphic representation of all activities and events that will occur during the performance of the Work; (2) identify each phase of construction and occupancy; and (3) set forth dates that are critical in insuring the timely and orderly completion of the Work in accordance with the requirements of the Contract Documents (hereinafter referred to as Milestone Dates). Upon review and acceptance by the Owner and the Engineer of the Milestone Dates, the construction schedule shall be deemed part of the Contract Documents and attached to the agreement as Exhibit. If not accepted, the construction schedule shall be promptly revised by the Contractor in accordance with the recommendations of the Owner and the Engineer and resubmitted for acceptance.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work, and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other Submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review the schedules submitted in accordance with Paragraph 2.03.A. No progress payment will be made to Contractor until acceptable schedules are submitted to Engineer.
1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or

progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.

2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.
4. If a schedule is not acceptable, Contractor will have an additional 10 days to revise and resubmit the schedule.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may send, and shall accept, Electronic Documents transmitted by Electronic Means.
- B. If the Contract does not establish protocols for Electronic Means, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. Subject to any governing protocols for Electronic Means, when transmitting Electronic Documents by Electronic Means, the transmitting party makes no representations as to long-term compatibility, usability, or readability of the Electronic Documents resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the Electronic Documents.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one Contract Document is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. In case of discrepancy, the following order of precedence will apply:

1. Special Provisions Section as included in the Specifications

2. Drawings

3. Supplementary Conditions

4. Standard Specifications of Jefferson Parish as either included or referenced in the Specifications

5. Standard Plans of Jefferson Parish as either included or referenced in the Specifications

Calculated dimensions will govern over scaled dimensions.

Contractor shall take no advantage of any error or omission in the Contract Documents. If Contractor discovers such an error or omission, Contractor shall immediately notify Engineer. Engineer will then make such corrections and interpretations as deemed necessary to fulfil the intent of the Contract Documents.

- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic versions of the Contract Documents (including any printed copies derived from such electronic versions) and the printed record version, the printed record version will govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.
- F. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Contractor, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- G. Nothing in the Contract Documents creates:
 - 1. any contractual relationship between Owner or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity; or
 - 2. any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity, except as may otherwise be required by Laws and Regulations.
- H. Owner makes no warranties, express or implied, with respect to the fitness of the Drawings or Specifications prepared by the Engineer or any other person, and Contractor waives any claims against Owner arising out of any implied or express warranties of the fitness of the Drawings or Specifications for their intended purpose.

3.02 *Reference Standards*

- A. *Standards Specifications, Codes, Laws, and Regulations*
 - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, means the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
 - 2. No provision of any such standard, specification, manual, reference standard, or code, and no instruction of a Supplier, will be effective to change the duties or responsibilities of Owner, Contractor, or Engineer from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner or Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*

1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.

The grades, elevations, dimensions, locations, and field measurements or any drawings or specifications issued by the Engineer, or the Work installed by other contractors, are not guaranteed by the Engineer or the Owner. Any errors due to the Contractor's failure to verify all such grades, elevations, locations, dimensions, or field measurements shall be promptly rectified by Contractor without any additional costs to Owner or extensions of Contract Times.

2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof, 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 part of the Contract Documents prepared by or for Engineer take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer in writing all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—

RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work.

- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly notify Owner and Contractor in writing that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 - 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media versions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein precludes Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

- A. ~~The Contract Times will commence to run on the 30th day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the 60th day after the day of Bid opening or the 30th day after the Effective Date of the Contract, whichever date is earlier.~~

The Contract Times will commence to run on the day indicated in the Notice to Proceed. The Owner shall issue a Notice to Proceed in accordance with La. R.S. 38:2215. In no event will Owner have any obligations or duties to Contractor under the Agreement until the Notice to Proceed is given to Contractor. In no event will the Contract Times commence to run later

than one hundred eighty days after the contract execution or the thirtieth day after the Effective Date of Agreement, whichever date is later, unless the parties otherwise agree.

4.02 *Starting the Work*

- A. Contractor shall start to perform the Work within 10 days from the date when the Contract Times commence to run. No Work may be done at the Site prior to such date.

4.03 *Reference Points*

- A. ~~Owner~~ Engineer shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times must be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work will be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Such an adjustment will be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption,

or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:

1. Severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 2. Abnormal weather conditions;
 3. Acts or failures to act of third-party utility owners or other third-party entities (other than those third-party utility owners or other third-party entities performing other work at or adjacent to the Site as arranged by or under contract with Owner, as contemplated in Article 8); and
 4. Acts of war or terrorism.
- D. Contractor's entitlement to an adjustment of Contract Times or Contract Price is limited as follows:
1. Contractor's entitlement to an adjustment of the Contract Times is conditioned on the delay, disruption, or interference adversely affecting an activity on the critical path to completion of the Work, as of the time of the delay, disruption, or interference.
 2. Contractor shall not be entitled to an adjustment in Contract Price for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor. Such a concurrent delay by Contractor shall not preclude an adjustment of Contract Times to which Contractor is otherwise entitled.
 3. Adjustments of Contract Times or Contract Price are subject to the provisions of Article 11.
- E. Each Contractor request or Change Proposal seeking an increase in Contract Times or Contract Price must be supplemented by supporting data that sets forth in detail the following:
1. The circumstances that form the basis for the requested adjustment;
 2. The date upon which each cause of delay, disruption, or interference began to affect the progress of the Work;
 3. The date upon which each cause of delay, disruption, or interference ceased to affect the progress of the Work;
 4. The number of days' increase in Contract Times claimed as a consequence of each such cause of delay, disruption, or interference; and
 5. The impact on Contract Price, in accordance with the provisions of Paragraph 11.07.

Contractor shall also furnish such additional supporting documentation as Owner or Engineer may require including, where appropriate, a revised progress schedule indicating all the activities affected by the delay, disruption, or interference, and an explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work.

- F. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with

reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5, together with the provisions of Paragraphs 4.05.D and 4.05.E.

- G. Paragraph 8.03 addresses delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

ARTICLE 5—SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor in writing of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 *Use of Site and Other Areas*

- A. *Limitation on Use of Site and Other Areas*
 - 1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
 - 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.13, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by a arbitration or other dispute resolution proceeding, or in a court of competent jurisdiction; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other

dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris will conform to applicable Laws and Regulations.
- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:
 - 1. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data;
 - 2. Those drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data; and
 - 3. Technical Data contained in such reports and drawings.
- B. *Underground Facilities:* Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph 5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.
- C. *Reliance by Contractor on Technical Data:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b.
- D. *Limitations of Other Data and Documents:* Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
 - 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;

2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;
3. the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or
4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

E. The Contractor and each Subcontractor shall evaluate and satisfy themselves as to the Site conditions and limitations under which the Work is to be performed, including, without limitation, (1) the location, condition, layout, and nature of the Project Site and surrounding areas; (2) generally prevailing climactic conditions; (3) anticipated labor, supply, and costs; (4) availability and cost of materials, tools, and equipment; and (5) other similar issues. The Owner assumes no responsibility or liability for the physical condition or safety of the Project Site or any improvements located on the Project Site. Except as set forth in Article 4, the Contractor shall be solely responsible for providing a safe place for the performance of the Work. The Owner shall not be required to make adjustments in either the Contract Price or Contract Times arising from a failure by the Contractor or any Subcontractor to comply with the requirements of this paragraph.

5.04 *Differing Subsurface or Physical Conditions*

A. *Notice by Contractor:* If Contractor ~~believes~~ discovers or should have discovered that any subsurface or physical condition that is uncovered or revealed at the Site or adjacent to the Site:

1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate;
2. is of such a nature as to require a change in the Drawings or Specifications;
3. differs materially from that shown or indicated in the Contract Documents; or
4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, ~~promptly after becoming aware thereof~~ immediately and in any event within 48 hours after the time the Contractor discovers and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine whether it is necessary for Owner to obtain additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for

any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.

- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the subsurface or physical condition in question may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- E. *Possible Price and Times Adjustments*
 - 1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. Such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
 - c. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
 - 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise;
 - b. The existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice required by Paragraph 5.04.A.
 - 3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
 - 4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days

after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

- F. *Underground Facilities; Hazardous Environmental Conditions:* Paragraph 5.05 governs rights and responsibilities regarding the presence or location of Underground Facilities. Paragraph 5.06 governs rights and responsibilities regarding Hazardous Environmental Conditions. The provisions of Paragraphs 5.03 and 5.04 are not applicable to the presence or location of Underground Facilities, or to Hazardous Environmental Conditions.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities:* Unless it is otherwise expressly provided in the Supplementary Conditions, the cost of all of the following are included in the Contract Price, and Contractor shall have full responsibility for:
1. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 2. complying with applicable state and local utility damage prevention Laws and Regulations;
 3. verifying the actual location of those Underground Facilities shown or indicated in the Contract Documents as being within the area affected by the Work, by exposing such Underground Facilities during the course of construction;
 4. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 5. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated on the Drawings, or was not shown or indicated on the Drawings with reasonable accuracy, then Contractor shall, ~~promptly after becoming aware thereof~~ immediately and in any event within 24 hours after Contractor discovers and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing regarding such Underground Facility.
- C. *Engineer's Review:* Engineer will:
1. promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy;
 2. identify and communicate with the owner of the Underground Facility; prepare recommendations to Owner (and if necessary issue any preliminary instructions to Contractor) regarding the Contractor's resumption of Work in connection with the Underground Facility in question;
 3. obtain any pertinent cost or schedule information from Contractor; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and
 4. advise Owner in writing of Engineer's findings, conclusions, and recommendations.

During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the Underground Facility may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the Underground Facility in question and conditions affected by its presence have been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- F. *Possible Price and Times Adjustments*
 - 1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, to the extent that any existing Underground Facility at the Site that was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - b. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E; and
 - c. Contractor gave the notice required in Paragraph 5.05.B.
 - 2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
 - 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.
 - 4. The information and data shown or indicated on the Drawings with respect to existing Underground Facilities at the Site is based on information and data (a) furnished by the owners of such Underground Facilities, or by others, (b) obtained from available records, or (c) gathered in an investigation conducted in accordance with the current edition of ASCE 38, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, by the American Society of Civil Engineers. If such information or data is incorrect or incomplete, Contractor's remedies are limited to those set forth in this Paragraph 5.05.F.

5.06 *Hazardous Environmental Conditions at Site*

- A. *Reports and Drawings*: The Supplementary Conditions identify:
1. those reports known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site;
 2. drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
 3. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized*: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. ~~Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work. Contractor must take all precautions to discover and locate any Hazardous Environmental Condition at the Site that may present a substantial danger to persons or property exposed thereto in connection with the Work at the Site.~~
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall ~~immediately~~ within 24 hours: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after

consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.

- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, as a result of such Work stoppage, such special conditions under which Work is agreed to be resumed by Contractor, or any costs or expenses incurred in response to the Hazardous Environmental Condition, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off. Entitlement to any such adjustment is subject to the provisions of Paragraphs 4.05.D, 4.05.E, 11.07, and 11.08.
- H. If, after receipt of such written notice, Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- ~~I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I obligates Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.~~
- ↓ I. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone

for whom Contractor is responsible. Nothing in this Paragraph 5.06.J obligates Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

- ~~K~~ J. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of Contractor's obligations under the Contract. These bonds must remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the terms of a prescribed bond form, the Supplementary Conditions, or other provisions of the Contract.
- B. Contractor shall also furnish such other bonds (if any) as are required by the Supplementary Conditions or other provisions of the Contract.
- C. All bonds must be in the form included in the Bidding Documents or otherwise specified by Owner prior to execution of the Contract, except as provided otherwise by Laws or Regulations, and must be issued and signed by a surety ~~named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Department Circular 570 (as amended and supplemented) by the Bureau of the Fiscal Service, U.S. Department of the Treasury meeting the requirements set forth in La. R.S. 38:2218 and 2219 and any other requirements and qualifications set forth in the Supplementary Conditions.~~ A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority must show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- D. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue bonds in the required amounts.
- E. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer in writing and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which must comply with the bond and surety requirements above.
- F. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- G. Upon request to Owner from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Owner shall provide a copy of the payment bond to such person or entity.

- H. Upon request to Contractor from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Contractor shall provide a copy of the payment bond to such person or entity.

I. Performance Bond: Any surety bond written for a Jefferson Parish Public Works project shall be written by a surety or insurance company currently on the U.S. Department of Treasury Financial Management Service list of approved bonding companies which is published annually in the Federal Register, or by a Louisiana domiciled insurance company with at least an A rating in the latest printing of the A.M. Best's Key Rating Guide to write individual bonds up to ten percent of policyholder's surplus as shown in the A.M. Best's Key Rating Guide or by a surety company that complies with the requirements of La. R.S. 38:2219.

No surety will be accepted from a bondsman which does not have a permanent agent or representative in the State upon whom notices referred to in the General Conditions may be served. Service of said notice on said agent or representative in the State shall be equal to service of notice on the president of the surety, or such other officer as may be concerned. Should the Contractor's surety, even though approved and accepted by the Owner, subsequently remove its agency or representative from the State or terminates its residency or license in this State or become insolvent, bankrupt, or otherwise fail, the Contractor shall immediately furnish a new bond from another company approved by the Owner, at no additional cost to the Owner. The new bond shall be executed upon the same terms and conditions as the original bond.

J. Alternative Security: The Owner may in its discretion accept alternative security pursuant to the requirements set forth in the Louisiana public contract law (La. R.S. 38:2181 et.seq.).

K. Scope of the Bond and Obligation of the Surety: The Contractor's surety shall obligate itself to all the terms and covenants of the Contract Documents covering the Work to be performed hereunder. The Owner reserves the right to order extra work or make changes by altering, adding to, or deducting from the Work under the conditions and in the manner hereinbefore described without notice to the Contractor's surety and without in any manner affecting the liability of bondsman or releasing it from any of its obligations hereunder.

The Bond shall also secure for the Owner the faithful performance of the Contract in strict accordance with the plans and specifications and Contract Documents. It shall protect the Owner against all lien laws of the State and shall provide for payment of reasonable attorney's fees for enforcement of the Contract and institution of concursus proceedings, if such proceedings become necessary. Likewise, it shall provide that if the Engineer is put to labor or expense by enforcement of the Contract and institution of concursus proceedings or through delinquency or insolvency of the Contract they shall be equitably paid for such extra expense and services involved.

The surety of the Contractor shall be and does hereby declare and acknowledge itself by acceptance to be bound to the Owner as guarantor jointly and in solido with the Contractor for fulfillment of the foregoing terms including, but not limited to, any provisions for actual or liquidated damages.

6.02 Insurance—General Provisions

- A. ~~Owner and~~ Contractor shall obtain and maintain insurance as required in this article, Article 7.18, and in the Supplementary Conditions. Pursuant to La. R.S. 9:2780.1, the cost of such insurance shall be included in the Contract Price.

- B. All insurance required by the Contract to be purchased and maintained by ~~Owner and Contractor~~ shall be obtained from insurance companies that are duly licensed or authorized in the ~~state or jurisdiction in which the Project is located~~ State of Louisiana to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VI or better. This requirement will be waived for workers' compensation coverage only for those contractors whose workers' compensation coverage is placed with companies who participate in the State of Louisiana Workers' Compensation Assigned Risk Pool or the Louisiana Worker's Compensation Corporation.
- C. Alternative forms of insurance coverage, including but not limited to self-insurance and "Occupational Accident and Excess Employer's Indemnity Policies," are not sufficient to meet the insurance requirements of this Contract, unless expressly allowed in the Supplementary Conditions.
- D. Contractor shall deliver to Owner, with copies to each additional insured identified herein or in the Contract, certificates of insurance and endorsements establishing that Contractor has obtained and is maintaining the policies and coverages required by the Contract. Contractor shall deliver these documents when returning the signed copies of the agreement to Owner. Each such certificate shall include the Project name, the Project number, proposal number, and Owner's address as identified in the Agreement. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, full disclosure of all relevant exclusions, and evidence of insurance required to be purchased and maintained by Subcontractors or Suppliers. In any documentation furnished under this provision, Contractor, Subcontractors, and Suppliers may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those applicable to this Contract.
- ~~E. Owner shall deliver to Contractor, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Owner has obtained and is maintaining the policies and coverages required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, and full disclosure of all relevant exclusions. In any documentation furnished under this provision, Owner may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those relevant to this Contract.~~
- F. Failure of Owner to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner to identify a deficiency in compliance from the evidence provided, will not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- G. In addition to the liability insurance required to be provided by Contractor, the Owner, at Owner's option, may purchase and maintain Owner's own liability insurance. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

~~H~~ G. Contractor shall require:

1. Subcontractors to purchase and maintain worker's compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project, and to name as additional insureds Owner and Engineer (and any other individuals or entities identified in the Supplementary Conditions as additional insureds on Contractor's liability policies) on each Subcontractor's commercial general liability insurance policy; and
2. Suppliers to purchase and maintain insurance that is appropriate for their participation in the Project.

~~I~~ H. If ~~either party Contractor~~ does not purchase or maintain the insurance required ~~of such party by by Owner in accordance with~~ the Contract, ~~such party Contractor~~ shall notify ~~the other party Owner~~ in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.

~~J~~ I. If Contractor has failed to obtain and maintain required insurance, Contractor's entitlement to enter or remain at the Site will end immediately, and Owner may impose an appropriate set-off against payment for any associated costs (including but not limited to the cost of purchasing necessary insurance coverage), and exercise Owner's termination rights under Article 16.

~~K~~ J. Without prejudice to any other right or remedy, if ~~a party Contractor~~ has failed to obtain required insurance, ~~the other party Owner~~ may elect (but is in no way obligated) to obtain equivalent insurance to protect ~~such other party's~~ Owner's interests at the expense of ~~the party Contractor~~ who was required to provide such coverage, and the Contract Price will be adjusted accordingly.

~~L~~ K. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests. Contractor is responsible for determining whether such coverage and limits are adequate to protect its interests, and for obtaining and maintaining any additional insurance that Contractor deems necessary.

~~M~~ L. The insurance and insurance limits required herein will not be deemed as a limitation on Contractor's liability, or that of its Subcontractors or Suppliers, under the indemnities granted to Owner and other individuals and entities in the Contract or otherwise.

~~N~~ M. All the policies of insurance required to be purchased and maintained under this Contract will contain a provision or endorsement that the coverage afforded will not be canceled, or renewal refused, until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured and Engineer.

6.03 Contractor's Insurance

- A. *Required Insurance:* Contractor shall purchase and maintain Worker's Compensation, Commercial General Liability, and other insurance pursuant to the specific requirements of the Supplementary Conditions.
- B. *General Provisions:* The policies of insurance required by this Paragraph 6.03 as supplemented must:
 1. include at least the specific coverages required;

2. be written for not less than the limits provided herein or in the Supplementary Conditions, or those required by Laws or Regulations, whichever is greater;
 3. remain in effect at least until the Work is complete (as set forth in Paragraph 15.06.D), and longer if expressly required elsewhere in this Contract, and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract;
 4. apply with respect to the performance of the Work, whether such performance is by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable; and
 5. include all necessary endorsements to support the stated requirements.
- C. *Additional Insureds*: The Contractor's commercial general liability, automobile liability, employer's liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies, if required by this Contract, must:
1. include and list as additional insureds Owner ~~and Engineer~~ and any individuals or entities identified as additional insureds in the Supplementary Conditions;
 2. include coverage for the respective officers, directors, members, partners, employees, and consultants of all such additional insureds;
 3. afford primary coverage to these additional insureds for all claims covered thereby (including as applicable those arising from both ongoing and completed operations);
 4. not seek contribution from insurance maintained by the additional insured;
 5. as to commercial general liability insurance, apply to additional insureds with respect to liability caused in whole or in part by Contractor's acts or omissions, or the acts and omissions of those working on Contractor's behalf, in the performance of Contractor's operations; and
 6. with respect to workers' compensation only, include a Waiver of Subrogation in favor of the Owner and any principals for whom the Owner is working, including any co-lessors of such principals; and, with respect to all of the foregoing, be subject to the approval of the Owner.
- D. The limits of liability for the insurance required by paragraph 6.03 of the General Conditions shall provide the following coverage for not less than the following amounts or greater where required by Laws and Regulations, and any Jefferson Parish resolutions:
1. Workers' Compensation, etc. under the General Conditions:
The CONTRACTOR shall take out and maintain during the life of this contract, Worker's Compensation Insurance for all his employees in any way engaged in this project. As required by Louisiana State Statute exception: employer's liability shall be \$1,000,000 per occurrence when work is to be over water and involves maritime exposures, otherwise this limit shall be no less than \$500,000 per occurrence.

2. CONTRACTOR's Comprehensive General Liability Insurance under the General Conditions which shall also include completed operations and product liability coverage:

The CONTRACTOR shall take out and maintain during the life of this contract Comprehensive General Liability Insurance with a combined Single Limit per occurrence for bodily injury and property damage. This insurance shall include coverage for bodily injury and property damage, and indicate on the certificate of insurance the following:

1. Premises - operations;
2. Broad form contractual liability;
3. Products and completed operations;
4. Use of contractors and sub-contractors;
5. Personal Injury;
6. Broad form property damage;
7. Explosion, collapse and underground [XCU] coverage.

NOTE: On the certificate of insurance, under the description of operations, the following wording is required: The aggregate loss limit applies to each project or a copy of ISO Form CG 25 03 [ed. 11-85 or latest form] shall be submitted.

COMBINED SINGLE LIMITS [CSL] -AMOUNT OF INSURANCE REQUIRED

CONTRACTS UP TO \$1,000,000:

General contracts - each occurrence/ minimum limits \$500,000.00,

New construction/renovations - each occurrence/minimum limits \$500,000.00***
[depending on building value],

CONTRACTS OVER \$1,000,000:

General contracts - each occurrence/ minimum limits \$1,000,000.00,

New construction/renovations - each occurrence/minimum limits \$1,000,000.00***
[depending on building value].

*** WHILE THE MINIMUM COMBINED SINGLE LIMITS OF \$500,000 IS REQUIRED FOR ALL RENOVATION, THE VALUE OF THE BUILDING SHALL BE MULTIPLIED BY 10% AND THE INSURANCE REQUIREMENTS WILL BE INCREASED AT \$1,000,000 INTERVALS AND ROUNDED TO THE NEAREST MILLION.

EXAMPLE: RENOVATIONS ON A THIRTY-THREE MILLION DOLLAR BUILDING WOULD REQUIRE THREE MILLION DOLLARS, [\$3,000,000] MINIMUM COMBINED SINGLE LIMITS OF COVERAGE

The CONTRACTOR shall take out and maintain a policy of Umbrella Liability Coverage in excess of the primary insurance afforded above and including all operations of the CONTRACTOR, with minimum limits of \$1,000,000.00.

3. The CONTRACTOR shall take out and maintain during the life of this contract Business Automobile Liability Insurance with a Combined Single Limit of \$1,000,000 per Occurrence for bodily injury and property damage, unless otherwise indicated. This insurance shall include for bodily injury and property damage the following coverage:

- 1) Any automobiles;
- 2) Owned automobiles;
- 3) Hired automobiles;
- 4) Non-owned automobiles.

4. OWNER's Protective Liability.

The CONTRACTOR shall take out and maintain a policy of OWNER's Protective Liability for the same limits of liability for bodily injury and property damage liability and conditions as provided hereinabove under "Comprehensive General Liability Insurance".

The cost of this coverage is at the CONTRACTOR's expense.

5. Builder's Risk Insurance

The CONTRACTOR shall take out and maintain Builder's Risk Insurance at his expense, to insure both the OWNER and CONTRACTOR as their interest may appear. These policies must cover for such amount of the work as is determined by the ENGINEER and/or Architect and shall be the all-risk type of coverage. Although the insurance takes account of payments during the course of the construction from the OWNER to the CONTRACTOR, it is understood that the work shall be at the risk of the CONTRACTOR until finally accepted by the OWNER as a whole pursuant to the provisions of the General Conditions. Except as otherwise provided by law, the Parish Attorney's Office with the concurrence of the Director of Risk Management is authorized to omit in whole or part the insurance requirements of this section in connection with such contracts.

6. Miscellaneous

(a) If at any time any of the said policies shall be or becomes unsatisfactory to the OWNER as to form or substance; or if a company issuing any such policy shall be or become unsatisfactory to the OWNER, the CONTRACTOR/Subcontractors shall promptly obtain a new policy, submit the same to the OWNER for approval and submit a certificate thereof as provided above.

Upon failure of a CONTRACTOR/Subcontractor to furnish to deliver and maintain such insurance as above provide this Contract, at the election of the OWNER, may be forthwith declared suspended, discontinued or terminated. Failure of the CONTRACTOR/Subcontractor to take out and/or to maintain insurance shall not relieve the CONTRACTOR/Subcontractor from any liability under the contract, nor shall the insurance requirements be construed to conflict with the obligation of the CONTRACTOR/Subcontractor concerning indemnification.

(b) WAIVER. Except as otherwise provided by law, the coverage requirements of this section may be waived in whole or part on contracts under \$100,000.00 and the Chairman of the Council is authorized to use his discretion in regard to insurance requirements for such contracts. Except as otherwise provided by law, the Parish Attorney's Office with the concurrence of the Director of Risk Management is authorized to omit in whole or part the insurance requirements of this section in connection with such contracts.

E. The policies of insurance so required by paragraph 6.03 to be purchased and maintained by CONTRACTOR shall indicate the project number, proposal number, and OWNER's address as identified in the Agreement and shall also include the following clauses:

1. The CONTRACTOR/Sub-contractor insurers will have no right of recovery or subrogation against the OWNER, it being the intention of the parties that the insurance policy so affected shall protect both parties and be the primary coverage for any and all losses covered by the below described insurance.

2. The OWNER shall be named as additional insured as regards to negligence by the CONTRACTOR [ISO Forms CG 20 10 (Form B) or latest applicable ISO form], or equivalent.

3. The insurance companies issuing the policy or policies shall have no recourse against the OWNER for payment of any premiums or for assessments under any form of policy.

4. Any and all deductibles in the insurance policies shall be assumed by and be for the amount of \$10,000.00 unless increased as set forth in section 5.04 C6(a) and at the sole risk of the CONTRACTOR/Sub-contractor.

5. Any and all communications regarding the insurance shall include the Project name, Project number, proposal number, and OWNER's address, as identified in the Agreement.

6.04 *Builder's Risk and Other Property Insurance*

A. *Builder's Risk:* Unless otherwise provided in the Supplementary Conditions, Contractor ~~shall~~ is not required to purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). ~~The specific requirements applicable to the builder's risk insurance are set forth in the Supplementary Conditions.~~

Except as otherwise provided by law, the Parish Attorney's Office with the concurrence of the Director of Risk Management is authorized to omit in whole or part the insurance requirements of this section in connection with such contracts.

B. *Property Insurance for Facilities of Owner Where Work Will Occur:* ~~Owner is responsible for obtaining and maintaining property insurance covering each existing structure, building, or facility in which any part of the Work will occur, or to which any part of the Work will attach or be adjoined. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, providing coverage consistent with that required for the builder's risk insurance, and will be maintained until the Work is complete, as set forth in Paragraph 15.06.D.~~

Owner shall not be responsible for purchasing and maintaining any property insurance specified in this paragraph 6.04 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any deductible amounts that are identified herein or 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.

~~C. *Property Insurance for Substantially Complete Facilities:* Promptly after Substantial Completion, and before actual occupancy or use of the substantially completed Work, Owner will obtain property insurance for such substantially completed Work, and maintain such property insurance at least until the Work is complete, as set forth in Paragraph 15.06.D. Such property insurance will be written on a special perils (all risk) form, on a replacement cost basis, and provide coverage consistent with that required for the builder's risk insurance. The builder's risk insurance may terminate upon written confirmation of Owner's procurement of such property insurance.~~

~~D. *Partial Occupancy or Use by Owner:* If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide advance notice of such occupancy or use to the builder's risk insurer, and obtain an endorsement consenting to the continuation of coverage prior to commencing such partial occupancy or use.~~

~~E. *D. Insurance of Other Property; Additional Insurance:* If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, then the entity or individual owning such property item will be responsible for insuring it. If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.04, it may do so at Contractor's expense.~~

6.05 *Property Losses; Subrogation*

A. The builder's risk insurance policy purchased and maintained in accordance with Paragraph 6.04 (or an installation floater policy if authorized by the Supplementary Conditions), will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors.

~~1. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils, risks, or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all individuals or entities identified in the Supplementary Conditions as builder's risk or installation floater insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused.~~

- ~~2. None of the above waivers extends to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.~~
- B. Any property insurance policy maintained by Owner covering any loss, damage, or consequential loss to Owner's existing structures, buildings, or facilities in which any part of the Work will occur, or to which any part of the Work will attach or adjoin; to adjacent structures, buildings, or facilities of Owner; or to part or all of the completed or substantially completed Work, during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06, will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them, and that the insured is allowed to waive the insurer's rights of subrogation in a written contract executed prior to the loss, damage, or consequential loss.
- ~~1. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from fire or any of the perils, risks, or causes of loss covered by such policies.~~
- ~~C. The waivers in this Paragraph 6.05 include the waiver of rights due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other insured peril, risk, or cause of loss.~~
- D. Contractor shall be responsible for assuring that each Subcontract contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from fire or other peril, risk, or cause of loss covered by builder's risk insurance, installation floater, and any other property insurance applicable to the Work.

6.06 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of property insurance required by Paragraph 6.04 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.04 shall maintain such proceeds in a segregated account, and distribute such proceeds in accordance with such agreement as the parties in interest may

reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.

- C. If no other special agreement is reached, Contractor shall repair or replace the damaged Work, using allocated insurance proceeds.

ARTICLE 7—CONTRACTOR’S RESPONSIBILITIES

7.01 *Contractor’s Means and Methods of Construction*

- A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. If the Contract Documents note, or Contractor determines, that professional engineering or other design services are needed to carry out Contractor’s responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor’s expense. Such services are not Owner-delegated professional design services under this Contract, and neither Owner nor Engineer has any responsibility with respect to (1) Contractor’s determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

7.02 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who will not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

For purposes of giving or receiving notice, directives, Change Orders, or any other information from Engineer or Owner to Contractor, the Contractor shall designate one person as Project Manager to receive such notice directives, Change Orders, or other information. If the person so identified by Contractor is not present on the job Site during normal working hours for any consecutive 48 hour period, the Contractor shall in writing, addressed to Engineer and Owner identify the individual who is acting as Project Manager. Contractor may designate the resident superintendent as the Project Manager.

7.03 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall maintain good discipline and order at the Site.
- B. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of Contractor’s employees; of Suppliers and Subcontractors, and their employees; and of any other individuals or entities performing or furnishing any of the Work, just as Contractor is responsible for Contractor’s own acts and omissions.

- C. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site will be performed during regular working hours, Monday through Friday. Contractor will not permit overtime work or perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld. For purposes of the foregoing sentence and this Contract "regular working hours" shall mean between 7:00 a.m. and 6:00 p.m. Emergency work may be performed without prior permission. Contractor shall establish a normal work schedule which does not exceed 40 hours per week. Overtime shall be scheduled only after Contractor obtains written permission from Owner.

7.04 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work must be new and of good quality, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications will expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment must be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.
- D. The Contractor agrees to assign to the Owner at the time of final completion of the Work any and all manufacturer's warranties relating to equipment, machinery, materials and labor used and incorporated in the Work and Contractor further agrees to perform the Work in such a manner to preserve any and all manufacturer's warranties.

7.05 *"Or Equals"*

- A. *Contractor's Request; Governing Criteria:* Whenever an item of equipment or material is specified or described in the Contract Documents by using the names of one or more proprietary items or specific Suppliers, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material, or items from other proposed Suppliers, under the circumstances described below.
1. If Engineer in its sole discretion determines that an item of equipment or material proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer will deem it an "or equal" item. For

the purposes of this paragraph, a proposed item of equipment or material will be considered functionally equal to an item so named if:

- a. in the exercise of reasonable judgment Engineer determines that the proposed item:
 - 1) is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) has a proven record of performance and availability of responsive service; and
 - 4) is not objectionable to Owner.
- b. Contractor certifies that, if the proposed item is approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) the item will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense:* Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal," which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. *Effect of Engineer's Determination:* Neither approval nor denial of an "or-equal" request will result in any change in Contract Price. The Engineer's denial of an "or-equal" request will be final and binding, and may not be reversed through an appeal under any provision of the Contract.
- E. *Treatment as a Substitution Request:* If Engineer determines that an item of equipment or material proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer consider the item a proposed substitute pursuant to Paragraph 7.06.

7.06 Substitutes

- A. *Contractor's Request; Governing Criteria:* Unless the specification or description of an item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material under the circumstances described below. To the extent possible such requests must be made before commencement of related construction at the Site.
 - 1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for

review of proposed substitute items of equipment or material from anyone other than Contractor.

2. The requirements for review by Engineer will be as set forth in Paragraph 7.06.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
3. Contractor shall make written application to Engineer for review of a proposed substitute item of equipment or material that Contractor seeks to furnish or use. The application:
 - a. will certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design;
 - 2) be similar in substance to the item specified; and
 - 3) be suited to the same use as the item specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times;
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from the item specified; and
 - 2) available engineering, sales, maintenance, repair, and replacement services.
 - d. will contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

- D. *Reimbursement of Engineer's Cost:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- E. *Contractor's Expense:* Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination:* If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request will be final and binding, and may not be reversed through an appeal under any provision of the Contract. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.06.D, by timely submittal of a Change Proposal.

7.07 *Concerning Subcontractors and Suppliers*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.
- B. Contractor shall retain specific Subcontractors and Suppliers for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor or Supplier to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable during the bidding process or otherwise). ~~Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 5 days.~~
- E. Owner may require the replacement of any Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, and Owner has accepted it ~~(either in writing or by failing to make written objection thereto)~~, then Owner may subsequently revoke the acceptance of any such Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor or Supplier.
- F. If Owner requires the replacement of any Subcontractor or Supplier retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, with respect to the replacement; and Contractor shall

initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.

- G. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. ~~At the request of Owner, on a monthly basis,~~ Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.

Contractor shall be fully responsible to Owner for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner and any such Subcontractor, Supplier or other individual or entity, nor shall it create any obligation on the part of Owner 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.

- I. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors and Suppliers.
- J. The divisions and sections of the Specifications and the identifications of any Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.
- K. All Work performed for Contractor by a Subcontractor or Supplier must be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract for the benefit of Owner and Engineer.
- L. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor for Work performed for Contractor by the Subcontractor or Supplier.
- M. Contractor shall restrict all Subcontractors and Suppliers from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed in this Contract.

7.08 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If an invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights will be disclosed in the Contract Documents.
- ~~B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or~~

~~relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.~~

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

7.09 *Permits*

A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits, licenses, and certificates of occupancy. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

7.10 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work. Parish may designate Contractor as its agent for the purpose of making sales tax exempt purchases on behalf of Jefferson Parish; such project shall be designated sales tax exempt in a Resolution adopted by the Jefferson Parish Council.
- B. Owner is exempt from payment of sales and compensating use taxes of the State of Louisiana and of cities and counties thereof on all materials to be incorporated into the Work when a Project is designated as tax exempt by the Jefferson Parish Council.
1. Owner will furnish the required certificates of tax exemption to Contractor for use in the purchase of supplies and materials to be incorporated into the Work.
 2. Owner's exemption does not apply to construction tools, machinery, equipment, or other property purchased by or leased by Contractor, or to supplies or materials not incorporated into the Work.

7.11 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses,

and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It is not Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this does not relieve Contractor of its obligations under Paragraph 3.03.

- C. Owner or Contractor may give written notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such written notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

D. Pursuant to La. R.S. 38:2196, with respect to public contracts involving the state or a political subdivision of the state, when the Work is to be done in this state (Louisiana), or the services are to be provided or the materials are to be supplied in this state, provisions in such agreements requiring disputes arising thereunder to be resolved in a forum outside of this state or requiring their interpretation to be governed by the laws of another jurisdiction are inequitable and against the public policy of this state.

7.12 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.13 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations.
- B. Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.
- C. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- D. All damage, injury, or loss to any property referred to in Paragraph 7.13.C.2 or 7.13.C.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
 - E. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.
 - F. Contractor shall notify Owner; the owners of adjacent property; the owners of Underground Facilities and other utilities (if the identity of such owners is known to Contractor); and other contractors and utility owners performing work at or adjacent to the Site, in writing, when Contractor knows that prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
 - G. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. ~~Any Owner's safety programs that are applicable to the Work are identified or included in the Supplementary Conditions or Specifications.~~
 - H. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
 - I. Contractor's duties and responsibilities for safety and protection will continue until all the Work is completed, Engineer has issued a written notice to Owner and Contractor in accordance with Paragraph 15.06.C that the Work is acceptable, and Contractor has left the Site (except as otherwise expressly provided in connection with Substantial Completion).
 - J. Contractor's duties and responsibilities for safety and protection will resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of safety data sheets (formerly known as material safety data sheets) or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 Emergencies

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent damage, injury, or loss. Contractor shall give Engineer ~~prompt written~~ notice immediately but in no event more than 24 hours after the alleged emergency if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused by an emergency, or are required as a result of Contractor's response to an emergency. If Engineer determines that a change in the Contract Documents is required because of an emergency or Contractor's response, a Work Change Directive or Change Order will be issued.

7.16 Submittals

A. Shop Drawing and Sample Requirements

1. Before submitting a Shop Drawing or Sample, Contractor shall:
 - a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determine and verify:
 - 1) all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;
 - 2) the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - 3) all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;
 - c. confirm that the Submittal is complete with respect to all related data included in the Submittal.
 2. Each Shop Drawing or Sample must bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that Submittal, and that Contractor approves the Submittal.
 3. With each Shop Drawing or Sample, Contractor shall give Engineer specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents. This notice must be set forth in a written communication separate from the Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.
- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall label and submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals.
1. *Shop Drawings*
 - a. Contractor shall submit the number of copies required in the Specifications.

- b. Data shown on the Shop Drawings must be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide, and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.C.

2. *Samples*

- a. Contractor shall submit the number of Samples required in the Specifications.
 - b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the Submittal for the limited purposes required by Paragraph 7.16.C.
3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. *Engineer's Review of Shop Drawings and Samples*

- 1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the accepted Schedule of Submittals. Engineer's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.
- 3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- 4. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order or other appropriate Contract modification.
- 5. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for complying with the requirements of Paragraphs 7.16.A and B.
- 6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, will not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
- 7. Neither Engineer's receipt, review, acceptance, or approval of a Shop Drawing or Sample will result in such item becoming a Contract Document.

8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.C.4.

D. Resubmittal Procedures for Shop Drawings and Samples

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous Submittals.
2. Contractor shall furnish required Shop Drawing and Sample submittals with sufficient information and accuracy to obtain required approval of an item with no more than two resubmittals. Engineer will record Engineer's time for reviewing a third or subsequent resubmittal of a Shop Drawing or Sample, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved Shop Drawing or Sample, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

E. Submittals Other than Shop Drawings, Samples, and Owner-Delegated Designs

1. The following provisions apply to all Submittals other than Shop Drawings, Samples, and Owner-delegated designs:
 - a. Contractor shall submit all such Submittals to the Engineer in accordance with the Schedule of Submittals and pursuant to the applicable terms of the Contract Documents.
 - b. Engineer will provide timely review of all such Submittals in accordance with the Schedule of Submittals and return such Submittals with a notation of either Accepted or Not Accepted. Any such Submittal that is not returned within the time established in the Schedule of Submittals will be deemed accepted.
 - c. Engineer's review will be only to determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.
 - d. If any such Submittal is not accepted, Contractor shall confer with Engineer regarding the reason for the non-acceptance, and resubmit an acceptable document.
2. Procedures for the submittal and acceptance of the Progress Schedule, the Schedule of Submittals, and the Schedule of Values are set forth in Paragraphs 2.03, 2.04, and 2.05.

- F. Owner-delegated Designs: Submittals pursuant to Owner-delegated designs are governed by the provisions of Paragraph 7.19.

7.17 Contractor's General Warranty and Guarantee

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer is entitled to rely on Contractor's warranty and guarantee.

- B. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 15.08. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.17 is limited only by applicable Laws and Regulations restricting actions to enforce such rights; provided, however, that after the end of the correction period under Paragraph 15.08:
 - 1. Owner shall give Contractor written notice of any defective Work within 60 days of the discovery that such Work is defective; and
 - 2. Such notice will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the notice.
- C. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 - 1. abuse, or improper modification, maintenance, or operation, by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 - 2. normal wear and tear under normal usage.
- D. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents, a release of Contractor's obligation to perform the Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.17:
 - 1. Observations by Engineer;
 - 2. Recommendation by Engineer or payment by Owner of any progress or final payment;
 - 3. The issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 - 4. Use or occupancy of the Work or any part thereof by Owner;
 - 5. Any review and approval of a Shop Drawing or Sample submittal;
 - 6. The issuance of a notice of acceptability by Engineer;
 - 7. The end of the correction period established in Paragraph 15.08;
 - 8. Any inspection, test, or approval by others; or
 - 9. Any correction of defective Work by Owner.
- E. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract will govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 Indemnification

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify, ~~defend, and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them (collectively the "Indemnitees"),~~ from any and all losses, damages, costs, and judgments

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(including, but not limited to, all reasonable fees and charges of engineers, architects, attorneys, and other professionals, ~~and~~ all court or arbitration or other dispute resolution costs, and all reasonable fees and charges incurred in establishing the right to indemnity pursuant to the provisions in this section) arising from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent or intentional 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.

Pursuant to La. R.S. 9:2780.1 and Article 6.02 of the General Conditions, Contractor acknowledges that Contractor is required to obtain insurance for the purpose of insuring its obligation to indemnify, defend, and hold harmless the Indemnitees as described above, and Contractor acknowledges that Contractor has recovered the cost of such insurance in the Contract Price.

B. In any and all claims against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A will not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

7.19 *Delegation of Professional Design Services*

- A. Owner may require Contractor to provide professional design services for a portion of the Work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that Contractor must furnish to Engineer with respect to the Owner-delegated design.
- B. Contractor shall cause such Owner-delegated professional design services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional. Such design professional must issue all certifications of design required by Laws and Regulations.
- C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Engineer, then such Shop Drawing or other Submittal must bear the written approval of Contractor's design professional when submitted by Contractor to Engineer.
- D. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or employed by Contractor under an Owner-delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.

- E. Pursuant to this Paragraph 7.19, Engineer's review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:
 - 1. Checking for conformance with the requirements of this Paragraph 7.19;
 - 2. Confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and
 - 3. Establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents.
- F. Contractor shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.
- G. Contractor is not required to provide professional services in violation of applicable Laws and Regulations.

ARTICLE 8—OTHER WORK AT THE SITE

8.01 *Other Work*

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.
- D. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- E. If the proper execution or results of any part of Contractor's Work depends upon work performed by others, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and

proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

- F. The provisions of this article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.05.C.3.

8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
 - 1. The identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 - 2. An itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. The extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

- A. If, in the course of performing other work for Owner at or adjacent to the Site, the Owner's employees, any other contractor working for Owner, or any utility owner that Owner has arranged to perform work, causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment will take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract, and any remedies available to Contractor under Laws or Regulations concerning utility action or inaction. When applicable, any such equitable adjustment in Contract Price will be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times or Contract Price is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.
 - 1. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may

impose a set-off against payments due Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this Paragraph 8.03.B.

2. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due Contractor.
- C. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor or Owner, ~~or Engineer~~, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by ~~arbitration or other~~ a dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner ~~and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them~~ from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9—OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer ~~provided Contractor makes no reasonable objection to the replacement engineer~~. The replacement engineer's status under the Contract Documents will be that of the former Engineer.

9.03 *Furnish Data*

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

9.04 *Pay When Due*

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

9.05 *Lands and Easements; Reports, Tests, and Drawings*

- A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.

