

**STANDARD
BID & SPECIFICATIONS PACKAGE**

Renovations at the
City of Myrtle Beach Train Depot
Bid #19-B0047



Prepared for

**THE CITY OF MYRTLE BEACH
HORRY COUNTY, SOUTH CAROLINA**

Procurement Office
3231 Mr. Joe White Avenue
Myrtle Beach, SC 29577
Ph# (843) 918-2170

SECTION 0100

NOTICE TO BIDDERS

Bid #19-B0047

Renovations at the
City of Myrtle Beach Train Depot

Owner: CITY OF MYRTLE BEACH
Post Office Drawer 2468
Myrtle Beach, South Carolina 29578

Architect: Tych & Walker Architects, LLP
PO Box 509
Pawleys Island, SC 29585

Date: October 2, 2018

Interested parties are invited to submit sealed bids to the Owner at the Procurement Office Conference Room located on 3231 Mr. Joe White Avenue, Myrtle Beach, South Carolina before 2:00pm, October 31, 2018.

The work consists of: upfits to an existing box car and caboos that are located at the existing historic train depot. Work to include leveling of the existing cars, and interior upfit to include PME