- C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

~~9.06 Insurance~~

- ~~A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.~~

9.06 *Change Orders*

- A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.07 *Inspections, Tests, and Approvals*

- A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.08 *Limitations on Owner's Responsibilities*

- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.09 *Undisclosed Hazardous Environmental Condition*

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

~~9.11 Evidence of Financial Arrangements~~

- ~~A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract (including obligations under proposed changes in the Work).~~

9.10 *NEW: Safety Programs*

- A. NEW: While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.
- B. Engineer shall identify a specific individual to serve as liaison between Owner and Contractor and between Engineer and Contractor. Engineer will notify Owner and Contractor of the name of an acting replacement as Engineer representative whenever the person so designated is not available. Whenever the Contractor or Owner requires information, direction, or assistance, the Contractor or Owner shall notify the individual designated by Engineer.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe, as an experienced and qualified design professional, the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.07. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Resident Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in the Supplementary Conditions and in Paragraph 10.07.
- B. If Owner designates an individual or entity who is not Engineer's consultant, agent, or employee to represent Owner at the Site, then the responsibilities and authority of such individual or entity will be as provided in the Supplementary Conditions.

10.04 *Engineer's Authority*

- A. Engineer has the authority to reject Work in accordance with Article 14.
- B. Engineer's authority as to Submittals is set forth in Paragraph 7.16.
- C. Engineer's authority as to design drawings, calculations, specifications, certifications and other Submittals from Contractor in response to Owner's delegation (if any) to Contractor of professional design services, is set forth in Paragraph 7.19.
- D. Engineer's authority as to changes in the Work is set forth in Article 11.
- E. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.05 *Determinations for Unit Price Work*

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.06 *Decisions on Requirements of Contract Documents and Acceptability of Work*

- A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.07 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation, and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Contractor under Paragraph 15.06.A, will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.07 also apply to the Resident Project Representative, if any.
- F. The duties, responsibilities, and limitations of authority of the Resident Project Representative are as further defined in the Supplementary Conditions and Exhibit A, which is attached thereto and incorporated therein by reference.

10.08 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs of which Engineer has been informed.

ARTICLE 11—CHANGES TO THE CONTRACT

11.01 *Amending and Supplementing the Contract*

- A. The Contract may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.

- B. If an amendment or supplement to the Contract includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order.
- C. All changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, must be supported by Engineer's recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of the Engineer.

11.02 *Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 - 1. Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 - 2. Changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 - 3. Changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.05, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters; and
 - 4. Changes that embody the substance of any final and binding results under: Paragraph 11.03.B, resolving the impact of a Work Change Directive; Paragraph 11.09, concerning Change Proposals; Article 12, Claims; Paragraph 13.02.D, final adjustments resulting from allowances; Paragraph 13.03.D, final adjustments relating to determination of quantities for Unit Price Work; and similar provisions.
- ~~B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of Paragraph 11.02.A, it will be deemed to be of full force and effect, as if fully executed.~~

11.03 *Work Change Directives*

- A. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Contract Price.
- B. If Owner has issued a Work Change Directive and:
 - 1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Proposal seeking such an adjustment no later than 30 days after the completion of the Work set out in the Work Change Directive.

2. Owner believes that an adjustment in Contract Times or Contract Price is necessary, then Owner shall submit any Claim seeking such an adjustment no later than 60 days after issuance of the Work Change Directive.

11.04 *Field Orders*

- A. Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly.
- B. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.05 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Changes involving the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters will be supported by Engineer's recommendation.
- B. Such changes in the Work may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work must be performed under the applicable conditions of the Contract Documents.
- C. Nothing in this Paragraph 11.05 obligates Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.06 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.C.2.

11.07 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12. No course of conduct or dealings between the parties, no express or implied acceptance of alterations or additions to the Work, and no claim that the OWNER has been unjustly enriched by any alterations or additions to the Work shall be the basis of any claim for an increase in any amount due under the Contract Documents
- B. An adjustment in the Contract Price will be determined as follows:

1. Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03);
 2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.07.C.2); or
 3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on ~~the~~ a "Force Account" basis, ~~of~~ comprised by the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).
- C. *Contractor's Fee:* When applicable, the Contractor's fee for overhead and profit will be determined as follows:
1. A mutually acceptable fixed fee.; or
 2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. For costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee will be 15 percent;
 - b. For costs incurred under Paragraph 13.01.B.3, the Contractor's fee will be 5 percent;
 - c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.07.C.2.a and 11.07.C.2.b is that the Contractor's fee will be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of 5 percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted Work the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the Work;
 - d. No fee will be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in Cost of the Work will be the amount of the actual net decrease in Cost of the Work and a deduction of an additional amount equal to 5 percent of such actual net decrease in Cost of the Work; and
 - f. When both additions and credits are involved in any one change or Change Proposal, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to

each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.

11.08 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment in the Contract Times must comply with the provisions of Article 12. No course of conduct or dealings between the parties, no express or implied acceptance of alterations or additions to the Work, and no claim that the Owner has been unjustly enriched by any alterations or additions to the Work shall be the basis of any claim for a change in any time period provided for in the Contract Documents.
- B. Delay, disruption, and interference in the Work, and any related changes in Contract Times, are addressed in and governed by Paragraph 4.05.
- C. All time limits stated in the Contract Documents are of the essence of the Agreement. The Contractor acknowledges and understands that failure by the Contractor will cause significant damage to the Owner both in direct damages as well as delay damages, including but not limited to the damages specified in the Agreement as actual damages and as liquidated damages.

11.09 *Change Proposals*

- A. *Purpose and Content:* Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; contest an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a set-off against payment due; or seek other relief under the Contract. The Change Proposal will specify any proposed change in Contract Times or Contract Price, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Proposal will address only one issue, or a set of closely related issues.
- B. *Change Proposal Procedures*
 - 1. *Submittal:* Contractor shall submit each Change Proposal to Engineer within 30 days after the start of the event giving rise thereto, or after such initial decision.
 - 2. *Supporting Data:* The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal.
 - a. Change Proposals based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.
 - b. Change proposals related to a change of Contract Price must include full and detailed accounts of materials incorporated into the Work and labor and equipment used for the subject Work.

The supporting data must be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event.

3. *Engineer's Initial Review:* Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal. If in its discretion Engineer concludes that additional supporting data is needed before conducting a full review and making a decision regarding the Change Proposal, then Engineer may request that Contractor submit such additional supporting data by a date specified by Engineer, prior to Engineer beginning its full review of the Change Proposal.
 4. *Engineer's Full Review and Action on the Change Proposal:* Upon receipt of Contractor's supporting data (including any additional data requested by Engineer), Engineer will conduct a full review of each Change Proposal and, within 30 days after such receipt of the Contractor's supporting data, either approve the Change Proposal in whole, deny it in whole, or approve it in part and deny it in part. Such actions must be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
 5. *Binding Decision:* Engineer's decision is final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- C. *Resolution of Certain Change Proposals:* If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties in writing that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice will be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.
- D. *Post-Completion:* Contractor shall not submit any Change Proposals after Engineer issues a written recommendation of final payment pursuant to Paragraph 15.06.B.

11.10 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12—CLAIMS

12.01 *Claims*

- A. *Claims Process:* The following disputes between Owner and Contractor are subject to the Claims process set forth in this article:
1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents;

3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters; and
 4. Subject to the waiver provisions of Paragraph 15.07, any dispute arising after Engineer has issued a written recommendation of final payment pursuant to Paragraph 15.06.B.
- B. *Submittal of Claim:* The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim rests with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
- C. *Review and Resolution:* The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim will be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation*
1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate will stay the Claim submittal and response process.
 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process will resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process will resume as of the date of the conclusion of the mediation, as determined by the mediator.
 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval:* If the party receiving a Claim approves the Claim in part and denies it in part, such action will be final and binding ~~unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.~~
- F. *Denial of Claim:* If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. ~~A denial of the Claim will be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.~~
- G. *Final and Binding Results:* If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is

approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim will be incorporated in a Change Order or other written document to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13—COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

- A. *Purposes for Determination of Cost of the Work:* The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
 2. When needed to determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included:* Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work will be in amounts no higher than those commonly incurred in the locality of the Project, will not include any of the costs itemized in Paragraph 13.01.C, and will include only the following items:

1. ~~Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor in advance of the subject Work. Such employees include, without limitation, superintendents, foremen, safety managers, safety representatives, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work will be apportioned on the basis of their time spent on the Work. Payroll costs include, but are not limited to, salaries and wages plus the cost of fringe benefits, which include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, will be included in the above to the extent authorized by Owner.~~

For labor and working foremen in direct charge of operations, the Contractor shall receive the wage rates agreed on in writing before beginning work for each hour that said labor and foremen are engaged in such work. Jobsite and home office supervisory personnel shall not be included as direct labor. The Contractor shall receive the actual costs paid to, or in behalf of, workers for subsistence and travel allowances, health and welfare benefits, pension fund benefits or other benefits when such amounts are required by collective bargaining agreement or other employment contract applicable to the classes of labor employed on the Work, but limited to a maximum daily rate for subsistence and travel allowances. This maximum shall be agreed upon prior to the Contractor incurring such charges.

2. ~~Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts will accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment will accrue to Owner, and Contractor shall make provisions so that they may be obtained.~~

For materials accepted by the Engineer and used, the Contractor shall receive the actual cost of such materials delivered to the Work, including transportation charges and sales taxes if applicable.

3. ~~Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, which will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee will be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.~~

For Change Order work performed by an approved Subcontractor, the Subcontractor shall receive the Subcontractor's actual and reasonable allowable direct cost of such Work plus a 15 percent mark-up for the Subcontractor's indirect jobsite and home office overhead expenses and profit. In addition, the Contractor will be paid a 10 percent mark-up on the Subcontractor's total direct and indirect costs, and profit for general supervision and sequencing of the Change Order work.

4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed or retained for services specifically related to the Work, but only to the extent approved in writing by Owner.
5. Other costs consisting of the following:
- a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - 1) In establishing included costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or the estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. Contractor will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such item.
 - c. *Construction Equipment Rental*
 - 1) ~~Rentals of all construction equipment and machinery, and the parts thereof, in accordance with rental agreements approved by Owner as to price (including any surcharge or special rates applicable to overtime use of the construction~~

~~equipment or machinery), and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs will be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts must cease when the use thereof is no longer necessary for the Work.~~

- ~~2) Costs for equipment and machinery owned by Contractor or a Contractor related entity will be paid at a rate shown for such equipment in the equipment rental rate book specified in the Supplementary Conditions. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs.~~
- ~~3) With respect to Work that is the result of a Change Order, Change Proposal, Claim, set off, or other adjustment in Contract Price ("changed Work"), included costs will be based on the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, must cease to accrue when the use thereof is no longer necessary for the changed Work.~~

For authorized machinery or special equipment, the Contractor shall receive the rental rates agreed on in writing before such work is begun. For equipment rented from independent outside sources, the Contractor will be reimbursed the reasonable actual cost as shown on paid rental invoices. For company owned equipment, the Contractor will be reimbursed his internal cost recovery equipment charge rate consistent with his original bid cost estimates. If the Contractor chooses to use a rental rate guide book instead of his internal cost recovery rates to establish rental rates for company owned equipment, costs for equipment and will be paid at a rate shown for such equipment in the equipment rental rate book specified in the Supplementary Conditions. In addition, no 15 percent mark-up on equipment direct cost for jobsite and home office overhead expenses and profit will be allowed if the Contractor chooses to use rental rate guide book prices instead of his internal cost recovery rates.

- d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
- e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work ~~(except losses and damages within the deductible amounts of builder's risk or other property insurance established in accordance with Paragraph 6.04),~~ provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses will be included in the Cost of the Work for the purpose of determining Contractor's fee.

- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. ~~The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.~~

For property damage, liability and workmen's compensation insurance premiums, unemployment insurance contributions, social security taxes, and bond costs on Force Account work, the Contractor shall receive the actual cost thereof. The Contractor shall furnish satisfactory evidence of the rates paid for such bond, insurance and tax.

C. *Costs Excluded:* The term Cost of the Work does not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
2. The cost of purchasing, renting, or furnishing small tools and hand tools.
3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
6. Expenses incurred in preparing and advancing Claims.
7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. *Contractor's Fee*

- ~~1. When the Work as a whole is performed on the basis of cost plus a fee, then:

 - ~~a. Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.~~
 - ~~b. for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:

 - ~~1) When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.~~~~~~

~~2) When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.~~

~~2~~ 1. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work will be determined in accordance with Paragraph 11.07.C.2.

- E. *Documentation and Audit*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor and pertinent Subcontractors will establish and maintain records of the costs in accordance with generally accepted accounting practices. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all Contractor's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and Contractor's fee. Contractor shall preserve all such documents for a period of three years after the final payment by Owner. Pertinent Subcontractors will afford such access to Owner, and preserve such documents, to the same extent required of Contractor.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances*: Contractor agrees that:
1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment for any of the foregoing will be valid.
- C. *Owner's Contingency Allowance*: Contractor agrees that an Owner's contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor for Work covered by allowances, and the Contract Price will be correspondingly adjusted.

13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, and the final adjustment of Contract Price will be set forth in a Change Order, subject to the provisions of the following paragraph.

E. *Adjustments in Unit Price*

~~1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:~~

~~a. the quantity of the item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and~~

~~b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.~~

~~2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.~~

~~3. Adjusted unit prices will apply to all units of that item.~~

1. Pursuant to La. R.S. 38:2212, where certain unit prices are contained in the initial Contract, no deviations shall be allowed in computing negotiated Change Order costs, thus adjustments in unit price are not permitted. To the extent the statute is found to be non-applicable, then the provisions set forth in paragraph 13.03(E)(2) will apply when the stated conditions exist.

2. The unit price of an item of Unit Price Work shall be subject to reevaluation and adjustment under the following conditions:

a. if the total cost of a particular item of Unit Price Work amounts to ten (10) percent or more of the Contract Price and the variation in the quantity twenty-five (25) percent from the estimated quantity of such item indicated in the Agreement; and

b. if there is no corresponding adjustment with respect to any other item of Work; and

c. if Contractor believes that Contractor has incurred additional expense as a result thereof; or if Owner believes that the quantity variation entitles Owner to an adjustment in the unit price, either Owner or Contractor may make a claim for an adjustment in the Contract Price in accordance with Article 12 if the parties are unable to agree as to the effect of any such variations in the quantity of Unit Price Work performed.

ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply with such procedures and programs as applicable.

14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work will be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
 - 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 - 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 - 3. by manufacturers of equipment furnished under the Contract Documents;
 - 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 - 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests will be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner ~~and Engineer.~~

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by

Engineer, uncover such Work for observation. Such uncovering will be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt written notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work will be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.

- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction unless Contractor fails to provide written notice as required by paragraph 14.02F. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work will not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 *Owner May Correct Defective Work*

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace defective Work as required by Engineer, then Owner may, after 7 days' written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against

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Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15—PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 *Progress Payments*

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments*
1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
 2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation establishing full payment by Contractor for the materials and equipment; (b) at Owner's request, documentation warranting that Owner has received the materials and equipment free and clear of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
 3. Beginning with the second Application for Payment, each Application must include an affidavit of Contractor stating that all previous progress payments received by Contractor have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
 4. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.
 5. Contractor shall also comply with the following specific requirements:
 - a. The aggregate cost of materials stored offsite shall not at any time, without written approval of Owner, exceed the amount identified in the Supplementary Conditions.

- b. Title to such materials shall be vested in Owner, as evidenced by documentation satisfactory in form and substance to Owner, including, without limitation, recorded financing statements, UCC filings, and UCC searches.
- c. With each application for payment, the Contractor shall submit to Owner a written list identifying each location where materials are stored off the Project Site and the value of materials at each location. Contractor shall procure insurance satisfactory to Owner for materials stored off the Project Site in an amount not less than the total value thereof.
- d. The consent of any Surety shall be obtained to the extent required prior to payment for any materials stored off the Project Site.
- e. Representatives of Owner shall have the right to make inspections of the storage areas at any time.
- f. Such materials shall be (1) protected from diversion, destruction, theft and damage to the satisfaction of Owner; (2) specifically marked for use on the Project; and (3) segregated from other materials at the storage facility.

C. Review of Applications

- 1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
- 2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
- 3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or

- b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work;
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto;
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work;
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid by Owner; or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
 5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
 6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents;
 - f. Engineer has knowledge that Contractor has failed to pay Subcontractors or Suppliers or for labor;
 - g. Contractor has failed to make submittals in accordance with the accepted schedules or otherwise failed to comply with paragraph 2.07; or
 - h. Contractor owes or may owe Owner liquidated damages, actual damages, or both, in accordance with the provisions in the Agreement regarding delay in completion of the Work within the Contract Times.

D. *Payment Becomes Due*

1. ~~Ten~~ Thirty (30) days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. *Reductions in Payment by Owner*

1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. Claims have been made against Owner based on Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages resulting from Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. The Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. The Contract Price has been reduced by Change Orders;
 - i. An event has occurred that would constitute a default by Contractor and therefore justify a termination for cause;
 - j. Liquidated or other damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
 - l. Other items entitle Owner to a set-off against the amount recommended;
 - m. Owner has actual knowledge of the occurrence of any of the events enumerated in paragraphs 15.01.C.6.f through 15.01.C.6.h or 16.02.A; or
 - n. Punch lists generated during a construction project shall include the cost estimates for the particular items of work the design professional has developed based on the mobilization, labor, materials and equipment costs of correcting each punch list item. The Owner shall withhold from payment the value of the punch list as per La. R.S. 38:2248 B.
2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining

after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed will be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.

3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld will be treated as an amount due as determined by Paragraph 15.01.D.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than 7 days after the time of payment by Owner.

15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which will fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment, along with cost estimates as required by law. Owner shall have 7 days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items, including cost estimates, to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work,

property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.

- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.
- G. Upon issuance of the final Certificate of Substantial Completion as set forth in Paragraph 15.03.C, Owner, through its governing authority, shall adopt a resolution accepting the work as substantially complete and directing Contractor to record such acceptance with the Clerk of Court and Ex-Officio Recorder of Mortgages as provided in La R.S. 38:2241.1(C). Contractor may also apply at the appropriate time for payment of retainage following the procedure for progress payments. In accordance with the Public Contract Law, Owner shall withhold from any payment made, an amount equal to the value established by Engineer of the cost of the incomplete items contained on the punch list of items to be completed or corrected that was prepared by Engineer in accordance with Paragraph 15.03.C, and an amount to cover the cost of any known claims of materialmen, laborers, suppliers or subcontractors, and any other amounts which Owner is permitted to deduct by law or pursuant to any provisions of the Contract Documents.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
 - 1. At any time, Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through 15.03.E for that part of the Work.
 - 2. At any time, Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
 - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.04 regarding builder's risk or other property insurance.
5. Owner may at any time request Contractor in writing to permit Owner to take over operation of any such part of the Work although it is not substantially complete. A copy of such request will be sent to Engineer and within a reasonable time thereafter Owner, Contractor and Engineer shall make an inspection of that part of the Work to determine its status of completion and will prepare a list of the items remaining to be completed or corrected thereon before final payment. If Contractor does not object in writing to Owner and Engineer that such part of the Work is not ready for separate operation by Owner, Engineer will finalize the list of items to be completed or corrected and will deliver such lists to Owner and Contractor together with a written recommendation as to the division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, maintenance, utilities, insurance, warranties and guarantees for that part of the Work which will become binding upon Owner and Contractor at the time when Owner takes over such operation (unless they shall have otherwise agreed in writing and so informed Engineer). During such operation and prior to Substantial Completion of such part of the Work, Owner shall allow Contractor reasonable access to complete or correct items on said list and to complete other related Work.

15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *Final Payment*

A. *Application for Payment*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.12), and other documents, Contractor may make application for final payment.
2. The final Application for Payment must be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
 - d. a list of all duly pending Change Proposals and Claims; and

- e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.

~~3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.~~

- B. *Engineer's Review of Final Application and Recommendation of Payment:* If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within 10 days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the final Application for Payment to Owner for payment. Such recommendation will account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.
- C. *Notice of Acceptability:* In support of its recommendation of payment of the final Application for Payment, Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to stated limitations in the notice and to the provisions of Paragraph 15.07.
- D. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment and issuance of notice of the acceptability of the Work.
- E. *Final Payment Becomes Due:* ~~Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to Contractor within 30 days of Owner's receipt of the final Application for Payment from Engineer.~~

1. After the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer will become due and, when due, will be paid by Owner to Contractor in accordance with the Louisiana Public Contract Statute.

2. Following acceptance of the Work by Owner, Contractor shall file the acceptance with the Clerk of Court and Ex-Officio Recorder of Mortgages.

3. Release and payment of Retainage, or balance due, will become due and will be paid by Owner to Contractor thirty days after receipt of Application for Retainage Payment (which must include a clear lien and privilege certificate secured from the Clerk of Court and Ex-Officio Recorder of Mortgages dated no less than forty-five (45) days after the filing of the acceptance and other documentation as required by the Contract Documents), and recommendation of payment by Engineer.

15.07 *Waiver of Claims*

- A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by Contractor, except as set forth in an outstanding Claim, appeal under the provisions of Article 17, set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted as a Claim, or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. The parties agree that: (a) any and all defects discovered in the Work within one year ~~the first three (3) years~~ after the issuance of the certificate of substantial completion are not due to the fault, negligence, and/or lack of maintenance by Owner; (b) any and all such defects in the Work are presumed to be due to the fault, negligence and/or unworkmanlike performance by Contractor; and (c) Contractor shall bear the burden of proof that any such defects are due to the fault, negligence, breach of the standard of care, and/or unworkmanlike performance by any person(s) or entity(ies) other than Contractor. If within one year ~~three (3) years~~ after the date of Substantial Completion (or such longer period of time as may be prescribed by the Supplementary Conditions or the terms of any applicable special guarantee required by the Contract Documents), Owner gives Contractor written notice that any Work has been found to be defective, or that Contractor's repair of any damages to the Site or adjacent areas has been found to be defective, then after receipt of such notice of defect Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such adjacent areas;
 - 2. correct such defective Work;
 - 3. remove the defective Work from the Project and replace it with Work that is not defective, if the defective Work has been rejected by Owner, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting from the corrective measures.
- B. Owner shall give any such notice of defect within 60 days of the discovery that such Work or repairs is defective. If such notice is given within such 60 days but after the end of the correction period, the notice will be deemed a notice of defective Work under Paragraph 7.17.B.

- C. If, after receipt of a notice of defect within 60 days and within the correction period, Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others). Contractor's failure to pay such costs, losses, and damages within 10 days of invoice from Owner will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the failure to pay.
- D. In special circumstances where a particular item of equipment is placed in continuous service for the benefit of Owner before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- E. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- F. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times directly attributable to any such suspension. Any Change Proposal seeking such adjustments must be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the Progress Schedule);
 - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 - 4. Contractor's repeated disregard of the authority of Owner or Engineer.

- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) 10 days' written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:
1. declare Contractor to be in default, and give Contractor (and any surety) written notice that the Contract is terminated; and
 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.
- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond will govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.
- H. The costs incurred by Owner due to Contractor's default, including attorney's fees, or for completing the Work under the Contract, will be deducted from any monies due or which may become due the Contractor. When this expense exceeds the sum which would have been payable under the Contract, the Contractor and surety shall be liable and shall pay Owner the amount of such excess.

16.03 *Owner May Terminate for Convenience*

- A. Upon 7 days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid for any loss of anticipated profits or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon 7 days' written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, 7 days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17—INTENTIONALLY OMITTED

ARTICLE 18—MISCELLANEOUS

18.01 *Giving Notice*

- A. Whenever any provision of the Contract requires the giving of written notice to Owner, Engineer, or Contractor, it will be deemed to have been validly given only if delivered:
 - 1. in person, by a commercial courier service or otherwise, to the recipient's place of business;
 - 2. by registered or certified mail, postage prepaid, to the recipient's place of business; or

3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

18.02 *Computation of Times*

- A. When any period of time is referred to in the Contract by days, ~~it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation~~ the date of the act, event, or default after which the period begins to run is not included. The last day of the period is to be included, unless it is a Saturday, Sunday, or legal holiday, in which event the period runs until the end of the next day which is not a legal holiday.

18.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto and, in particular but without limitation, the warranties, guarantees, and obligations imposed upon Contractor hereunder and all of the rights and remedies available to Owner and Engineer thereunder are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of Contractor.
- B. Nothing herein, in the Agreement, or any of the other Contract Documents shall be construed as a waiver, modification, or alteration of the CONTRACTOR's or its surety's obligations under La. R.S. 38:2189. Nothing in this paragraph or any other provision in the General Conditions or other Contract Documents concerning any specific time periods shall establish a period of limitation with respect to any other obligation which CONTRACTOR has under the Contract Documents. The establishment of time periods relates only to the specific obligations of CONTRACTOR to correct the Work, and has no relationship to the time within which CONTRACTOR's obligations under the Contract Documents may be sought to be enforced, nor

to the time within which the proceedings may be commenced to establish CONTRACTOR's liability with respect to CONTRACTOR's obligations other than specifically to correct the Work.

18.07 *Controlling Law*

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

18.08 *Assignment of Contract*

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party to this Contract of any rights under or interests in the Contract will be binding on the other party without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract.

18.09 *Successors and Assigns*

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

18.10 *Headings*

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

SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

These Supplementary Conditions amend or supplement EJCDC® C-700, Standard General Conditions of the Construction Contract (2018), as edited for Jefferson Parish. The General Conditions remain in full force and effect except as amended.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

SC-4.05 Amend Paragraph 4.05.C by adding the following subparagraphs:

5. *Weather-Related Delays*

- a. The Contractor acknowledges and agrees that weather conditions shall not be an automatic cause for time extension. The Contract Times specified in the Bidding Documents and Contract Documents include an allowance as stated in those documents for inclement weather. In order to document and claim days lost to inclement weather conditions, the Contractor shall, on a semi-monthly basis, submit a report to the Engineer, stating the time lost to inclement weather, within seven (7) days of the end of the report period. The Engineer will review the report for submittal to the Owner within seven days of receipt of the report and make recommendations for either acceptance or rejection of each claimed time period lost to inclement weather. The Owner will then instruct the Engineer to approve or reject the report. There shall be no additional compensation due the Contractor for inclement weather days allowed hereunder.
- b. The report for lost days due to inclement weather shall account for all days during the reporting period, including weekends and holidays. Claims for lost days on either weekends or holidays will not be considered unless the Contractor can show that the inclement weather affected work production on the following workday. The reporting periods shall be from the first day of the month through and including the last day of the month. Lost time accounting shall be in one-half day increments.
- c. Lost time shall be considered only if the weather occurrence is in excess of the normal weather patterns as established by the nearest office of the National Weather Service, U.S. Department of Commerce. When the Contract utilizes critical path method scheduling (C.P.M.), the Engineer will determine if the days lost due to weather conditions actually affected the critical path activities. If weather conditions did not affect the progress of the critical path activities, no time extension will be granted.

SC-5.03 Add the following new paragraphs immediately after Paragraph 5.03.E:

- F. Unless otherwise provided by Contractor in accordance with the Special Provisions section as included in the Specifications, the following table lists the reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data, and specifically identifies the Technical Data in the report upon which Contractor may rely: **[If there are no such reports, so indicate in the table.]**

Report Title	Date of Report	Technical Data
		[Identify Technical Data]

- G. Unless otherwise provided by Contractor in accordance with the Special Provisions section as included in the Specifications, the following table lists the drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data, and specifically identifies the Technical Data upon which Contractor may rely: **[If there are no such drawings, so indicate in the table.]**

Drawings Title	Date of Drawings	Technical Data
		[Identify Technical Data]

- H. Contractor may examine copies of reports and drawings identified in SC-5.03.F and SC-5.03.G that were not included with the Bidding Documents at **[location]** during regular business hours, or may request copies from Engineer. These reports and drawing are not part of the Contract Documents, but the Technical Data contained therein upon which Contractor is entitled to rely as identified and established above are incorporated therein by reference. Contractor is not entitled to rely upon other information and data utilized in the preparation of the Drawings and Specifications.

SC-5.06 Add the following new paragraphs immediately after Paragraph 5.06.A.3:

4. Unless otherwise provided by Contractor in accordance with the Special Provisions section as included in the Specifications, the following table lists the reports known to Owner relating to Hazardous Environmental Conditions at or adjacent to the Site, and the Technical Data (if any) upon which Contractor may rely: **[If there are no such reports, so indicate in the table]**

Report Title	Date of Report	Technical Data
		[Identify Technical Data]

5. Unless otherwise provided by Contractor in accordance with the Special Provisions section as included in the Specifications, the following table lists the drawings known to Owner relating to Hazardous Environmental Conditions at or adjacent to the Site, and Technical Data (if any) contained in such Drawings upon which Contractor may rely: [If there are no such drawings, so indicate in the table]

Drawings Title	Date of Drawings	Technical Data
		[Identify Technical Data]

SC-10.03 See Exhibit A.

SC-13.01 Supplement Paragraph 13.01.B.5.c.(2) by adding the following sentence:

The equipment rental rate book that governs the included costs for the rental of machinery and equipment owned by Contractor (or a related entity) under the Cost of the Work provisions of this Contract is the most current edition of the Equipment Rental Rate book.

SC-15.01.B.5

Pursuant to the reference in paragraph 15.01.B.5.a of the Standard General Conditions, the aggregate cost of materials stored offsite shall not at any time exceed **\$ 250,000.00**, without the written approval of the Owner.

SC-19. Non-Work Days: Non-work days shall be defined as days in which the Contractor worked less than four (4) hours due to inclement weather conditions.

SC-20 Removal and Disposal of Structures and Obstructions

A. General

The Contractor shall remove any existing structure or part of structure, fence, building, or other encumbrances or obstructions that interfere in any way with the new construction. Compensation for the removal of any structure not listed as a pay item in the Proposal and with a Contract Bid Price shall be included in the Contract unit prices bid for the pay items of the Work.

B. Privately and Publicly Owned Materials

If called for in the Special Conditions, all privately and publicly owned materials in structures removed shall be salvaged without damage and shall be piled neatly and in an acceptable manner upon the premises if it belongs to an abutting property owner, otherwise at accessible points along the improvements. Material in structures which is property of the Owner or property of any public body, private body, or individual which is fit for use elsewhere, shall remain property of the original owner. It shall be carefully

removed without damage, in sections, which may be readily transported, and shall be piled neatly in an accessible point by the Contractor. When materials of Owner, State, Municipality, or Parish are stored on or beyond the right of way, the Contractor will be held responsible for their care and preservation for a period of ten (10) days following the day the last or final portion of the materials stored at a particular location are placed thereon. When privately owned materials are stored beyond the right of way, the Contractor will be held responsible for their care and preservation for a period of ten (10) days (computed as set forth above); provided, however, that as of the day the ten (10) days responsibility period for care and preservation of the materials begins, the Contractor must furnish the Engineer with evidence satisfactory to the latter that the proper owner of the materials has been duly notified by the Contractor that the said owner must assume responsibility for his materials on the date following the Contractor's ten (10) day responsibility.

SC-21 Public Convenience and Safety

A. Care of Traffic

No road shall be closed by the Contractor to the public except by written permission of the Engineer and/or Architect, and except while so closed, the Contractor shall maintain traffic over, through, or around the work included in his Contract, with the maximum practical convenience, for the full twenty-four hours of each day of the Contract, whether or not work has ceased temporarily. The Contractor shall notify the Engineer at the earliest possible date after the Contract has been executed, and in any case before the starting of any construction that might in any way inconvenience or endanger traffic, so that the necessary arrangements may be determined.

B. General Public

The convenience of the general public and of residents along the Work shall be provided for in a reasonable adequate and satisfactory manner. Where existing roads are not available for use as detours, unless otherwise provided, all traffic shall be permitted to pass through the Work. In such cases the vehicles of the traveling public shall have precedence over Contractor's vehicles to the end that the traveling public's vehicles shall not be unduly delayed for the convenience of the Contractor. In order that all unnecessary delay to the traveling public may be avoided, where ordered by the Engineer, the Contractor shall provide and station competent flagmen whose sole duties shall consist of directing and controlling the movement of public traffic either through or around the Work.

C. Temporary Roads, Driveways, etc.

The Contractor shall provide and maintain, in a manner approved and deemed practicable by the Engineer, such temporary roads as may be necessary to provide convenient access to driveways, houses, buildings, or other property abutting the work. Where temporary bridges are necessary for traffic and pedestrians, these bridges shall be constructed at the expense of the Contractor as directed by the Engineer.

D. Arranging the Work

The Contractor shall arrange his work so that no undue or prolonged blocking of business establishments will occur.

E. Storage of Materials

Materials and equipment stored on the right of way or Project Site shall be so placed and the Work at all times shall be so conducted as to insure minimum danger and obstruction to the traveling public.

F. Control During Work

During grading operations where traffic is being permitted to pass through construction, the Contractor shall provide a smooth, even surface that will provide a satisfactory passageway for use of traffic. The roadbed shall be sprinkled with water if necessary to prevent a dust nuisance, provided the dust nuisance is a result of the Work.

G. Fire Protection

Fire hydrants shall be accessible at all times to the Fire Department. No material or other obstructions shall be placed closer to a fire hydrant than permitted by ordinances, rules, or regulations or within fifteen (15') feet of a fire hydrant, in the absence of such ordinances, rules, or regulations.

SC-22 Structures at Railroad Crossings

A. Notification

No Work of any character shall be commenced on railroad right of way until the Railroad Company has issued a permit to the Owner and has been duly notified by the Contractor in writing (with a copy forwarded to the Engineer) of the date he proposes to begin work, and until an authorized representative of the Railroad Company is present, unless the Railroad Company waives such requirement.

B. Inspection by Railroad Company

All Work performed by the Contractor within the right of way limits of the railroad shall be subject to the inspection and approval of the chief engineer of the Railroad Company, or his authorized representative and any precautions considered necessary by said chief engineer to safeguard the property, equipment, employees, and passengers of the Railroad Company shall be taken by the Contractor without extra compensation.

C. Cooperation with Railroad Company

The Contractor shall, without extra compensation, take such precautions and erect and maintain such telltale or warning devices as the Railroad Company considers necessary to safeguard the operation of its trains. The temporary vertical and horizontal clearances

specified by the chief engineer of the Railroad Company in approving these shall be maintained at all times. No steel, brick, pipe, or any other loose material shall be left on the ground in the immediate vicinity of the railway tracks.

D. Insurance

Before any Work is done within Railroad right of way, the Contractor shall provide and pay all costs of any special insurance requirements of the Railroad.

SC-23 Protection and Restoration of Property and Landscape

A. Contractor's Responsibility

The Contractor shall not enter upon private property for any purpose without first obtaining permission from the owners and lessees. The Contractor shall use every precaution necessary for the preservation of all public and private property, monuments, highway signs, telephone lines, other utilities, etc., along and adjacent to the Work; shall use every precaution necessary to prevent damage to pipes, conduits, and other underground structures; and shall protect carefully from disturbance or damage all land monuments and property marks until an authorized agent has witnessed or otherwise referenced their location and shall not remove them until directed. The street and highway signs and markers that are to be affected by the Work shall be carefully removed when the Work begins and stored in a manner to keep them clean and dry. The Contractor must obtain all necessary information in regard to existing utilities, and shall give notice in writing to the owners or the proper authorities in charge of streets, gas, water, pipes, electric, sewers, and other underground structures, including conduits, railways, poles and pole lines, manholes, catch basins, fixtures, appurtenances, and all other property that may be affected by the Contractor's operations, at least forty-eight (48) hours before his operations will affect such property. The Contractor shall not hinder or interfere with any person in the protection of such work or with the operation of utilities, at any time. When property or the operation of railways, telephone lines, telegraph lines, or other public utilities are endangered, the Contractor shall, at his own expense, maintain flagmen or watchmen and any other necessary precautions to avoid interruption of service or damage to life or property, and he shall promptly repair, restore, or make good any injury or damage caused by his negligent operations in an acceptable manner. The Contractor must also obtain all necessary information in regard to the installation of new cables, conduits, and transformers, and make proper provision and give proper notifications, so that these can be installed at the proper time without delay to the Contractor or unnecessary inconvenience to the Owner.

B. Undercutting Buildings

Where provided in Special Conditions, when the work involves the undercutting of any buildings along the Work, the Contractor must give property owners and lessees due and sufficient notice of the undercutting and the Contractor shall adequately support such buildings. The Contractor and his Surety shall hold the Owner and their representatives harmless from any damages resulting from undercutting any such buildings.

C. Trees, Shrubs, Plants, or Grass

The Contractor shall not remove, injure, cut, or destroy trees, shrubs, plants, or grass that are to remain in the streets or those which are privately owned, without proper authority. Unless otherwise provided in the Special Provisions or the Proposal, the Contractor shall replace and replant all plants, shrubs, and grass and restore the grounds back to its original good condition to the satisfaction of the Owner and property owner. The Contractor shall assume the responsibility of replanting and guarantees that plants, shrubs, and grass will be watered, fertilized, and cultivated until they are in a growing condition. No direct payment will be made for removing and replanting of trees, shrubs, plants, or grass unless such items are set forth in the Proposal.

D. Reparation

When or where any direct damage or injury is done to public or private property by or on account of any negligent act, omission, neglect, or otherwise of the Contractor, he shall make good such damage or injury in an acceptable manner. In case of failure on the part of the Contractor to restore such property or make good such damage, the Owner may upon forty-eight (48) hours' notice proceed to repair, rebuild, or otherwise restore such property as may be deemed necessary, and the cost thereof will be deducted from any monies due or which may become due under the Contract. The Contractor shall indemnify and save harmless the Owner, or the Design Professional acting in behalf of the Owner, from all suits and actions that may be brought against it by reason of any injury, or alleged injury, to the person or property of another resulting from negligence or carelessness in the execution of the Work, or on account of any negligent act or omission, or from improper methods or means of construction on the part of the Contractor, his representatives, or employees. The Contractor shall have the sole responsibility of determining the best and proper method or means of construction and the Owner, or the Design Professional acting on behalf of the Owner, shall not be held responsible for determining or suggesting a method or means of construction, except as expressly indicated in the Contract Documents

SC-24 Barricades, Danger, Warning, and Detour Signs

A. General

The Contractor shall, without extra compensation, provide, erect, paint, and maintain all necessary barricades. Also without extra compensation, the Contractor shall provide suitable and sufficient lights, torches, reflectors, or other danger signals and signs, provide a sufficient number of watchmen and flagmen, and take all necessary precautions for the protection of the Work and safety of the public.

B. Warning Signs, Painting, Illumination

The Contractor shall erect warning signs beyond the limits of the Project, sufficiently in advance of any place on the Project where operations interfere with the use of the road by traffic, including all intermediate points where the new Work crosses or coincides with the existing road. Barricades shall be kept well painted and suitable warning signs shall

be placed thereon. All barricades and obstructions shall be illuminated at night and all lights or devices for this purpose shall be kept burning from sunset to sunrise.

C. Hazards and Compensation

Whenever traffic is maintained through or over any part of the project, the CONTRACTOR shall clearly mark all traffic hazards. No direct payment will be made for barricades, signs, and illumination therefor, or for watchmen or flagmen.

SC-25 Affidavit Attesting That Public Contract Not Secured Through Employment or Payment of Solicitor (LSA R.S. 38:2224): The Contractor warrants that (1) he has not employed or retained any person, corporation, firm, association, company or other organization, either directly or indirectly, to secure this Contract, other than persons regularly employed by the Contractor and whose services were in the regular course of their duties for the Contractor and (2) that no part of the Contract Price received by Contractor was paid or will be paid to any person, corporation, firm, association, company or other organization, either directly or indirectly any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon or resulting from the award or making of this Contract or to solicit or secure this Contract, other than the payment of their normal compensation to persons regularly employed by the Contractor whose services in connection with this Contract were in the regular course of their duties for Contractor. For breach or violation of this warranty, the Owner shall have the right to annul this Contract without liability.

SC-26 Historical or Archaeological Deposits: If, during the course of construction, evidence of deposits of historical or archaeological interest is found, Contractor shall cease operations affecting the find and shall notify Owner, who shall notify the State Historic Preservation Officer. No further disturbance of the deposits shall ensue until Contractor has been notified by Owner that he may proceed. Owner will issue a notice to proceed only after the state official has surveyed the find and made a determination to the Owner. Compensation to Contractor, if any, for lost time or changes in construction to avoid the find, shall be determined in accordance with changed conditions or Change Order provisions of the Contract Documents.

SC-27 Additional Liquidated Damages: Contractor shall owe the amounts set forth in ARTICLE VII of the Agreement for each of the following items:

- (1) Extended architectural and/or engineering fees;
- (2) Extended Resident Project Representative fees;
- (3) Extended construction management fees;
- (4) Extended Owner's overhead and personnel expenses; and
- (5) Owner's other costs directly related to the delay in completion beyond the Contract Times.

SC-28 Removal/Relocation of Trees on Public Property: The Director of the Jefferson Parish Parkways Department shall be contacted and advised of trees that are on public property prior to the removal/relocation of such trees by the Contractor. Furthermore, the Department of Parkways shall be given a reasonable period of time to respond and when necessary remove the trees.

SC-29 Road Closure: In the event that it becomes necessary to close any roadway or partially close any major road due to scheduled construction work being performed by Contractor the public must be notified and made aware of the closure in a timely manner. In order to utilize both the print and electronic media to disseminate this information to the public, the Jefferson Parish Public Information Office must receive pertinent information from the Contractors concerning the closure. Notice of a road closure or partial road closure of a major road must be sent to Jefferson Parish in care of its Public Information Officer, 1221 Elmwood Park Blvd., Suite 1002, Jefferson, Louisiana 70123. THAT NOTIFICATION MUST CONTAIN THE FOLLOWING INFORMATION AND MUST BE RECEIVED BY THE PUBLIC INFORMATION OFFICE AT LEAST 10 DAYS PRIOR TO THE SCHEDULED CLOSURE:

- (a) Name of the Contractor, engineer, etc., involved in the work/project who is responsible for the action.
- (b) A brief description of the project (Example: "...drain line installation," "...to remove and replace concrete slabs," etc.)
- (c) The date and time the action will take place and when re-opening is scheduled. (Example: "...will be closed from 6 a.m. on Friday, July 23, 1999 to 8 p.m. on Monday, July 26, 1999.")
- (d) The exact location of action. (Example: "...closed on David Drive from W. Napoleon Avenue to Veterans Memorial Boulevard," or "...the 900 block of David Drive")
- (e) Define the action that will be taken. (Example: eastbound, westbound, inside or outside lanes or both, etc.)
- (f) If the roadway will be closed completely to traffic and a detour will be in effect, a map illustrating the detour route must accompany the information.
- (g) Contact person for additional information.

EXHIBIT A

TO SUPPLEMENTARY CONDITIONS

OF THE CONSTRUCTION CONTRACT

Duties, Responsibilities and Limitations of
Authority of Resident Project Representative

The Resident Project Representative (RPR) will be Engineer's representative at the Site. RPR's dealings in matters pertaining to the Work in general will be with Engineer and Contractor. RPR's dealings with Subcontractors will only be through or with the full knowledge or approval of Contractor. RPR shall generally communicate with Owner with the knowledge of and under the direction of Engineer. The RPR will:

1. *Conferences and Meetings:* Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings (but not including Contractor's safety meetings), and as appropriate prepare and circulate copies of minutes thereof.
2. *Safety Compliance:* Comply with Site safety programs, as they apply to RPR, and if required to do so by such safety programs, receive safety training specifically related to RPR's own personal safety while at the Site.
3. *Liaison*
 - a. Serve as Engineer's liaison with Contractor. Working principally through Contractor's authorized representative or designee, assist in providing information regarding the provisions and intent of the Contract Documents.
 - b. Assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-Site operations.
 - c. Assist in obtaining from Owner additional details or information, when required for Contractor's proper execution of the Work.
4. *Review of Work; Defective Work*
 - a. Conduct on-Site observations of the Work to assist Engineer in determining, to the extent set forth in Paragraph 10.02, if the Work is in general proceeding in accordance with the Contract Documents.
 - b. Observe whether any Work in place appears to be defective.
 - c. Observe whether any Work in place should be uncovered for observation, or requires special testing, inspection or approval.

- d. Report to Engineer whenever RPR believes that any Work will not produce a completed Project that conforms generally to the Contract Documents or will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise Engineer of Work that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.
5. *Inspections and Tests*
- a. Observe Contractor-arranged inspections required by Laws and Regulations, including but not limited to those performed by public or other agencies having jurisdiction over the Work.
 - b. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Work.
6. Shop Drawings and Samples
- a. Record date of receipt of Shop Drawings and Samples.
 - b. Receive Samples, which are furnished at the Site by Contractor, and notify Engineer of availability of Samples for examination.
 - c. Advise Engineer and Contractor of the commencement of any Work requiring a Shop Drawing or Sample if the submittal has not been approved by Engineer.
7. Interpretation of Contract Documents: Report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.
8. Modifications: Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report with RPR's recommendations to Engineer. Transmit to Contractor in writing decisions as issued by Engineer.
9. Records
- a. Maintain at the job Site orderly files for correspondence, reports of job conferences, Shop Drawings and Samples, reproductions of original Contract Documents including all Work Change Directives, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, Engineer's clarifications and interpretations of the Contract Documents, progress

reports, Shop Drawing submittals received from and delivered to Contractor and other Project related documents.

- b. Prepare a daily report or keep a diary or log book, recording Contractors hours on the job site, weather conditions, data relative to questions of Work Change Directives, Change Orders or changed conditions, list of job Site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to Engineer.
- c. Record names, addresses and telephone numbers of all contractors, subcontractors and major suppliers of materials and equipment.

10. Reports

- a. Furnish to Engineer periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and Sample submittals.
- b. Consult with Engineer in advance of scheduled major tests, inspections or start of important phases of the Work.
- c. Draft proposed Change Orders and Work Change Directives, obtaining backup material from Contractor and recommend to Engineer Change Orders, Work Change Directives, and Field Orders.
- d. Report immediately to Engineer and Owner the occurrence of any accident.

11. Payment Requests: Review Applications for Payment with Contractor.

12. Certificates, Maintenance and Operation Manuals: During the course of the Work, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have this material delivered to Engineer for review and forwarding to Owner prior to final payment for the Work.

13. Completion

- a. Participate in Engineer's visits regarding Substantial Completion.
- b. Assist in the preparation of a punch list of items to be completed or corrected.
- c. Participate in Engineer's visit to the Site in the company of Owner and Contractor regarding completion of the Work, and prepare a final punch list of items to be completed or corrected by Contractor.

- d. Observe whether items on the final punch list have been completed or corrected.
14. The RPR will not:
- a. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items).
 - b. Exceed limitations of Engineer's authority as set forth in the Contract Documents.
 - c. Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers.
 - d. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction.
 - e. Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.
 - f. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
 - g. Authorize Owner to occupy the Project in whole or in part.

Fill this after???????????????

**FORM OF AGREEMENT
BETWEEN
THE PARISH OF JEFFERSON
AND
[INSERT NAME OF VENDOR]**

THIS AGREEMENT is made as of the date of full execution by the parties, as evidenced by the electronic signatures by and between the Parish of Jefferson, State of Louisiana, hereinafter called "OWNER", duly represented herein by _____, Chairman of Jefferson Parish Council, duly authorized to act by virtue of Resolution No. _____, adopted on the ____ day of _____, 20__, which is made a part hereof, and insert contractor's legal name, represented by contractor's representative's name, representative's title, hereinafter called "CONTRACTOR".

NOW THEREFORE, in consideration of the compensation to be paid to CONTRACTOR and of the mutual agreements herein contained, the parties hereby agree as follows:

SECTION 1. SCOPE OF WORK

A. OWNER, through the Chairman of the Jefferson Parish Council, _____, by virtue of Resolution No. _____, does hereby grant and confirm unto CONTRACTOR an Agreement to perform the Work under Project No. _____, Proposal No. 50-_____, for _____ *name of project*, as per the General Conditions, any Supplementary Conditions, the Drawings, and Specifications on file in the Office of the Chief Buyer for the Parish of Jefferson for the bid amount of \$_____ in accordance with the CONTRACTOR's written bid proposal dated _____, which is made a part hereof by reference.

B. The CONTRACTOR, its successors and assigns shall perform all Work, including the assumption of all obligations, duties and responsibilities necessary to the successful completion of the Contract and the furnishing of all materials and equipment required to be incorporated in and to form a permanent part of the Work; tools, equipment, supplies, transportation, facilities, labor, superintendence and services required to perform the Work; and Bond, insurance and submittals; all as indicated or specified in the Contract Documents to be performed or furnished by CONTRACTOR for the Work included in and covered by OWNER's official award of this Contract to CONTRACTOR; such award being based on the acceptance by OWNER of CONTRACTOR's bid.

C. That OWNER shall pay to CONTRACTOR for performance of the Work embraced in this Contract, in accordance with the Contract Documents, and CONTRACTOR shall accept as full compensation therefor, the sum (subject to adjustment as provided in the Contract Documents) of _____ Dollars and __ Cents (\$_____)

for all Work covered by and included in the Contract award and designated in the foregoing Article I; payment thereof to be made in current funds in the manner provided in the Contract Documents.

D. Notwithstanding anything to the contrary in the foregoing, CONTRACTOR acknowledges and agrees that, pursuant to the applicable Laws and Regulations, this Agreement is subject to an annual appropriation dependency requirement to the effect that the renewal and/or continuation of this Agreement is contingent upon the appropriation of funds to fulfill the requirements of the Agreement. If the OWNER fails to appropriate sufficient monies to provide for payments under this Agreement, the Agreement shall terminate on the last day of the last fiscal year for which funds were appropriated. This ground for termination is in addition to any other grounds that are identified in the General Conditions or the Supplementary Conditions.

E. As provided in Paragraph 13.03.B of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classification are to be made by ENGINEER as provided in Paragraph 10.05 of the General Conditions. Unit prices have been computed as provided in Paragraph 13.03.D of the General Conditions.

SECTION 2. OWNER'S REPRESENTATIVE

A. The Project has been designed by insert engineer, who is hereinafter called "ENGINEER" and who is to act as OWNER's representative, to assume all duties and responsibilities and to have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

B. All notices, letters, and other communications directed to OWNER shall be delivered, mailed (with proper postage), or emailed to the ENGINEER at the address in the Invitation to Bid, with a copy sent to:

insert Director of Department
Jefferson Parish Department of insert name of Department
insert address
Jefferson, Louisiana insert zip code

C. In addition, a copy of all correspondence directed to the ENGINEER shall be sent to the OWNER. The business address of CONTRACTOR given in this Agreement and CONTRACTOR's office in the vicinity of the Work are both hereby designated as the places to which all notices, letters, and other communications to CONTRACTOR will be mailed, emailed, or delivered. CONTRACTOR shall notify ENGINEER and OWNER of any change of address immediately.

SECTION 3. CONTRACT TERM

The Work will be substantially completed within ____ days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions ("Substantial Completion"), and completed and ready for final acceptance in accordance with Paragraph 15.06.B. of the General Conditions within ____ days after the date when the Contract Times commence to run. This time allocation allows for ____ days of lost production due to inclement weather. The contract time shall commence on the date listed on the CONTRACTOR'S Notice To Proceed issued by OWNER.

SECTION 4. BONDS

A. LABOR AND MATERIALS PAYMENT BOND

CONTRACTOR hereby firmly and truly binds itself as principal with _____, as surety, unto the OWNER in the full and true sum of \$_____ for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents, according to the terms and conditions of the labor and material payment bond(s).

B. PERFORMANCE BOND

CONTRACTOR hereby firmly and truly binds itself as principal with _____, as surety, unto the OWNER in the full and true sum of \$_____ for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents, according to the terms and conditions of the performance payment bond(s).

SECTION 5. LIQUIDATED DAMAGES

A. OWNER and CONTRACTOR recognize and agree that time is of the essence of this Agreement and that the Work must be completed in every respect appropriate within the applicable time limits set forth in the Contract Documents, commencing from the date specified in the Contract Documents. OWNER and CONTRACTOR further understand and agree that it is difficult at this time to estimate the damage which the delay in completion of the Work would cause the OWNER and that, accordingly, if the CONTRACTOR shall neglect, fail, or refuse to complete the Work in accordance with the Contract Times specified in the Contract Documents, or any extension thereof granted by the OWNER in accordance with the applicable provisions of the Contract Documents then, in addition to the other stipulated damages provided for in Article VII below, the CONTRACTOR agrees, as a part of the consideration for the award of this Contract, that OWNER shall be entitled to receive the amount or amounts per day set forth in paragraph B below from CONTRACTOR, not as a penalty but as stipulated

("liquidated") damages for delay for such breach of contract, such amounts being specifically herein agreed upon in advance as the measure of damages to the OWNER on account of such delay in the completion of the Work.

B. The CONTRACTOR shall owe OWNER liquidated damages in the amount of _____ dollars (\$_____.00) for each and every calendar day after the time specified in Article V for Substantial Completion of the Work until the Work is determined to be substantially complete in accordance with the Contract Documents. After Substantial Completion, if the CONTRACTOR shall neglect, fail, or refuse to complete the Work within the time specified in Article V for final completion, or any proper extension thereof granted by the OWNER, CONTRACTOR shall owe OWNER liquidated damages in the amount of _____ dollars (\$_____.00) for each day after the time specified in Article V for final completion until the Work is determined to be finally completed in every respect in accordance with the Contract Documents.

C. The number of calendar days in default shall be calculated exclusive of the day on which the applicable completion time was specified and shall include each and every other calendar day up to and including the day that the CONTRACTOR has been determined to satisfy its obligation for the applicable degree of completion under the Contract Documents.

D. CONTRACTOR further agrees that the expiration of the Contract Time shall, ipso facto, constitute a putting in default where CONTRACTOR has failed to complete the Work in accordance with the applicable Contract Times, and OWNER need not formally place the CONTRACTOR in default, the CONTRACTOR hereby expressly waiving any and all notices of default.

E. CONTRACTOR agrees and consents that the liquidated damages may be deducted from progress payments payable to CONTRACTOR pursuant to the Contract Documents and that CONTRACTOR shall accept the Contract Price, reduced by the aggregate amount of the liquidated damages so deducted, in full satisfaction of all Work executed under the Contract Documents.

F. In addition to, and not in lieu of the liquidated damages provided above, OWNER shall also be entitled to recover from CONTRACTOR or CONTRACTOR's Surety additional liquidated damages arising out of the breach of contract for delay in completion of the Work in accordance with the Contract Times for the same amount of time calculated pursuant to ARTICLE VI above. These additional liquidated damages, the amounts of each of which are applicable to the Contract having been set forth in the Supplementary Conditions, may include, but are not limited to:

- (1) Extended architectural and/or engineering fees: \$_____/hour;
- (2) Extended Resident Project Representative fees: \$_____/hour;
- (3) Extended construction management fees: \$_____/day;
- (4) Extended OWNER'S overhead and personnel expenses: \$_____/hour; and

- (5) Owner's other costs directly related to the delay in completion beyond the Contract Times.

CONTRACTOR agrees and consents that the additional liquidated damages may be deducted from progress payments payable to CONTRACTOR pursuant to the Contract Documents and that CONTRACTOR shall accept the Contract Price, reduced by the aggregate amount of the additional liquidated damages so deducted, in full satisfaction of all Work executed under the Contract Documents.

SECTION 6. PAYMENTS

CONTRACTOR shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by ENGINEER as provided in the General Conditions.

OWNER shall make progress payments on account of the Contract Price on the basis of CONTRACTOR's Applications for Payment as recommended by ENGINEER, as provided below. All such payments will be measured by the schedule of values established pursuant to Paragraph 2.05 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.

Upon receipt of the Final Application for Payment, OWNER shall pay the remainder of the Contract Price as recommended by ENGINEER as provided in Paragraph 15.06.E.3. of the General Conditions and any relevant Supplementary Conditions.

Pursuant to LSA-R.S. 38:2248, OWNER shall retain the following percentages of each progress payment until payment is due under the terms and conditions governing retainage payment:

<u>CONTRACT AMOUNT</u>	<u>RETAINAGE</u>
\$0 - \$499,999.99	10%
\$500,000 or greater	5%

SECTION 7. CONTRACT DOCUMENTS

The Contract Documents, which comprise the agreement between OWNER and CONTRACTOR, concerning the Work, consist of the documents listed in the Table of Contents, if any, and the documents identified below:

1. General Conditions (pages 1 to 82 of 104, inclusive).
2. Supplementary Conditions (pages 83 to 91 of 104, inclusive).
3. Exhibits to this Agreement (pages 92 to 95 of 104, inclusive).
4. Form of Agreement (pages 96 to 104 of 104, inclusive).
5. Performance, Payment, and other Bonds, consisting of ____ pages.
6. Notice to Proceed. (Not attached)
7. Specifications bearing the title insert title of project and consisting of ____ pages.
8. Drawings consisting of a cover sheet and sheets numbered ____ through ____, inclusive with each sheet bearing the following general title: insert title of project
9. Addenda numbers ____ to ____, inclusive.
10. CONTRACTOR's Bid (pages ____ to ____, inclusive).
11. Documentation submitted by CONTRACTOR prior to Notice of Award: (pages ____ to ____, inclusive).
12. 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 Article 11 of the General Conditions.

The documents listed above are attached to this Agreement (except as expressly noted otherwise above).

SECTION 8. CONTRACTOR'S REPRESENTATIONS

In order to induce OWNER to enter into this Agreement, the CONTRACTOR makes the following representations:

- A. CONTRACTOR has visited the Site, has familiarized himself with and is satisfied as to the nature and extent of the Contract Documents, Work, locality, and as to all general, local and Site conditions and federal, state, and local Laws, and Regulations, which may affect cost, progress, performance or furnishing of the Work.
- B. CONTRACTOR has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents including Technical Data.

C. CONTRACTOR has carefully studied all (1) 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 5.03.A. of the General Conditions and (2) reports and drawings of a Hazardous Environmental Condition, if any, at the Site which has been identified in the Supplementary Conditions as provided in Paragraph 5.03.A of the General Conditions. CONTRACTOR accepts the determination set forth in Paragraph SC-5.03 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 5.03 of the General Conditions. CONTRACTOR acknowledges that such reports and drawings are not Contract Documents and may not be complete for CONTRACTOR's purpose. CONTRACTOR acknowledges that OWNER and ENGINEER 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, test, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the Site or otherwise which may affect cost, progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto. CONTRACTOR does not consider that any additional examinations, investigations, explorations, tests, studies or data are necessary for the performance and furnishing of the Work at the Contract Price, within the Contract Times and in accordance with the other terms and conditions of the Contract Documents.

D. 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.

E. 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.

F. CONTRACTOR has given ENGINEER written notice of all conflicts, errors, ambiguities or discrepancies that CONTRACTOR has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR, and the Contract Documents are generally sufficient to indicate and convey an understanding of all terms and conditions for performance and furnishing of the Work.

SECTION 9. ASSIGNMENT

Neither the OWNER nor the CONTRACTOR shall assign, sell, transfer or otherwise convey any interest in this Agreement, including any monies due or to become due to the CONTRACTOR under the contract,

without the prior written consent of the other, nor without the consent of the surety, unless the surety has waived its right to notice of assignment. Unless specifically stated to the contrary in any written consent, no assignment, sale, transfer, or conveyance will act as a release or discharge of a party from any duty or responsibility under this Agreement or the General Conditions.

SECTION 10. INSPECTOR GENERAL

It shall be the duty of every parish officer, employee, department, agency, special district, board, and commission; and the duty of every contractor, subcontractor, and licensee of the parish, and the duty of every applicant for certification of eligibility for a parish contract or program, to cooperate with the inspector general in any investigation, audit, inspection, performance review, or hearing pursuant to JPCO 2-155.10(19).

By signing this document, every corporation, partnership, or person contracting with PARISH, whether by cooperative endeavor, intergovernmental agreement, bid, proposal, application or solicitation for a parish contract, and every application for certification of eligibility for a parish contract or program, attests that it understands and will abide by all provisions of JPCO 2-155.10.

SECTION 11. SEVERABILITY CLAUSE

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.

SECTION 12. ENTIRE AGREEMENT

This Agreement shall be deemed to be a contract made under the laws of the State of Louisiana, and for all purposes shall be interpreted in its entirety in accordance with the laws of said State. The contractor hereby agrees and consents to the jurisdiction of the courts of the State of Louisiana over its person. The parties hereto agree that the sole and exclusive venue of any suit or proceeding brought pursuant to this contract shall be the 24th Judicial District Court for the Parish of Jefferson, State of Louisiana.

This Agreement and the attached documents represent the entire agreement between the OWNER and CONTRACTOR and supersede all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by a written instrument signed by both the OWNER, through its Council Chairperson, and the CONTRACTOR.

This Agreement is fully executed on the latest date indicated below.

PARISH OF JEFFERSON

Date

By: _____

_____, Chairman
Jefferson Parish Council

INSERT CONTRACTOR'S NAME

Date

By: _____

insert representative name
insert title

License No. _____

Address for giving notices:

NOTICE TO CONTRACTORS

ALL PAYMENT REQUESTS OR INVOICES MUST BE SENT TO THE ENGINEERS FIRST FOR REVIEW AND COMMENT ON THE PROPER PARISH FORMS, WHICH ARE THEN FORWARDED TO THE PROGRAM MANAGER FOR FURTHER HANDLING. CONTRACTORS WHO FAIL TO FOLLOW THIS PROCEDURE WILL NOT BE PAID ON A TIMELY BASIS DUE TO THE UNNECESSARY DELAYS IN RE-ROUTING THE PAYMENT REQUESTS.

SECTION 01010: SUMMARY OF WORK

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Special and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this section.
- 1.2 Scope of Work: The Work of this Contract comprises of improvements to the Williams Play Lot and construction of a new parking lot, sidewalks and fencing.
- 1.3 General:
- A. The Contractor shall furnish all labor, materials, equipment, tools, services, and incidentals to complete all work required by these Specifications and as shown on the Drawings.
 - B. The Contractor shall perform the work complete, in place and ready for continuous service, and shall include repairs, replacements, and restoration required as a result of damages caused during this construction.
 - C. Furnish and install all materials, equipment, and labor which is reasonably and properly inferable and necessary for the proper completion of the work, whether specifically indicated in the Contract Documents or not.
 - D. Protect all existing work from damage. It is intended that any existing Work in place shall be repaired to original condition if damaged by Work of this Contract.
 - E. Contractor shall verify all field and job conditions prior to preparing his bid. Any conditions not described in these drawings and specifications shall be brought to the attention of the A/E prior to bid date. Failure to do so shall render the contractor responsible for correction of this condition should he be awarded the contract.
 - F. The word "Provide" as used in these specifications and on the drawings will be termed to mean "furnish and install" and includes all items necessary for the proper execution and completion of the work.
 - G. Visit and examine the job site, and with all authorities concerned in order to become familiar with all existing conditions pertinent to the work to be performed thereon. No additional compensation will be allowed for failure to be so informed. Pay all costs and fees for utility connections.
 - H. All work shall be performed in a neat and workmanlike manner, and in accordance with all codes, standards, and requirements of the industry.
 - I. Check all specifications and all drawings and bring to attention any conflicts or variations as shown or noted.

- J. Specifications and accompanying drawings apply to all material and/or labor for construction of work specified herein and shown on drawings.
- K. For any points which are not clear, or from items and/or details which the Contractor feels are in need of clarification, consult the A/E before submission of a proposal.
- L. The drawings and the specifications are complementary and what is shown and/or called for one shall be furnished and installed the same as if shown and/or called for in the other.
- M. In case of discrepancies and/or ambiguities in the drawings and/or in the specifications, the A/E shall be consulted prior to submission of a proposal. Failure to do so on the part of the successful bidder shall be construed as explicit agreement on his part to abide by the A/E's decision in such matters.

1.4 Contract: Construct Work under single fixed-price (lump-sum) contract.

1.5 Work Sequence: Contractor is responsible for work sequence.

1.6 Contractor Use of Premises:

- A. Confine operations at site to areas permitted by law, ordinances, permits, Contract Documents.
- B. Do not unreasonably encumber site with materials or equipment. Assume full responsibility for protection and safekeeping of products stored on premises. Move any stored products which interfere with operations of Owner.
- C. Do not load structures with weight that will endanger structure.
- D. Use of Site: Limit use of site for work and storage. Coordinate parking areas, materials delivery, and storage areas at site with Owner.
- E. In no case shall the Work interfere with existing streets, drives, walks, passageways, pedestrian traffic, and the like. Comply with provisions of the Conditions of the Contract and regulatory ordinances.
- F. Contractor shall at all times conduct his operations as to insure the least inconvenience to the general public.

1.7 Construction Areas:

- A. Contractor shall limit his use of the construction areas for work and for storage to allow for work by other Contractors, Owners use, and Public use as applicable.
- B. Coordinate use of work site under direction of Owner.
- C. Assume full responsibility for the protection and safekeeping of Products under this Contract, stored on site.
- D. Move any stored Products, under Contractor's control, which interfere with operations of the Owner or separate contractor.

- E. Obtain and pay for the use of additional storage or work areas needed for operation.

1.8 Partial Owner Occupancy: The Contractor shall schedule his operations for completion of portions of the Work, as designated, for the Owner's occupancy prior to Substantial Completion of the entire Work.

1.9 Noise During Construction:

- A. The noise generated by construction of this Work may at times create a problem for the Owner.
- B. The Owner recognizes and can tolerate the normal level of noise created by a majority of construction activity and, therefore, does not feel any need to set certain hours of the day when noise will be restricted.
- C. However, the Owner also recognizes that, during certain construction work, the noise level is unusually higher than normal. These higher levels of noise generation may conflict with a specific activity being simultaneously conducted by the Owner.
- D. It is required of the Contractor that agreement be secured from the Owner prior to scheduling any such unusually noise activity, and that the Contractor cooperate if an on-going-activity becomes objectionable by its longevity or overlapping into a program started later by the Owner. It is understood and agreed that both parties will cooperate to the end that neither will unduly inconvenienced by this requirement.

1.10 Miscellaneous Conditions:

- A. CAD Drawings: All bidders are advised that the Architect's CAD drawings will not be available for use during construction. This includes all drawings and any variation thereof for piling and foundation location, sprinkler heads, fire alarm systems, etc. The cost of drafting from scratch of any drawings shall be included in the cost of contractor's bid.
- B. The A/E shall apply for the building permit and shall apply to the State Fire Marshal. The Contractor shall pick up and pay for the building permit and other required permits.
- C. Work Stoppage Due to Publically Declared Emergency: If there is an emergency declared by the Federal, State or Local government in Jefferson Parish or in any portion thereof, then all work on this project shall cease until such time as the contractor is instructed to resume work by Department Director (no one else) who has jurisdiction over the project. If there is any type of work which must proceed to prevent harm to persons or property, or damage to the project itself; then contractor should immediately contact the Department Director for necessary instructions. If contractor is unable to contact the Department Director, contractor may perform the work necessary to prevent such harm in accordance with

industry safety standards. Contactor shall be entitled to an extension of time for the period of the stoppage, but shall not be entitled to any additional compensation by reason thereof.

D. Construction Schedule:

1. Contractor shall submit a detailed construction schedule to the A/E ten (10) days after receipt of Notice of Award.
2. Contractor shall submit a revised construction schedule at the Pre-Construction Conference.
3. Contractor shall submit revised construction schedules to the A/E monthly thereafter.

* * *

SECTION 01011: INSURANCE

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract, (General, Special and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 Provisions: A/E shall be named as an additional insured on all policies except as applied to Worker's Compensation Coverage. Contractor shall provide A/E with a Certificate of Insurance. A/E shall be listed as Certificate Holder.
- 1.3 Submittals: A sample Certificate of Insurance is attached.

ACORD. CERTIFICATE OF INSURANCE

DATE (MM/DD/YY)

PRODUCER

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.

COMPANIES AFFORDING COVERAGE

COMPANY
A

COMPANY
B

COMPANY
C

COMPANY
D

INSURED

Sample

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS
	GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> OCCUR <input type="checkbox"/> OWNERS' & CONT PROT				GENERAL AGGREGATE \$ PRODUCTS-COMP/OP AGG \$ PERSONAL & ADV INJURY \$ EACH OCCURRENCE \$ FIRE DAMAGE (Any one fire) \$ MED EXP (Any one person) \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS				COMBINED SINGLE LIMIT \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE \$
	GARAGE LIABILITY <input type="checkbox"/> ANY AUTO				AUTO ONLY - EA ACCIDENT \$ OTHER THAN AUTO ONLY: EACH ACCIDENT \$ AGGREGATE \$
	EXCESS LIABILITY <input type="checkbox"/> UMBRELLA FORM <input type="checkbox"/> OTHER THAN UMBRELLA FORM				EACH OCCURRENCE \$ AGGREGATE \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY THE PROPRIETOR/ PARTNERS/EXECUTIVE OFFICERS ARE: <input type="checkbox"/> INCL <input type="checkbox"/> EXCL				STATUTORY LIMITS EACH ACCIDENT \$ DISEASE - POLICY LIMIT \$ DISEASE - EACH EMPLOYEE \$
	OTHER				

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

All required insurance includes Owner and Meyer Engineers, Ltd. as an additional insured except as applied to Worker's Compensation coverage.

CERTIFICATE HOLDER

Meyer Engineers, Ltd.
P.O. Box 763
Metairie, LA 70004

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

ACORD 25-S (3/93)

© ACORD CORPORATION 1993

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SECTION 01012: REQUESTS FOR CLARIFICATION OR INTERPRETATION

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract, (General, Special and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 Request For Information (RFI): The Contractor may, after exercising due diligence to locate required information, request from the Consultant clarification or interpretation of the requirements of the Contract Documents. The Consultant shall, with reasonable promptness, respond to such Contractor's requests for clarification or interpretation. However, if the information requested by the Contractor is apparent or reasonably inferable, the Contractor shall be responsible to the Client for all reasonable costs charged by the Consultant to the Client for the Additional Services required to provide such information.
- 1.3 Time: No additional Contract Time shall be allowed for RFI's relative to information that is available from field observations, is contained in the Contract Documents, or is reasonably inferable from them.
- 1.4 Submittals: RFI's may be submitted verbally or in writing. Each RFI will address one topic only.
- 1.5 Recordation: The Consultant will log each RFI received and send a copy to the Contractor monthly.
- 1.6 Provisions: Contractors will be allowed a specific number of RFI's with no additional cost. The specific number of RFI's allowed with no additional cost to the contractor is shown below:

<u>NUMBER OF RFI'S ALLOWED</u>	<u>CONTRACT AWARD AMOUNT</u>	
5	\$0	\$100,000
10	\$100,001	\$500,000
15	\$500,001	\$1,000,000
20	\$1,000,001	\$10,000,000

* * *

SECTION 01027: APPLICATIONS FOR PAYMENT

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract, (General, Special and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 General: Submit Applications for Payment to A/E in accordance with the schedule established by Conditions of the Contract and Agreement Between Owner and Contractor.
- 1.3 Format and Data Required: Submit itemized applications typed on sheets with the same exact language on either AIA Document G702, Application and Certificate for Payment, and continuation sheets G703, or NSPE Document NSPE-1910-8-E, Application for payment, or Owner's form, whichever is applicable.
- 1.4 Preparation of Application for Each Progress Payment:
- A. Application Form:
 - 1. Fill in required information, including that for Change Orders executed prior to the date of submittal of application.
 - 2. Fill in summary of dollar values to agree with the respective totals indicated on the continuation sheets.
 - 3. Execute certification with the signature of a responsible officer of the contract firm.
 - B. Continuation Sheets:
 - 1. Fill in total list of all scheduled component items of Work, with item number and the scheduled dollar value for each item.
 - 2. Fill in the dollar value in each column for each scheduled line item when Work has been performed or products stored.
 - 3. List each Change Order executed prior to the Date of submission, at the end of the continuation sheets. List by Change Order Number, and description, as for an original component item of work.
 - C. A/E and Owner project numbers must appear on all documentation.
- 1.5 Substantiating Data for Progress Payments:
- A. When the Owner or the A/E requires substantiating data, Contractor shall submit suitable information, with a cover letter identifying
 - 1. Project.
 - 2. Application number and date.
 - 3. Detailed list of enclosures.
 - 4. For stored products:
 - a. Item number and identification as shown on application.

- b. Description of specific material.
 - c. Copy of invoice showing project and amount.
 - d. Location of material.
 - e. Copy of paid invoice will be required for following pay request.
- B. Submit one copy of data and cover letter for each copy of application. If applicable to project, a duplicate original and one (1) copy of tickets are required for sand, asphalt concrete and granular materials.
- C. Submit Record Drawings for review by A/E. A/E will return Record Drawings after review.

1.6 Preparation of Application for Final Payment:

- A. Fill in Application form as specified for progress payments.
- B. Use continuation sheet for presenting the final statement of accounting as specified.

1.7 Submittal Procedure:

- A. Submit Applications for Payment to A/E at the times stipulated in the Conditions of the Contract.
- B. Number: Five copies of each Application with substantiating data.
- C. Contractor must submit a Project Schedule with each Application for Payment. The Project Schedule must be up to date and included in each and every Application for Payment submittal. Each schedule shall indicate the original schedule with the current schedule immediately below it.
- D. When A/E finds the Application properly completed and correct, he will transmit a certificate for payment to Owner, with a copy to Contractor.

1.8 Notarized:

- A. All applications for payment shall be notarized.

* * *

SECTION 01252: WEATHER DELAYS

PART 1: GENERAL

1.1 Related Documents: The general conditions of the Contract, including (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the work specified in this Section.

1.2 Extensions of Contract Time:

A. If the basis exists for an extension of time in accordance with the General Conditions, an extension of time on the basis of weather may be granted only for the number of weather delay days in excess of the number of days listed as the standard baseline for that month.

1.3 Standard Baseline for Average Climatic Range:

A. The Louisiana Department of Transportation Department has reviewed weather data available from the U.S. National Weather Service (NWS) and defined a Standard Baseline average climatic range for the State of Louisiana.

B. The standard baseline is defined as the normal number of anticipated calendar days for each month during which construction activity exposed to weather conditions is expected to be prevented and suspended by cause of adverse weather. Suspension of construction activity for the number days each month as listed in the standard baseline is included in the contract time allotted and is not eligible for extension of Contract Time.

C. Standard baseline is as follows:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
11	10	8	7	5	6	6	5	4	3	5	8

D. The contractor's request shall be considered only for days over the allowable number of days stated above.

1.4 Adverse Weather and Weather Delays Days:

A. Adverse weather is defined as the occurrence of one or more of the following conditions within a twenty-four (24) hour day that prevents construction activity exposed to weather conditions or access to the site:

1. Precipitation (rain, snow, or ice) in excess of 1/2 inch (0.5") liquid measure.
2. Sustained wind in excess of thirty-five (35) m.p.h.

B. Adverse weather may include, if appropriate, "dry-out" or "mud" days:

1. Resulting from precipitation days that occur beyond the standard baseline;

2. Only if there is a hindrance to site access or sitework and Contractor has taken all reasonable accommodations to avoid such hindrance; and,
 3. At a rate no greater than 1 make-up day for each day or consecutive days of precipitation beyond the standard baseline that total 1/2 inch or more, liquid measure, unless specifically recommended otherwise by the Designer.
- C. A weather delay day may be counted if adverse weather prevents work on the project for fifty percent (50%) or more of the contractor's scheduled work day and critical path construction activities were included in the day's schedule.
- D. Contractor shall take into account that certain construction activities are more affected by adverse weather and seasonal conditions than other activities, and that "dry-out" or "mud" days are not eligible to be counted as a weather delay day until the standard baseline is exceeded. Hence, Contractor should allow for an appropriate number of additional days associated with the standard baseline days in which such applicable construction activities are expected to be prevented and suspended.
- E. If adverse weather conditions are the basis for a claim for additional time, the Contractor shall document that weather conditions had an adverse effect on the scheduled construction. An increase in the contract time due to weather shall not be cause for an increase in the contract sum. At the end of each month, the Contractor shall make one Claim for any adverse weather days occurring within the month. The Claim must be accompanied by sufficient documentation evidencing the adverse days and the impact on construction. Failure to make such Claim within **twenty-one (21) days** from the last day of the month shall prohibit any future claims for adverse days for that month. No additional adverse weather days shall be granted after the original or extended contract completion date, except those adverse weather days associated with a NWS named storm or federally declared weather related disaster directly affecting the project site.

1.5 Documentation and Submittals:

- A. Submit daily jobsite work logs showing which and to what extent critical path construction activities have been affected by weather on a monthly basis.
- B. Submit actual weather data to support claim for time extension obtained from nearest NWS station.
- C. Use standard baseline data provided in this section when documenting actual delays due to weather in excess of the average climatic range.

- D. Organize claim and documentation to facilitate evaluation on a basis of calendar month periods and submit to the A/E.
- E. If an extension of the Contract Time is appropriate, such extension shall be made by Change Order.

* * *

SECTION 01300: SUBMITTALS

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this section.
- 1.2 Correspondence: Six copies of all transmittal letters accompanying shop drawings, product data, operations and maintenance data and manuals, layout data, and other information shall be sent to the Owner's Program Management Office at an address to be supplied to the contractor at the pre-construction conference.
- 1.3 Progress Reports:
- A. A progress report shall be furnished to A/E with each application for progress payment. If the Work falls behind schedule, Contractor shall submit additional progress reports at such intervals as A/E may request.
 - B. Each progress report shall include sufficient narrative to describe current and anticipated delaying factors, their effect on the construction schedule, and proposed corrective actions. Any work reported complete, but which is not readily apparent to A/E must be substantiated with satisfactory evidence.
 - C. Each progress report shall also include three prints of the accepted graphic schedule marked to indicate actual progress.
- 1.4 Survey Data: All field books, notes, and other data developed by Contractor in performing surveys required as part of the Work shall be available to A/E for examination throughout the construction period. All such data shall be submitted to A/E with the other documentation required for final acceptance of the Work.
- 1.5 Layout Data: Contractor shall keep neat and legible notes of measurements and calculations made by him in connection with the layout of the Work. Copies of such data shall be furnished to the Resident Project Representative for use in checking Contractor's layout as provided. All such data considered of value to Owner will be transmitted to Owner by A/E with other records upon completion of the work.
- 1.6 Schedule of Values:
- A. A tentative Schedule of Values reflecting the total cost of the work shall be submitted at the pre-construction conference.
 - B. After review of the tentative schedule at the pre-construction conference and before submission of the first application for payment, Contractor shall prepare and submit to A/E a schedule of

values covering each lump sum item. The schedule of values, showing the value of each kind of work, shall be acceptable to A/E before any partial payment estimate is prepared.

- C. The sum of the items listed in the schedule of values shall equal the contract lump sum price. Such items as bond premium, temporary construction facilities, and plant may be listed separately in the schedule of values, provided the amounts can be substantiated. Overhead and profit shall not be listed as separate items.
- D. An unbalanced schedule of values providing for overpayment to Contractor on items of Work which would be performed first will not be accepted. The schedule of values shall be revised and resubmitted until acceptable to the A/E.
- E. Final acceptance by A/E shall indicate only consent to the schedule of values as a basis for preparation of applications for progress payments and shall not constitute an agreement as to the value of each indicated item.
- F. Within 30 days after award of contract, Contractor shall furnish to A/E a schedule of estimated monthly payments. The schedule shall be revised and resubmitted each time an application for payment varies more than 10 percent from the estimated payment schedule.

1.7 Submittals to other Concerned Agencies: The Contractor shall comply with all submittals required by utility companies and other concerned agencies as specified. Submittals to other agencies shall be submitted to A/E for information purposes only.

1.8 Schedule:

- A. Contractor shall submit a detailed construction schedule to the A/E ten (10) day after receipt of Notice of Award.
- B. Contractor shall submit a revised construction schedule at the Pre-Construction Conference.
- C. Contractor shall submit revised construction schedules to the A/E monthly thereafter.

* * *

SECTION 01340: SHOP DRAWINGS, PROJECT DATA, AND SAMPLES

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Special, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section. No requirements of the Supplementary or Special Conditions shall be superseded by this Section but format of submittals shall be as follows.
- 1.2 General:
- A. Submit, to the A/E, shop drawings, project data, and samples required by specification sections.
 - B. Prepare and submit, with Construction Schedule, a separate schedule listing dates for submission and date reviewed shop drawings, project data, and samples will be needed for each product.
- 1.3 Shop Drawings: Original drawings, prepared by Contractor, Subcontractor, Supplier, or Distributor, which illustrate some portion of the Work; showing fabrication, layout, setting, or erection details.
- A. Prepared by a qualified detailer.
 - B. Identify details by reference to sheet and detail numbers shown on Contract Drawings.
 - C. Maximum Sheet Size: 24" x 36".
 - D. Submit three (3) copies of each submittal.
- 1.4 Manufacturer's Literature, Project Data:
- A. Manufacturer's standard schematic drawings.
 - 1. Modify drawings to delete information to provide additional information applicable to project.
 - 2. Supplement standard information to provide additional information applicable to project.
 - B. Manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations, and other standard descriptive data.
 - 1. Clearly mark each copy to identify pertinent materials, products, or models.
 - 2. Show dimensions and clearances required.
 - 3. Show performance characteristics and capacities.
 - 4. Show wiring diagrams and control.
- 1.5 Samples: Physical examples to illustrate materials, equipment, or workmanship, and to establish standards by which completed work is judged.
- A. Office samples: Of sufficient size and quantity to clearly illustrate:
 - 1. Functional characteristics of product or material, with integrally related parts and attachment devices.
 - 2. Full range of color samples.
 - B. Field Samples and Mock-Ups.
 - 1. Erect at project site at location acceptable to A/E.

2. Construct each sample or mock-up complete, including work of all trades required in finished work.

1.6 Contractor Responsibilities:

- A. Contractor shall submit a schedule of the submittals needed prior to construction.
- B. Contractor shall review each submittal, project data, and samples and verify in writing to the A/E that each submittal conforms with the contract documents prior to submitting. Contractor shall list any deviations from that specified and in addition, shall cause a specific notation to be made on each shop drawing and sample submitted to the A/E for review and approval of each such variation.
- C. Verify field measurements, field construction criteria, catalog numbers, and similar data.
- D. Coordinate each submittal with requirements of Work and of Contract Documents.
- E. Contractor's responsibility for errors and omissions in submittals is not relieved by A/E's review of submittals.
- F. Contractor's responsibility for deviations in submittals from requirements of Contract Documents is not relieved by A/E's review of submittals, unless A/E gives written acceptance of specific deviations.
- G. Begin no work which requires submittals until return of submittals with A/E's stamp and initials or signature indicating review.
- H. After A/E's review, distribute copies.
- I. Contractor shall direct specific attention, in writing, to the A/E of the failure to receive reviewed submittals after a reasonable time and shall denote consequences of an excessive review period with regard to the progress of work.

1.7 Submission Requirement:

- A. Schedule submissions at least 21 days before dates reviewed submittals will be needed.
- B. Shop Drawings: Submit three (3) of each submittal.
- C. Manufacturer's Literature: Number of copies of Project Datum which Contractor requires for distribution plus 2 copies which will be retained by A/E, plus one (1) copy retained by the Consulting A/E for mechanical or electrical submittals.
- D. Submit number of Samples specified in each of specification sections.
- E. Accompany submittals with transmittal letter containing: date; project title and number; Contractor's name and address; the number of each Shop Drawings, Project Datum, and Sample submitted; notification of deviations from Contract Documents; other pertinent data.
- F. Submittals shall include:
 1. Date and revision dates.
 2. Project title, A/E Project number, and Owner's Project number, if any.

3. The names of: A/E; Contractor; Subcontractor; Supplier; Manufacturer.
4. Identification of product or material.
5. Relation to adjacent structure or materials.
6. Field dimensions, clearly identified as such.
7. Applicable standards, such as ASTM number or Federal Specification.
8. A blank space, 8" x 8" for the A/E's stamp.
9. Identification of deviations from Contract Documents.
10. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of field measurements, and compliance with Contract Documents.
11. Applicable standards, such as ASTM number or Federal Specification number.

1.8 Resubmission Requirements:

- A. Shop Drawings: Revise initial drawings as required and resubmit as specified for initial submittal. Indicate on drawings any changes which have been made other than those requested by A/E.
- B. Project Data and Samples: Submit new datum and samples as required for initial submittal.
- C. Contractor shall accept full responsibility for the completeness of each submission, and, in the case of a resubmission, shall verify that all exceptions previously noted by A/E have been taken into account. In the event that more than one resubmission is required because of failure of Contractor to account for exceptions previously noted, Contractor shall reimburse Owner for the charges of A/E for review of the additional resubmissions.
- D. Any need for more than one resubmission, or any other delay in obtaining A/E's review of submittals, will not entitle Contractor an extension of the Contract Time unless delay of the Work is directly caused by a change in the Work authorized by a Change Order or by failure of A/E to return any submittal within a reasonable time after its receipt in A/E's office.
- E. When the drawings and data are returned marked SUBMIT SPECIFIED ITEM the Contractor shall do so. When the drawings and data are returned marked REVISE AND RESUBMIT, the corrections shall be made as noted thereon and as instructed by the A/E and nine corrected copies (or one corrected reproducible copy) resubmitted.

1.9 Distribution of Submittals after Review:

- A. Distribute copies of Shop Drawings and Project Datum which carry A/E stamp to:
 1. Contractor's file
 2. Job site file
 3. Record Documents file
 4. Subcontractors

- 5. Supplier or fabricator
- 6. Other affected Contractors
- B. Distribute samples as directed.

1.10

A/E's Duties:

- A. Review submittals with reasonable promptness.
- B. Review for design concept of project and information given in Contract Documents.
- C. Review of separate item does not constitute review of an assembly in which item functions.
- D. Affix stamp and initials or signature certifying to review of submittal.
- E. Return sepia of Shop Drawings and other submittals to Contractor for distribution, or for resubmission. Contractor is responsible obtaining number of opaque prints from sepia necessary for distribution.
- F. The Design Professional shall review Contractor submittals, such as shop drawings, product data, samples and other data, as required by the Design Professional, but only for the limited purpose of checking for conformance with the design conception and the information expressed in the contract documents. This review shall not include review of the accuracy or completeness of details, such as quantities, dimensions, weights or gauges, fabrication processes, construction means or methods, coordination of the work with other trades or construction safety precautions, all of which are the sole responsibility of the Contractor. The Design Professional's review shall be conducted with reasonable promptness while allowing sufficient time in the Design Professional's judgement to permit adequate review. Review of a specific item shall not indicate that the Design Professional has reviewed the entire assembly of which the item is a component. The Design Professional shall not be responsible for any deviations for the contract documents not brought to the attention of the Design Professional in writing by the Contractor. The Design Professional shall not be required to review partial submissions or those for which submissions or correlated items have not been received.

* * *

SECTION 01510: TEMPORARY UTILITIES

- 1.1 Related Documents: The general provisions of the Contract including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 General:
 - A. Comply with Federal, State, and Local codes and regulations and with utility company requirements.
 - B. Materials may be new or used, but must be adequate in capacity for the required usage, must not create unsafe conditions, and must not violate requirements of applicable codes and standards.
- 1.3 Job Conditions:
 - A. Establish and initiate use of each temporary facility at time first reasonably required for proper performance of the Work. Terminate use and remove facilities at earliest reasonable time, when no longer needed or when permanent facilities have, with authorized use, replaced the need.
 - B. Install, operate, maintain and protect temporary facilities in a manner and at locations which will be safe, non-hazardous, sanitary and protective of persons and property, and free of deleterious effects.
- 1.4 Temporary Water:
 - A. Provide water for construction purposes; pay all costs for installation, maintenance and removal, and service charges for water used.
 - B. Install branch piping as necessary, with taps located so that water is available throughout the construction by the use of hoses. Protect piping and fittings against freezing.
- 1.5 Temporary Sanitary Facilities: Contractor shall provide and maintain an adequate number of temporary toilets with proper enclosures as necessary for use of workmen during construction. Keep toilets clean and comply with all local and state health requirements and sanitary regulations. Toilet facilities shall consist of the prefabricated chemical type.
- 1.6 Temporary Electricity and Lighting:
 - A. Comply with National Electric Code.
 - B. Arrange with utility company, provide service required for power and lighting, and pay all costs for service and for power used.
 - C. Install circuit and branch wiring, with area distribution boxes located so that power and lighting is available throughout the construction by the use of construction type power cords.
 - D. Provide adequate artificial lighting for all areas of work when natural light is not adequate for work, and for areas accessible to the public.

1.7

Temporary Heat and Ventilation:

- A. Provide temporary heat and ventilation as required to maintain adequate environmental conditions to facilitate progress of the Work, to meet specified minimum conditions for the installation of materials, and to protect materials and finishes from damage due to temperature or humidity.
- B. Provide adequate forced ventilation of enclosed areas for curing of installed materials, to disperse humidity, and to prevent hazardous accumulations of dust, fumes, vapors, or gases.
- C. Portable heaters shall be standard approved units complete with controls.
- D. Pay all costs of installation, maintenance, operation and removal, and for fuel consumed.
- E. After building is completely enclosed, the Contractor may utilize the permanent mechanical equipment which he furnishes and installs under this Contract, with the qualifications herein stipulated. Supply any additional equipment required. Any permanent equipment so used shall be turned over to the Owner in the condition and the time required by the Specifications. The Contractor's use of the permanent equipment is hereby qualified as follows:
 - 1. Do not use the permanent equipment for temporary heat or cooling unless and until all safety devices specified or required for safe operation of the equipment are installed and operating properly.
 - 2. The Contractor shall pay all fuel costs and assume all responsibility for the use of the permanent equipment.
 - 3. The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work.
 - 4. The warranty period on the equipment shall not commence until final acceptance of the project.

1.8

Removal:

- A. Completely remove temporary materials and equipment when their use is no longer required. Clean and repair damage caused by temporary installations or use of temporary facilities.
- B. Restore any permanent facilities used for temporary services to specified condition. Prior to final inspection, remove temporary lamps and install new lamps.

* * *

SECTION 01530: TEMPORARY FENCING

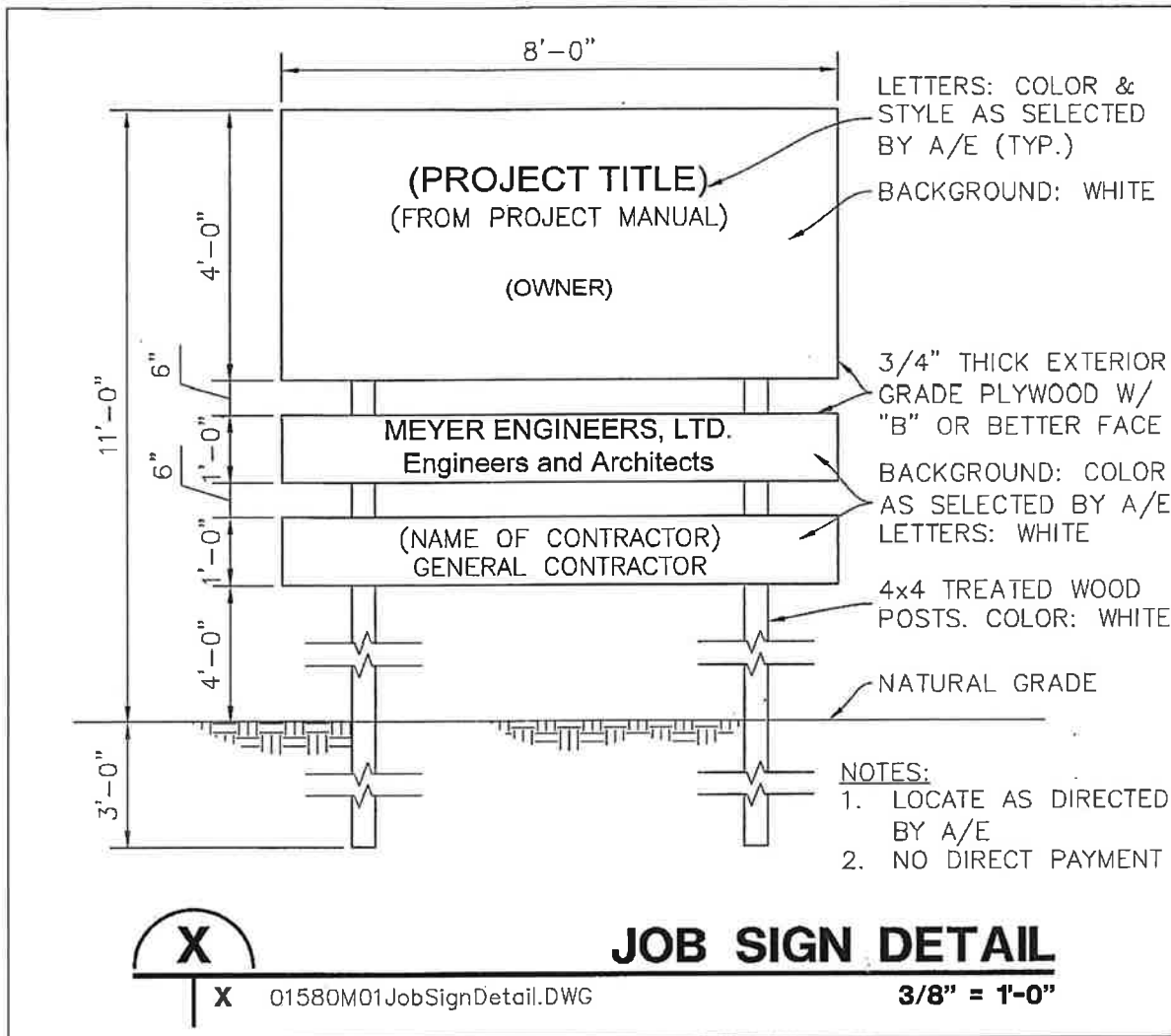
- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 General:
 - A. Comply with Federal, State, and Local codes and regulations and with utility company requirements.
 - B. Materials may be new or used, but must be adequate in capacity for the required usage, must not create unsafe conditions, and must not violate requirements of applicable codes and standards.
- 1.3 Job Conditions:
 - A. Establish and initiate use of each temporary facility at time first reasonably required for proper performance of the Work. Terminate use and remove facilities at earliest reasonable time, when no longer needed or when permanent facilities have, with authorized use, replaced the need.
 - B. Install, operate, maintain and protect temporary facilities in a manner and at locations which will be safe, non-hazardous, sanitary and protective of persons and property, and free of deleterious effects.
- 1.4 Temporary Fencing:
 - A. Contractor shall provide temporary fencing for the duration of the project. Do not remove temporary fencing until project is complete.
 - B. Construct and maintain fencing and barricades sufficient to prevent injury to persons and damage to property in accordance with all safety laws and requirements.
 - C. Cover trenches and holes when not in use.
 - D. Provide facilities to exclude unauthorized visitors from the site. Provide personal safety equipment such as hard hats for authorized visitors.
- 1.5 Removal:
 - A. Completely remove temporary materials/equipment when their use is no longer required. Clean/repair damage caused by temporary installations or use of temporary facilities.
 - B. Restore existing facilities used for temporary services to specified, or to original condition.
 - C. Restore any permanent facilities used for temporary services to specified condition.

* * *

SECTION 01580: JOB SIGN

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 General:
- A. Comply with Federal, State, and Local codes and regulations and with utility company requirements.
 - B. Materials may be new or used, but must be adequate in capacity for the required usage, must not create unsafe conditions, and must not violate requirements of applicable codes and standards.
- 1.3 Job Conditions: Install, maintain and protect sign in a manner and at location which will be safe, non-hazardous, and protective of persons and property, and free of deleterious effects.
- 1.4 Job Sign:
- A. Construct and maintain job sign as detailed. All lumber shall be treated pine. Signs shall be 3/4 inch thick exterior grade plywood with "B" or better face.
 - B. See Project Manual Title Sheet for text of Project Title and Owner's Name(s). Consult A/E for specific requirements within seven (7) days of execution of contract.
 - C. Locate one (1) job sign where directed by A/E at the site.
 - D. Lettering and layout on sign shall be done by a professional sign painter. (Helvetica Style).
 - E. 4 x 4 Treated Pine Posts. Brace as required.
 - F. Job Sign shall be painted with first coat primer, with second and third coats exterior semi-gloss enamel, as per Painting Specification Section. Colors as selected by A/E.
 - G. Job Sign shall be erected within two weeks of Notice to Proceed and shall be maintained through duration of project.
 - H. At his option, Contractor may provide and maintain a separate job sign, approved by the A/E, for listing of subcontractors. If approved, paint by professional sign painter in identical colors as project sign.
 - I. Do not allow other signs or advertisements at or near the project site.
- 1.5 Removal:
- A. Completely remove temporary materials and equipment at completion of job or when notified by A/E. Clean and repair damage caused by temporary installations or use of temporary facilities.
 - B. Restore existing facilities used for temporary services to specified, or to original condition.
 - C. Restore any permanent facilities used for temporary services to specified condition.

GET PROJECT SIGN DETAIL DRAWING FROM
DIVISION 1 MASTER BOOK



SECTION 01590: TEMPORARY FIELD OFFICES AND SHEDS

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 General:
 - A. Comply with Federal, State, and Local codes and regulations and with utility company requirements.
 - B. Materials may be new or used, but must be adequate in capacity for the required usage, must not create unsafe conditions, and must not violate requirements of applicable codes and standards.
- 1.3 Job Conditions:
 - A. Establish and initiate use of each temporary facility at time first reasonably required for proper performance of the Work. Terminate use and remove facilities at earliest reasonable time, when no longer needed or when permanent facilities have, with authorized use, replaced the need.
 - B. Install, operate, maintain and protect temporary facilities in a manner and at locations which will be safe, non-hazardous, sanitary and protective of persons and property, and free of deleterious effects.
- 1.4 Temporary Sheds: Contractor shall provide and maintain additional offices, storage sheds, and other temporary buildings or trailers as required. Location of sheds and trailers shall be approved by Owner and A/E. Remove sheds when Work is completed, or as directed.
- 1.5 Removal:
 - A. Completely remove temporary materials and equipment when their use is no longer required. Clean and repair damage caused by temporary installations or use of temporary facilities.
 - B. Restore existing facilities used for temporary services to specified, or to original condition.
 - C. Restore any permanent facilities used for temporary services to specified condition.

* * *

SECTION 01601: MATERIAL AND EQUIPMENT

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 General: Material and Equipment Incorporated into the Work:
- A. Conform to applicable specifications and standards.
 - B. Comply with size, make, type, and quality specified, or as specifically approved in writing by the A/E.
 - C. Manufactured and Fabricated Products:
 - 1. Design, fabricate, and assemble in accordance with the best engineering and shop practices.
 - 2. Manufacture like parts of duplicate units to standard sizes and gages, to be interchangeable.
 - 3. Two or more items of the same kind shall be identical, by the same manufacturer.
 - 4. Products shall be suitable for service conditions.
 - 5. Equipment capacities, sizes, and dimensions shown or specified shall be adhered to unless variations are specifically approved in writing.
 - D. Do not use material or equipment for any purpose other than that for which it is designed or is specified.
- 1.3 Reuse of Existing Material:
- A. Except as specifically indicated or specified, materials and equipment removed from the existing structure shall not be used in the completed Work.
 - B. For material and equipment specifically indicated or specified to remain or to be used in the Work.
 - 1. Use special care in removal, handling, storage, add reinstallation to assure proper function and finishing of the completed Work.
 - 2. Arrange transportation, storage, and handling of products which require off-site storage, restoration, or renovation. Pay all costs for such work.
- 1.4 Manufacturer's Instructions:
- A. When Contract Documents require that installation of work shall comply with manufacturer's printed instructions, obtain and distribute copies of such instructions to parties involved in the installation, including two copies to A/E. Maintain one set of complete instructions at the job site during installation and until completion.

- B. Handle, install, connect, clean, condition, and adjust products in strict accordance with such instructions and in conformity with specified requirements.
 - 1. Should job conditions or specified requirements conflict with manufacturer's instructions, consult with A/E for further instructions.
 - 2. Do not proceed with work without clear instructions.
- C. Perform work in accordance with manufacturer's instructions. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by Contract Documents.

1.5

Transportation and Handling:

- A. Arrange deliveries of Products in accordance with construction schedules, coordinate to avoid conflict with work and conditions at the site.
 - 1. Deliver Products in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible.
 - 2. Immediately on delivery, inspect shipments to assure compliance with requirements of Contract Documents and approved submittals, and that Products are properly protected and undamaged.
- B. Provide equipment and personnel to handle Products by methods to prevent soiling or damage to Products or packaging.

1.6

Storage and Protection:

- A. Store Products in accordance with manufacturer's instructions, with seals and labels intact and legible.
 - 1. Store products subject to damage by the elements in weathering enclosures.
 - 2. Maintain temperature and humidity within the ranges required by manufacturer's instructions.
- B. Exterior Storage:
 - 1. Store fabricated products above the ground, on blocking or skids, prevent soiling or staining. Cover products which are subject to deterioration with impervious sheet coverings, provide adequate ventilation to avoid condensation.
 - 2. Store loose granular materials in a well-drained area on solid surfaces to prevent mixing with foreign matter.
- C. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored Products to assure that Products are maintained under specified conditions, and free from damage or deterioration.
- D. Protection After Installation: Provide substantial coverings as necessary to protect installed Product from damage from traffic and

subsequent construction operations. Remove when no longer needed.

1.6

Substitutions and Product Options:

- A. Products List: Within five days after Contract Date, Submit to A/E a complete list of major products proposed to be used, with the name of the manufacturer and the installing subcontractor.
- B. Contractor's Options:
 - 1. For Products specified only by reference standard, select any product meeting that standard.
 - 2. For Products specified by naming several products or manufacturers, select any one of the products or manufacturers named, which comply with the specifications.
 - 3. For Products specified by naming one or more products or manufacturers and "or approved equal", Contractor must submit a request prior to Bid Date as for substitutions for any product or manufacturer not specifically named.
 - 4. For Products specified by naming only one product and manufacturer, there is no option.
- C. Substitutions:
 - 1. Substitutions are only allowed by approval 7 working days prior to Bid Date as stipulated in the Instructions to Bidders or Supplementary Conditions.
 - 2. If a Product that is specified becomes unavailable due to no fault of the Contractor, an item that has been approved prior to Bid Date may be substituted.
 - 3. If prior approved items are unavailable or if no prior approval exists for the unavailable item, the A/E will consider written requests from Contractor for substitution of Products.
 - 4. Submit a separate request for each Product, supported with complete data, with drawings and samples as appropriate, including:
 - a. Comparison of the qualities of the proposed substitution with that specified.
 - b. Changes required in other elements of the work because of the substitution.
 - c. Effect on the construction schedule.
 - d. Cost data comparing the proposed substitution with the Product specified.
 - e. Any required license fees or royalties.
 - f. Availability of maintenance service, and source of replacement materials.
- D. Contractor's Representation: A request for a substitution constitutes a representation that Contractor:
 - 1. Has investigated the proposed Product and determined that it is equal to or superior in all respects to that specified.

2. Will provide the same warranties or bonds for the substitutions for the Product specified.
 3. Will coordinate the installation of an accepted substitution into the Work, and make such other changes as may be required to make the Work complete in all respects.
 4. Waives all claims for additional costs, under his responsibility, which may subsequently become apparent.
- E. A/E will review requests for substitutions with reasonable promptness, and notify Contractor, in writing, of the decision to accept or reject the requested substitution.

* * *

SECTION 01635 - SUBSTITUTION PROCEDURES

PART 1: GENERAL

- 1.1 Related Documents: Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.
- 1.2 Summary:
- A. Section includes administrative and procedural requirements for substitutions.
 - B. Related Sections:
 - 1. Division 1 Section "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.
 - 2. Division 2 through 16 sections for specific requirements and limitations for substitutions.
- 1.3 Definitions:
- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
 - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
 - 2. Substitutions for Convenience: Changes proposed by Contractor that are not required in order to meet other Project requirements but may offer advantage to Contractor or Owner.
- 1.4 Submittals:
- A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Substitution Request Form: Use copy of form provided in the Project Manual.
 - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable. The burden of proof of the merit of the proposed substitute is upon the proposers.
 - a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.
 - b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison (point by point) of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable specification section. Significant qualities may include attributes such as

performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.

- 1) Detailed comparison (point by point) must be included in all substitution request documentation submitted for review by the A/E.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. Certificates and qualification data, where applicable or requested.
 - g. List of similar installations for completed projects with project names and addresses and names and addresses of A/Es and owners.
 - h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - i. Research reports evidencing compliance with building code in effect and indicated UL or documented testing methods.
 - j. Construction Schedule (After Contract Execution): Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
 - k. Construction Schedule (After Contract Execution): Cost information, including a proposal of change, if any, in the Contract Sum.
 - l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
 - m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
3. A/E's Action:
- a. Prior to the Bid Date: If necessary, A/E will request additional information or documentation for evaluation within seven (7) working days of receipt of a request for substitution. Prior to the bid date the A/E will notify the contractor/supplier of acceptance or rejection of proposed substitution within three (3) working days of the bid date.
 - 1) Forms of Acceptance: Signed "Contractor/Supplier Substitution Required Form, Addendum, Change Order, Construction Change Directive, or A/E's

supplementary instructions for minor changes in the work.

2) Use product specified if A/E does not issue a decision on use of a proposed substitution within time allocated.

3) The A/E's decision of approval or disapproval will be final.

b. After Contract Execution: A/E will notify Contractor of acceptance or rejection of proposed substitution during construction within fifteen (15) working days of receipt of request, or seven (7) working days of receipt of additional information or documentation, whichever is later.

1) Forms of Acceptance: Signed "Contractor/Supplier Substitution Required Form, Addendum, Change Order, Construction Change Directive, or A/E's supplementary instructions for minor changes in the work.

2) Use product specified if A/E does not issue a decision on use of a proposed substitution within time allocated.

3) The A/E's decision of approval or disapproval will be final.

1.5 Quality Assurance

A. The contractor represents that he has personally investigated the proposed substitution and determined that it is equal or superior in all respects to that specified.

B. The contractor represents that he will provide the same warranty for the substitution that he would for that specified.

C. The contractor certifies that the cost data presented is complete and includes all related costs under this Contract but excludes costs under separate contracts, and any additional A/E redesign costs, as well as waives all claims for additional costs related to the substitution which subsequently become apparent.

D. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage qualified testing agency to perform compatibility tests recommended by manufacturers.

E. Bidders/Contractor is advised that any acceptable substitution that requires a change or modifications to other parts of the project shall be his responsibility including any additional cost required thereof. Any cost associated for other parts of the projects due to a substitution shall be the responsibility of the Contractor.

1.6 Procedures: Coordination: Modify or adjust affected work as necessary to integrate work of the approved substitutions.

PART 2: PRODUCTS

2.1 Substitutions – Pre-Bid

- A. Substitutions for Cause: Submit requests for substitution immediately upon discovery of need for change, but not later than seven (7) working days prior to date for receipt of bids.
 - 1. Conditions: A/E will consider Supplier's / Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, A/E will return requests without action, except to record noncompliance with these requirements:
 - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - b. Substitution request is fully documented as outlined under submittals and properly submitted on required form.
 - c. Requested substitution is compatible with other portions of the Work.
 - d. Requested substitution provides specified warranty.
- B. Substitutions for Convenience: A/E will consider requests for substitution if received within seven (7) working days prior to date for receipt of bids. Requests received after that time will be rejected.
 - 1. Conditions: A/E will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, A/E will return requests without action, except to record noncompliance with these requirements:
 - a. Requested substitution does not require extensive revisions to the Contract Documents.
 - b. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - c. Substitution request is fully documented as outlined under submittals and properly submitted on required form.
 - d. Requested substitution is compatible with other portions of the Work.
 - e. Requested substitution provides specified warranty.

2.2 Substitutions – After Contract Execution

- A. In the interest of keeping the project on schedule, the A/E will not continuously and exhaustively review proposed substitutes for each specification section. The A/E will review only one (1) proposed substitution per product per specification section. If that proposed substitution is rejected for any reason, the contractor shall use the product specified.
- B. Substitutions for Cause: Submit requests for substitution immediately upon discovery of need for change, but not later than fifteen (15) days prior to time required for preparation and review of related submittals.
 - 1. A/E will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, A/E will return requests without any action, except to record noncompliance with these requirements.
 - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.

- b. Substitution request is fully documented as outlined under submittals herein and properly submitted on required form.
 - c. Requested substitution will not adversely affect Contractor's construction schedule.
 - d. Requested substitution has received necessary approval of authorities having jurisdiction.
 - e. Requested substitution is compatible with other portions of the Work.
 - f. Requested substitution has been coordinated with other portions of the Work.
 - g. Requested substitution provides specified warranty.
 - h. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- C. Substitutions for Convenience: A/E will consider requests for substitution.
1. Conditions: A/E will consider the Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, A/E will return requests without action, except to record noncompliance with these requirements.
- a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to A/E for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
 - b. Requested substitution does not require extensive revisions to the Contract documents.
 - c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - d. Substitution request is fully documented as outlined under submittals and properly submitted on the required form.
 - e. Requested substitution will not adversely affect Contractor's construction schedule.
 - f. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - g. Requested substitution is compatible with other portions of the Work.
 - h. Requested substitution has been coordinated with other portions of the Work.
 - i. Requested substitution provides specified warranty.
 - j. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

* * *

CONTRACTOR / SUPPLIER SUBSTITUTION REQUEST FORM

(Section to be completed by Contractor / Supplier)

Project: _____ Substitution Request Number: _____

From: _____
To: _____ Date: _____

A/E Project Number: _____
Re: _____ Contract For: _____

Specification Title: _____ Description: _____
Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____
Manufacturer: _____ Address: _____ Phone: _____
Trade Name: _____ Model No.: _____
Installer: _____ Address: _____ Phone: _____

History: ☐ New product ☐ 2-5 years old ☐ 5-10 yrs old ☐ More than 10 years old

Differences between proposed substitution and specified product: _____

☐ Point-by-point comparative data attached - **REQUIRED BY A/E**

Reason for substitution request: _____

Similar Installation:

Project: _____ Architect: _____
Address: _____ Owner: _____
_____ Date Installed: _____

Proposed substitution affects other parts of Work: ☐ No ☐ Yes; explain _____

Supporting Data Attached: ☐ Drawings ☐ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ _____

**CONTRACTOR / SUPPLIER
SUBSTITUTION
REQUEST FORM
(Continued)**

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted by: _____

Signed by: _____

Firm: _____

Address: _____

Telephone: _____

Fax: _____

Email: _____

Attachments: _____

SECTION TO BE COMPLETED BY A/E:

A/E's REVIEW AND ACTION

- ☐ Substitution approved - Provided all Contract Documents requirements are met.
- ☐ Substitution approved as noted.
- ☐ Substitution rejected - Does not meet Contract Documents - Use specified materials.
- ☐ Substitution Request received too late – Not Approved. Received less than seven (7) working days prior to Bid Date. Insufficient time in accordance with R.S. 38:2295.
- ☐ Substitution rejected – Insufficient information submitted to make determination.
 - ☐ Submit model or catalog numbers.
 - ☐ Submit information following Specification format in enough detail to make comparison to product specified.

Signed by: _____ Date: _____

Additional Comments: _____

SECTION 01700: CONTRACT CLOSEOUT

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 General: Comply with requirements stated in Conditions of the Contract and in Specifications for administrative procedures in closing out the Work.
- 1.3 Substantial Completion:
 - A. When Contractor considers the Work substantially complete, he shall submit to A/E written notice that the Work, or designated portion thereof, is substantially complete, and a list of items to be completed or corrected. This can be a joint list, but must have cost with mobilization, overhead and profit. This "Costed Punch List" is withheld from the Contractor's final check until the work is complete.
 - B. Within a reasonable time after receipt of such notice, A/E will determine the status of completion.
 - C. Should A/E determine that the Work is not substantially complete:
 - 1. A/E will promptly notify the Contractor in writing, giving the reasons therefore.
 - 2. Contractor shall remedy the deficiencies in the Work, and send a second written notice of substantial completion to the A/E.
 - 3. A/E will reinspect the Work.
 - D. When A/E concurs that the Work is substantially complete, he will recommend acceptance of the work to the Owner and if required for acceptance he will:
 - 1. Prepare a Certificate of Substantial Completion accompanied by Contractor's list of items to be completed or corrected, as verified and amended by the A/E.
 - 2. Submit the Certificate to Owner and Contractor for their written acceptance of the responsibilities assigned to them in the Certificate.
 - 3. Request the Contractor to make closeout submittals.
- 1.4 Final Inspection:
 - A. When Contractor considers the Work is complete, he shall submit written certification that:
 - 1. Contract Documents have been reviewed.
 - 2. Work has been inspected for compliance with Contract Documents.
 - 3. Work has been completed in accordance with Contract Documents.
 - 4. Equipment and systems have been tested in presence of the Owner's representative and are operational.
 - 5. Work is completed and ready for final inspection.

6. As-Builts are completed and submitted to A/E for acceptance.
- B. A/E will make an inspection to verify the status of completion with reasonable promptness after receipt of such certification.
- C. Should A/E consider that the Work is incomplete or defective:
 1. A/E will promptly notify the Contractor in writing, listing the incomplete or defective work.
 2. Contractor shall take immediate steps to remedy the stated deficiencies, and send a second written certification to A/E that the Work is complete.
 3. A/E will reinspect the Work.
- D. When the A/E concurs that the Work is complete, he will request the Contractor to make closeout submittals.

- 1.5 Reinspection Fees: Should A/E perform reinspection due to failure of the Work to comply with the claims of status of completion made by the Contractor:
- A. Owner will compensate A/E for such additional services.
 - B. Owner will deduct the amount of such compensation from the final payment to the Contractor.

- 1.6 Contractor's Closeout Submittals to A/E:
- A. Evidence of compliance with requirements of governing authorities and all Certificates of Inspection.
 - B. Project Record Documents: To requirements of General Conditions.
 - C. Warranties and Bonds: To requirements of Specification Sections.
 - D. Maintenance Materials: To the requirements of Specifications Sections.
 - E. Evidence of Payment and Release of Liens: To requirements stated in the Conditions of the Contract.

- 1.7 Final Adjustment of Accounts:
- A. Submit a final statement of accounting to the A/E.
 - B. The Statement shall reflect all adjustments to the Contract Sum:
 1. The Original Contract Sum.
 2. Additions and deductions resulting from:
 - a. Previous Change Orders.
 - b. Unit Prices.
 - c. Deductions for uncorrected Work.
 - d. Deductions for liquidated damages.
 - e. Deductions for reinspection payments.
 - f. Other adjustments.
 3. Total Contract Sum, as adjusted.
 4. Previous payments.
 5. Sum remaining due.
 - C. A/E will prepare a final Change Order, reflecting approved adjustments to the Contract Sum which were not previously made by Change Orders.

1.8 Final Application for Payment: Contractor shall submit the final Application for Payment in accordance with procedures and requirements stated in the Conditions of the Contract.

1.9 Post-Construction Inspection:

- A. Prior to expiration of one year from date of Acceptance, A/E will make visual inspection of Project in company with Owner and Contractor to determine whether correction of Work is required, in accordance with provisions of the Conditions of the Contract.
- B. For guarantees and warranties beyond one year, A/E will make inspections at request of Owner, after notification to Contractor. A/E will promptly notify Contractor of any observed deficiencies.

* * *

SECTION 01710: CLEANING

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 General: Execute cleaning, during progress of the Work, and at completion of the Work and as required by Conditions of the Contract. For cleaning for specific Products or work, see the Specification Section for that work.
- 1.3 Disposal Requirements: Conduct cleaning and disposal operations to comply with codes, ordinances, regulations, and anti-pollution laws.

PART 2: PRODUCTS

- 2.1 Materials:
 - A. Use only those cleaning materials which will not create hazards to health or property and which will not damage surfaces.
 - B. Use only cleaning materials and methods recommended by manufacturer of the surface material to be cleaned.
 - C. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3: EXECUTION

- 3.1 During Construction:
 - A. Execute periodic cleaning to keep the Work, the site, and adjacent properties free from accumulations of waste materials, rubbish, and windblown debris resulting from construction operations.
 - B. Provide on-site containers for the collection of waste materials, debris, and rubbish.
 - C. Remove waste materials, debris, and rubbish from the site periodically and dispose of at legal disposal areas away from the site.
- 3.2 Dust Control: Schedule operations so that dust and other contaminants resulting from cleaning process will not fall on wet or newly-coated surfaces.
- 3.3 Final Cleaning:
 - A. Employ skilled workmen for final cleaning.
 - B. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels, and other foreign materials from sight-exposed interior and exterior surfaces.

- C. Broom clean exterior paved surfaces; rake clean other surfaces of the grounds.
- D. Prior to final completion, or Owner occupancy, Contractor shall conduct an inspection of sight-exposed interior and exterior surfaces, and all work areas, to verify that the entire Work is clean.

* * *

SECTION 01720: PROJECT RECORD DOCUMENTS

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 General: Maintenance of Documents:
 - A. Maintain at job site one copy of: Contract Drawings; Specifications; Addenda; Reviewed Shop Drawings; Change Orders; Other Modifications to Contract; Field Test Records. Also keep Louisiana State Fire Marshall's approved contract documents in temporary field office; documents furnished to Contractor by A/E or Owner.
 - B. Store documents in temporary field office, apart from documents used for construction.
 - C. Provide files and racks for storage of documents.
 - D. Maintain documents in clean, dry, legible condition.
 - E. Do not use record documents for construction purposes.
 - F. Make documents available at all times for inspection by A/E and Owner.
- 1.3 Marking Devices: Provide felt waterproof marking pens for all markings.
- 1.4 Recording:
 - A. Label each document "PROJECT RECORD" in printed letters.
 - B. Keep record documents current.
 - C. Do not permanently conceal any work until required information has been recorded.
 - D. Project Record Drawings: Legibly mark Contract Drawings to record actual construction:
 - 1. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements. Locate underground bends, cleanouts, connections, branches, valves, cut-offs or stops, end of sewers, etc. by offset distances from buildings only. Note all invert elevations of the storm and sanitary sewer systems.
 - 2. Location of new and/or relocated internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.
 - 3. Field changes of dimension and detail.
 - 4. Changes made by Change Order or Field Order.
 - 5. Details not on original Contract Drawings.
 - E. Specifications and Addenda: Legibly mark each Section to record:
 - 1. Manufacturer, trade name, catalog number, and Supplier of each Product and item of equipment actually installed.
 - 2. Changes made by Change Order or Field Order.

- F. Shop Drawings: Maintain as record documents; legibly annotate drawings to record any changes made after review.

1.5

Submittal:

- A. Prior to each pay request, present project record documents for review by A/E. Documents shall be annotated as required herein to include those portions of work of which payment is requested. Failure to have properly maintained Project Documents will be considered as incomplete work.
- B. At Contract close-out, deliver record documents to A/E. Provide 2 copies of the Project Record Drawings; 1 copy of other required record documents.
- C. Accompany submittal with transmittal letter containing:
 - 1. Date
 - 2. Project title and number.
 - 3. Contractor's name and address.
 - 4. Title and number of each record document.
 - 5. Signature of Contractor or his authorized representative.

* * *

SECTION 01730: OPERATING AND MAINTENANCE DATA

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Special, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 General:
- A. Compile product data and related information appropriate for Owner's maintenance and operation of products furnished under the Contract. Prepare operating and maintenance data as specified in this Section and as referenced in other pertinent sections of Specifications.
 - B. Instruct Owner's personnel in the maintenance of products and in the operation of equipment and systems.
- 1.3 Quality Assurance: Preparation of data shall be done by personnel trained and experienced in maintenance of products and in the operation of equipment and systems.
- 1.4 Form of Submittals:
- A. Prepare data in the form of an instructional manual for use by Owner's personnel.
 - B. Format:
 - 1. Size: 8 1/2 inches x 11 inches.
 - 2. Paper: White, for typed pages.
 - 3. Text: Manufacturer's printed data, or neatly typewritten.
 - 4. Drawings: Provide reinforced punched binder tab, bind in with text. Fold larger drawings to the size of the text pages.
 - 5. Provide fly-leaf for each separate product, or each piece of operating equipment. Provide typed description of product; and major component parts of equipment. Provide indexed tabs.
 - 6. Cover: Identify each volume with typed or printed title "OPERATING AND MAINTENANCE INSTRUCTIONS". List title of Project, identity of separate structure as applicable, identity of general subject matter covered in the manual.
 - C. Binders: Commercial quality three-ring binders with durable and cleanable plastic covers. When multiple binders are used, correlate the data into related consistent groupings.
- 1.5 Contents of Manual:
- A. Neatly typewritten table of contents for each volume, arranged in a systematic order.
 - 1. Contractor, name of responsible principal, address, and telephone number.
 - 2. A list of each product required to be included, indexed to the content of the volume.

3. List, with each product, the name, address, and telephone number of subcontractor or installer, maintenance contractor, as appropriate. Identify the area of responsibility of each and identify the local source of supply for parts replacement.
 4. Identify each product by product name and other identifying symbols as set forth in Contract Documents.
- B. Product Data: Include only those sheets which are pertinent to the specific product. Annotate each sheet to clearly identify the specific product or part installed and the data applicable to the installation. Delete references to inapplicable information.
 - C. Drawings: Supplement product data with drawings as necessary to clearly illustrate relations of component parts of equipment and systems, control and flow diagrams. Coordinate drawings with information in Project Record Documents to assure correct illustration of completed installation. Do not use Project Record Documents as maintenance drawings.
 - D. Written text, as required to supplement product data for particular installation. Organize in a consistent format under separate headings for different procedures. Provide a logical sequence of instructions for each procedure.
 - E. Provide a copy of each warranty, bond, and service contract issued. Provide information sheet for Owner's personnel, giving proper procedures in the event of failure and instances which might affect the validity of warranties or bonds.

1.6 Manual for Materials and Finishes:

- A. Content, for Architectural Products, Applied Materials, and Finishes:
 1. Manufacturer's data, giving full information on products. Catalog number, size, composition. Color and texture designations. Information required for re-ordering special manufactured products.
 2. Instructions for Care and Maintenance: Manufacturer's recommendation for types of cleaning agents and methods. Cautions against cleaning agents and methods which are detrimental to the product. Recommended schedule for cleaning and maintenance.
- B. Provide complete information for products specified in the respective sections of Specifications.

1.7 Manual for Equipment and Systems:

- A. Content, for Each Unit of Equipment and Systems (as appropriate):
 1. Description of Unit and Component Parts: Function, normal operating characteristics, and limiting conditions. Performance curves, engineering data, and tests. Complete nomenclature and commercial number of all replaceable parts.

2. Operating Procedures: Start-up, break-in, routine, and normal operating instructions. Regulation, control, stopping, shut-down, and emergency instructions. Summer and winter operating instructions. Special operating instructions.
 3. Maintenance Procedures: Routine operations. Guide to "trouble-shooting". Disassembly, repair, and reassembly. Alignment, adjusting, and checking.
 4. Servicing and lubrication schedule. List of lubricants required.
 5. Manufacturer's printed operating and maintenance instructions. Original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
 6. As-installed control diagrams and description of sequence of operation by controls manufacturer.
 7. Each contractor's coordination drawings and as-installed color coded piping diagrams.
 8. Charts of valve tag numbers, with the location and function of each valve.
 9. Other data as required under pertinent sections of Specifications.
- B. Content, for Each Electric and Electronic System (as appropriate):
1. Operating characteristics, and limiting conditions. Performance curves, engineering data, and tests. Complete nomenclature and commercial number of replaceable parts.
 2. Circuit directories of panelboards. Electrical service. Controls. Communications.
 3. As-installed color coded wiring diagrams.
 4. Operating Procedures: Routine and normal operating instructions. Sequences required. Special operating instructions.
 5. Maintenance Procedures: Routine operations. Guide to "trouble-shooting". Disassembly, repair, and reassembly. Adjustment and checking.
 6. Manufacturer's printed operating maintenance instructions.
 7. Other data as required under pertinent sections of Specifications.
- C. Prepare and include additional data when the need for each data becomes apparent during instruction of Owner's personnel.
- D. Provide complete information for products specified in the respective section of Specifications.

1.8

Submittal Schedule:

- A. Submit one (1) copy of preliminary draft of proposed format and outline of contents prior to start of work. A/E will review draft and return copy with comments.
- B. Submit one (1) copy of completed data in final form 15 days prior to anticipated date of Substantial Completion. Copy will be returned with comments.

- C. Submit three (3) hard copies and one (1) electronic copy on CD of approved data in final form at Contract Closeout.

1.9

Instruction of Owner's Personnel:

- A. Prior to final inspection or acceptance, fully instruct Owner's designated operating and maintenance personnel in the operation, adjustment, and maintenance of all products, equipment, and systems.
- B. Operating and maintenance manual shall constitute the basis of instruction. Review contents of manual with personnel in full detail to explain all aspects of operations and maintenance.

* * *

SECTION 01740: WARRANTIES AND BONDS

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Special, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 General:
 - A. Compile specified warranties, bonds, and service and maintenance contracts. Co-execute submittals when so specified.
 - B. Review submittals to verify compliance with Contract Documents.
 - C. Submit to A/E for review and transmittal to Owner.
- 1.3 Submittal Requirements:
 - A. Assemble warranties, bonds, and maintenance manuals, executed by each of the respective manufacturers, suppliers, and subcontractors.
 - B. Number of original signed copies required: Two each.
 - C. Table of Contents: Neatly typed, in orderly sequence. Provide complete information for each item.
 - 1. Product or work item.
 - 2. Firm, with name of principal, address, and telephone number.
 - 3. Scope.
 - 4. Date of beginning and duration of warranty, bond, or service and maintenance contract.
 - 5. Provide information for Owner's personnel giving proper procedure in case of failure and instances which might affect the validity of warranty or bond.
 - 6. Contractor, name of responsible principal, address, and telephone number.
- 1.4 Form of Submittals:
 - A. Prepare in duplicate packets.
 - B. Format:
 - 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8 -1/2 inches x 11 inches paper. Fold larger sheets to fit into binders.
 - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
 - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES", Project name, and name of Contractor.

4. Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide table of contents at beginning of document.
- C. Provide additional copies of each warranty to include in operation and maintenance manuals.

1.5

Time of Submittals

- A. Make submittals at Contract close-out, prior to final request for payment.
- B. For items of Work where acceptance is delayed beyond the Date of Project Acceptance, provide updated submittal within ten days after acceptance of the delayed items of work, listing the date of acceptance of the delayed items of work as the start of the warranty period.
- C. Submit written warranties on request of A/E for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
 1. In accordance with Louisiana State Law (LSA-R.S. 9:2774) the commencement date for ALL warranties or guarantees of every nature or kind shall be the date of responsibility to ensure that all written warranties include this commencement time. Also, in accordance with LSA-R.S. 9:2774 the provision of this Section shall not be subject to waiver by contract.

1.6

Submittals Required: Submit warranties, bonds, service and maintenance contracts as specified in the respective sections of Specifications.

* * *

SECTION 02051: SITE DEMOLITION

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 Scope of Work: Furnish all labor, materials, equipment, and incidentals required for demolition and disposal of existing obstructions to the installation of new pipelines and to other work. Obstructions may include but are not limited to existing structures, foundations, slabs, mechanical, electrical, and miscellaneous appurtenances encountered during construction operations.
- 1.3 General: These specifications call attention to certain activities necessary to maintain and facilitate operation during and immediately following construction and do not purport to cover all of the activities necessary.
- 1.4 Rules and Regulations:
- A. The Building Code of the appropriate governing body shall control the demolition or alteration of the existing buildings, or appurtenances.
 - B. No building, structure, or appurtenance, or any part thereof, shall be demolished until an application has been filed by the Contractor with the Building Inspector, and a permit issued. The fee for this permit shall be the Contractor's responsibility.
- 1.5 Traffic and Access:
- A. Conduct demolition and removal operations to ensure minimum interference with roads, streets, walks, both on site and off site, and to ensure minimum interference with occupied or used facilities.
 - B. Do not close or obstruct streets, walks, or other coupled or used facilities without permission from the A/E. Provide alternate routes around closed or obstructed traffic access ways.
- 1.6 Protection: Conduct operations to minimize damage by falling debris or other causes to adjacent buildings, structures, roadways, and other facilities, including persons. Provide interior and exterior shoring, bracing, or support to prevent movement, settlement, or collapse of structures to be demolished and adjacent facilities to remain.
- 1.7 Damage: Promptly repair damage caused to adjacent facilities by demolition operations as directed by the A/E at no cost to the Owner.

- 1.8 Utilities:
- A. Maintain existing utilities as directed by the A/E to remain in service and protect against damage during demolition operations.
 - B. Do not interrupt existing utilities serving occupied or used facilities, except when authorized by the A/E. Provide temporary services during interruptions to existing utilities as acceptable to the A/E.
 - C. The Contractor shall cooperate with the Owner to shut off utilities serving structures of the existing facilities as required by demolition operations.
 - D. The Contractor shall be solely responsible for making all necessary arrangements and for performing any necessary work involved in connection with the discontinuance, re-routing, and/or interruption of all public and private utilities or services under the jurisdiction of the utility companies.
 - E. All utilities being abandoned shall be disconnected and terminated at the service mains in conformance with the requirement of the utility companies or the governing body owning or controlling them.

1.9 Extermination: If required, before starting demolition, employ a certified rodent and vermin exterminator and treat the facilities in accordance with governing health laws and regulations.

- 1.10 Pollution Control:
- A. For pollution control, use water sprinkling, temporary enclosures, and other suitable methods as necessary to limit the amount of dust and dirt rising and scattering in the air to the lowest level of air pollution practical for the condition of work. Comply with the governing regulations.
 - B. Clean adjacent structures and improvements of all dust, dirt, and debris caused by demolition operations as directed by the A/E. Return areas to conditions existing prior to the start of work.

PART 2: PRODUCTS (NOT USED)

PART 3: EXECUTION

3.1 Items to be Demolished: Remove and dispose of all items shown on the Drawings or where necessary for the construction of new work.

3.2 Backfill: Cavities or trenches left by demolition, removal, and disposal work shall be backfilled to the level of the surrounding ground and compacted to a minimum of 95% density or as approved by A/E.

3.3 Disposal of Material:

- A. Demolished material shall become the Contractors property and must be removed from the site.

- B. The storage or sale of removed items on the site will not be allowed.
- C. Any equipment and material specified to remain the property of the Owner shall be removed and delivered to a location as designated by the Owner. Equipment and material not retained by the Owner shall become the property of the Contractor and shall be removed from the site by him.

3.4 Salvage Schedule: None.

* * *

SECTION 02114: TEMPORARY EROSION CONTROL

PART 1: GENERAL:

- 1.1 Related Documents: Section 204 of the Louisiana Standard Specifications for Roads and Bridges, 2016 edition, and latest revisions, is amended as follows:

Subsection 204.07, Construction Requirements: Heading (k), Maintenance of Erosion Control Features. The first paragraph is deleted and the following substituted.

The Contractor shall be responsible for complying with all Federal, State and Local Laws and Policies and shall obtain all necessary and applicable Permits.

- 1.2 Summary of Work: The Contractor shall furnish, inspect and maintain temporary erosion control devices as described below or replace as directed at no direct pay.
- A. Temporary Seeding: The seeded areas shall be inspected after each rainfall. Area showing erosion shall be reseeded if necessary.
 - B. Mulches: The mulched areas shall be inspected after each rainfall and the mulch shall be repaired or reapplied if necessary.
 - C. Straw or Hay Bale Barriers: The bale barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. Close attention shall be paid to the repair of damaged bales, "end runs" and undercutting beneath bales.
 - D. Slope Drains: Slope Drains shall be inspected weekly and after every rainfall and repairs made if necessary. The Contractor shall avoid the placement of any material on and prevent construction traffic across the slope drain.
 - E. Sediment Check Dams: The check dams shall be inspected after each rainfall and sediment shall be removed when it reaches one-half the height of the check dam. Inspections shall be made to insure that the center of the dam is lower than the edges. Erosion around the edges shall be corrected immediately.
 - F. Silt Fencing: Sediment deposits shall be removed after each rainfall and must be removed when the deposits reach approximately one-half the height of the fence. If the fabric on the silt fence decomposes or becomes ineffective, the fabric shall be replaced promptly.
 - 1. Temporary Stone Construction Entrance and/or Wash Racks: The gravel on the construction entrance shall be maintained to allow for removal of mud from the tires. The sediment from the wash rack runoff shall be removed periodically.

2. Contractor shall obtain Storm Water Discharge Permit from Louisiana Department of Environmental Quality.

* * *

SECTION 02210: GRADING

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 Scope of Work: Furnish all materials, labor and equipment for the installation of fill, grading, excavation, compacting, disposal of surplus materials and restoration of existing surfaces as indicated on the Drawings or specified elsewhere herein. Provide all necessary supplementary items for a complete installation intended by documents.
- 1.3 Protection:
- A. Maintain carefully all benchmarks, monuments, and other reference points. If disturbed or destroyed, replace as directed. If found at variance with the Drawings, notify the A/E before proceeding to lie out Work.
 - B. Protect as may be necessary any existing vegetation, trees, or the like immediately adjacent to the limits of Work which are not stated or directed to be removed. Any such damaged plant shall be replaced at no cost to Owner with like species and size.
 - C. In the event any excavation must be made immediately adjacent to the existing portion of buildings, covered walks or other Work, which is to remain, thoroughly crib and shore. Any settling or damage to that portion of the existing Work which is to remain, as a direct result of excavation Work, will be the responsibility of Contractor who shall repair the damage at no cost to Owner.
 - D. Restore all existing curbs and paving damaged in performance of this Work without extra cost to Owner in the manner prescribed by authorities having jurisdiction.
 - E. Protect all existing fencing and other work to remain, from damage. If damaged, restore or replace at no additional cost to Owner.
 - F. Where trees are to be left in place in areas to be graded, adequately protect from damage. Natural surface of ground shall be left undisturbed to the drip line of the existing trees.
- 1.4 Existing Utilities:
- A. Follow rules and regulations of the authority having jurisdiction in executing all Work under this article. Adequately protect active utilities shown on the Drawings from damage and remove or relocate only as indicated or specified. Where active utilities are encountered, but are not shown on the Drawings, advise the A/E.

- B. Locate existing underground utilities in areas of work. If utilities are to remain in place, provide adequate means of support and protection during earthwork operations.
- C. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult utility owner immediately for directions. Cooperate with Owner and utility companies in keeping respective services and facilities operation. Repair damaged utilities to satisfaction of utility owner.
- D. Do not interrupt existing utilities serving facilities occupied and used by Owner or others, except when permitted in writing by A/E and then only after acceptable temporary utility services have been provided.
- E. Provide minimum of 48-hour notice to A/E, and receive written notice to proceed before interrupting any utility. Contractor shall be responsible for notifying applicable agency.
- F. Demolish and completely remove from site existing underground utilities indicated to be removed. Coordinate with utility companies for shut-off of services if lines are active.
- G. Remove, plug or cap inactive and abandoned utilities encountered in excavating and grading operations as directed.

1.5

Compaction Standards:

- A. Densities: Required densities of compaction are expressed hereinafter in terms of percentages. Such terms shall mean percentages of maximum density at optimum moisture content, as determined and controlled in accordance with the American Society of Testing and Materials, "Standard Test Methods for Moisture - Density Relationships of Soils and Soil - Aggregate Mixtures" using 5.5 lb. (2.49 kg) Rammer and 12 inch (305mm) Drop.
- B. Field density determinations shall be made at locations as directed by the A/E.
- C. If tests indicate insufficient density, compact as required and have additional testing performed until required densities are met. The Contractor shall pay for all such additional testing.

1.6

Quality Assurance:

- A. Testing Agency: In-place soil compaction tests to be performed by the designated testing laboratory.
- B. Reference Standards:
 - 1. Granular Material Reference Standards:
 - a. American Society for Testing and Materials (ASTM) D698-78, Moisture-Density Relations of "Soils Using 5.5-lb. (2.49-kg) Hammer and 12-in. (305-mm) Drop.
 - b. ASTM D 2487, Classification of Soils for Engineering Purpose.
 - 2. Bedding Material Reference Standards:
 - a. American Society for Testing and Materials (ASTM) D4253 for Moisture-Density Relations.

- b. ASTM D4254 for calculation of relative density.
- C. Contractor is responsible for the payment of all retests.

1.7 Job Conditions: Existing conditions are generally shown on the Drawings. Contractor shall visit the site, familiarize himself with actual conditions and verify existing conditions in the field. The Contractor is required to accept actual conditions at the site and do the Work specified without additional compensation for possible variation from grades and conditions shown, whether surface or sub-surface.

PART 2: PRODUCTS

2.1 Granular Material: Fill shall be AASHTO A-2-4 or better or clean sand well graded from fine to coarse, free of debris, organic or other deleterious matter and approved by A/E. A/E shall approve all fill materials. Legally remove from site, stockpile on site, or waste over lawn areas as directed any material found unsuitable by A/E.

2.2 Topsoil: For final grading of areas adjacent to structure, use existing. Provide topsoil from off-site borrows when on-site topsoil:

- A. Is not sufficient to complete the work.
- B. Does not meet the requirements set forth below, or
- C. Is deemed unsuitable by A/E.

Topsoil shall be free from slag, cinders, stones, lumps of soil, sticks, trash or other material over 1-1/2 inches diameter. Topsoil shall be free from viable plants and plant parts. Topsoil shall also be free from debris, noxious weeds, toxic substances, or other materials harmful to plant growth. Topsoil shall have a minimum PI of 4, a maximum PI of 12, a pH of 5.5-8.0, a minimum organic content of 2%, and shall be capable of supporting adequate vegetation. Pump sand may not be used for topsoil under any circumstances.

PART 3: EXECUTION

3.1 Preparation:

- A. Lay out and maintain grade stakes as required. Reference layout work to base lines, property lines, easements, and/or rights-of-way as indicated.
- B. Where new grades tie into existing grades, verify existing grades. If existing conditions are at variance with the Drawings, notify A/E before proceeding with the Work and make adjustments only as directed by the A/E.
- C. The Contractor shall verify that preceding work affecting work of this section has been satisfactorily completed.
- D. Correct conditions adversely affecting work of this section.

- 3.2 Stripping and Stockpiling of Topsoil: Carry out this Work when dry weather exists and the topsoil is reasonably loose and dry. Remove topsoil a minimum of four (4") inches to remove all vegetation, roots, and foreign matter, from areas to receive fill. Pile topsoil in designated or approved locations where it will not interfere with construction operations. Stockpiles shall be of such size and shape as will keep loss of topsoil by erosion and wind to a minimum.
- 3.3 Disposal of Materials:
- A. Excavated material shall be stacked without excessive surcharge on the excavation or obstructing free access to street, drives, walks, utility appurtenances, and private property. Excessive inconvenience to traffic and adjacent property owners shall not be allowed. Excavated material shall be segregated for use in topsoil as specified below.
 - B. All excavated material which is either unsuitable for topsoil or which will not be used for topsoil in the same location shall be legally removed from the site by the Contractor.
- 3.4 Excavation:
- A. Excavated areas shall be cleared of all debris, water, slush, muck, and soft or loose earth and shall be conditioned to the entire satisfaction of the A/E.
 - B. All material excavated shall be placed so as to minimize interference with public travel and to permit proper access for inspection of the work.
 - C. Stumps, roots, and logs, which are encountered within the excavated area, shall be cut to a depth of one (1') foot below the required excavation. The Contractor shall fill this excavated space with granular material.
 - D. The Contractor shall probe one (1') foot below the established bottom on the excavation. If this probing discovers any stump, roots, logs, etc., the Contractor shall cut them out just as if they had been visible in the trench.
 - E. Blasting will not be allowed for the removal of stumps.
- 3.5 Site Grading:
- A. Execute all Work in an orderly and careful manner with due consideration for any and all surroundings areas and planting which are to remain. Periodically water as required to allay dust and dirt. Protect any adjacent property and improvements from damage and replace any portions damaged through this operation.
 - B. Finish grade all areas affected by Work of this project. Accomplish proper and positive surface drainage with no areas that pond water. Provide a sloping earth berm around all construction of this project and swales as required for positive drainage.

- C. Do all cutting, filling, compaction of fills, and rough grading to bring the entire project area outside of construction to grades indicated on the Drawings and as required to provide proper and positive drainage away from construction.
- D. Where fill is required to rise the existing grades outside of construction to the new elevation required or indicated, place and compact such fill as specified.
- E. Remove all debris subject to termite attack, rot, or corrosion, and all other deleterious materials from areas to be filled. The moisture content of the loosened material shall be such that it will readily bond with the first layer of fill material.
- F. Place the material in successive horizontal layers in loose depth for the full width of the cross section. Deposit fill in layers not more than nine (9") inches thick under lawn and planted areas. If necessary, moisten soil, or allow to dry to the correct moisture content, before compaction. Do not deposit any fill on a subgrade that is muddy, frozen, or that contains frost.
- G. Compact fills under lawns and planting areas to 95% density unless otherwise specified.

3.6 Distribution of Topsoil: Spread stockpiled topsoil that is acceptable to A/E to a depth of four (4") inches over open graded areas to be planted with grass, seeded, or where required elsewhere. After topsoil is spread, remove all hard lumps of clay, stones over one (1") inch in diameter, roots, limbs, and other deleterious matter, which would be harmful, or prevent proper establishment or maintenance of lawn and planting areas.

3.7 Field Quality Control:

- A. Rough grading of all areas within the project, including excavated and filled sections and adjacent transition areas, shall be reasonably smooth, compacted, and free from irregular surface changes.
- B. Finish all swales and gutters to drain readily, unless otherwise indicated; evenly slope the grade to provide drainage toward public drainage system or as indicated elsewhere at a grade not less than 1/2" to 3/4" per foot or more than two (2") inches per foot.
- C. Tolerances of topsoil shall be within 1/2" of grades required.

3.8 Repair: Where any existing lawn areas are damaged, rutted, or otherwise disturbed, repair to original condition.

3.9 Disposal: Burning of materials on the site will not be permitted. Legally remove rubbish and debris from the site as it accumulates.

* * *

SECTION 02220: EXCAVATING, BACKFILLING, AND COMPACTING FOR
STRUCTURES AND MINOR UTILITIES AND PAVING

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 Scope of Work: Furnish all necessary materials, labor and equipment for the complete earthwork for construction of foundations for structures, paving, utilities and appurtenances, including excavation, backfilling, filling, compacting, disposal of surplus material and restoration of ground surfaces, as shown on the drawings and specified herein. Provide all necessary supplementary items for a complete installation intended by documents.
- 1.3 Provisions:
- A. Existing conditions are generally shown on the Drawings. Contractor shall visit the site, familiarize himself with actual conditions and verify existing conditions in the field. The Contractor is required to accept actual conditions at the site and do the Work specified without additional compensation for possible variation from grades and conditions shown, whether surface or sub-surface.
 - B. Execute all Work in an orderly and careful manner with due consideration for any and all surroundings areas and planting which are to remain. Periodically water as required to allay dust and dirt. Protect any adjacent property and improvements from damage and replace any portions damaged through this operation.
 - C. Finish grade all areas affected by Work of this project. Accomplish proper and positive surface drainage with no areas that pond water. Provide a sloping earth berm around all construction of this project and swales as required for positive drainage.
- 1.4 Protection:
- A. Maintain carefully all benchmarks, monuments, and other reference points. If disturbed or destroyed, replace as directed. If found at variance with the Drawings, notify the A/E before proceeding to lie out Work.
 - B. Protect as may be necessary any existing vegetation, trees, or the like immediately adjacent to the limits of Work which are not stated or directed to be removed. Any such damaged plant shall be replaced at no cost to Owner with like species and size.

- C. In the event any excavation must be made immediately adjacent to the existing portion of buildings, covered walks or other Work, which is to remain, thoroughly crib and shore. Any settling or damage to that portion of the existing Work which is to remain, as a direct result of excavation Work, will be the responsibility of Contractor who shall repair the damage at no cost to Owner.
- D. Restore all existing curbs and paving damaged in performance of this Work without extra cost to Owner in the manner prescribed by authorities having jurisdiction.
- E. Protect all existing fencing and other work to remain, from damage. If damaged, restore or replace at no additional cost to Owner.
- F. Where trees are to be left in place in areas to be graded, adequately protect from damage. Natural surface of ground shall be left undisturbed for a distance of eight feet from tree on all sides except as approved or directed by A/E.

1.5

Existing Utilities:

- A. Follow rules and regulations of the authority having jurisdiction in executing all Work under this article. Adequately protect active utilities shown on the drawings from damage and remove or relocate only as indicated or specified. Where active utilities are encountered, but are not shown on the drawings, advise the A/E.
- B. Locate existing underground utilities in areas of work. If utilities are to remain in place, provide adequate means of support and protection during earthwork operations.
- C. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult utility owner immediately for directions. Cooperate with Owner and utility companies in keeping respective services and facilities operational. Repair damaged utilities to satisfaction of utility owner.
- D. Do not interrupt existing utilities serving facilities occupied and used by Owner or others, except when permitted in writing by A/E and then only after acceptable temporary utility services have been provided.
- E. Provide minimum of 48-hour notice to A/E, and receive written notice to proceed before interrupting any utility. Contractor shall be responsible for notifying applicable agency.
- F. Demolish and completely remove from site existing underground utilities indicated to be removed. Coordinate with utility companies for shut-off of services if lines are active.
- G. Remove, plug or cap inactive and abandoned utilities encountered in excavating and grading operations as directed.

1.6

Compaction Standards:

- A. Densities for Materials:
 - 1. Granular Material, Topsoil and Excavation Materials Densities: Required densities of compaction are expressed hereinafter in terms of percentages. Such terms shall mean percentages of

maximum density at optimum moisture content, as determined and controlled in accordance with the American Society For Testing and Materials, "Standard Test Methods for Moisture - Density Relationships of Soils and Soil - Aggregate Mixtures" using 5.5 lb. (2.49kg) Hammer and 12 inch (305mm) Drop. Use relative density test for the bedding material.

2. Bedding Material Densities: Standard Test Methods for Moisture Density Relationships of Soils and Soil-Aggregate Mixtures.
 3. Base Course Densities: Standard Test Methods for Laboratory Compaction Characteristics of Soil using Standard Effort (12,400 ft-lb/ft³)
- B. Field density determinations shall be made at locations as directed by the A/E.
- C. If tests indicate insufficient density, compact as required and have additional testing performed until required densities are met. The Contractor shall pay for all such additional testing.

1.7 Quality Assurance:

- A. Testing Agency: In place soil compaction tests to be performed by the designated testing laboratory.
- B. Reference Standards:
1. American Society for Testing and Materials (ASTM):
 - a. ASTM D698-07, Moisture-Density Relations of Soils Using 5.5-lb. (2.49-kg) Rammer and 12-in 305-mm) Drop.
 - b. ASTM D 2487, Classification of Soils for Engineering Purpose.
- C. Contractor is responsible for the payment of all retests.

1.8 Job Conditions:

- A. Time of construction should be kept to a minimum.
- B. Sheet piling, shoring, and dewatering during construction should be properly designed to keep a stable excavation at all times and to prevent disturbance of the in place soils.
- C. As specified in these Specifications, the Contractor shall provide, operate, and maintain all necessary pumps, discharge lines, well points, etc., in sufficient number and capacity to keep all excavation, bases, pits, etc. in conformance with the indicated foundation construction condition at each structure at all times throughout the period of construction.
- D. As specified in these Specifications, the Contractor shall assume all responsibility for security of the excavation required, employing bracing, lining, or other accepted means necessary to accomplish same.

- E. Excavated areas shall be cleared of all debris, water, slush, muck, and soft or loose earth and shall be conditioned to the entire satisfaction of the A/E.
- F. All excavated material unsuitable for use, or which will not be used, shall be disposed of as specified.
- G. All excavations encountering stumps, roots, logs, etc. shall be removed of such items by the Contractor and refilled with proper material, as specified.

PART 2: PRODUCTS

- 2.1 Granular Material: Fill shall be AASHTO A-2-4 or better or clean sand well graded from fine to coarse, free of debris, organic or other deleterious matter and approved by A/E.
- 2.2 Topsoil: For final grading of areas adjacent to structure, use existing. Provide topsoil from off-site borrows when on-site topsoil:
 - A. Is not sufficient to complete the work.
 - B. Does not meet the requirements set forth below, or
 - C. Is deemed unsuitable by A/E.

Topsoil shall be free from slag, cinders, stones, lumps of soil, sticks, trash or other material over 1-1/2 inches diameter. Topsoil shall be free from viable plants and plant parts. Topsoil shall also be free from debris, noxious weeds, toxic substances, or other materials harmful to plant growth. Topsoil shall have a minimum PI of 4, a maximum PI of 12, a pH of 5.5-8.0, a minimum organic content of 2%, and shall be capable of supporting adequate vegetation. Pump sand may not be used for topsoil under any circumstances.

- 2.3 Bedding Material: Material shall be limestone and from a source approved by the Owner. Graded aggregate for 16 inch or less pipes shall be No. 67. Graded aggregate for 18 inch or greater pipes shall be No. 57.

The limestone shall meet the following gradations when tested in accordance with DOTD TR 113:

<u>U.S. Sieve</u>	<u>#57</u> <u>Percent</u>	<u>#67</u> <u>Percent</u>
1 1/2"	100	---
1"	95 - 100	100
3/4"	---	90 - 100
1/2"	25 - 60	---
3/8"	C	20 - 55
#4	0 - 10	0 - 10
#8	0 - 5	0 - 5

The limestone shall have an absorption rate of not more than 1.5 percent and an abrasion loss of not more than 30 percent when tested in accordance with test method AASHTO T96.

2.4 Select Backfill Material (for Utility Trenching):

- A. Composition: Only approved material shall be used for backfill, free from organic matter. Excavated earth free from debris or organic material may be used for backfilling, as specified.
- B. Excavated clay soils free of debris, organic material, or large lumps of clay shall be used only when indicated by geotechnical recommendations, when available.

2.5 Base Course: Unless otherwise noted, material shall be crushed stone in accordance with LA DOTD Standard Specification, Section 1003-03(b), 2016 Edition.

PART 3: EXECUTION

3.1 Preparation:

- A. Lay out and maintain grade stakes as required. Reference layout work to base lines, property lines, easements, and/or rights-of-way as indicated.
- B. Where new grades tie into existing grades, verify existing grades. If existing conditions are at variance with the Drawings, notify A/E before proceeding with the Work and make adjustments only as directed by the A/E.
- C. The Contractor shall verify that preceding work affecting work of this section has been satisfactorily completed.
- D. Correct conditions adversely affecting work of this section.

3.2 Stripping and Stockpiling of Topsoil: Carry out this Work when dry weather exists and the topsoil is reasonably loose and dry. Remove topsoil a minimum of four (4) inches to remove all vegetation, roots, foreign matter, from areas to receive fill. Pile topsoil in designated or approved locations where it will not interfere with construction operations. Stockpiles shall be of such size and shape as will keep loss of topsoil by erosion and wind to a minimum.

3.3 Disposal of Materials:

- A. Excavated material shall be stacked without excessive surcharge on the excavation or obstructing free access to street, drives, walks, utility appurtenances, and private property. Excessive inconvenience to traffic and adjacent property owners shall not be allowed. Excavated material shall be segregated for use in topsoil as specified below.

- B. All excavated material which is either unsuitable for topsoil or which will not be used for topsoil in the same location shall be removed from the site by the Contractor.
- C. Should conditions make it impractical or unsafe to stack material adjacent to the excavation, the material shall be hauled and stored at a location provided by the Contractor. When required, it shall be rehandled and used in backfilling the excavation.

3.4

Excavation:

- A. Excavation shall extend to the width and depth shown on the drawings or as specified. Where not specified, Contractor shall confine his excavation to the least width practicable and shall provide suitable room for installing structures and appurtenances.
- B. The Contractor shall furnish and place all sheeting, bracing, and supports and shall remove from the excavation all materials which are unsuitable for backfill or which the A/E may deem unsuitable for backfilling. The bottom of the excavation shall be firm, dry, and in all respects, acceptable. The Contractor shall deposit bedding, or refill for excavation below grade, directly on the bottom of the excavation, immediately after excavation has reached the proper depth, and before the bottom has become softened or disturbed by any cause whatever. It shall also include the wasting or disposal of surplus excavated material in a manner and in locations approved by the A/E. If the bottom of the excavation is carried below the level called for by the Drawings, or made mucky or unstable due to the Contractor's operations or carelessness, the excavation shall be deepened to undisturbed soil. Also, the thickness of bedding material or depth of fill material, as determined by the A/E, shall be increased accordingly, without additional compensation to the Contractor.
- C. Shore, sheet-pile, and brace excavations as required to maintain them secure and to safeguard life. Remove shoring as the backfilling progresses, but only when banks are safe against caving or collapse and backfill meets required densities.
- D. Control the grading so that ground is etched to prevent water from running into the excavated areas or damaging the structures. Maintain all pits and trenches free of water at all times.
- E. Pumping: The Contractor shall keep all excavations free from water, at his own expense, while work is in progress. He shall provide for the disposal of the water removed from excavations in such a manner as not to cause injury to the public health, to public or private property, or to any portion of the work completed or in progress, or shall he cause any impediment to the use of the streets by the public.
- F. All material excavated shall be placed so as to minimize interference with public travel and to permit proper access for inspection of the work.

- G. All excavation shall be made within an area bounded by lines 5 feet outside of, and parallel to, exterior walls of the structure to allow for correct forming, shoring, and inspection of foundation work. Pouring of concrete against earth sidewalls will not be permitted.
- H. Where soil conditions permit, footing trenches may be excavated to the exact dimensions of the concrete footing and side form omitted.
- I. When bedding material is to rest on an excavated surface, care shall be taken not to disturb the bottom of the excavation. Final removal and replacement of the foundation material and sub base compaction to grade shall not be made until just before the structure is placed.
- J. When any excavation is completed, the contractor shall notify the A/E who will make an inspection of the excavation. No concrete or masonry shall be placed until the excavation has been approved by the A/E.
- K. The elevation of the bottoms of footings and base slabs, as shown on the drawings, shall be considered as approximate only and the A/E may order, in writing, such changes in dimensions or elevation of footings as may be necessary to secure a satisfactory foundation.
- L. Stumps, roots, and logs, which are encountered within the trench area, shall be cut to a depth of one (1) foot below the bottom of the excavation. The Contractor shall fill this excavated space with bedding material.
- M. When so required by the A/E, the contractor shall probe one (1) foot below the established bottom on the excavation. If this probing discovers any stump, roots, logs, etc., the Contractor shall cut them out just as if they had been visible in the excavation.
- N. Blasting will not be allowed for the removal of stumps.

3.5

Fill Under Slabs and Paving:

- A. Where fill is required to raise the subgrade for concrete placement to the elevations indicated, place and compact as specified.
- B. Before depositing fill, remove all loam, vegetation and other unsuitable material from areas to receive fill. In no case shall fill be placed on a subgrade that is muddy, frozen, or that contains frost. Compact subgrade by rolling with spreading equipment uniformly over entire area.
- C. Deposit fill material in horizontal layers not exceeding nine (9) inches in depth before compacting. Spread fill evenly and compact each layer by uniformly rolling, pneumatic tamping or other approved equipment over the entire area. If necessary, moisten fill or allow to dry to the correct moisture content before compaction.
- D. Bring the finished compacted areas to a reasonably true and even plane at the required elevations.
- E. Compact all fill to 95 percent density unless otherwise specified.

3.6

Utility Trench Backfilling:

- A. As soon as practicable after the utilities have been laid, jointed, and tested (if required), backfilling shall begin and completed expeditiously. Bedding shall conform to the details on the Drawings. When laying pipe, the groove for the pipe and bell hole must be accurately shaped, and the backfill must be closely packed adjacent to the pipe.
- B. Bedding material shall be placed and compacted as shown on the Drawings. All foundation lumber (i.e., planking, sills, and stringers in the trench bottom) shall be suitable for the purpose. Installation of foundation lumber and piling shall be in accordance with the Drawings.
- C. Bedding compaction shall consist of the placement in lifts not exceeding 12 inches and compacted by a drum roller or plate vibrating compactor. This mechanical compactor must make a minimum of two passes over every area of the bedding. Compacted bedding shall be enclosed in a filter fabric in areas that require a granular material backfill.
- D. Backfill around manholes, catch basins, area drains, and other structures shall be compacted by flooding. All backfill shall be compacted, especially under and over pipes connected to the manholes.
- E. All paved surfaces adjacent to backfilling operations shall be broomed and hose-cleaned immediately after backfilling. Dust control measures shall be employed at all times.
- F. Compact all bedding material to 75 percent relative density and granular material backfill to 95 percent density. Compact all select backfill material to 90 percent of maximum density.

3.7

Restoring Trench Surface:

- A. Where the trench occurs adjacent to paved streets, in shoulders or sidewalks, the Contractor shall thoroughly consolidate the backfill and shall maintain the surface as the work progresses. If settlement takes place, he shall immediately deposit additional fill to restore the level of the ground.
- B. The surface of any driveway, paving or other area which is disturbed by the trench excavation shall be restored by the Contractor to a condition at least equal to that existing before work began
- C. In sections where the pipeline passes through grassed areas, the Contractor shall regrade and reseed all disturbed areas to a condition at least equal to that existing before work began.

3.8

Site Grading:

- A. Do all cutting, filling, compaction of fills, and rough grading to bring the entire project area outside of construction to grades indicated on Drawings and as required to provide proper and positive drainage away from construction.

- B. Where fill is required to rise the existing grades outside of construction to the new elevation required or indicated, place and compact such fill as specified.
- C. Remove all debris subject to termite attack, rot, or corrosion, and all other deleterious materials from areas to be filled. The moisture content of the loosened material shall be such that it will readily bond with the first layer of fill material.
- D. Place the material in successive horizontal layers in loose depth for the full width of the cross section. Deposit fill in layers not more than nine (9) inches thick under lawn and planted areas. If necessary, moisten soil, or allow to dry to the correct moisture content, before compaction. Do not deposit any fill on a subgrade that is muddy, frozen, or that contains frost.
- E. Compact fills under lawns and planting areas to 95 percent density unless otherwise specified.

3.9 Distribution of Topsoil: Spread stockpiled topsoil that is acceptable to A/E to a depth of four (4) inches over open graded areas to be planted with grass. After topsoil is spread, remove all hard lumps of clay, stones over one (1) inch in diameter, roots, limbs, and other deleterious matter which would be harmful, or prevent proper establishment or maintenance of lawn and planting areas.

3.10 Field Quality Control:

- A. Rough grading of all areas within the project, including excavated and filled sections and adjacent transition areas, shall be reasonably smooth, compacted, and free from irregular surface changes.
- B. Finish all swales and gutters to drain readily.

3.11 Repair: Where any existing lawn areas are damaged, rutted, or otherwise disturbed, repair to original condition.

3.12 Disposal: Burning of materials on the site will not be permitted. Remove rubbish and debris from the site as it accumulates.

3.13 Barricades and Flares: The Contractor shall provide temporary fencing, barricades, flares, signs, etc., as necessary, to protect vehicles and pedestrians at locations where there exists an open excavation, trench, or any other obstacle. Barricades shall bear the Contractor's name and any other information required by the A/E or public authorities. Where on public roadways all barricade signs and flares shall be of a type and located in a manner that conforms to recommendations of the Louisiana Manual on Uniform Traffic Control Devices, latest edition as revised, or as specified herein, subject to the approval of the A/E.

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SECTION 02272: GEOTEXTILE FABRIC (FILTER CLOTH)

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 Scope of Work: Furnish all necessary materials, labor and equipment for the complete installation of geotextile fabric. Provide all necessary supplementary items for a complete installation intended by documents.
- 1.3 Submittals: The characteristics and properties of the geotextile fabric to be installed shall be submitted to the A/E prior to the installation of the fabric in accordance with Division 1.

PART 2: PRODUCTS

- 2.1 Materials: Geotextile fabric shall be manufactured and fabricated in strict conformance to ASTM and other industry standards.

A. Underdrains, Bedding, and around Pipe Joints:

<u>Fabric Property</u>	<u>Minimum Specifications</u>
1. Weight, ASTM D-3776-79	3.0 oz./sq. yd.
2. Equivalent Opening Size ASTM D-4751-87	50+
3. Average Grab Tensile, ASTM D-4632-86	90 lb./in.
4. Grab Elongation (any direction), ASTM D-4632-86	70%
5. Permittivity Factor, ASTM D-4491-85	0.8 sec ⁻¹

B. Under Base: The fabric shall be installed between the base and subbase layers.

<u>Fabric Property</u>	<u>Minimum Specifications</u>
1. Equivalent Opening Size	40+
2. Permittivity Factor, ASTM D-4491-85	0.2 sec ⁻¹
3. UV Radiation Stability, ASTM D-4355	70%
4. Grab Tensile Strength, ASTM D-4632-86	200 lb/in.
5. Grab Elongation, ASTM D-4632-86	30%
6. Puncture Resistance ASTM D-4833-88	85 lbs

7. Mullen Burst Strength
ASTM D-3786-87 400 psi

- 2.2 Approved Products:
- A. Underdrains, Bedding, and around Pipe Joints: Mirafi 140 NL, Mirafi 140 NS, Trevira 1112, or approved equal.
 - B. Under Base: Mirafi 500X, Mirafi 600X, Trevira 1135, or approved equal.
- 2.3 Manufacturer: The manufacturer of the geotextile fabric shall have been normally engaged in the manufacture or fabrication of this geotextile fabric for at least five (5) continuous years.
- 2.4 Fabrication: The geotextile fabric shall be furnished to the Contractor by the manufacturer as a continuous sheet in the widths required for installation in the trench. The length of each sheet shall be such that the total number of sheets to be joined in the field is minimized.

PART 3: EXECUTION

- 3.1 Handling:
- A. The Contractor shall handle and store the sheets in accordance with manufacturer's recommendations to avoid any damage to the sheets. Geotextile fabric shall be stored such that it is not exposed to sunlight.
 - B. Damaged geotextile fabric will not be acceptable for installation until and unless it has been replaced to the satisfaction of the A/E.
- 3.2 Installation:
- A. The geotextile fabric shall be installed in a prepared area as specified in the Specifications or as indicated on the Plans.
 - B. Manufacturer's recommendations shall be followed during the installation of the fabric. Care shall be taken during pipe laying, embedment and backfilling operations to avoid damage to the geotextile fabric. Any portion of the fabric damaged during installation shall be removed and replaced or repaired to the satisfaction of the A/E prior to continuing the installation of the geotextile fabric or pipe laying.
 - 1. Field Joints: The number of field joints shall be minimized. Lap joints shall be used to join sections in the field.
 - 2. Lap joints shall be formed by lapping the edges of the fabric sections a minimum of 18 inches.
 - C. Pipe joints shall be wrapped with geotextile filter cloth for a minimum of 12 inches on each side of the joint. Ends of the cloth shall be lapped at least 10 inches and edges and ends of the cloth shall be suitably secured.

- D. Underdrains: Completed trenches for perforated pipe shall be lined with filter cloth. Adjoining sheets of cloth shall be spliced by lapping at least 18 inches and satisfactorily securing, or by use of sewn or heat-bonded splices. A sufficient width of cloth shall be placed in the trench to permit the cloth to lap over the top of the trench for the full width of the trench.
- E. Bedding: Completed trenches for bedding material shall be lined with filter cloth, encapsulating the bedding material. Adjoining sheets of cloth shall be spliced by lapping at least 18 inches and satisfactorily securing, or by use of sewn or heat-bonded splices. A sufficient width of cloth shall be placed in the trench to permit the cloth to lap over the bedding material for the full width of the trench.
- F. Care shall be taken during placement of the cloth, pipe, bedding material, backfill, and other material to avoid damaging the filter cloth.
- G. The Contractor shall satisfactorily repair or replace any damaged filter cloth.

3.3 Field Quality Control: The Contractor is fully responsible for the installation of the geotextile fabric.

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SECTION 02510: CONCRETE WALKS

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract (General and Supplementary and other Conditions, Division 0) and Division 1 as appropriate, apply to work specified in this section.
- 1.2 Scope of Work: Furnish all necessary materials, labor and equipment for the complete installation of concrete walks, as shown on the drawings and specified herein. Provide all necessary supplementary items for a complete installation intended by documents.
- 1.3 Quality Assurance:
- A. Codes and Standards: Comply with local governing regulations if more stringent than herein specified.
 - B. Concrete formwork, reinforcing steel, and related items shall be in accordance with the following:
 - 1. ACI 304 "Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete"
 - 2. ACI 305 "Recommended Practice for Hot Weather Concreting"
 - 3. ACI 306R "Recommended Practice for Cold Weather Concreting"
 - 4. ACI 315 "Manual of Standard Practice for Concrete Formwork"
 - 5. ACI 318 "Building Code Requirements for Reinforced Concrete".
 - 6. Concrete Reinforcing Steel Institute, "Manual of Standard Practice".
 - 7. ASTM C33 "Concrete Aggregates"
 - 8. ASTM C150 "Portland Cement"
 - 9. ASTM C260 "Air Entraining Admixtures for Concrete"
 - 10. ASTM C94 "Ready-Mixed Concrete"
 - C. Mixing and Transporting Concrete: In accordance with "Specifications for Ready Mixed Concrete" (ASTM C 94) except complete discharge from the hauling containers within 60 minutes after the cement has been added to the aggregate and water in the mixer.
 - D. Allowable Tolerances: Flatwork true to plane 1/8 inch in 10 feet. No open paving shall pond water.
 - E. Testing:
 - 1. Laboratory shall prepare and furnish to the A/E, in triplicate, reports of concrete mix and all inspection and testing complete with summary of results. Laboratory also furnishes copy of all reports to the concrete supplier.
 - 2. Contractor shall furnish samples of the various materials and the concrete mix for laboratory test.

3. The required laboratory testing and control shall be as follows:
 - a. Prepare and furnish the concrete mixes to be used for all concrete on this job.
 - b. Test gradation of aggregate used in the concrete mix for compliance with the specifications.
 - c. Make concrete cylinders to perform compressions tests of cylinders taken from concrete used on the job. Make a minimum of 2 sets of cylinders per day or one set of cylinders per 50 yards, whichever is greater. Each set shall consist of 2 cylinders. Make compression tests at 7 days with both cylinders of each set.
 - d. Make minimum of 4 slump tests per day or one per 25 yards, whichever is greater.
4. If tests indicate insufficient concrete strength and if additional tests are ordered (cores, etc.), Contractor shall pay for such additional tests.

1.4 Submittals:

- A. Detailed shop drawings, showing layout, sizes, arrangements, bar supports, etc. for all reinforcing steel, joints, curbs, etc.
- B. Submit to A/E in writing concrete curing method for A/E approval.
- C. Furnish samples, manufacturer's product data and test reports.
- D. Submit in accordance with requirements of Division 1.

1.5 Storage of Materials: Store all paving related materials above ground on suitable supports and keeps free of foreign materials, corrosion, damage, etc.

PART 2: PRODUCTS

2.1 Materials:

- A. Forms: Steel, wood, or other suitable material of size and strength to resist movement during concrete placement and to retain horizontal and vertical alignment until removal. Use straight forms, free of distortion and defects.
 1. Use flexible spring steel forms or laminated boards to form radius bends as required.
 2. Coat forms with a non-staining form release agent that will not discolor or deface surface of concrete.
- B. Welded Wire Mesh: Welded plain cold-drawn steel wire fabric, ASTM A185, (70,000 psi yield point).
 1. Furnish in flat sheets, not rolls, unless otherwise acceptable to A/E.
- C. Reinforcing Bars: Deformed steel bars, ASTM A 615, Grade 60, (60,000 psi yield point).

- D. Joint Dowel Bars: Plain steel bars, ASTM A 615, Grade 40. Cut bars true to length with ends square and free of burrs.
- E. Tie Wire: Annealed steel, black, 16 gauge minimum.

2.2 Concrete: ASTM C 94. HIGH EARLY STRENGTH.

- A. Cement: Type I, ASTM C 150.
- B. Admixture:
 - 1. Water reducing Admixture: ASTM C 494, Type A: Eucon WR-75 by Euclid Chemical Co., Pozzolith 300 N by Master Builders, Plastocrete 160 by Silea Chemical Corporation or approved equal.
 - 2. Water Reducing, Retarding Admixture: ASTM C 494 Type D: Eucon Retarder 75 by Euclid Chemical Co., Pozzolith 300-R by Master Builders, Plastiment by Silea Chemical Co. or approved equal.
 - 3. Air Entraining: ASTM C 260, Master Builders MB-VR, Chem-Masters Adz-air, Glifford-Hill Air-Tite, or approved equal, at exterior paving only.
- C. Fine Aggregate: Sand, ASTM C 33.
- D. Coarse Aggregate: Gravel, ASTM C 33, size number 47 (1 inch to No. 4).
- E. Water: Clean and free from oil, alkali, sugar or other deleterious substances.
- F. Slump: Maximum 4 inches.
- G. Air Content: 6% +/- 1% in exterior exposed concrete only.
- H. Mix Proportioning:
 - 1. 7 day compressive strength of moist cured laboratory samples, 3000 psi minimum.
 - 2. Minimum Cement Content: 540 pounds per cubic yard.
 - 3. Admixture: Use in accordance with manufacturer's recommendations.

2.3 Curing Material: ASTM C 171, waterproof paper or polyethylene film.

2.4 Mixes: ASTM C 94. Mix concrete only in quantities for immediate use. Do not retemper or use set concrete.

2.5 Expansion Joint Materials: Expansion Joint Filler: Redwood or Treated Wood Strips.

PART 3: EXECUTION

3.1 Surface Preparation:

- A. Remove loose material from compacted subbase surface immediately before placing concrete.

- B. Proof-roll prepared subbase surface to check for unstable areas and need for additional compaction. Do not begin paving work until such conditions have been corrected and are ready to receive paving.

3.2 Form Construction:

- A. Set forms to required grades and lines, rigidly braced and secured. Install sufficient quantity of forms to allow continuous progress of work and so that forms can remain in place at least 24 hours after concrete placement.
- B. Check completed formwork for grade and alignment to following tolerances:
 - 1. Top of forms not more than 1/8" in 10'.
 - 2. Vertical face on longitudinal axis, not more than 1/4" in 10'.
- C. Clean forms after each use, and coat with form release agent as often as required to ensure separation from concrete without damage.

3.3 Placing Reinforcement:

- A. Comply with Concrete Reinforcing Steel Institute's recommended practice for "Placing Reinforcing Bars", for details and methods of reinforcement placement and supports, and as herein specified.
- B. Clean Reinforcement of loose rust and mill scale, earth, ice, and other materials, which reduce or destroy bond with concrete.
- C. Accurately position, support and secure reinforcement against displacement by formwork, construction, or concrete placement operations. Locate and support reinforcing by metal chairs, runners, bolsters, spacers, and hangers, as required.
- D. Place Reinforcement as shown on plans or to obtain at least minimum coverage for concrete protection. Arrange, space and securely tie bars and bar supports to hold reinforcement in position during concrete placement operations. Set wire ties so ends are directed into concrete, and toward exposed concrete surfaces.
- E. Install welded wire fabric in as long lengths as practicable. Lap adjoining pieces at least on full mesh and lace splices with wire. Offset end laps in adjacent widths to prevent continuous laps in either direction.

3.4 Concrete Placement:

- A. General: Comply with specifications herein for mixing and placing concrete.
- B. Do not place concrete until subbase and forms have been checked for line and grade. Moisten subbase if required to provide a uniform dampened condition at time concrete is placed. Do not place concrete around manholes or other structures until they are at required finish elevation and alignment.

- C. Place concrete using methods, which prevent segregation of mix. Consolidate concrete along face of forms and adjacent to transverse joints with internal vibrator. Use only square-faced shovels for hand-spreading and consolidation. Consolidate with care to prevent dislocation of reinforcing, dowels, and joint devices.
- D. Deposit and consolidate concrete in a continuous operation between transverse joints, until complete section has been placed. Where complete section cannot be placed or if interrupted for more than 1/2-hour, place a construction joint.

3.5

Joints:

- A. General: Construct expansion, weakened-plane (contraction), and construction joints true-to-line with face perpendicular to surface of concrete. Construct transverse joints at right angles to the centerline, unless otherwise indicated. When joining existing structures, place transverse joints to align with previously placed joints, unless otherwise indicated.
- B. Weakened-Plane (Contraction) Joints: Provide weakened-plane (contraction) joints, sectioning concrete into areas as shown on drawings. Construct weakened-plane joints for a depth equal to at least 1/4 concrete thickness, as follows:
 - 1. Tooled Joints: Form weakened-plane joints in fresh concrete by grooving top portion with a recommended cutting tool and finishing edges with a jointer.
 - 2. Sawed Joints: Form weakened-plane joints using powered saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut joints into hardened concrete as soon as surface will not be torn, abraded, or otherwise damaged by cutting action.
 - 3. Inserts: Use embedded strips of metal or sealed wood to form weakened-plane joints. Set strips into plastic concrete and carefully remove strips after concrete has hardened.
- C. Construction Joints: Place construction joints at end of placements and at locations where placement operations are stopped for a period of more than 1/2-hour, except where such placements terminate at expansion joints.
 - 1. Construct joints as shown or, if not shown, use standard metal keyway-section forms.
 - 2. Where load transfer-slip dowel devices are used install so that one end of each dowel bar is free to move.
- D. Expansion Joints: Provide joint filler for expansion joints abutting concrete curbs, catch basins, manholes, inlets, structures, walks and other fixed objects, unless otherwise indicated.
 - 1. Locate expansion joints as indicated on Drawings.
 - 2. Extend joint fillers full-width and depth of joint.

3. Furnish joint fillers in one-piece lengths for full width being placed.
 4. Protect top edge of joint filler during concrete placement.
- E. Joint Fillers (Installation):
1. Clean joint surfaces immediately before installation of joint fillers.
 2. Tool each side of expansion joint filler of abutting edge to concrete to achieve smooth and consistent radius edge.

3.6

Concrete Finishing:

- A. After striking-off and consolidating concrete, smooth surface by screening and floating. Use hand methods only where mechanical floating is not possible. Adjust floating to compact surface and produce uniform texture.
- B. After floating, test surface for trueness with a 10' straight edge. Distribute concrete as required to remove surface irregularities, and refloat repaired areas to provide a continuous smooth finish.
- C. Work edges of slabs, gutters, back top edge of curb, and formed joints with an edging tool, and round to 1/2" radius, unless otherwise indicated. Eliminate tool marks on concrete surface.
- D. After completion of floating and troweling when excess moisture or surface sheen has disappeared, complete surface finishing, as follows:
 1. Broom finish, by drawing a fine-hair broom across concrete surface, perpendicular to line of traffic. Repeat operation if required to provide a fine line texture acceptable to A/E.
 2. On inclined slab surfaces, provide a coarse, non-slip finish scoring surface with a stiff-bristled broom, perpendicular to line of traffic.
 3. Burlap finish, by dragging a seamless strip of damp burlap across concrete, perpendicular to line of traffic. Repeat operation to provide a gritty texture acceptable to A/E.
- E. Do not remove forms for 24 hours after concrete has been placed. after form removal, clean ends of joints and point-up any minor honeycombed areas. Remove and replace areas or sections with major defects, as directed by A/E.

3.7

Curing Concrete - General:

- A. Prior to installation of concrete walks contractor shall submit in writing concrete curing method to be used to A/E for approval.
- B. Protect freshly placed concrete from premature drying and excessive cold or hot temperature, and maintain without drying at relatively constant temperature for period of time necessary for hydration of the cement and proper hardening of concrete.
- C. Start initial curing as soon as free water has disappeared from concrete surface after placing and finishing. Weather permitting; keep continuously moist for not less than 72 hours.

- D. Begin final curing procedures immediately following initial curing and before concrete have dried. Final curing shall continue for at least seven (7) consecutive days maintaining concrete exposure air temperature above 50 degrees.
- E. Avoid rapid drying at the end of final curing period.

3.8

Curing Methods:

- A. Moisture Curing: Covering concrete surface with specified absorptive cover, thoroughly saturating cover with water, and keeping continuously wet. Place absorptive cover so as to provide coverage of concrete surfaces and edges with a 4" lap over adjacent absorptive covers.
- B. Temperature of Concrete During Curing
 - 1. Maintain concrete temperature as uniformly as possible, and protect from rapid atmospheric temperature changes. Avoid temperature changes in concrete, which exceed 5 degrees F. in any one hour and 50 degrees F. in any 24-hour period.
 - 2. Comply with requirements of ACI 305 and 306.
- C. Protection from Injury: During curing period, protect from damaging mechanical disturbances including load stresses, heavy shock, excessive vibration, and from damage.

3.9

Repairs and Protection:

- A. Contractor shall provide the necessary protection to prevent vandalism or damage to concrete finish. Damage and/or vandalism of concrete finish will be cause for rejection of affected paving. Patching or topping is unacceptable. Removal and replacement of any such rejected paving will be at Contractor's expense, including any charges for retesting.
- B. Repair or replace broken or defective concrete, as directed by A/E.
- C. Protect concrete from damage until acceptance of work. Exclude traffic from pavement for at least 7 days after placement. When construction traffic is permitted, maintain pavement as clean as possible by removing surface stains and spillage of materials as they occur.
- D. Sweep concrete pavement and wash free of stains, discolorations, dirt and other foreign material just prior to final inspection.

* * *

SECTION 02514: PORTLAND CEMENT CONCRETE PAVING

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract (General and Supplementary and other Conditions, Division 0) and Division 1 as appropriate, apply to work specified in this section.
- 1.2 Scope of Work: Work Included: Furnish all necessary materials, labor and equipment for the complete installation of portland cement concrete paving, as shown on the drawings and specified herein. Provide all necessary supplementary items for a complete installation intended by documents. Prepared sub-base as specified elsewhere herein.
- 1.3 Quality Assurance:
- A. Codes and Standards: Comply with local governing regulations if more stringent than herein specified.
 - B. Concrete formwork, reinforcing steel, and related items shall be in accordance with the following:
 - 1. ACI 304 "Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete"
 - 2. ACI 305 "Recommended Practice for Hot Weather Concreting"
 - 3. ACI 306R "Recommended Practice for Cold Weather Concreting"
 - 4. ACI 315 "Manual of Standard Practice for Concrete Formwork"
 - 5. ACI 318 "Building Code Requirements for Reinforced Concrete".
 - 6. Concrete Reinforcing Steel Institute, "Manual of Standard Practice".
 - 7. ASTM C33 "Concrete Aggregates"
 - 8. ASTM C150 "Portland Cement"
 - 9. ASTM C260 "Air Entraining Admixtures for Concrete"
 - 10. ASTM C94 "Ready-Mixed Concrete"
 - C. Mixing and Transporting Concrete: In accordance with "Specifications for Ready Mixed Concrete" (ASTM C 94) except complete discharge from the hauling containers within 60 minutes after the cement has been added to the aggregate and water in the mixer.
 - D. Allowable Tolerances: Flatwork true to plane 1/8 inch in 10 feet. No open paving shall pond water.
 - E. Testing:
 - 1. Laboratory shall prepare and furnish to the A/E, in triplicate, reports of concrete mix and all inspection and testing complete with summary of results. Laboratory also furnishes copy of all reports to the concrete supplier.
 - 2. Contractor shall furnish samples of the various materials and the concrete mix for laboratory test.

3. The required laboratory testing and control shall be as follows:
 - a. Prepare and furnish the concrete mixes to be used for all concrete on this job.
 - b. Test gradation of aggregate used in the concrete mix for compliance with the specifications.
 - c. Make concrete cylinders to perform compressions tests of cylinders taken from concrete used on the job. Make a minimum of 2 sets of cylinders per day or one set of cylinders per 50 yards, whichever is greater. Each set shall consist of 2 cylinders. Make compression tests at 7 days with both cylinders of each set.
 - d. Make a minimum of 4 slump tests per day or one per 25 yards, whichever is greater.
4. If tests indicate insufficient concrete strength and if additional tests are ordered (cores, etc.), Contractor shall pay for such additional tests.

1.4 Submittals: Detailed shop drawings, showing layout, sizes, arrangements, bar supports, etc. for all reinforcing steel, joints, curbs, etc. Furnish samples, manufacturer's product data, test reports, and materials certifications for joint fillers and sealers. Submit in accordance with requirements of General Conditions for all paving accessories incorporated into the work.

1.5 Storage of Materials: Store all paving related materials above ground on suitable supports and keep free of foreign materials, corrosion, damage, etc.

PART 2: PRODUCTS

2.1 Materials:

- A. Forms: Steel, wood, or other suitable material of size and strength to resist movement during concrete placement and to retain horizontal and vertical alignment until removal. Use straight forms, free of distortion and defects.
 1. Use flexible spring steel forms or laminated boards to form radius bends as required.
 2. Coat forms with a non-staining form release agent that will not discolor or deface surface of concrete.
- B. Welded Wire Mesh: Welded plain cold-drawn steel wire fabric, ASTM A185, (70,000 psi yield point).
 1. Furnish in flat sheets, not rolls, unless otherwise acceptable to A/E.
- C. Reinforcing Bars: Deformed steel bars, ASTM A 615, Grade 60, (60,000 psi yield point).
- D. Joint Dowel Bars: Plain steel bars, ASTM A 615, Grade 40. Cut bars true to length with ends square and free of burrs.
- E. Tie Wire: Annealed steel, black, 16 gauge minimum.

- 2.2 Concrete Materials:
- A. Expansion Joint Filler: Non-extruding, resilient bituminous joint filler conforming to AASHTO M 213, ASTM D1751 or FS-HH-E-341 Type I. Preformed strips from cane or other cellular fiber uniformly saturated with bituminous binder.
 - B. Joint Sealer: Hot poured asphaltic mineral filler to conform to La. DOTD.
 - C. Epoxy Resin Grout: FS MMM-G-650.
 - D. Metal Keys: Heckman No. 95, 16 gage tongue and groove joint, or approved equal, with both stake pin and dowel holes. Provide No. 88, 18 gage tapered channel type stake pins, 15 inches long. Provide approved type metal bar supports as indicated on Drawings.
- 2.3 Precast Concrete Items (Curbs, Wheel Stops): May be standard manufactured precast concrete of similar sizes; verify with A/E, or concrete (cast-in-place) as dimensioned on Drawings.
- 2.4 Concrete: ASTM C 94. HIGH EARLY STRENGTH.
- A. Cement: Type I, ASTM C 150.
 - B. Admixture:
 - 1. Water reducing Admixture: ASTM C 494, Type A: Eucon WR-75 by Euclid Chemical Co., Pozzolith 300 N by Master Builders, Plastocrete 160 by Silea Chemical Corporation.
 - 2. Water Reducing, Retarding Admixture: ASTM C 494 Type D: Eucon Retarder 75 by Euclid Chemical Co., Pozzolith 300-R by Master Builders, Plastiment by Silea Chemical Co.
 - 3. Air Entraining: ASTM C 260, Master Builders MB-VR, Chem-Masters Adz-air, Glifford-Hill Air-Tite, or approved equal, at exterior paving only.
 - C. Fine Aggregate: Sand, ASTM C 33.
 - D. Coarse Aggregate: Gravel, ASTM C 33, size number 47 (1 inch to No.4).
 - E. Water: Clean and free from oil, alkali, sugar or other deleterious substances.
 - F. Slump: Maximum 4 inches.
 - G. Air Content: 6% +/- 1% in exterior exposed concrete only.
 - H. Mix Proportioning:
 - 1. 7 day compressive strength of moist cured laboratory samples, 3000 psi minimum.
 - 2. Minimum Cement Content: 540 pounds per cubic yard.
 - 3. Admixture: Use in accordance with manufacturer's recommendations.
- 2.5 Curing Material: Concrete shall be cured using one of the following methods:
- A. ASTM C 171, waterproof paper or polyethylene film.
 - B. Ponding, continuous sprinkling, application of sand kept continuously wet, or application of other moisture-retaining covering.

- C. ASTM C 309, clear liquid membrane curing material may be utilized provided it is compatible with all concrete finishes. Verify with all manufacturers concerned. Master seal by Master Builders, Ecocure by Euclid Chemical Co., Clear Seal by W.R. Grace.

2.6 Mixes: ASTM C 94. Mix concrete only in quantities for immediate use. Do not retemper or use set concrete.

PART 3: EXECUTION

3.1 Surface Preparation:

- A. Remove loose material from compacted sub-base surface immediately before placing concrete.
- B. Proof-roll prepared sub-base surface to check for unstable areas and need for additional compaction. Do not begin paving work until such conditions have been corrected and are ready to receive paving.

3.2 Form Construction:

- A. Set forms to required grades and lines, rigidly braced and secured. Install sufficient quantity of forms to allow continuous progress of work and so that forms can remain in place at least 24 hours after concrete placement.
- B. Check completed formwork for grade and alignment to following tolerances:
 - 1. Top of forms not more than 1/8" in 10'.
 - 2. Vertical face on longitudinal axis, not more than 1/4" in 10'.
- C. Clean forms after each use, and coat with form release agent as often as required to ensure separation from concrete without damage.

3.3 Placing Reinforcement:

- A. Comply with Concrete Reinforcing Steel Institute's recommended practice for "Placing Reinforcing Bars", for details and methods of reinforcement placement and supports, and as herein specified.
- B. Clean Reinforcement of loose rust and mill scale, earth, ice, and other materials, which reduce or destroy bond with concrete.
- C. Accurately position, support and secure reinforcement against displacement by formwork, construction, or concrete placement operations. Locate and support reinforcing by metal chairs, runners, bolsters, spacers, and hangers, as required.
- D. Place Reinforcement as shown on plans or to obtain at least minimum coverage for concrete protection. Arrange, space and securely tie bars and bar supports to hold reinforcement in position during concrete placement operations. Set wire ties so ends are directed into concrete, not toward exposed concrete surfaces.

- E. Install welded wire fabric in as long lengths as practicable. Lap adjoining pieces at least on full mesh and lace splices with wire. Offset end laps in adjacent widths to prevent continuous laps in either direction.

3.4

Concrete Placement:

- A. General: Comply with specifications herein for mixing and placing concrete.
- B. Do not place concrete until sub-base and forms have been checked for line and grade. Moisten sub-base if required to provide a uniform dampened condition at time concrete is placed. Do not place concrete around manholes or other structures until they are at required finish elevation and alignment.
- C. Place concrete using methods, which prevent segregation of mix. Consolidate concrete along face of forms and adjacent to transverse joints with internal vibrator. Use only square-faced shovels for hand-spreading and consolidation. Consolidate with care to prevent dislocation of reinforcing, dowels, and joint devices.
- D. Deposit and consolidate concrete in a continuous operation between transverse joints, until complete section has been placed. Where complete section cannot be placed or if interrupted for more than 1/2-hour, place a construction joint.
- E. Curbs and Gutters: Automatic machine may be used for curb placement at Contractor's option. If machine placement is to be used, submit revised mix design and laboratory test results, which meet or exceed minimums specified. Machine placement must produce curbs and gutters to required cross-section, lines, grades, finish, and jointing as specified for formed concrete. If results are not acceptable, remove and replace with formed concrete as specified.

3.5

Joints:

- A. General: Construct expansion, weakened-plane (contraction), and construction joints true-to-line with face perpendicular to surface of concrete. Construct transverse joints at right angles to the centerline, unless otherwise indicated. When joining existing structures, place transverse joints to align with previously placed joints, unless otherwise indicated.
- B. Weakened-Plane (Contraction) Joints: Provide weakened-plane (contraction) joints, sectioning concrete into areas as shown on drawings. Construct weakened-plane joints for a depth equal to at least 1/4 concrete thickness, as follows:
 - 1. Tooled Joints: Form weakened-plane joints in fresh concrete by grooving top portion with a recommended cutting tool and finishing edges with a jointer.

2. Sawn Joints: Form weakened plane joints using powered saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut joints into hardened concrete as soon as surface will not be torn, abraded, or otherwise damaged by cutting action.
3. Inserts: Use embedded strips of metal or sealed wood to form weakened-plane joints. Set strips into plastic concrete and carefully remove strips after concrete has hardened.
- C. Construction Joints: Place construction joints at end of placements and at locations where placement operations are stopped for a period of more than 1/2-hour, except where such placements terminate at expansion joints.
 1. Construct joints as shown or, if not shown, use standard metal keyway-section forms.
 2. Where load transfer-slip dowel devices are used install so that one end of each dowel bar is free to move.
- D. Expansion Joints: Provide premolded joint filler for expansion joints abutting concrete curbs, catch basins, manholes, inlets, structures, walks and other fixed objects, unless otherwise indicated.
 1. Locate expansion joints as indicated on Drawings.
 2. Extend joint fillers full-width and depth of joint, and not less than 1/2" or more than 1" below finished surface where joint sealer is indicated.
 3. Furnish joint fillers in one-piece lengths for full width being placed, wherever possible. Where more than one length is required, lace or clip joint filler sections together.
 4. Protect top edge of joint filler during concrete placement with a metal cap or other temporary material. Remove protection after concrete has been placed on both sides of joint.
- E. Joint Fillers and Sealers (Installation):
 1. Clean joint surfaces immediately before installation of joint fillers and sealant. Remove dirt, insecure coatings, moisture and other substrates, which could interfere with bond of sealant.
 2. Prime or seal joint surfaces where indicated, and where recommended by sealant manufacturer. Confine primer/sealer to areas of sealant bond; do not allow spillage or migration onto adjoining sources.
- F. Keyways: Provide keyways minimum 1 1/2 inches deep where indicated on paving plan.

3.6

Concrete Finishing:

- A. After striking-off and consolidating concrete, smooth surface by screening and floating. Use hand methods only where mechanical floating is not possible. Adjust floating to compact surface and produce uniform texture.

- B. After floating, test surface for trueness with a 10' straight edge. Distribute concrete as required to remove surface irregularities and refloat repaired areas to provide a continuous smooth finish.
- C. Work edges of slabs, gutters, back top edge of curb, and formed joints with an edging tool, and round to 1/2" radius, unless otherwise indicated. Eliminate tool marks on concrete surface.
- D. After completion of floating and troweling when excess moisture or surface sheen has disappeared, complete surface finishing, as follows:
 - 1. Broom finish, by drawing a fine-hair broom across concrete surface, perpendicular to line of traffic. Repeat operation if required to provide a fine line texture acceptable to A/E.
 - 2. On inclined slab surfaces, provide a coarse, non-slip finish by scoring surface with a stiff-bristled broom, perpendicular to line of traffic.
 - 3. Burlap finish, by dragging a seamless strip of damp burlap across concrete, perpendicular to line of traffic. Repeat operation to provide a gritty texture acceptable to A/E.
- E. Do not remove forms for 24 hours after concrete has been placed. After form removal, clean ends of joints and point-up any minor honeycombed areas. Remove and replace areas or sections with major defects, as directed by A/E.

3.7

Curing Concrete - General:

- A. Protect freshly placed concrete from premature drying and excessive cold or hot temperature and maintain without drying at relatively constant temperature for period of time necessary for hydration of the cement and proper hardening of concrete.
- B. Start initial curing as soon as free water has disappeared from concrete surface after placing and finishing. Weather permitting; keep continuously moist for not less than 72 hours.
- C. Begin final curing procedures immediately following initial curing and before concrete has dried. Final curing shall continue for at least seven (7) consecutive days maintaining concrete exposure air temperature above 50 degrees F. Avoid rapid drying at the end of final curing period.

3.8

Curing Methods:

- A. Perform curing of concrete by one or combinations of the following methods. Use only water free of impurities, which could etch or discolor exposed, natural concrete surface. Do not use curing method or compounds, which would prevent or interfere with proper installation of finish materials by causing loss of bond or bleeding through of chemicals. Refer to Finish Schedule and Detail Drawings and coordinate as required.

1. Moisture Curing - any one of the following:
 - a. Keeping surfaces of concrete continuously wet by covering with water.
 - b. Continuous water-fog spray.
 - c. Covering concrete surface with specified absorptive cover, thoroughly saturating cover with water, and keeping continuously wet. Place absorptive cover so as to provide coverage of concrete surfaces and edges with a 4" lap over adjacent absorptive covers.
 2. Moisture Cover Curing - Cover concrete surfaces with specified moisture-retaining cover for curing concrete, placing in widest practicable width with sides and ends lapped at least 3" and sealed by waterproof tape or adhesive. Immediately repair any holes or tears during the curing period using cover material and waterproof tape.
 3. Liquid Membrane Curing:
 - a. Apply approved membrane-forming curing compound to damp concrete surfaces as soon as water film has disappeared. Apply uniformly in two-coat continuous operation by power spray equipment in accordance with manufacturer's directions. Recoat areas, which are subjected to heavy rainfall, within three (3) hours after initial application. Maintain continuity of coating and repair damage during entire curing period.
 - b. Do not use membrane curing compounds on surfaces which are to be covered with coating material applied directly to concrete or with covering material bonded to concrete.
- B. Temperature of Concrete During Curing
1. Maintain concrete temperature as uniformly as possible and protect from rapid atmospheric temperature changes. Avoid temperature changes in concrete, which exceed 5 degrees F. in any one hour and 50 degrees F. in any 24-hour period.
 2. Comply with requirements of ACI 305 and 306.
- C. Protection from Injury: During curing period, protect from damaging mechanical disturbances including load stresses, heavy shock, excessive vibration, and from damage.

3.9

Repairs and Protection:

- A. Contractor shall provide the necessary protection to prevent vandalism or damage to concrete finish. Damage and/or vandalism of concrete finish will be cause for rejection of affected paving. Patching or topping is unacceptable. Removal and replacement of any such rejected paving will be at Contractor's expense, including any charges for retesting.
- B. Repair or replace broken or defective concrete, as directed by A/E.

- C. Protect concrete from damage until acceptance of work. Exclude traffic from pavement for at least 7 days after placement. When construction traffic is permitted, maintain pavement as clean as possible by removing surface stains and spillage of materials as they occur.
- D. Sweep concrete pavement and wash free of stains, discolorations, dirt and other foreign material just prior to final inspection.

* * *

SECTION 02525: CURBS

PART 1: GENERAL

- 1.1 Summary: Provide curbs along edges of roadways and compacted gravel base.
 - A. Granite curbs.
 - B. Precast concrete curbs.
- 1.2 Submittals: Submit for approval product data, mock-ups, and test reports.
- 1.3 Quality Assurance: Comply with governing codes and regulations. Provide products of acceptable manufacturers, which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

PART 2: PRODUCTS

- 2.1 Materials:
 - A. Granite: Vertical sound granite curbstone, 6" by 18" with sawn top and split face. Special shapes as required.
 - B. Precast concrete: Sound units 6" by 18" by 6' long with smooth form finish. Special shapes as required.
 - C. Joints:
 - 1. Portland cement mortar.
 - 2. Open joints.

PART 3: EXECUTION

- 3.1 Installation:
 - A. Install curbing in strict compliance with local Standard Specifications for Highways and Bridges.
 - B. Set curbs on compacted gravel subbase with joints between stones from 1/8" to 3/4" wide. Point joints with mortar and clean curbs.

* * *

SECTION 02584: PAVEMENT MARKINGS (ROADWAY AND PARKING)

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 Scope of Work: Work Included: Furnish all necessary materials, labor and equipment for the complete installation of roadway and parking pavement markings, as shown on the drawings and specified herein. Provide all necessary supplementary items for a complete installation intended by documents.
- 1.3 Quality Assurance:
- A. Include, on label of containers, manufacturer's name, type of paint, manufacturer's stock number, color, instructions.
 - B. Submit, in accordance with requirements of General Conditions, certification or literature from manufacturer that materials furnished meet or exceed specification requirements.
- 1.4 Environmental Conditions: Comply with manufacturers recommendations as to environmental conditions under which markings are to be applied. Apply no markings when the ambient air temperature is below 40 degrees Fahrenheit or when there is moisture on the pavement surface.

PART 2: PRODUCTS

- 2.1 Traffic Paint: PPG Traffic and Zone Marking Paint. Color for all asphaltic paving shall be white and color for all concrete paving shall be yellow, unless specifically noted otherwise. Striping for handicap stalls and symbols shall be blue.

PART 3: EXECUTION

- 3.1 Inspection: Examine pavements for conditions that will adversely affect execution, permanence, or quality of work and which cannot be put into an acceptable condition through preparatory work as included herein. Do not proceed with surface preparation or coating application until conditions are suitable.

- 3.2 Surface Preparation: Strictly follow manufacturer's surface preparation recommendations for all surfaces. Clean pavement surfaces of all dirt, grease, oil, curing compound, loose or unsound layers, and any other material that would reduce the adhesion of the markings to the pavement. Clean by approved methods and maintain surfaces in clean condition until placement of markings.
- 3.3 Application:
- A. Strictly follow markings manufacturer's application recommendations and information.
 - B. Application Equipment: Brush, marking machine, or spray as approved by A/E.
 - C. Locations: Apply markings as indicated on the Drawings.
 - D. Apply two coats of paint in straight lines for all parking spaces as indicated on Drawings, 4-inch width. Finished lines shall have well defined edges and be free of waviness.
- 3.4 Cleaning: Touch-up and restore finish where damaged. Remove spilled, splashed or splattered paint from all surfaces.

* * *

SECTION 02612: CONCRETE PIPE

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 Scope of Work: This section covers materials for concrete pipe for storm drainage systems.

PART 2: PRODUCTS:

- 2.1 Reinforced Concrete Pipe: Reinforced concrete pipe shall conform to ASTM C76, Class 3, wall "B" thickness; bell and spigot type up to and including 48" diameter and tongue and groove type for pipe greater than 48" diameter. All arch pipe shall have tongue and groove joints. All joints of pipe greater than 43 inch round and equivalent arch pipe shall be banded with metal straps on three sides in accordance with manufacturers' requirements.
- 2.2 Unreinforced Concrete Pipe: Unreinforced concrete pipe shall conform ASTM C-14. Joints are to be bell and spigot.
- 2.3 Joints for bell and spigot pipe to be rubber gaskets conforming to ASTM C-443. The lubricant shall be the type recommended by the manufacturer for tongue and groove joints, the cold applied plastic joint sealing compound shall conform to Federal Specification SS-S-00210.

PART 3: EXECUTION:

NONE

* * *

SECTION 02622E: POLYVINYL CHLORIDE PIPE (PVC) (E)

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 Scope of Work: This section covers materials for PVC pipe and fitting for water mains, sewage force mains, gravity sewerage systems, and storm drainage.

PART 2: PRODUCTS

2.1 Materials:

A. Wastewater and Stormwater Gravity Lines

1. Pipe: All PVC pipe shall be specifically designed to carry domestic sewage by gravity flow and shall meet the requirements of ASTM D-3034 (latest revision) with a maximum SDR of 26 and a minimum F/ Y stiffness of 115 psi as tested in conformance with ASTM D-2412 (latest revision) for sizes up to and including 15". Pipes 18" and larger shall meet requirements of ASTM F-679-80.
2. Joints: All joints shall consist of an integral bell with a factory installed "locked in" gasket. The spigot end of each joint shall be factory beveled.
3. Fittings: All fittings shall be standard manufacturer fittings approved by the pipe manufacturer for use on his pipe. All fittings shall meet the requirements of the pipe. All fittings shall be of the same or greater strength as the pipe.
4. Caps and Permanent Plugs: Caps and permanent plugs for sewerage service line shall be as manufactured by Vassalko or approved equal; and shall meet the requirements set forth in ASTM D-3034.

B. Water Lines:

1. 14" and Larger: PVC pipe 14" and larger shall be UNI-B-11-84 minimum pressure 150 psi; maximum DR of 18.
2. 4" thru 12": PVC pipe 4" and greater shall be AWWA C-900 DR18 integral bell with locked gaskets and ductile iron O.D.
3. Smaller than 4:
 - a. PVC pipe shall be Schedule 40, conforming to the requirements of ASTM D1784, Type I, Grade I and ASTM D1785.
 - b. PVC fittings shall be Schedule 40 socket type, conforming to the requirements of ASTM D1784, Type I, Grade 1 and ASTM D2466.

C. Wastewater Pressure Lines:

1. Pipe: PVC pipe up to and including 12" shall be specifically designed to carry domestic sewage by pumping and shall conform to the requirements of ASTM D2241 for PVC plastic pipe for PR 160 with a maximum SDR of 26. Pipe and fitting compound shall conform to ASTM D1784.
2. PVC pipe 14" to 24" shall conform to UNI-B-11 DR25.
3. PVC pipe 24" to 30" shall conform to UNI-B-11 DR 25.
4. Joints to be locked in gasket type that conforms to ASTM F477.

D. Restrained Joints:

1. Polyvinyl chloride (PVC) pipe (4" to 10") shall be restrained using the Series 5500 mechanical joint thrust restraint as manufactured by EBAA Iron, Inc., or approved equal.
2. Polyvinyl chloride (PVC) pipe (14" to 24") shall be restrained using the Series 1100 PV or 1100 HV MEGALUG mechanical joint thrust restraint as manufactured by EBAA Iron, Inc., or series 1300 or 1350 large diameter restrainers as manufactured by Uni-Flange, a Division of NAPPCO, Inc., or approved equal.
3. The EBAA Iron Series 5500, 1100 PV or 1100 HV MELUG assembly shall be cast completely of closely controlled ductile iron conforming to ASTM A536, latest revision, and furnished with silicon bronze bolts, IFI 140, Grade 655. All bolts made of corrosion resistant steel and ductile iron will not be permitted. All glands and bolts shall be field coated with two (2) coats of coal tar epoxy, Koppers 300-M Bitumastic, or approved equal, with a minimum dry film thickness of eight (8) mils per coat.
4. Restraining glands shall be wrapped with an eight (8) mil thick polyethylene tube for additional protection. The polyethylene wrap shall extend a minimum of two feet (2') in either direction from the gland and secured on the end with circumferential turns of tape.
5. All restrained joints shall be inspected at the job site after installation. Field touch-up and repair if needed shall be made by the Contractor under the supervision and inspection of a representative of the coating supplier.
6. Follow manufacturers' specifications when installing the restrained joints. Using a torque wrench tighten bolts to recommended torque and in the proper sequence. Supplier to provide on-site training in the proper installation of joint restrainers.
7. The Uni-Flange series 1300 or 1350 large diameter restrainer assembly shall be manufactured of structural steel ASTM-A36 and furnished with silicon bronze bolts, IFI 140, Grade 655. All bolts made of corrosion resistant steel and ductile iron will not be permitted. All glands and bolts shall be field coated with two

(2) coats of coal tar epoxy, Koppers 300-M Bitumastic, or approved equal, with a minimum dry film thickness of eight (8) mils per coat.

- E. Transition Couplings: Long body transition couplings, 12" minimum length, shall be used to connect new pipe to old pipe.

PART 3: EXECUTION: See other Sections.

* * *

SECTION 02638: REMOVAL AND REPLACEMENT OR RELOCATION OF EXISTING UTILITIES

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 Scope of Work: Furnish all labor materials, equipment, and incidentals required to remove and replace or relocate and repair all utilities, both known and unknown. All work shall be in accordance with requirements of the respective relocated utilities company.
- 1.3 General: The Contractor shall be responsible for removal and replacement or relocation of all utilities, which are in conflict with his operations. The local gas, electric, telephone, and television cable companies shall remove and replace or relocate, if necessary, all their own utilities in conflict with the operations of the Contractor. Those utilities located within publicly owned right-of-ways shall be removed and replaced or relocated at the expense of the concerned utility. Utilities located within privately owned right-of-ways shall be removed and replaced or relocated at the expense of the Contractor. Other utilities belonging to the Owner and other public agencies shall be removed and replaced or relocated by and at the expense of the Contractor.
- 1.4 Governing Standard: Removal and replacement or relocation of utilities shall be done according to the latest standards and standard details of the company or agency owning or having jurisdiction over the utility, as indicated on the Drawings and as specified herein. In the event of a conflict between these specifications and the latest standards of the concerned company or agency owning or having jurisdiction over the utility, the latest standards of the company or agency owning or having jurisdiction over the utility shall govern.
- 1.5 Unknown Utilities: The Drawings attempt to indicate the location of all known utilities within the limits of the work. However, the Contractor shall be responsible to inspect the entire project to verify all existing utilities and determine the existence of any additional utilities conflicting with his work. In the event the Contractor encounters an unknown utility in his operations and such an item will interfere with his work and will require removal and replacement or relocation, the Contractor shall expeditiously notify the A/E and arrange to relocate the utility in conformance with the applicable section of the Specifications.

- 1.6 Coordination of Utilities Relocation: The Contractor shall be completely responsible to contact and schedule such relocation of utilities in a manner to prevent any delay in his operations.
- 1.7 Privately Owned Utilities: The Contractor shall review and resolve with the owner of each utility any conflicts with his operation. All submittals required shall comply with the requirements in the submittals section.

PART 2: PRODUCTS

- 2.1 All materials shall be new, and shall conform to the latest ASTM and industry standards. Materials for the removal and replacement or relocation of utilities shall conform to the standards of the company or agency owning or having jurisdiction, or as indicated on the Drawings and as specified.
- 2.2 Water Mains and Sewerage Force Mains: All adjustments shall be constructed using ductile iron pipe with restrained push-on joints. Any couplings required shall be epoxy coated ductile iron with neoprene gaskets, and restrained joints on both ends. All bolts and nuts shall be stainless steel.

PART 3: EXECUTION

- 3.1 Gas Mains: On gas lines that are exposed during construction, the Contractor shall be careful to avoid damage to the existing coating on the gas main. Damage to coating shall be replaced by the local gas company at the expense of the Contractor. The Contractor shall review with the local gas company construction methods to be used in the vicinity of their gas mains and shall comply with the requirements of the local gas company for protection of their facilities.
- 3.2 Electric: As required by the local power company, the contractor shall conduct his operations and maintain his equipment away from all electric lines at all times. Verify minimum distances and clearances with local electric company representative. The local electric company shall be notified as soon as these clearances have to be violated.
- 3.3 Publicly Owned Utilities:
A. General
1. The Contractor shall furnish all labor, equipment and material and perform all work required for removal and replacement or relocation of publicly owned utilities. Utility relocation shall be as indicated on the Drawings and specified herein. Damage to any utilities by the Contractor, subcontractors, material and equipment suppliers and other persons, until the job has been accepted, shall be repaired by the Contractor to the satisfaction of the A/E and Owner.

2. Removal and replacement of utilities shall be done in close coordination with the Owner. Removal and replacement or relocation work shall be planned in advance so the inconvenience to the Owner and utility users caused by the disruption of service is minimized. The Contractor shall perform work on utilities in off-peak hours of usage as required by the A/E and Owner.
- B. Water Mains:
1. The Contractor shall be responsible for immediately notifying the Owner and A/E of existing water mains that interfere with his work. The Contractor is responsible for conducting operations in the vicinity of water mains that do not interfere with the work such that main breaks and disruption of water service is avoided. Water mains removed by the Contractor shall be replaced or relocated with cast iron or ductile iron as indicated on the Drawings and specified in the governing standard and herein. Restrained pipe joints are required to resist thrust forces.
 2. At no time will the contractors be allowed to operate water main valves unless they are directly supervised by a Water Department employee. Contractor shall notify all affected residents and the Water Department of water shut downs at least 48 hours in advance. All materials needed to perform the work will be verified on the site before the water pressure is shut off. After the valves have been closed, certification is required that the line has been isolated from the source before any work will be allowed on the water main.
- C. Sewer Mains: Sewer mains removed by the Contractor shall be replaced or relocated with PVC or ductile iron as indicated on the Drawings and specified in the governing standard and herein. Restrained pipe joints are required to resist thrust forces.
- D. Service Connections: The Contractor is responsible for locating water and sewer house service connections and other building connections. The operations of the Contractor shall be conducted with due care and regard for service connections. Any damage to a service connection due to the operations of the Contractor shall be repaired to its original or better condition by the Contractor. Materials used and work on service connections shall be in accordance with the governing standard unless required otherwise by the A/E.

3.4 Payment: The removal and replacement or relocation of utilities will be paid for as specified herein.

- A. Privately Owned Utilities: The Contractor shall be responsible for removal and replacement or relocation of all utilities, which are in conflict with his operations. The local gas, electric, telephone, and television cable companies shall remove and replace or relocate, if necessary, all their own utilities in conflict with the operations of the

Contractor. Those utilities located within publicly owned right-of-ways shall be removed and replaced or relocated at the expense of the concerned utility. Utilities located within privately owned right-of-ways shall be removed and replaced or relocated at the expense of the Contractor.

B. Publicly Owned Utilities: The removal, replacement, or relocation of any Parish owned utilities which are shown on the Drawings or which can reasonably be anticipated by the Contractor will be paid for as specified below:

1. Sewers: No separate payment shall be made in connection with any work required on existing sewer gravity lines or force mains. All such work shall be considered a subsidiary obligation of the Contractor and all costs in connection therewith shall be included in the unit price or lump sum price bid items.
2. Water Mains: No separate payment will be made in connection with the removal and replacement or relocation of water lines shown on the Drawings. The removal or replacement of all waterlines shall be considered a subsidiary obligation of the Contractor and all costs in connection therewith shall be included in the unit price bid per linear foot for pipe in place.
3. Drain Pipe: No separate payment will be made in connection with the removal and replacement or relocation of drainpipe. The removal or replacement of all drain pipe shall be considered a subsidiary obligation of the Contractor and all costs in connection herewith shall be included in the unit price bid per linear foot for pipe in place.
4. Drainage Catch Basins: No separate payment will be made in connection with the removal and replacement of drainage catch basins or drop inlets. The removal or replacement of all drainage catch basins and drop inlets shall be considered a subsidiary obligation of the Contractor and all costs in connection therewith shall be included in the unit price bid per linear foot for pipe in place.
5. Service Connections: No separate payment will be made on any work required by the operations of the Contractor in connection with house or other service connections. Any work required by the operations of the Contractor in connection with water, sewer, gas, and other house service connections shall be considered a subsidiary obligation of the Contractor and all costs in connection therewith shall be included in the unit prices bid for pipe in place.
6. Public Owned Utilities: Relocate, construct, or remove infrastructure items, which are not shown or differ substantially from what is shown on the plans or could not be reasonably anticipated and are found during construction,

when authorized by the Engineer. When the costs for necessary relocation, repairs, or removal are to be paid for by the Owner, the Contractor shall keep accurate records of all time, material, and equipment used and shall submit a copy of said report on a daily basis (same day) to the Resident Project Representative for review. The actual costs of any work as described herein shall be determined as set forth in the General Conditions and Supplementary Conditions as appropriate.

* * *

SECTION 02639: MODIFICATION OF EXISTING PIPING

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 Scope of Work: Furnish all labor, materials, equipment, and incidentals required to modify, alter, and/or convert existing piping as shown, as specified, and as required for the installation of new mechanical equipment, pumping units, piping, and appurtenances. Existing piping shall be removed and dismantled as necessary for the performance of alterations in accordance with the requirements herein specified.

PART 2: PRODUCTS

- 2.1 Field Cut Joints: Field cut joints shall be Can-Tex "C-T Adapters", Dickey "Field Unions", Fernco "Flexible Couplings", or Mission "Band-Seal", with stainless steel shear ring, or equal.
- 2.2 Connections to Other Piping Materials: Connections to other piping materials shall be Can-Tex, "C-T Adapters", Dickey "Coupling Adapters", Fernco "PVC Donuts", Fernco "Flexible Couplings", Mission "Bushing Adapters", Nashua re-Cast Corporation "Flex-O-Joint", or equal.

PART 3: EXECUTION

- 3.1 General:
- A. The Contractor shall cut, repair, reuse, excavate, demolish, or otherwise remove parts of the existing piping or appurtenances, as indicated on the Drawings, herein specified, or necessary to permit completion of the work under this Contract. He shall dispose of surplus materials resulting from the above work in an acceptable manner.
 - B. The Contractor shall dismantle and remove all existing piping and other appurtenances required for the completion of the work. Where called for or required, he shall cut existing pipelines for the purpose of making connections thereto.
 - C. No existing piping or appurtenance shall be shifted, cut, removed, or otherwise altered except with the express approval of, and to the extent approved, by the A/E.
 - D. When removing materials, the Contractor shall take all precautions and use all necessary barriers and other protective devices so as not to damage the piping beyond the limits necessary for the new work.

- E. All work of altering existing piping shall be done at such time and in such manner as will comply with the approved time schedule. So far as possible, before any part of the Work is started, all tools, equipment, and materials shall be assembled and made ready so that the work can be completed without delay.
- F. All workmanship and new materials involved in constructing the alterations shall conform to the Specifications for the classes of work insofar as such specifications are applicable.
- G. Where necessary or required for the purpose of making connections, the Contractor shall cut existing pipe lines in a manner to provide an approved joint. Where required, he shall weld beads, flanges, or provide Dresser Couplings, all as required. Existing piping to be abandoned in place shall have open ends plugged or capped, as specified elsewhere in these Specifications.
- H. The Contractor shall provide flumes, hoses, piping, etc. to divert or provide suitable plugs, bulkheads, or other means to hold back the flow of wastewater, water, or other liquids, all as required in the performance of the Work under this Contract.
- I. Blasting will not be permitted to complete any work under this Contract. Care shall be taken not to damage any part of existing buildings or foundations or outside structures.

* * *

SECTION 02720: STORM SEWERAGE SYSTEMS

PART 1: GENERAL

- 1.1 Related Requirements: Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 Scope of Work: Furnish all labor, equipment, and incidentals required, and install in the locations shown on the Drawings, all piping, fittings, and appurtenances for storm sewerage systems as specified.
- 1.3 General: Material and Equipment
- A. Conform to applicable specifications and standards.
 - B. Comply with size, make, type, and quality specified, or as specifically approved in writing by the A/E.
 - C. Manufactured and Fabricated Products:
 - 1. Design and fabricate, and assemble in accordance with the best engineering and shop practices.
 - 2. Manufacture like parts of duplicate units to standard sizes and gages, to be interchangeable.
 - 3. Two or more items of the same kind shall be identical, by the same manufacturer.
 - 4. Products shall be suitable for service conditions.
 - D. Do not use material or equipment for any purpose other than that for which it is designed or is specified.
 - E. Comply with all local, state and federal laws and regulations.
 - F. Furnish all necessary labor, material or equipment necessary for compliance with all requirements of this contract.
- 1.4 Governing Standards: Installation shall conform to the latest standards of the governing authority. In the event of a conflict between these specifications and the latest standards of the Owner and/or governing authority, the latest standards of the Owner and/or governing authority shall govern.

PART 2: PRODUCTS

Piping and other materials are specified elsewhere.

PART 3: EXECUTION

- 3.1 Unknown Utilities:
- A. The drawings attempt to indicate the location of all known underground facilities within the limits of the work. However, the Contractor shall be responsible to inspect the entire project to verify

all underground facilities and determine the existence of any additional facilities conflicting with his work. In addition the Contractor shall be required to prospect ahead of the work to locate and verify all under ground facilities.

- B. In the event the Contractor encounters an unknown underground facility in his operations and such an item will interfere with his work and will require removal and replacement or relocation, the Contractor shall immediately notify the A/E and Owner and/or appropriate governing authority, and arrange for relocation.

3.2 Coordination: Removal and replacement of drainage facilities shall be done in close coordination with the Owner and/or governing authority. Removal and replacement or relocation work shall be planned in advance so the inconvenience to the Owner and utility users caused by the disruption of service is minimized.

3.3 Handling:

- A. Pipe, fittings, and accessories shall be handled in a manner that will insure installation in sound, undamaged condition. Equipment, tools, and methods used in handling and installing pipe and fittings shall not damage the pipe and fittings. Hooks inserted in ends of pipe shall have broad, well-padded contact surfaces.
- B. All pipe coating, which has been damaged, shall be repaired by the Contractor before installing the pipe.

3.4 Cleaning:

- A. The interior of all pipe and fittings shall be thoroughly cleaned of foreign matter before being installed and shall be kept clean until the work has been accepted. Before jointing, all joint contact surfaces shall be wire brushed if necessary, wiped clean, and kept clean until jointing is completed.
- B. Precautions shall be taken to prevent foreign material from entering the pipe during installation. Debris, tools, clothing, or other materials shall not be placed in or allowed to enter the pipe.

3.5 Inspection: Pipe and fittings shall be carefully examined for cracks and other defects immediately before installation; spigot ends shall be examined with particular care. All defective pipe and fittings shall be removed from the site of the work.

3.6 Laying Pipe:

- A. Lay all pipe in straight lines and on uniform grades. Rest pipe on a firm prepared bed with bells laid up grade. Insure position of pipe to proper grade by blocking or other means. Maintain lines laterally so that minimum of 66% of internal area is visible throughout total length of pipe between fittings.

- B. Lay pipe with sealed joints in accordance with manufacturer's recommendations; join so that spigot end enters to full depth of socket. No infiltration of soils will be allowed at joints.
- C. Install concrete pipe in accordance with applicable provisions of American Concrete Pipe Association "Concrete Pipe Installation Manual", unless otherwise indicated. All joints of pipe greater than 43 inch round and equivalent arch pipe shall be banded with metal straps on three sides in accordance with manufacturers' requirements.
- D. Keep pipe lines clean as the laying progresses and keep open ends securely stopped.
- E. Make connections into drainage structures with joints thoroughly sealed with mortar, so that no excess mortar remains inside pipe or basin to block flow of water.
- F. Pipe shall be protected from lateral displacement by placing the specified pipe embedment material. Under no circumstances shall pipe be laid in water and no pipe shall be laid under unsuitable weather or trench conditions.
- G. Pipe shall be laid with the bell ends facing the direction of laying except when reverse laying is specifically authorized by the A/E.
- H. Alignment and grade shall be as existed in removed and replaced pipe, unless otherwise indicated on the drawings or directed by the A/E.

3.7

Piping Connections: Where corrugated steel pipe is to be joined with reinforced concrete pipe, corrugated steel pipe shall overlap the concrete pipe using pipe sizes as indicated on the drawings conforming to current local regulatory standards. Required diameters of corrugated steel pipe shall be specially fabricated if not otherwise available. The space between the steel pipe and the concrete pipe where the steel pipe overlaps, shall be filled with grout, except for the upstream 12 inch length of overlap. The upstream 12 inch length of overlay shall be tightened with a corrugated steel band so that there is no space between the corrugated steel pipe and the concrete pipe.

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SECTION 02721: CATCH BASINS, GRATES & FRAMES

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 Scope of Work: Furnish all necessary materials, labor and equipment for the complete installation of catch basins, paved area drainage, site surface drainage and accessories, as shown on the Drawings and specified herein. Provide all necessary supplementary items for a complete installation intended by documents. Make revisions and tie-ins to existing lines, catch basins, grates, etc. as required to produce a complete drainage system and as shown on the Drawings. Modify existing catch basins to lower the top of casting elevation as shown on the Drawings. Clean and flush all existing drainage structures.
- 1.3 Submittals:
 - A. Submit Manufacturer's Literature and Installation Instructions.
 - B. Submit in accordance with requirements of Division 1.
- 1.4 Product Handling: Protect materials during transportation, storage, and installation to avoid physical damage.

PART 2: PRODUCTS

- 2.1 Brick: ASTM C 62, Grade SW, common building brick.
- 2.2 Mortar: ASTM C 270, Type S, cement and mortar.
- 2.3 Gratings, Curb Inlets, Manhole Covers: East Jordan Iron Works, Neenah, or approved equal, ASTM A 48, Class 30 iron castings. Provide type and sizes with frames as indicated on the Drawings.
- 2.4 Concrete: As specified elsewhere herein.
- 2.5 Substitutions: Equivalent equipment and materials of other manufacturers may be substituted on approval of the A/E. Request for substitution shall include manufacturer's descriptive information and evidence of satisfactory past performance. Substitutions shall meet or exceed the specified item in all respects. Submittals shall include comparison of the manufacturer's literature of both the specified item and the proposed substitution; all differences from the specified item shall be annotated. Substitutions, which change the generic type of material or equipment or fail to meet the performance criteria of the specified item, will not be approved.

PART 3: EXECUTION

3.1 Trenching:

- A. Verify with A/E exact position of lines and catch basins. Re-route lines if necessary to protect trees, planting, other items to remain.
- B. Trenches shall be not less than 1% true to grade shown. Remove unsuitable material and replace with sand or gravel properly compacted.

3.2 Drainage Structures, Headwalls, Catch Basins:

- A. Construct in accordance with the requirements of R & B, and with the locations, designs, and dimensions as indicated on the Drawings.
- B. Lay bricks in full, close, shove joints of mortar.
- C. Plaster inside and outside of structure with a coat of mortar 1/4 inch thick. Surface inverts and benches in structures with a 14 inch thick coat of mortar.
- D. Set grates and frames in a full bed of mortar. Extend inlet and outlet pipes through the wall for sufficient distance beyond the outside surface to allow for connections. Construct concrete around them neatly, so as to prevent leakages along the outer surface.
- E. No pipes, cables, or other structures shall be built into or through these structures except the attendant drainage pipes, indicated.

3.3 Examination: Notify the A/E in ample time to permit examination of completed underground piping before backfilling is commenced.

3.4 Backfilling: Take necessary precautions in backfilling to prevent disalignment of pipe, longitudinally, laterally, or vertically. Replace pipe damaged during backfilling and compacting. Conform to requirements for fill and backfill.

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SECTION 02791
POURED-IN-PLACE RUBBER SURFACING FOR PLAYGROUNDS

PART 1 – GENERAL

1.01 WORK INCLUDED

This work includes furnishing and installing the poured in place safety surface. The surfacing Manufacturer/installer shall be responsible for all labor, materials, tools, and equipment to perform all work and services for the installation of the surface.

1.02 DESCRIPTION OF SYSTEM & GENERAL CONDITIONS

Safety Surface shall be poured-in-place and trowelled to provide for a resilient, seamless rubber surface installed over the specified rigid base and composed of premium quality SBR and EPDM rubber mixed with a non-flammable, non-shrinking, one-part moisture cured polyurethane adhesive as recommended by the Manufacturer and capable of bonding to concrete, asphalt or compacted stone. Safety Surface shall be stable and slip resistant to comply with, meet or exceed all requirements set forth in the Americans with Disabilities Act (ADA) and the American Standard Testing Methods (ASTM and Consumer Products Safety Commission (CPSC) for manufactured Safety Surfaces as detailed below.

1.03 QUALITY ASSURANCE

A. Test Results

1. Impact Attenuation - ASTM F 1292: Surfacing within playground equipment use zones shall meet or exceed the performance requirements of CPSC, ASTM F 1292 and/or CSA Z614-98 that a surface yield both a peak deceleration of no more than 200 g's and a Head Injury Criteria (HIC) value of no more than 1,000 for a head-first fall from the highest accessible portion of play equipment being installed as shown on drawings. Manufactured Safety Surface: For surfaces manufactured for the purpose of playground safety surface, the impact attenuation performance shall be documented by a certificate of compliance provided by third party at Owner or contractor's expense.
2. Coefficient of Friction - ASTM D2047: All products must meet minimum standard on coefficient of friction of 0.7-wet, 0.9-dry.
3. Surface Frictional Properties & Skid Resistance – ASTM E303: All products shall meet or exceed 90 BPN when tested Dry and 64 BPN when tested Wet.
4. Permeability: Product shall meet or exceed a coefficient of permeability of seven (7) feet per minute. NOTE: From a geotechnical standpoint, the permeability of a material is a measure of the velocity at which water will flow through the void spaces or pores under a given hydraulic gradient. The product shall handle a minimum of 8" of rainfall per hour.
5. Flammability of Finished Floor Cover - ASTM D2859: Product shall pass flammability.
6. Accessibility of Surface Systems – ASTM F1951: All playground surfacing products must pass testing to ensure wheelchair access under and around playground equipment as required by the American Disabilities Act.

7. Tear Strength – ASTM D624-00e1 Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic: Tear Resistance must be equal to or greater than 12 pounds per inch.
 8. Tensile Strength – ASTM D412-02 Standard Test Methods for Vulcanized Rubber Elastomers and Thermoplastic Elastomers: Tensile Strength must be equal to or greater than 25 Psi.
 9. IPEMA Certification Required: “In the Interest of playground safety, the International Play Equipment Manufacturers Association (IPEMA) provides a Third Party Certification Service whereby a designated independent laboratory, TÜV SÜD America Inc., (TÜV), validates a surfacing manufacturer’s certification of conformance to ASTM F1292, Standard Specification for Impact Attenuation Under and Around Playground Equipment. A list of current validated products, their thickness and critical height may be viewed at www.ipema.org.”
- B. Installer Qualifications - All materials under this section shall be installed by the Manufacturer or its Certified Installers. The playground surfacing installation shall not be performed by anyone other than the product Manufacturer or its Certified Installers.
- C. Manufacturer Pre-Qualifications
1. A list of twenty-five (25) surfacing projects completed with a similar product. List shall include names of project representatives and respective telephone numbers. At least five (5) of these projects must be at least five (5) years old.

1.04 SUBMITTALS

- A. One original hard copy of the submittal package will be supplied with additional copies on individual CD’s. Upon request only hard copies shall be supplied.
- B. Manufacturer’s descriptive data and installation instructions.
- C. Manufacturer’s details showing depths of wear surface and sub-base materials, anchoring systems and edge details.
- D. A list of all materials and components to be installed, including Manufacturer’s name, storage requirements, and precautions, and shall state chemical composition and test results to which material has been subjected in compliance with these specifications.
- E. Test results to substantiate that the product meets or exceeds all ASTM & ADA requirements for each standard listed in Section 1.03 Quality Assurance. Test must be performed and certified by an independent laboratory.
- F. Copy of IPEMA Certification.
- G. Statement signed by the Manufacturer of the synthetic safety surfacing attesting that all materials under this section shall be installed by the Manufacturer or its Certified Installers.
- H. A listing of at least twenty-five (25) installations where products similar to those proposed for use have been installed and have been in successful service for a minimum period of three (3) years. This list shall include Owner or purchaser, address of installation, date of installation, contact person, and phone number.
- I. Upon request, a sample specimen of safety surface proposed for this project.

1.05 DELIVERY, STORAGE and HANDLING:

Materials and equipment shall be delivered and/or stored in accordance with the Manufacturer's recommendations.

1.06 PROJECT SITE CONDITIONS:

- A. Synthetic safety surfacing shall be installed on a dry subsurface, with no prospect of rain within the initial drying period, at temperatures recommended by the Manufacturer.
- B. Installation in weather condition of extreme heat, temperatures less than 40 degrees (F), and/or high humidity may impact cure time, and/or the structural integrity of the final product. Immediate surroundings of the site shall be reasonably free of dust conditions and poor particulate air quality will impact the final surface look.
- C. The Manufacturer's installation manager shall reserve the right to control the project schedule installation based on such factor without penalty to the manufacturer/dealer.
- D. Safety surfacing shall be installed after the playground equipment is installed unless otherwise noted.
- E. Surface installation shall be coordinated by the project manager or designated individual of playground equipment and sub-base installation, with manufacturer's local production manager and in accordance with the manufacturer's sub-base requirements.
- F. Surface depths to meet or exceed the required playground equipment fall heights.

1.07 WARRANTY:

Surfacing shall maintain required impact attenuation characteristics and be guaranteed against defects in workmanship and material for a period of no less than **FIVE (5) years** or as specified and agreed upon per contract.

PART 2 – PRODUCTS

Product shall be **No Fault Safety Surface** as manufactured and sold by No Fault Sport Group, LLC. **OR PRIOR APPROVED EQUAL.** Safety Surface shall consist of synthetic poured-in-place safety surfacing meeting the requirements of this specification.

2.01 MATERIALS

- A. Polyurethane Binder
 - 1. Binder for safety surfacing shall be specifically designed for use with rubber granule material for outdoor installations.
 - 2. No toluene diphenyl isocyanate (TDI) shall be used.
 - 3. No filler materials shall be used in urethane such as plasticizers and the catalyzing agent shall contain no heavy metals.
 - 4. Weight of polyurethane shall be no less than 8.5 lbs/gal (1.02 Kg/1) and no more than 9.5 lbs/gal (1.14 Kg/1)
 - 5. COLOR TINTED BINDER WILL NOT BE ALLOWED.
 - 6. Aromatic or Aliphatic Polyurethane Binder may be used.
- B. SBR (Impact Layer)
 - 1. Only 100% shredded styrene butadiene rubber may be used

2. Strands of SBR may vary from 0.5 mm – 2.0 mm in thickness by 3.0 mm – 20 mm in length.
- C. EPDM (Wear Surface)
 1. EPDM particles shall meet requirements of ASTM D 412 and CSA Z614-98 for tensile strength and elongation; and ASTM D 2240 (Shore A) hardness of 55-65, not less than 26 percent rubber hydrocarbons.
 2. EPDM shall be peroxide cured with an EPDM content of 26% and shall include a processing aid to prevent hardness with 26% poly content to maintain dynamic testing characteristics, weatherization and UV stability.
 3. EPDM Wear surface shall be installed at a "compressed" 1/2" inch depth. Installation method shall use a measured screed rod 1/16" thicker than the required depth (9/16").
 4. Color to be 50% Black/ 50% Standard color mix (blue, green, tan or terra cotta). Final color selection to be made by architect/owner.
 5. Size of rubber particles shall be not less than 1.00 mm, or greater than 3.0 mm across. with a minimum EPDM content of 25% by weight and certified letter from Manufacturer stating this content. All rubber shall remain consistent in gradation and size.
 6. STRAND, SHAVED, CHIPPED OR SHREDDED RUBBER IS NOT ACCEPTABLE IN THE POURED CAP.

2.02 PRODUCT SUBSTITUTIONS & APPROVED EQUALS

- A. All product substitutions must be submitted for preapproval at least seven (7) days prior to bid date. A complete submittal package must be provided before a substitute product will be considered for preapproval. If the product submitted for preapproval cannot meet all requirements of the submittal package, it will not be considered.
- B. Once all products submitted for substitution have been reviewed, a list of the approved substitutes will be circulated and made available to bidders.

PART 3 – EXECUTION

3.01 SUB-BASE REQUIREMENTS

- A. Owner or Owner's representative shall provide sub-surface in accordance with Manufacturer's recommendation for the project location and application.
- B. The base shall be concrete installed in accordance with Manufacturer's written specifications.
- C. The base shall have the specific minimum slope (2%) and shall vary no more than 1/8" when measured in any direction with a 10' foot straight edge. Verify that sub-surfacing drainage, if required, has been installed to provide positive drainage.
- D. Tolerance of concrete or bituminous subsurface shall be within 1/8 inch (3.0 mm) in 10 feet (3050 mm).
- E. All sub-bases shall be approved by Owner or Owner's Representative prior to installation of the safety surface.
- F. Alternate sub-base material must have prior approval from Manufacturer.

3.02 PREPARATION

- A. Scheduling – Safety Surface shall be installed after other sub-contractors are complete, the area is free from pedestrian traffic.
- B. Cleaning - The entire subsurface shall be clean, dry and free from any foreign and loose material.

3.03 INSTALLATION

A. SBR Cushion Layer

- 1. Polyurethane binder and SBR will be mixed on site in a rotating tumbler to ensure components are thoroughly mixed and are in accordance with manufactures recommendations.
- 2. Binder shall be not less than 18 percent (18%), nor more than 22 percent (22%), of the total weight of rubber, and shall provide 100 percent coating of the particles.
- 3. The SBR and binder mixture will then be poured-in-place by means of screeding, and hand-troweled to maintain a seamless application.
- 4. Installation method shall use a measured screed rod 1/16" thicker than the required depth.
- 5. Whenever practical, SBR cushion layer shall be installed in one continuous pour on the same day. When a second pour is required, fully coat the edge of the previous work with polyurethane binder to ensure 100 percent bond with new work. Apply adhesive in small quantities so that new SBR mixture can be placed before the adhesive dries.
- 6. Total depth of the safety surface system throughout the playground equipment use zone shall be as required to meet the applicable critical fall height requirements or as specified by Owner or Architect. Therefore, thickness of the SBR cushion layer will be total depth less 1/2" inch (minimum required thickness of the EPDM wear course layer).
- 7. Edges - Surface edges shall be flush with edge of adjacent area or tapered to provide safe transition. When connecting to a concrete curb or border the hardened edge shall be primed with adhesive.
- 8. The SBR cushion layer surface shall be porous.

B. EPDM Wear Course Layer

- 1. Polyurethane binder and EPDM will be mixed on site in a rotating tumbler to ensure components are thoroughly mixed and are in accordance with manufactures recommendations.
- 2. The binder shall be not less than 20 percent of total weight of rubber used in the wear surface, and shall provide 100 percent coating of the particles.
- 3. The EPDM and binder mixture will then be poured-in-place by means of screeding, and hand-troweled to maintain a seamless application.
- 4. Installation method shall use a measured **9/16"** screed rod (1/16" thicker than the 1/2" inch compressed depth).
- 5. The cap will have a minimum weight of 3.3 pounds per square foot.
- 6. Thickness of wear surface shall be a minimum 1/2" inch "compressed".
- 7. The wear layer shall be porous.
- 8. Edges - Surface edges shall be flush with edge of adjacent area or tapered to provide safe transition.
- 9. Color: EPDM wear course shall be a blend of 50% Black 50% standard color mix (blue, green, tan, terra cotta). A/E/owner to finalize during the submittal process from manufacturer's available color selections.

3.04 PROTECTION

- A. The synthetic safety surface shall be allowed to fully cure in accordance with Manufacturer's instructions. The surface shall be protected by the Owner from all traffic during the curing period of 48 to 72 hours after surface installation is complete, or as instructed by the Manufacturer.
- B. Surface installation crew shall be responsible for the protection of Safety Surface during the installation process. Owner or General Contractor shall be responsible for the protection of the surface during the crews off hours and during the curing period upon completion of the installation.

3.05 CLEAN UP

- A. Manufacturer's installers shall not leave adhesive on adjacent surface or play equipment. Spills of excess adhesive shall be promptly cleaned.
- B. Manufacturer's installers shall properly dispose of all material and packing waste before leaving the job site.
- C. Owner or contractor shall be responsible for supplying a dumpster at job site for all waste associated with installation of the safety surface.

END SECTION

SECTION 02830: CHAIN LINK FENCING

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 Scope of Work: This section includes fence framework, fabric, gates, related hardware and accessories indicated on drawings, in specifications or necessary for a complete installation.
- 1.3 Product Handling: Deliver materials with manufacturer's tags and labels intact. Handle and store so as to avoid damage.

PART 2: PRODUCTS

- 2.1 General: Fence components galvanically compatible. Overall height of new fencing, when erected shall be indicated on Drawings. Weld all connections at gates. Use standard connections at other fencing.
- 2.2 Fabric: Zinc-coated steel, one-piece fabric, full height. Provide 2 inch, 9 gage mesh. Zinc coated steel fabric shall be galvanized after weaving and shall conform to ASTM A-392. Galvanizing shall be 1.2 oz./sq.ft. minimum. Fabric shall have knuckled top selvage and bottom selvage.
- 2.3 Framework:
- A. All material shall be hot-dipped galvanized with a minimum coating of 1.2 ounces per square foot of surface. Steel pipe shall be standard weight, Type I, Schedule 40, ASTM A 53. Weld all joints fully at gates, and apply touch-up coating.
 - B. Posts and Rails: Size members as indicated on Drawings and/or as specified, steel pipe as follows.
- | Outside Diameter, inches | Weight, #/ft. |
|--------------------------|---------------|
| 1 3/8 | 1.34 |
| 1 5/8 | 2.27 |
| 2 | 2.72 |
| 2 1/2 | 3.65 |
| 3 | 5.79 |
| 4 | 9.11 |
- 2.4 Truss Rods: 3/8 inch diameter rod with adjustable take-up, diagonal truss. Provide at bottom bay each side of each gate and at top and bottom bays each side of corner posts.
- 2.5 Accessories: Manufacturer's standard as required, all galvanized. Provide caps at tops of all posts.

- 2.6 Bottom Tension Wire: Minimum 7 gauge, galvanized unless otherwise noted on Drawings.
- 2.7 Gates: Sizes as indicated on Drawings. Frame of 2 inch o.d. steel pipe, all joints welded and hot-dip galvanized after welding. Fabric same as fence fabric. Provide 1-5/8 inch o.d. intermediate steel pipe, welded and galvanized. Properly brace to eliminate any possible sagging condition. Standard type hinges, size to accommodate gate frame and post. Fork type latches, operable from either side of gate; padlock hasp integral part of latch.
- 2.8 Touch-Up Coating: MIL-P-21035 zinc-rich galvanizing repair compound.
- 2.9 Concrete: As specified or as indicated on plans.

PART 3: EXECUTION

- 3.1 Preparation: Measure and lay out complete fence lines. Locate line posts at equal distance spacing, not exceeding 10 foot centers. Locate corner posts at positions where fence changes direction more than 10 degrees.
- 3.2 Installation:
- A. Posts: Minimum post hole diameters to be 12 inches; minimum depths to be 40 inches or as indicated on drawings. Place concrete in hole to depth of bottom of grade beam at locations wherever concrete slab will be poured over footings. Set posts plumb to 1/4 inch in 10 feet.
 - B. Fence Fabrics: Stretch fabric tight between terminal posts. Join ends of fabric by weaving with single strand of fabric wire to form continuous mesh pattern with selvage twisted to match balance of fabric. Attach fabric directly to posts, using wire ties or clips, spacing not to exceed 15 inches o.c. Attach to all rails or bottom tension wire using wire ties or clips, spacing not to exceed 24 inches o.c.
 - C. Gates: Install gates plumb and level to 1/4 inch in 10 feet. Install ground-set items in concrete. Adjust hardware to provide smooth operation.
 - D. Welding: Conform to requirements of American Welding Society, "Specifications for Iron and Steel Arc-Welding Electrodes." Electrodes shall be suitable for conditions of intended use. Make joint surfaces free from fins and tears and grind rough surfaces smooth.
- 3.3 Adjust and Clean: Adjust brace rails and tension rods for rigid installation. Wire brush to expose bare steel at welds, cuts, abrasions, etc. and apply 2 coats of zinc rich coating. Tighten hardware, fasteners, and accessories. Remove excess and waste materials from project site.

* * *

SECTION 02932: SEEDING & SODDING

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 Scope of Work: Furnish all necessary materials, labor and equipment for the complete installation of seeding and sodding materials at all lawn areas of the site disturbed by work of this contract and over areas to be graded where soil is uncovered or new fill added, as shown on the drawings and specified herein. Existing areas of site with total stand of grass and that are not affected by work of this contract need not be re-seeded or sodded. Provide all necessary supplementary items for a complete installation intended by documents.
- 1.3 Job Conditions:
- A. Existing Conditions: Perform seeding and sodding only after preceding work affecting ground surface is completed.
 - B. Environmental Requirements: Do not perform seeding when wind exceeds 15 mph. Arrange planting schedule to suit specified seeds.
 - C. Protection: Restrict foot and vehicular traffic from seeded and sodded areas after planting or placement until lawn areas are established.
- 1.4 Standards: Meet requirements and recommendations of the applicable portions of the latest editions of Standards listed below:
- A. U.S. Department of Agriculture (USDA)
 - B. Federal Seed Act (FSA)
- 1.5 Quality Assurance: Conform to all requirements of La. Seed Commission, La. Seed Law Rules and Regulations of the La. Revised Statutes (Title 3, Chapter 2, Part I) as amended by the 1977 session of the Legislature.

PART 2: PRODUCTS

- 2.1 Materials
- A. Grass Seed (between March 31 & September 15): Seed shall be Bermuda Grass (*Cynodon dactylon*) (Hulled) minimum 82% by weight of pure live seed, maximum 1% by weight weed seed. Seed shall be labeled in accordance with the latest U.S. Department of Agriculture Rules and Regulations under the Federal Seed Act.
 - B. Grass Seed (between September 15 & March 31): Seed shall be half (50%) Fescue, Turf-type tall Fescue (*Festuca arundinacea*) variety "Winning Colors" minimum 82% by weight of live seed, maximum .05% by weight weed seed. Only if the variety "Winning

Colors” becomes temporarily unavailable, another variety of turf type tall Fescue will be selected by the Owner’s Representative. “Winning Colors” is the recommended hybrid variety for use in this area, since it is the best acclimated to this area. The seed shall be a minimum 85% by weight of pure live seed with a maximum of 1% by weight weed seed. The second half (50%) shall be 419 Bermuda Grass (Cynodon dactylon) Non Hulled Seed. It shall be 82% by weight of pure live seed, maximum 1% by weight weed seed. Seeds shall be labeled in accordance with the latest U.S. Department of Agriculture Rules and Regulations under the Federal Seed Act.

- C. The Owner’s Representative reserves the right to reject at or after delivery any seed which does not, in his opinion, meet requirements of these specifications.
- D. Sod: Sod shall be 100% 419 Bermuda Grass (Cynodon dactylon). It shall be field grown. It shall be at least 2 years old, well rooted, and cut to a depth of 3/4" - 1". The sod shall be cut in rectangular strips 12 inches wide and of a size which will permit the strip to be lifted without breaking. Sources of the sod shall be made known to the Consultant at least 5 days prior to cutting. Delivered sod shall be approved by the Owner’s Representative prior to installation.
- E. Fertilizer and Herbicide: Provide Agriform CRF 16-7-12 (+ Iron), or approved equal, Sierra Chemical Company (local distributor) Burlap Sales Company. New Orleans, LA 70124. These chemicals are necessary to complete the establishment of a healthy dense turf. The following list is a list of the exact chemical names, and concentrations, and the possible vendors.

- 1. Only M.S.M.A. 6 Selections Post Emergent Weed Control to contain 6.0 pounds M.S.M.A. per gallon with surfactant. 3 Gallons per acre.

Source:

Van Water & Rogers
5229-A Salmen Ave.
Harahan, LA 70127

Pennington Seed, Inc.
1100 Edwards Ave.
Harahan, LA 70127

Chembro, Inc.
P.O. Box 702
Marrero, LA 70073

Jefferson Feed & Garden
4421 Jefferson Hwy.
Jefferson, LA 70121

- 2. P.B.I. Trimec Broadleaf Herbicide. 3 Gallons per acre.

Source:

Van Water & Rogers

Pennington Seed, Inc.

5229-A Salmen Ave.
Harahan, La 70127

1100 Edwards Ave.
Harahan, La 70127

Chembro, Inc.
P.O. Box 702
Marrero, La 70073

Jefferson Feed & Garden
4421 Jefferson Hwy.
Jefferson, La 70121

3. Turf Spray Dye (blue) Blazon or Regal Blue Turf colorant in one or five gallon containers. 1 Gallon per gallon of mixture.

Source:

Gulf Shore Turf Supply
P. O. Box 7185
Pensacola, Fl 32504

Chembro, Inc.
P. O. Box 702
Marrero, La 70073

Van Water & Rogers
5229-A Salmen Ave.
Harahan, La 70127

- F. Additional Earth Fill: If required for proper seed or sod bed preparation and finish grading operations shall be top soil, clean and free from clay, roots, muck or other objectionable material. See paragraph F. for description of Top Soil.
- G. Soil Mixture: Shall be fertile, friable, natural surface soil obtained from a well-drained area and free of all stones, shells, brush, weeds, shale, stumps, roots and other organic litter. The soil shall have at least six (6%) percent organic matter and an acidity range between pH 5.0 and 7.0 inclusive, and not more than 20% clay.
- H. Water: Free of matter harmful to plant growth.

PART 3: EXECUTION

3.1 Methods

A. General:

1. The Contractor shall, prior to seeding or sodding operations, repair all ruts, depressions, eroded areas, etc., to the satisfaction of the Owner's Representative.
2. Grade changes within the dripline of trees shall not exceed two inches.

B. Bed Preparation:

1. Any area, within areas to be seeded where existing areas of weeds remain, shall be mowed with blades set to a depth of 1" to 1-1/2."
2. Fertilizer shall be distributed evenly, by mechanical spreader over all areas to be seeded. The rate of application shall be

twenty (20) pounds per 1,000 square feet. Fertilizer shall be applied not more than one week prior to seeding. Fertilizer to be uniformly distributed in the top 2" to 4" inches of seed bed, or sodded area.

C. Finish Grading

1. Immediately prior to seeding or sodding the bed shall be prepared by breaking, disking, harrowing, blading, dragging or other approved methods. The soil shall be thoroughly pulverized to a minimum depth of approximately four (4") inches and smoothed by means of raking or other approved methods. Each area shall then be rolled in two directions perpendicular to each other with a light roller then finely raked. Raking shall be done by hand adjacent to structures, walks, curbing, and trees.
2. The finished surface shall be smooth, finely textured, free of all sticks, debris, rubbish, etc. and shall conform to the lines and grades indicated on the drawings and/or as directed by the Landscape Architect. All humps, depressions or other irregularities shall be corrected prior to seeding.

D. Seeding

1. On the same day that the finish grading operations are performed (with no rain between operations) and after approved by the Owner's Representative of the seed bed, the grass seed shall be applied at the rate of ten (10) pounds each of the specified seed types per 1,000 square feet of seed bed by means of an approved mechanical seed spreader which will provide a depth of 1/8" to 1/4".
2. Seeding shall be done in two (2) directions perpendicular to each other, using half of the specified amount in each application.
3. Immediately after seeding, roll seeded areas with a hand roller weighing not less than 150 pounds nor more than 200 pounds. Care should be exercised to prevent foot prints or other disturbances to the finished surface.

E. Sodding

1. Prior to sodding, the finished surface shall be free of all sticks, debris and rubbish and shall conform to the lines and grades shown on the drawings or as directed by the Engineer.
2. Upon delivery, slab sod shall be transferred and laid properly to avoid gaps and over onto the surface of the soil, rolled or tamped and watered as directed.
3. Inspection of the work to determine its final acceptance will be made by the Owner's Representative. No grass will be accepted unless it is alive and healthy.
4. In the event that sod is laid in place after September 15 and before March 31, the Contractor is required to overseed the

sod with the required Hybrid Fescue seed only as stated in Part 2 Products Section 2.01 Materials B, and all other related horticultural requirements.

3.2 Maintenance and Protection

- A. Watering shall be required for all areas which have been seeded except when natural precipitation has provided the necessary moisture as determined by the Landscape Architect. Watering shall be done in a manner which will prevent erosion due to the application of excessive quantities, and the watering equipment shall be of a type that will prevent damage to the finished surface. A minimum amount of rainfall would be two (2) one (1) inch rains per week. If more water is needed, it is the responsibility of the Contractor to provide it.
- B. The seeded areas shall be protected against traffic or other use by placing warning signs of a type approved by the Owner's Representative on the various areas where seeding or sodding has been completed or by other means, such as protective fencing, as may be required.
- C. The Contractor shall produce dense, vigorous, well-established lawns and shall maintain lawn areas until final acceptance of the work by the Owner. Maintenance shall include, but not be limited to, preparation and reseeding or resodding of all bare areas, proper watering refilling of rain-washed gullies and rutted areas, refertilizing and mowing. At the time of the first cutting, mower blades shall be set 2½" high. At least three (3) mowings shall be completed before the work will be accepted. Any areas which fail to show a uniform stand of grass shall be reworked, and reseeded at the Contractor's expense with the same seed as originally used thereon, and such reseeding shall be replaced until all required areas are covered with a satisfactory stand of grass. A satisfactory stand of grass is defined as a cover of living grass in which gaps larger than 4" do not occur at the time of acceptance by the Owner.
- D. The Contractor shall refertilize the lawn areas after eight (8) weeks and the first two grass cuttings have been made, or as otherwise directed by the Owner's Representative.

3.2 Inspection and Guarantees

- A. Final Inspection
 - 1. Inspection of work to determine its final acceptance will be made by the Owner's Representative. No plant material, turf included, will be accepted unless they are alive and healthy and all related work conforms to the drawings and specifications, at the conclusion of the one (1) year guarantee period.
 - 2. Should any portion of the work be unacceptable, Contractor shall make all work acceptable and request a reinspection by

- Owner within five (5) working days.
3. The Contractor will be notified by letter of acceptance within five (5) days after reinspection should the latter be necessary.

* * *

SECTION 03100: CONCRETE FORMWORK

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 Scope of Work: Furnish all necessary materials, labor and equipment for the complete installation of formwork for cast-in-place concrete, with shoring, bracing, anchorage and other accessories, as shown on the drawings and specified herein. Provide all necessary supplementary items for a complete installation intended by documents.
- 1.3 Reference Standards: Concrete formwork shall be in accordance with the "Building Code Requirements for Reinforced Concrete" (ACI 318), "Recommended Practice for Concrete Formwork" (ACI 347), and Manual of Standard Practice for Concrete Formwork" (ACI 315).
- 1.4 Tolerances:
- A. Construct formwork to provide completed cast-in-place concrete surfaces complying with the tolerances specified in ACI 347 and as follows:
 - 1. Variation from plumb in lines and surfaces of columns, piers, walls, and arises: 1/4" per 10 ft. but not more than 1". For exposed corner columns, control joint grooves and other conspicuous lines, 1/4" in any bay or 20 ft. maximum; 1/2" maximum in 40 ft. or more.
 - 2. Variation from level or grade in slab soffits, ceilings, beam soffits, and in arises 1/4" in 10 ft., 3/8" in any bay or 20 ft. maximum, and 3/4" in 40 ft. or more. For exposed lintels, sills, parapets, horizontal grooves and other conspicuous lines, 1/4" in any bay or 20 ft. maximum and 1/2" in 40 ft. or more.
 - 3. Variation from position of the linear building lines and related columns, walls, and partitions, 1/2" in any bay or 20 ft. maximum and 1" in 40 ft. or more.
 - 4. Variation in sizes and locations of sleeves, floor openings, and wall openings, 1/4".
 - 5. Variation in cross-sectional dimensions of columns and beams and thickness of slabs and walls, minus 1/4" and plus 1/2".
 - 6. Variation in steps: In flight of stairs, 1/8" for rise and 1/4" for treads. In consecutive steps: 1/16" for rise and 1/8" for treads.
 - B. Before concrete placement, check the lines and levels of erected formwork. Make corrections and adjustments to ensure proper size and location of concrete members and stability of forming systems.

During concrete placement, check formwork and related supports to ensure that forms are not displaced and that completed work will be within specified tolerances.

PART 2: PRODUCTS

2.1 Materials:

- A. Forms: Steel, wood, or other suitable material of size and strength to resist movement during concrete placement and to retain horizontal and vertical alignment until removal. Use straight forms, free of distortion and defects.
 - 1. Use flexible spring steel forms or laminated boards to form radius bends as required.
 - 2. Coat forms with a non-staining form release agent that will not discolor or deface surface of concrete.
- B. General: Unless otherwise indicated, construct formwork for concrete surfaces with plywood, metal, metal formed plywood faced or other acceptable panel-type materials, to provide continuous, straight, smooth surfaces. Furnish in largest practicable sizes to minimize number of joints. Provide form materials of sufficient thickness to withstand pressure of newly-placed concrete without bow or deflection.
 - 1. Plywood: Use plywood complying with U.S. Product Standard PS-1, B-B Ply form, Grade 1, exterior grade or better, mill-oiled and edge-sealed.
 - 2. Lumber: Form lumber shall be No. 2 DENSE, of good quality, free from loose knots, holes, twists, shakes, or decay.
- C. Form Coatings: Provide commercial formulation form-coating compounds that will not bond with, stain nor adversely affect concrete surfaces, and will not impair subsequent treatments of concrete surfaces.
- D. Form Ties: Provide factory fabricated, adjustable length, removable or snap-off form-ties, designed to prevent form deflection, and to prevent spalling concrete surfaces upon removal.

PART 3: EXECUTION

3.1 Design forms and falsework to include assumed values of live load, dead load, weight of moving equipment operated on formwork, concrete mix, height of concrete drop, vibrator frequency, ambient temperature, foundation pressures, stresses, lateral stability, and other factors pertinent to safety of structure during construction.

3.2 Form Construction

- A. Construct forms complying with ACI 347 to the exact sizes, shapes, lines and dimensions shown, and as required to obtain accurate

alignment, location, grades, level and plumb work in finished structures. Provide for openings, offsets, sinkages, keyways, recesses, reglets, chamfers, blocking, screeds, bulkheads, anchorages and inserts, and other features required. Use selected materials to obtain required finishes.

- B. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush plates or wrecking plates where stripping may damage case concrete surfaces. Kerf wood inserts for forming keyways, recesses and the like to prevent swelling and assure ease of removal.
- C. Provide temporary openings where interior area of formwork is inaccessible for cleanout, for inspection before concrete placement, and for placement of concrete mortar. Locate temporary openings in as inconspicuous locations as possible.
- D. Form intersecting planes to provide true, clean-cut corners, with edge grain of plywood not exposed as form for concrete.
- E. Provide formwork sufficiently tight to prevent leakage of cement paste during concrete placement. Solidly butt joints and provide backup material at joints are required to prevent leakage and fins.
- F. Provide shores and struts with positive means of adjustment capable of taking up formwork settlement during concrete placing operations, using wedges or jacks or a combination thereof. Provide trussed supports when adequate foundations for shore and struts cannot be secured.
- G. Support form facing materials by structural members spaced sufficiently close to prevent deflection. Fit forms placed in successive units for continuous surfaces to accurate alignment, free from irregularities and within allowable tolerances. Provide camber in formwork as required for anticipated deflections due to weight and pressures of fresh concrete and construction loads for longspan members without intermediate supports.

3.3 Coating Forms: Coat form contact surfaces with form-coating compound before reinforcement is placed. Do not allow excess form coating material to accumulate in the forms or to come into contact with surfaces, which will be bonded, to fresh concrete. Apply in compliance with manufacturer's instructions.

3.4 Installing Embedded Items:

- A. General: Set and built into the work anchorage devices and other embedded items required for other work that is attached to or supported by cast-in-place concrete. Use setting drawings, diagrams, instructions and directions provided by suppliers of the items to be attached thereto.
- B. Edge Forms and Pipe Screeds for Slabs: Set edge forms or bulkheads and intermediate pipe screed strips for slabs to obtain

required elevations and contours in the finished slab surface. Provide ad secure units to support pipe screeds as required.

- C. Reposition forms to true alignment prior to, during, and after concrete placement, if necessary.
- D. Where electrical or telephone conduit is run at slabs, install beneath required slab thickness. Conduit runs are not allowed in foundation beam trenches. Where conduit must cross foundation beams or where short runs of conduit must be placed within foundation beams, place conduit within top 1/3 of foundation beam.
- E. Where vertical runs of conduit or piping interrupt more than 12 inches of concrete slab in any direction, such as at electrical and telephone panels, double the slab thickness for a distance of not less than 24 inches from the group of conduit.

3.5 Cleaning Forms:

- A. Remove debris and foreign matter from formwork prior to concrete placement.
- B. Remove rust or dirt from reusable hardware prior to installation into formwork.

3.6 Removing Forms:

- A. Formwork not supporting weight of concrete, such as sides of beams, walls, columns, and similar parts of the work, may be removed no sooner than 24 hours, provided the concrete of sufficient strength as not been damaged and curing and protection operations are maintained.
- B. Do not remove supporting forms and shores from beams, floors and columns until fourteen (14) days have elapsed from time of pouring and these structural members have attained eighty (80%) per cent of design strength and are capable of carrying their own weight and that of any superimposed load. Do not at any time exceed design live load.

3.7 Form Reuse:

- A. Withdraw projecting nails; clean concrete form contact surfaces. Replace with new material when necessary or when directed.
- B. Reuse forms only when contact surfaces equal those specified for original use.
- C. Floor level shall conform to latest edition of ACI Code and Commentary. Floor level shall be 1/8" per 10' - 0" as stated in code.

3.8 Site Cleaning: Remove debris from project site upon completion of work, or sooner, if directed.

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SECTION 03200: CONCRETE REINFORCEMENT

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract, including the Conditions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this Section.
- 1.2 Scope of Work: This section includes reinforcing bars, wire, mesh, accessories, etc. for concrete construction indicated on the Drawings and in specifications. Provide all necessary supplementary items for a complete installation intended by documents.
- 1.3 Reference Standards: Furnish and install all reinforcing steel and accessories in accordance with "Building Code Requirements for Reinforced Concrete" (ACI 318), "Manual of Standard Practice for Detailing Reinforced Concrete Structures" (ACI 315), "Concrete Sanitary Engineering Structures" (ACI 350)", and CRSI.
- 1.4 Submittals:
- A. Provide detailed shop drawings, showing layout, sizes, arrangements, bar supports, etc. for all reinforcing steel, joints, curbs, accessories, etc. Furnish samples, manufacturer's product data, test reports, and materials certifications for joint fillers and sealers.
 - B. Submit in accordance with requirements of Division 1.
- 1.5 Storage of Materials: Store materials above ground on suitable supports and keep free of foreign material and corrosion, damage, etc., as far as practical.

PART 2: PRODUCTS

- 2.1 Materials:
- A. Reinforcing Bars: Deformed billet steel bars in accordance with ASTM A 615 Supplement S1, having a minimum yield of 60,000 psi.
 - B. Joint Dowel Bars: Plain steel bars, ASTM A 615, Grade 60. Cut bars true to length with ends square and free of burrs.
 - C. Welded Wire Fabric: Electrically-welded wire fabric of cold-drawn wire (70,000 psi yield point) of gage and mesh size indicated on the Drawings. Conform to ASTM A 185 and ASTM A497. Furnish in flat sheets.
 - D. Tie Wire: Annealed steel, black, 16 gage minimum.
 - E. Metal Keys: Heckman No. 95, 16 gage tongue and groove joint, Dayton Superior Screed-Load key, or approved equal, with both stake pin and dowel holes. Provide No. 88, 18 gage tapered channel type stake pins, 15 inches long. Provide approved type metal bar

- supports as indicated on the Drawings.
- F. Bar Support Chairs: CRSI Class I hot dipped galvanized, plastic, ceramic, or stainless steel protected.

2.2 Fabrication: In accordance with CRSI Manual of Standard Practice.

PART 3: EXECUTION

3.1 Placing Reinforcement, General:

- A. Comply with Concrete Reinforcing Steel Institute's recommended practice for "Placing Reinforcing Bars", for details and methods of reinforcement placement and supports, and as herein specified.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, and other materials, which reduce or destroy bond with concrete.
- C. Accurately position, support and secure reinforcement against displacement by formwork, construction, or concrete placement operations. Locate and support reinforcing by metal chairs, runners, bolsters, spacers, and hangers, as required.
- D. Place reinforcement as shown on plans or to obtain at least minimum coverages for concrete protection. Arrange, space and securely tie bars and bar supports to hold reinforcement in position during concrete placement operations. Set wire ties so ends are directed into concrete, not toward exposed concrete surfaces.

3.2 Installation:

- A. Placement: Bar supports, CRSI 65. Reinforcing bars, CRSI 63.
- B. Steel Adjustment: Move within allowable tolerances to avoid interference with other reinforcing steel, conduits, or embedded items. Do not move bars beyond allowable tolerances without concurrence of A/E. Do not heat, bend, or cut bars without concurrence of A/E.
- C. Splices: All splices, laps, and dowels shall be at a minimum Class C per ACI. Tie securely with wire to prevent displacement of splices during placement of concrete. Do not splice bars except at locations shown on the Drawings without concurrence of A/E. Stagger all laps.
 - 1. Lap top bars at mid-span and bottom bars at pile. Lap all bars a minimum of 15 inches.
 - 2. Provide standard 90 degree hooks at all top bars at discontinuous ends.
 - 3. Provide corner bars at all discontinuous ends, same number and size as outside beam bars and with a lap of 15 inches minimum each way.
 - 4. Lap all continuous bars a minimum of 30 bar diameters. Stagger laps in slabs a minimum of 24 inches.
- D. Wire Fabric: Install in longest practicable length. Lap adjoining pieces two full wire spaces minimum and tie splices with 16 gage wire. Do not make end laps midway between supporting beams, or

directly over beams of continuous structures. Offset end laps in adjacent widths to prevent continuous laps. In lieu of adequate support for mesh, left the mesh during placing of concrete so that it is completely surrounded by concrete and not less than two (2") inches above the bottom of slabs.

- E. Cleaning: Remove dirt, grease, oil, loose mill scale, excessive rust, and foreign matter that will reduce bond with concrete.
- F. Protection During Concreting: Keep reinforcing steel in proper position during concrete placement.

* * *

SECTION 03250: CONCRETE ACCESSORIES

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract General and Supplementary and other Conditions, Division 0) and Division 1 as appropriate, apply to work specified in this section.
- 1.2 Scope of Work: Furnish all necessary materials, labor and equipment for the complete furnishings and installation of expansion joint fillers, joint sealer, concrete floor hardener, sealing compound and other accessories as shown on the drawings and specified herein. Provide all necessary supplementary items for a complete installation intended by documents.
- 1.3 Product Handling: Deliver materials in manufacturer's original unopened bundles or containers with brand name and identification clearly marked thereon. Store material in packs, on platforms or other supports above ground to prevent damage, deterioration or contamination.
- 1.4 Submittals:
 - A. Submit manufacturers supporting technical literature, performance data, installation and maintenance data.
 - B. Submit in accordance with requirements of Division 1.

PART 2: PRODUCTS

- 2.1 Concrete Accessories:
 - A. Expansion Joint Filler: Non-extruding, resilient bituminous joint filler conforming to AASHTO M213-0-UL or ASTM D1751-04(2013)C1. Preformed strips from cane or other cellular fiber uniformly saturated with bituminous binder.
 - B. Joint Sealant: Hot poured asphaltic mineral filler to conform to La. DOTD, or Elastomeric sealant equal to Sonneborn, Sonolasic NP II.
 - C. Waterstop: PVC ribbed waterstop equal to Greenstreak type 709, serrated with center bulb.
 - D. Metal Keys: Heckman Building Products, Inc., Heckman No. 95, 16 gage Tongue and Groove joint, or approved equal, with both stake pin and dowel holes. Provide No. 88, 18 gages tapered channel type strive pins, 15 inches long. Provide approved type metal bar support as indicated on Drawings.
 - E. Pigmented Floor Hardener: LM Scofield Co. Floorcron Non-Metallic or approved equal. Color as selected by A/E from manufacturer's standard course.
 - F. Colored Curing and Sealing Compound: ASTM C-309-11, LM Scofield Co. Chrom-a-Seal or approved equal, color as selected by A/E.

- G. Non-Colored Curing and Sealing Compound: ASTM C-309-11, LM Scofield Co. Sealed 309 or approved equal.

PART 3: EXECUTION

3.1 Expansion Joints:

- A. Provide pre-molded joint filler for expansion joints abutting concrete curbs, catch basins, manholes, inlets, structures, and other fixed objects, unless otherwise indicated.
1. Locate expansion joints as indicated on Drawings.
 2. Extend joint fillers full-width and depth of joint, and not less than 1/2" or more than 1" below finished surface where joint sealer is indicated.
 3. Furnish joint fillers in one-piece lengths for full width being placed, where ever possible. Where more than one length is required, lace or clip joint filler sections together.
 4. Protect top edge of joint filler during concrete placement with a metal cap or other temporary material. Remove protection after concrete has been placed on both sides of joint.
- B. Joint Fillers and Sealants (Installation):
1. Clean joint surfaces immediately before installation of joint fillers and sealants. Remove dirt, insecure coatings, moisture and other substrates, which could interfere with bond of sealant.
 2. Prime or seal joint surfaces where indicated and/or where recommend by sealant manufacturer. Confine primer or sealer to areas of sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. Keyways: Provide keyways minimum 1 1/2 inches deep where indicated on paving plan.

- 3.2 Pigmented Floor Hardener: Where shown on drawings or indicated elsewhere apply at all finished concrete as indicated. Apply 1 coat of hardener and comply strictly with manufacturer's instructions and recommendations

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SECTION 03300: CAST-IN-PLACE CONCRETE

PART 1: GENERAL

- 1.1 Related Documents: The general provisions of the Contract (General and Supplementary and other Conditions, Division 0) and Division 1 as appropriate, apply to work specified in this section.
- 1.2 Scope of Work: Furnish all necessary materials, labor and equipment for the complete installation of cast-in-place concrete, as shown on the Drawings and specified herein. Provide all necessary supplementary items for a complete installation intended by documents.
- 1.3 Quality Assurance:
- A. Codes and Standards: Comply with local governing regulations if more stringent than herein specified.
 - B. Concrete form work, reinforcing steel, and related items shall be in accordance with the following:
 - 1. ACI 301 "Specifications for Structural Concrete for Buildings."
 - 2. CI 304 "Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete."
 - 3. ACI 305 "Recommended Practice for Hot Weather Concreting."
 - 4. ACI 306R "Recommended Practice for Cold Weather Concreting."
 - 5. ACI 350 "Concrete Sanitary Engineering Structures "
 - 6. ASTM C33 "Concrete Aggregates."
 - 7. ASTM C150 "Portland Cement."
 - 8. ASTM C260 "Air Entraining Admixtures for Concrete."
 - 9. ASTM C494 "Chemical Admixtures for Concrete."
 - 10. ASTM C94 "Ready-Mixed Concrete."
 - C. Mixing and Transporting Concrete: In accordance with "Specifications for Ready Mixed Concrete" (ASTM C 94) except complete discharge from the hauling containers within 60 minutes after the cement has been added to the aggregate and water in the mixer.
 - D. Allowable Tolerances: Flatwork true to plane 1/8 inch in 10 feet. No open paving shall pond water. At floor slabs, grind smooth any defects of sufficient magnitude to show through floor coverings.
 - E. Testing:
 - 1. Laboratory shall prepare and furnish to the A/E, in triplicate, reports of concrete mixed all inspection and testing complete with summary of results. Laboratory shall also furnish copy of all reports to the concrete supplier.
 - 2. Contractor shall furnish samples of the various materials and the concrete mix for laboratory test.
 - 3. The required laboratory testing and control shall be as follows:
 - a. Review the proposed concrete mixes submitted by the Contractor for all concrete to be used on this job.

- b. Test gradation of aggregate used in the concrete mix for compliance with the Specifications.
 - c. Make concrete cylinders to perform compression tests of cylinders taken from concrete used on the job. Make a minimum of two (2) sets of cylinders per day or one (1) set of cylinders per 50 yards, whichever is greater. For regular strength concrete, each set shall consist of three (3) cylinders. Make compression tests at seven (7) days (with one cylinder of each set) and at 28 days (with remaining 2 cylinders of each set). For high early strength concrete, each set shall consist of two (2) cylinders. Make compression tests at seven (7) days with both cylinders of each set.
 - d. Make a minimum of 4 slump tests per day or one per 25 yards, whichever is greater.
4. If tests indicate insufficient concrete strength and if additional tests are ordered (cores, etc.), Contractor shall pay for such additional tests.

PART 2: PRODUCTS

2.1 Concrete: ASTM C 94

- A. Cement: Type II, ASTM C 150.
- B. Admixture:
 - 1. Water Reducing Admixture: ASTM C 494, Type A: Eucon WR-75 by Euclid Chemical Co., Pozzolith 300 N by Master Builders, Plastocrete 160 by Silea Chemical Corporation.
 - 2. Water Reducing, Retarding Admixture: ASTM C 494 Type D: Eucon Retarder 75 by Euclid Chemical Co., Pozzolith 300-R by Master Builders, Plastiment by Silea Chemical Co.
 - 3. Air Entraining: ASTM C 260, Master Builders MB-VR, Chem-Masters Adz-air, or approved equal, at exterior paving only.
- C. Fine Aggregate: Sand, ASTM C 33.
- D. Coarse Aggregate: Gravel, ASTM C 33, size number 57 (1 inch to No. 4).
- E. Fly Ash (Type C or F): The Contractor will be permitted partial substitution of fly ash for portland cement in concrete mixes up to 25%. Fly ash, if used, shall be incorporated into the mix by methods such that the fly ash will be uniformly distributed throughout the mixture. Fly ash may be weighed cumulatively in the same hopper with the cement, provided the cement is weighed first. The amount of fly ash used in the mix shall be recorded and certified by the plant's Concrete Batcher or Concrete Technician. For mixes including partial replacement of cement with fly ash, the minimum cement content

- shown below apply to the total cement/fly ash content of the mix.
- F. Water: Clean and free from oil, alkali, sugar or other deleterious substances.
 - G. Slump: Maximum 5 inches. With a High Range Water Reducer (Superplastizier) Maximum 9 inches.
 - H. Air Content: 2% minimum, 5% maximum in exterior exposed concrete only.
 - I. Mixes:
 - 1. Unless noted or specified otherwise, all concrete shall be 3,000 psi, regular strength.

CONCRETE MIX PROPORTIONING

Type of	Compressive	Min. Pounds Cement Per Cubic Yard
Regular	3000	430
	4000	510
High Early Strength	3000	540
	4000	560

- 2. The compressive strength of moist cured laboratory samples shall reach design strength in 28 days for regular strength concrete and in 7 days for high early strength concrete.
- 3. Admixture: Use in accordance with manufacturer's recommendations.

2.2 Curing Material:

- A. ASTM C 171, waterproof paper or polyethylene film.
- B. At Contractor's option, ponding, continuous sprinkling, application of sand kept continuously wet, or application of other moisture-retaining covering may be used.
- C. ASTM C 309, clear liquid membrane curing material may be utilized provided it is compatible with all concrete finished and floor coverings. Verify with all manufacturers concerned. LM Scofield Co. Sealed 309 or approved equal.

PART 3: EXECUTION

3.1 Surface Preparation:

- A. Remove loose material from compacted subbase surface immediately before placing concrete.
- B. Pre-roll prepared subbase surface to check for unstable areas and need for additional compaction. Do not begin paving work until such conditions have been corrected and are ready to receive paving.

- 3.2 Inspection: Contractor shall inspect his work to insure that excavations and form work are completed, that excess water is removed, and that reinforcement is secured in place. Contractor shall verify that expansion joint material, anchors, sleeves, and other embedded items are secured in position. After the Contractor verifies that the form work, placement of reinforcement, joints, anchors, etc. are complete and has been inspected by the Contractor for accuracy, he shall notify the A/E. This notification must be provided to the A/E on the day proceeding the concrete pour.
- 3.3 Form Construction:
- A. Set forms to required grades and lines, rigidly braced and secured. Install sufficient quantity of forms to allow continuous progress of work and so that forms can remain in place at least 24 hours after concrete placement.
 - B. Check completed form work for grade and alignment to the following tolerances:
 - 1. Top of forms not more than 1/8" in 10'. Accumulative total not to exceed 1/2" from that required by documents.
 - 2. Vertical face on longitudinal axis, not more than 1/4" in 10'.
 - C. Clean forms after each use, and coat with form release agent as often as required to insure separation from concrete without damage.
- 3.4 Concrete Placement:
- A. General: Comply with specifications herein for mixing and placing concrete.
 - B. Do not place concrete until subbase and forms have been checked for line and grade. Moisten subbase if required to provide a uniform dampened condition at time concrete is place. Do not place concrete around manholes or other structures until they are at required finish elevation and alignment.
 - C. Placing concrete: Convey concrete from mixer to final position by method, which will prevent separation or loss of material. Maximum height of concrete free fall, 4 feet. Regulate rate of placement so concrete remains plastic and flows into position. Deposit concrete in continuous operation until panel or section is completed. Place concrete in horizontal layers 18 inches maximum thickness. Use only square-faced shovels for hand-spreading and consolidation. Consolidate with care to prevent dislocation of reinforcing, dowels, and joint devices.
 - D. Deposit in a continuous operation between transverse joints, until complete section has been placed.
 - E. Consolidating Concrete: Use mechanical vibrating equipment for consolidating. Vertically insert and remove hand-held vibrators at points 18 to 30 inches apart. Do not use vibrators to transport concrete in forms. Vibrate concrete minimum amount required for consolidation.

3.5

Joints:

- A. General: Construct expansion, weakened-plane (contraction), and construction joints true-to-line with face perpendicular to surface of concrete. Construct transverse joints at right angles to the centerline, unless otherwise indicated. When joining existing structures, place transverse joints to align with previously placed joints, unless otherwise indicated.
- B. Weakened-Plane (Contraction) Joints: Provide weakened-plane (contraction) joints, sectioning concrete into areas as shown on the Drawings. Construct weakened-plane joints for a depth equal to at least 1/4 concrete thickness, as follows:
 - 1. Tooled Joints: Form weakened-plane joints in fresh concrete by grooving top portion with a recommended cutting tool and finishing edges with a jointer.
 - 2. Sawed Joints: Form weakened-plane joints using powered saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut joints into hardened concrete as soon as surface will not be torn, abraded, or otherwise damaged by cutting action.
 - 3. Inserts: Use embedded strips of metal or sealed wood to form weakened-plane joints. Set strips into plastic concrete and carefully remove strips after concrete has hardened.
- C. Construction Joints: Place construction joints at end of placements and at locations where placement operations are stopped for a period of more than 1/2-hour, except where such placements terminate at expansion joints. Verify location of any joints not shown on plans with A/E.
 - 1. Construct joints as shown or, if not shown, use standard metal keyway-section forms.
 - 2. Where load transfer-slip dowel devices are used, install so that one end of each dowel bar is free to move.

3.6

Finishing Formed Concrete:

- A. Tops of Forms: Strike concrete smooth at tops of forms. Float to texture comparable to formed surfaces.
- B. Formed Surfaces: As-cast finish. Patch tie holes and defects after form removal. Remove fins from surfaces. Provide smooth rubbed finish to eliminate defects or unsightly texture.

3.7

Concrete Flatwork Finishing:

- A. After striking-off and consolidating concrete, smooth surface by screening and floating. Use hand methods only where mechanical floating is not possible. Adjust floating to compact surface and produce uniform texture.
- B. After floating, test surface for trueness with a 10' straightedge. Distribute concrete as required to remove surface irregularities, and refloat repaired areas to provide a continuous smooth finish.

- C. Slope uniformly at exterior surfaces as indicated. Insure uniform slopes. Method of screening and finishing shall produce uniform slope of entire slab.
- D. Work edges of slabs, gutters, back top edge of curb, and formed joints with an edging tool, and round to 1/2" radius, unless otherwise indicated. Eliminate tool marks on concrete surface.
- E. After completion of floating and troweling when excess moisture or surface sheen has disappeared, complete surface finishing, as follows:
 - 1. Troweled Finish: At interior slabs and where indicated on the Drawings, power trowel surface to smooth finish. Hand trowel areas inaccessible to power trowel.
 - 2. Broom Finish: At exterior walks, platforms, pads, slabs, etc., draw broom or brush across concrete surface, perpendicular to line of traffic. Repeat operation if required to provide a fine line texture acceptable to A/E.
 - 3. On exterior inclined slab surfaces, provide a coarse, non-slip finish by scoring surface with a stiff-bristled broom, perpendicular to line of traffic.
- F. Do not remove forms for 24 hours after concrete has been placed. After form removal, clean ends of joints and point-up any minor honeycombed areas. Remove and replace areas or sections with major defects, as directed by A/E.

3.8 Curing Concrete - General:

- A. Protect freshly placed concrete from premature drying and excessive cold or hot temperature, and maintain without drying at relatively constant temperature for period of time necessary for hydration of the cement and proper hardening of concrete.
- B. Start initial curing as soon as free water has disappeared from concrete surface after placing and finishing. Weather permitting, keep continuously moist for not less than 72 hours.
- C. Begin final curing procedures immediately following initial curing and before concrete has dried. Continue final curing for at least seven (7) consecutive days during which concrete is not exposed to air temperature below 50 degrees F. Avoid rapid drying at the end of final curing period.

3.9 Curing Methods:

- A. Perform curing of concrete by one or combinations of the following methods. Use only water free of impurities, which could etch or discolor exposed, natural concrete surface. Do not use curing method or compounds, which would prevent or interfere with proper installation of finish materials by causing loss of bond or bleeding through of chemicals. Refer to Finish Schedule and Detail Drawings and coordinate as required.

1. Moisture Curing - any one of the following:
 - a. Keeping surfaces of concrete continuously wet by covering with water.
 - b. Continuous water-fog spray.
 - c. Covering concrete surface with specified absorptive cover, thoroughly saturating cover with water, and keeping continuously wet. Place absorptive cover so as to provide coverage of concrete surfaces and edges with a 4" lap over adjacent absorptive covers.
2. Moisture Cover Curing - Cover concrete surfaces with specified moisture-retaining cover for curing concrete, placing in widest practicable width with sides and ends lapped at least 3" and sealed by waterproof tape or adhesive. Immediately repair any holes or tears during the curing period using cover material and waterproof tape.
3. Liquid Membrane Curing:
 - a. Apply approved membrane-forming curing compound to damp concrete surfaces as soon as water film has disappeared. Apply uniformly in two-coat continuous operation by power spray equipment in accordance with manufacturer's directions. Recoat areas, which are subjected to heavy rainfall within three (3) hours after initial application. Maintain continuity of coating and repair damage during entire curing period.
 - b. Do not use membrane curing compounds on surfaces which are to be covered with coating material applied directly to concrete or with covering material bonded to concrete.
- B. Temperature of Concrete During Curing
 1. Maintain concrete temperature as uniformly as possible, and protect from rapid atmospheric Temperature changes. Avoid temperature changes in concrete which exceed 5 degrees F. in any one (1) hour and 50 degrees F. in any 24 hour period.
 2. Comply with requirements of ACI 305 and 306.
- C. Protection:
 1. During curing period, protect from damaging mechanical disturbances including load stresses, heavy shock, excessive vibration, and from damage caused by rain or flowing water.
 2. Protect all finished concrete surfaces from damage by subsequent construction operations.
 3. Contractor shall provide necessary protection to prevent any vandalism or damage to finish. Vandalism and damage of finish will be cause for rejection of effected concrete work. Patching and topping are unacceptable. All costs and fees for removal and replacement of such rejected paving will be the Contractor's responsibility, including any charges for retesting.
 4. Protect concrete from damage until acceptance of work.

3.10

Corrections:

- A. Remove all excess projections and loose material from all concrete. Patch honeycombs and minor defects with mortar (1 part cement and 2 parts sand) until all exposed surfaces are smooth and acceptable to A/E.
- B. Repair or replace broken or defective concrete, as directed by A/E.

3.11

Cleaning:

- A. Remove all form material, stakes, excess concrete, all other debris from site.
- B. Sweep concrete pavement and wash free of stains, discolorations, dirt, and other foreign material just prior to final inspection.

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DIVISION II
TECHNICAL SPECIFICATIONS
SECTION 10426E
"EXTERIOR SIGNAGE"

PART 1: DESCRIPTION:

All work shall be in accordance with the requirements of Section 729 of the Louisiana Standard Specifications for Roads and Bridges, 2016 Edition, as amended.

PART 2: MATERIALS:

Material shall be in accordance with the requirements of Section 729 of the Louisiana Standard Specifications for Roads and Bridges, 2016 Edition, as amended.

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SECTION 11 68 00
PLAY STRUCTURES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

The general provisions of the Contract (General, Supplementary, and other Conditions, Division 0) and Division 1 as appropriate, apply to the Work specified in this section.

1.2 SCOPE OF WORK

Furnish all necessary materials, labor and equipment for the complete installation of play structures and other accessories, as shown on the drawings and specified herein. Provide all necessary supplementary items for a complete installation as intended by documents.

1.3 REFERENCES

A. ASTM International (ASTM):

1. ASTM A123 - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
2. ASTM A500 - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
3. ASTM A635 - Standard Specification for Steel, Sheet and Strip, Heavy-Thickness Coils, Hot-Rolled, Alloy, Carbon, Structural, High-Strength Low-Alloy, and High-Strength Low-Alloy with Improved Formability, General Requirements for.
4. ASTM A1011 - Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength.
5. ASTM B117 - Standard Practice for Operating Salt Spray (Fog) Apparatus.
6. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
7. ASTM C39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
8. ASTM C947 - Standard Test Method for Flexural Properties of Thin-Section Glass-Fiber-Reinforced Concrete (Using Simple Beam with Third-Point Loading).
9. ASTM D522 - Standard Test Methods for Mandrel Bend Test of Attached Organic Coatings.
10. ASTM D638 - Standard Test Method for Tensile Properties of Plastics,
11. ASTM D1505 - Standard Test Method for Density of Plastics by the Density-Gradient Technique.
12. ASTM D1654 - Standard Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments.
13. ASTM D2794 - Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
14. ASTM D3359 - Standard Test Methods for Rating Adhesion by Tape Test.
15. ASTM D3363 - Standard Test Method for Film Hardness by Pencil Test.
16. ASTM F879 - Standard Specification for Stainless Steel Socket Button and Flat Countersunk Head Cap Screws.
17. ASTM F1487 - Standard Consumer Safety Performance Specification for Playground Equipment for Public Use.
18. ASTM G154 - Standard Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Nonmetallic Materials.

- B. Industrial Fasteners Institute (IFI): IFI 125 - Test Procedure for the Performance of Chemical Coated Prevailing-Torque Screws.

C. ADA Standard for Accessible Design.

1.4 SUBMITTALS

- A. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- B. Shop Drawings; colored 3D drawings
- C. Selection Samples for each finish product specified representing manufacturer's full range of available colors and patterns. Specific color chip samples to be submitted upon request.
- D. Installation Documentation: All shipments shall include a packet of order-specific, step-by-step instructions for assembly of each component, including equipment assembly diagrams, estimated hours for assembly, footing dimensions, concrete quantity for direct bury components, fall height information, and area required information.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum 15-year experience manufacturing similar products.
- B. Installer Qualifications: Minimum 2-year experience installing similar products.
- C. All play structures shall be certified and validated to be in conformance with the ASTM F1487 Standard. Project specific IPEMA Certification required.
- D. To the best of manufacturer's belief and knowledge play structures conform to the U.S. Consumer Products Safety Commission (CPSC) Guidelines.
- E. Unless otherwise noted, all play structures are considered accessible according to the 2010 ADA Standard for Accessible Design. (See the play components listing for each structure to determine the number of additional play components required to meet the guidelines.)
 - 1. Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines for Buildings and Facilities and ICC A117.1 for playground equipment designated as accessible.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.
- B. Packaging: Components shall be individually wrapped or bulk wrapped to provide protection during shipment. Small parts and hardware packages will be placed in crates for shipment. The components and crates are then shrink-wrapped to skids (pallets) to ensure secure shipping.
- C. Handling: Handle materials to avoid damage.

1.7 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.8 SEQUENCING

- A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.
- B. Hardware Packages: Each hardware package shall be labeled with the part number, description, package weight, a bar code linking the hardware package to the job number, assembler's name, date and time the package was assembled, work center number, and work order number.

1.9 WARRANTY

- A. "Manufacturer" warrants that all play structures and/or equipment sold will conform in kind and in quality to the specifications manual for the products identified in the Acknowledgment of Order and will be free of defects in manufacturing and material. Manufacturer further warrants:
 - 1. 100-Year Limited Warranty: On all PlayBooster and PlayShaper and PlaySense aluminum posts, stainless steel fasteners, clamps, beams and caps against structural failure due to corrosion/natural deterioration or manufacturing defects, and on PlayBooster steel posts against structural failure due to material or manufacturing defects.
 - 2. 15-Year Limited Warranty: On all Evos and Weevos steel arches, all plastic components (including TuffTimbers edging), all aluminum and steel components not covered above, Mobius climbers, Rhapsody Outdoor Musical Instruments, decks and TenderTuff coatings (except Wiggle Ladders, Chain Ladders and Swing Chain) against structural failure due to material or manufacturing defects.
 - 3. 3-Year Limited Warranty: On all other parts, i.e.: Pulse products, all swing seats and hangers, Mobius climber handholds, Wiggle Ladders, Chain Ladders and ProGuard Swing Chain, Track Ride trolleys and bumpers, all rocking equipment including Sway Fun gliders, belting material, HealthBeat resistance mechanism, Seesaws, etc., against failure due to corrosion/natural deterioration or manufacturing defects.
 - 4. The environment near a saltwater coast can be extremely corrosive. Some corrosion and/or deterioration is considered "normal wear" in this environment. Product installed within 500 yards (457 meters) of a saltwater shoreline will only be covered for half the period of the standard product warranty, up to a maximum of five years, for defects caused by corrosion. Products installed in direct contact with saltwater or that are subjected to salt spray are not covered by the standard warranty for any defects caused by corrosion.
 - 5. This warranty does not include any cosmetic issues or wear and tear from normal use. It is valid only if the playstructures and/or equipment are erected to conform with Landscape Structures' installation instructions and maintained according to the maintenance procedures furnished by Landscape Structures Inc.

1.10 EXTRA MATERIALS

- A. Maintenance Kit: A maintenance kit shall be provided for each Play Structure design ordered. The kit will include a maintenance document with recommendations on how often to inspect, what to look for and what to do to keep the equipment in like-new condition. The kit also includes appropriate color touch-up paint and additional installation tools for the tamperproof fasteners.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Basis of design is Landscape Structures Inc. Design Drawing #1169876-02 or PRIOR APPROVED EQUAL. Any manufacturer seeking prior approval must submit a 2-Dimentional drawing (AutoCAD) of the proposed playground structure(s) which includes the IPEMA

certification and manufacturer's statement that proposed equipment conforms to the ADA accessibility Guidelines with a breakdown of total elevated components, elevated components accessible by transfer, and total accessible ground level components. An itemized list of product deviations is also required.

2.2 MATERIAL

- A. Material: All materials shall be structurally sound and suitable for safe play.
- B. Fasteners: Primary fasteners shall be socketed and pinned, tamperproof in design, stainless steel (SST) per ASTM F879 unless otherwise indicated. All primary fasteners shall include a locking patch-type material that will meet the minimum torque requirements of IFI-125. Manufacturer shall provide special tools for pinned tamperproof fasteners.
- C. TenderTuff Coating: Metal components to be TenderTuff coated shall be thoroughly cleaned in a hot phosphatising wash system, then primed with a water-based thermosetting solution. Primed parts shall be preheated prior to dipping in UV stabilized, liquid polyvinyl chloride (PVC), and then salt cured at approximately 400 degrees F (204 degrees C). The finished coating shall be approximately .080 inch (2 mm) thick at an 85 durometer with a minimum tensile strength of 1700 psi and a minimum tear strength of 250lbs/inch. (Colors: Handhold/Leg Lifts, Grab Bars and D-Rings available in Brown only. Decks in Brown or Gray. Wiggle Ladders, Loop Ladders and Steering Wheels available in standard colors).
- D. ProShield Finish: All metal components with ProShield finish shall be thoroughly cleaned and pretreated through a multi-stage wash system. Parts are then thoroughly dried, preheated and processed through a set of powder spray guns where a minimum .002 inch of epoxy primer is applied. A minimum .004 inch of architectural-grade Super Durable polyester TGIC powder is applied. The average ProShield film thickness is .006 inch.
 - 1. ProShield is formulated and tested per the following ASTM standards. Each color must meet or exceed the ratings listed below:
 - a. Hardness (D3363) rating 2H.
 - b. Flexibility (D522) pass 1/8-inch mandrel.
 - c. Impact (D2794) rating minimum 80 inch-pounds.
 - d. Salt Fog Resistance (B117 and D1654) 4,000 hours and rating 6 or greater.
 - e. UV Exposure (G154, 340 bulb) 3,000 hours, rating delta E of 2, and 90 percent gloss retention. Certain colors may exceed delta E of 2. Contact manufacturer for exceptions.
 - f. Adhesion (D3359, Method B) rating 5B.
 - 2. The Paint Line shall employ a "checkered" adhesion test daily.
 - 3. Standard colors are available.
- E. Rotationally Molded Polyethylene Parts: These parts shall be molded using prime natural linear low-density polyethylene with a tensile strength of 2400 psi per ASTM D638. Rotational molding resin is compounded with color and UV-stabilizing additives with a nominal wall thickness typically 1/4 inch with some variation depending upon product type. Standard colors are available.
- F. Recycled Permalene Parts: These parts shall be manufactured from 3/4-inch high-density polyethylene that has been specially formulated for optimum UV stability and color retention. Products shall meet or exceed density of .960 G/cc per ASTM D1505, tensile strength of 2400 PSI per ASTM D638. Available in a three-layer product with (2) .100-inch-thick colored exterior layers over a .550-inch-thick recycled Black interior core. Standard colors are available.
- G. Footings: All footings shall be for **Surface Mount** installation except for the Cool topper shade posts.

2.3 PlayBooster PLAY SYSTEM

A. Description:

1. Ages 2-12 Years.
2. The PlayBooster playground structure, the original post-and-clamp system, combines exciting ground-level components with climbing events and sliding activities.
3. Model #1169876-02 per drawing
4. System must include 5" OD Aluminum support post & clamps.
5. Direct bolt through design systems without clamps are not acceptable.

B. Material:

1. Posts: Post length shall vary depending upon the intended use and shall be a minimum of 42 inches (1067 mm) above the deck height. All posts shall be ProShield finished to specified color. All posts shall have a "finished grade marker" positioned on the post identifying the 34 inches (864 mm) bury line required for correct installation and the top of the loose fill protective surfacing. Top caps for posts shall be aluminum die cast from 369.1 alloy and ProShield finished to match the post color. All caps shall be factory installed and secured in place with self-sealing rivets. A molded low-density polyethylene cap, with drain holes, shall be pressed onto the bottom end of the post to increase the footing area.
2. Steel Posts – Shade top post ONLY – Direct bury: All steel PlayBooster posts are manufactured from 5 inches O.D. tubing with a wall thickness of .120 inches and shall be galvanized after rolling and shall have both the I.D. and the cut ends sprayed with a corrosion resistant coating.
3. Steel Post Mechanical Properties:
 - a. Yield Strength (min): 50,000 PSI.
 - b. Tensile Strength (min): 55,000 PSI.
 - c. Elongation: 25% in 2 inches (51 mm).
 - d. Modulus of Elasticity: 29.5 x 1,000,000 PSI.
4. Aluminum Posts: All aluminum PlayBooster posts are manufactured from 6005-T5 extruded tubing conforming to ASTM B-221. Posts shall have a 5 inches outside diameter with a .125 inches wall thickness. *Steel support posts are not acceptable except as noted above.
5. Aluminum Post Mechanical Properties:
 - a. Yield Strength (min): 35,000 PSI.
 - b. Tensile Strength (min): 38,000 PSI.
 - c. Elongation: 10% in 2 inches.
 - d. Modulus of Elasticity: 10 x 1,000,000 PSI.
6. Clamps: All clamps are ProShield finished and, unless otherwise noted, shall be die cast using a 369.1 aluminum alloy and have the following mechanical properties:
 - a. Ultimate Tensile: 47,000 PSI.
 - b. Yield Strength: 28,000 PSI.
 - c. Elongation: 7% in 2 inches (51 mm).
 - d. Shear Strength: 29,000 PSI.
 - e. Endurance Limit: 20,000 PSI.
7. Clamps: Each functional clamp assembly shall have an appropriate number of half clamps and shall be fastened to mating parts with (2) 3/8-inch x 1-1/8 inches pinned button head cap screws (SST) and (2) stainless-steel (SST) recessed "T" nuts. A 1/4-inch aluminum drive rivet with stainless steel pin is used to ensure a secure fit to the post.
8. PlayBooster clamps have three functional applications and shall be named as follows:
 - a. Offset hanger clamp assembly.
 - b. Deck hanger clamp assembly.
 - c. Hanger clamp assembly.
9. 111404F 76"Alum Post 2"SM, 111404G 68"Alum Post 2"SM, 111404H 60"Alum Post 2"SM, 111404E 84"Alum Post 2"SM, 111404D 92"Alum Post 2"SM, 111404C 100"Alum

- Post 2"SM - See PlayBooster (PB) General Specifications.
10. 154883D 221"Steel Post (60" Bury) For CoolTopper Single Post Pyramid Roof.
 - a. Weldment comprised of 5" O.D. x 11 GA. (.120") galvanized steel tubing and 1/4" steel plate. Finish: ProShield, color specified.
 11. 154883A 265"Steel Post (60" Bury) For CoolTopper Single Post Pyramid Roof.
 - a. Weldment comprised of 5" O.D. x 11 GA. (.120") galvanized steel tubing and 1/4" steel plate. Finish: ProShield, color specified. Footer Extension: Weldment comprised of 5" O.D. x 11 GA. (.120") galvanized steel tubing and 1/4" steel plate. Finish: ProShield, color specified.
 12. 121948A Kick Plate 8"Rise: Fabricated from 11 GA (.120") HR flat steel. Finish: TenderTuff, brown or gray in color.
 13. 121949A Tri-Deck Kick Plate 8"Rise: Fabricated from 11 GA (.120") HR flat steel. Finish: TenderTuff, brown or gray in color.
 14. 122197A 90* Triangular Tenderdeck: Triangular Deck: Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures 2 5/8" x 37 3/4". Finish: TenderTuff, color specified. Deck Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.
 15. 111228A Square Tenderdeck: Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures 2 5/8" x 47" x 47". Finish: TenderTuff, color specified. Deck Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.
 16. 185852A Transfer Step w/2 Handloops 2"SM
 - a. Handloop: Weldment comprised of 1.125" (28,58 mm) O.D. x 11 GA (.120") steel tubing with 203 or 303 stainless steel inserts, with 5/8" internal thread. Finish: TenderTuff, color specified.
 - b. Step Support: Weldment comprised of 1.660" (42,16 mm) O.D. RS-20 (.080" - .095") galvanized steel tubing and 1 3/4" x 1 3/4" x 1/8" HR angle. Finish: ProShield, color specified.
 - c. Clamps: Cast aluminum. Finish: ProShield, color specified.
 - d. Step: Formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Finish: TenderTuff, color specified.
 17. 120818A Playstructure Seat: Flange formed from 11 GA (.120") sheet steel. Seating surface is perforated with 1/4" diameter holes. Finish: TenderTuff, color specified.
 - a. Deck Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.
 18. 147424A Clatterbridge 84 w/Barriers
 - a. Clamps: Cast aluminum. Finish: ProShield, color specified.
 - b. Barrier: Weldment comprised of 1.900" O.D. RS-20 (.090" - .100") galvanized steel tubing beam, 1.029" O.D. RS-20 (.070" - .080") galvanized steel tubing and 7 GA. (.179") HRPO sheet steel. Finish: ProShield, color specified.
 - c. Attachment Bracket: Fabricated from 11 GA. (.120") HRPO plate. Finish: TenderTuff, color specified.
 - d. Cover Plate: Fabricated from 12 GA. (.105") (2,66 mm) HRPO plate. Finish: ProShield, color specified.
 - e. Plank: Weldment comprised from 12 GA. (.105") HRPO plate with 5/16" diameter perforated holes and threaded stainless steel inserts, plank measures 11 7/16" x 46 7/8" long. Finish: TenderTuff, color specified.
 - f. Mounting Bracket: Weldment comprised from 1/2" HRPO sheet steel, (2) 1/4" x 1 3/4" steel half clamps and 7/8" diameter 304L stainless steel tube. Finish: ProShield, color specified.
 - g. Cable: Made of tightly woven, polyester-wrapped, six stranded galvanized-steel cable with a PVC wrapped galvanized steel core.
 19. 139782A 2"Horizontal Ladder 4-5 Years
 - a. Half Clamp: Cast aluminum. Finish: ProShield, color specified.

- b. Ladder: Weldment comprised of 2.375" O.D. RS-40 (.130" - .140") galvanized steel tubing, 1.029" O.D. RS-20 (.070" - .080") galvanized steel tubing and 1/4" HRPO flat steel. Finish: ProShield, color specified.
- 20. 141887B Access/Landing Assembly Seat Barrier Left 16"Dk
 - a. Clamps: Cast aluminum. Finish: ProShield, color specified.
 - b. Rail/ Handloop: Fabricated from 1 1/8" O.D. steel tubing with 303 stainless steel welded 5/8" threaded inserts in each end. Finish: Coated with TenderTuff, color specified.
- 21. 116244A/B Pipe Barrier/PB w/Wheel Above Deck: Pipe Barrier: Weldment comprised of 5/8" solid steel vertical rails, 1 1/8" O.D. x 11 GA (.120") steel horizontal rails with 203 or 303 stainless steel welded inserts with 5/8" internal threads, 1 1/2" x 1 1/2" x 29 1/2 angle iron. Barrier measures 33 7/8" wide x 39 13/16" high. Finish: TenderTuff, color specified
 - a. Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified. Bracket: Formed from 1/4" x 1 1/4" HRPO flat steel. Finish: ProShield, color specified.
 - b. Wheel: 12" diameter cast A319.1 aluminum alloy. Shaft-303 stainless steel. Finish: TenderTuff, color specified.
 - c. Wheel Clamp: Formed from 3/16" x 2" HRPO zinc plated. Finish: ProShield, color specified.
- 22. 130565A Table Panel: One-color Permalene panel measures 19 1/2" wide x 34 3/4" long, color specified. Table End Panel: One-color Permalene panel measures 34" wide x 13 3/8" high, color specified
 - a. Frame: Weldment comprised of 3/16" x 2" x 1 1/4" HRS angle and 3/16" x 2" flat steel bar. Finish: ProShield, color matched to posts.
 - b. Support Leg: Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and 1/4" x 2 1/2" x 9" flat plate. Finish: ProShield, color specified
 - c. Table Top Bracket: Fabricated from 1/4" x 3 1/2" x 28 9/16" HRPO flat steel. Finish: ProShield, color matched to posts.
 - d. Access Clamp: Weldment comprised of 3/8" HRPO steel plate and 1/4" x 1 3/4" wide steel clamp. Finish: ProShield, color specified.
- 23. 115235B House Panel Ground Level: One-color panel measures 35 5/8" (904,88 mm) wide x 41" high, color specified.
 - a. Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified. Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.
 - b. Angled Panel Bracket: Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6005-T5 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield, color specified.
- 24. 115254A Storefront Panel: One-color Permalene. Panel measures 35 1/2" wide x 37" high, color specified.
 - a. Bracket: Formed 11 GA (.120") 5052 aluminum angle. Finish: ProShield, color matched to panel. Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.
- 25. 173567A Marble Panel Above Deck
 - a. Spacer Tube: Made from 6061-T6 aluminum 7/8" (22,23 mm) O.D. x 1 11/16". Finish: ProShield, color specified. Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.
 - b. Angled Panel Bracket: Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6005-T5 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield, color specified.
 - c. Marble Panel Assy.: (Panels) Two color Permalene, color specified. (Poly Panel) Fabricated from .236" thick clear polycarbonate. (Marbles) 2" Diameter glass.
 - d. Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

26. 111240 Balcony Deck
 - a. Deck: Fabricated from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes. The finished size measures 2 5/8" x 34" (straight edge) x 17" radius (curved edge). Finish: TenderTuff, color specified.
 - b. Barrier: Weldment comprised of 5/8" solid steel vertical rails, 1 1/8" O.D. steel horizontal rails with 203 or 303 stainless steel welded inserts with 5/8" internal threads. Finish: TenderTuff, color specified.
 - c. Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.
27. 143199B Conical Climber 40"Dk 2"SM
 - a. Handhold Panel: One color Permalene, color specified
 - b. Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.
 - c. Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.
 - d. Belt: PVC belting, 5/16" thick, 300 PIW tension rating.
 - e. Center Loop: Weldment comprised of 1.315" O.D. RS-20 (.080" - .090") galvanized steel tubing, 1/4" x 1 1/4" HR flat steel and 1/4" x 2 3/4" HR flat steel. Finish: ProShield, color specified.
 - f. Footer: Fabricated from 1.125" O.D. x 11 GA (.120") galvanized steel tubing. Finish: ProShield, color specified.
 - g. Hand Grip: Made from Polyester Resin. Hand Grips measure 5 3/4" long x 2 1/2" wide x 1 3/4" high.
 - h. Mounting Plate: Fabricated from 1/8" (3,17 mm) HR flat steel. Finish: ProShield, green in color.
 - i. Rails: Weldment comprised of 1.315" O.D. RS-20 (.080" - .090") galvanized steel tubing, and 1/4" x 1 1/4" HR flat steel. Finish: ProShield, color specified.
28. 156916B Pod Climber w/Handloop 24"Dk 2"SM Right Mounted Handhold.
 - a. Handhold Panel: Permalene, color specified.
 - b. Clamps: Cast aluminum. Finish: ProShield, color specified.
 - c. Handloop: Weldment comprised of 1.125" (28,58 mm) O.D. x 11 GA (.120") steel tubing with 203 or 303 stainless steel inserts, with 3/8" internal thread. Finish: TenderTuff, color specified.
 - d. Support: Weldment comprised of 1.900" (48,26 mm) O.D. RS-20 (.090" - .100") 1.315" O.D. RS-20 (.080" - .090") and 3/16" x 5" diameter plate. Finish: ProShield, color specified.
 - e. Disc: Rotationally molded from U.V. stabilized linear low-density polyethylene, disc measures 14" in diameter x 7" high, color specified.
29. 152907A Deck Link w/Barriers Steel end panels 1 Step
 - a. Clamps: Cast aluminum. Finish: ProShield, color specified.
 - b. Barrier: Weldment comprised of 1.125" O.D. x 11 Ga. (.120") wall steel tubing, 5/8" O.D. steel bar with 203 or 303 stainless steel 3/8" threaded inserts. Finish: TenderTuff, color specified.
 - c. Step Section: Formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is 24 1/4" wide x 14" deep and is perforated with 5/16" diameter holes. Finish: TenderTuff, color specified.
 - d. Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.
 - e. SteelX Panels: Zinc plated 7 GA (.179") HRPO flat steel. Finish: ProShield, color specified.
30. 153076A Mini Summit Climber 48"Dk 2"SM
 - a. Clamps: Cast aluminum. Finish: ProShield, color specified.
 - b. Handhold Panel: Permalene, color specified.
 - c. Support: Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and 1/4" x 3" mounting plate. Finish: ProShield, color specified.

- d. Summit Climber: Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified.
- 31. 111357 Chinning Bar
 - a. Rail: Weldment comprised of 1.125" O.D. x 11 GA (.120") steel tubing with 203 or 303 stainless steel 5/8" threaded inserts. Finish: TenderTuff, color specified.
 - b. Post: See PlayBooster® (PB) General Specifications.
 - c. Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield®, color specified.
- 32. 154884A CoolTopper Single Post Pyramid Roof DB Only
 - a. Clamp: Weldment comprised of 1/4" x 3" HRPO flat steel and 1/4" HRPO steel plate. Finish: ProShield, color specified.
 - b. Extension Arms: Weldment comprised of 2.375" O.D. RS-20 (.095"-.105") galvanized steel tubing, 1/4" steel plate and 1/4" diameter carbon steel J-hooks. Finish: ProShield, color specified.
 - c. CoolTopper Shade Top: Heavy duty, 62.9 mils thick professional grade shade fabric for tensioned structures and other shade applications. Made from UV stabilized HDPE monofilament and tape yarns. Specialized lock stitch knit for more air movement and better channeling of cooling breezeways. Constructed to block up to 97.7% of harmful UV sun rays. Fade and tear resistant, will not crack, rot or fray. Tensile strength warp 142.75 lbs. weft 560.67 lbs. Tear strength warp 42.03 lb. and weft 80.70 lbs. Burst pressure 507.63 PSI. Remove fabric when wind speed is expected to exceed 90 mph and snow load is expected to exceed 5 psf, per International Building Code (IBC) 2009.
- 33. 124863E SlideWinder2 64"Dk 2"SM 1 Straight 2 Left
 - a. Rail Spacer: Fabricated from 1.312" O.D. x 16 Ga. (.065") steel tubing. Finish: ProShield, color specified.
 - b. Rail: 1 1/8" O.D. 6061-T6 aluminum extrusion with 5/16" walls. Finish: ProShield, color specified.
 - c. Slide Sections: Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified.
 - d. Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.
 - e. Exit Footer: Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and 1/4" x 3" x 7 1/2" HRPO steel mounting plate. Finish: ProShield, color specified.
 - f. Mid-Support: Weldment comprised of 1.900" O.D. RS20 (.090" - .100") galvanized steel tubing and 7 GA. (.179") HRPO steel strap. Finish: ProShield, color specified.
 - g. Support Base (SM): Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing and 1/4" x 3" x 8" mounting plate. Finish: ProShield, color specified.
- 34. 123337A Single Slide 40"Dk 2"SM
 - a. Rail Spacer: Fabricated from 1.312" O.D. x 16 Ga. (.065") steel tubing. Finish: ProShield, color specified.
 - b. Rail: Extruded from 1.125" O.D. x .312" wall. 6005-T5 aluminum. Finish: ProShield, color specified.
 - c. Slide Hood: Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified.
 - d. Exit Support: Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and 1/4" x 3" mounting plate. Finish: ProShield, color specified.
 - e. Slide: Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified.
- 35. 130798A Double Swirl Slide 56"Dk 2"SM
 - a. Rail Spacer: Fabricated from 1.312" O.D. x 16 Ga. (.065") steel tubing. Finish: ProShield, color specified.

- b. Rail: Extruded from 1.125" O.D. x .312" wall. 6005-T5 aluminum. Finish: ProShield, color specified.
- c. Slide Hood: Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified.
- d. Slide Support: Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and 1/4" x 3" mounting plate. Finish: ProShield, color specified.
- e. Mid-Support: Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing and 1/4" x 3" mounting plate. Finish: ProShield, color specified.
- f. Slide: Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified.

2.4 MULTIPLE USERS MOTION EVENTS

A. Description:

- 1. OmniSpin Spinner Model 173591
- 2. Age Ranges 2-5 years and 5-12 years.
- 3. Available only in surface mount
- 4. Contains speed limiter for added safety
- 5. Transfer points from wheelchair or walker
- 6. U.S. Patent number 8,870,668

B. Material:

- 1. Spinner: Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified.
- 2. Spinner Frame Assembly: (Frame) Weldment comprised of 2.375 inches O.D. RS20 (.095-inch to .105-inch wall) galvanized steel tubing, 2.875 inches O.D. RS40 (.160-inch to .170-inch wall) galvanized steel tubing, 1/4-inch HR flat steel and 3-1/2 inches O.D. CF steel bar. (Base) Weldment comprised of 3/8-inch HRPO sheet steel and 3/16-inch HRPO sheet steel. (Shock Covers) 16 GA (.060-inch HRPO sheet steel. (Crank Arms & Pins) Fabricated from stainless steel. (Shocks) Gas shocks with fixed bearings. Finish: ProShield, black in color.
- 3. Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated.

2.5 SITE FURNISHINGS

A. Description:

- 1. 72" TenderTuff bench w/back, SM, Model 141683B
- 2. Welcome Signs (LSI Provided) Ages 2-12 Years Model 182503B

B. Material:

- 1. Back Plank: Back Plank: Fabricated from formed 11 GA (.120") HRPO sheet steel perforated, plank measures 6 3/4" wide x 72" long and 6 3/4" wide x 92" long with 5/16" diameter holes on surface. Finish: TenderTuff, color specified.
- 2. Seat Planks: Fabricated from formed 11 GA (.120") HRPO sheet steel perforated, planks measure 10 3/4" wide x 72" long and 10 3/4" wide x 92" long with 5/16" diameter holes on surface. Finish: TenderTuff, color specified.
- 3. Leg: Weldment comprised of 2.375" O.D. RS-40 (.130" - .140") galvanized steel tubing and 3/8" x 4" HRPO steel straps. Finish: ProShield, color specified.
- 4. Sign Panel: Panel is fabricated from 1/8" (.125") aluminum plate. Finish: ProShield®, gray in color. (Sign) Digital image is transferred to a 1/8" (.125") ProShield coated aluminum plate, then infused into the ProShield.
- 5. Border: Permalene, black in color.
- 6. Post: Weldment comprised 2.375" O.D. RS20 (.095-.105) wall galvanized tube, 1/4" HRPO steel sheet and aluminum post cap. Finish: ProShield, color specified.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions, approved submittals and in proper relationship with adjacent construction. Installation shall be done by a Factory Certified Installer.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION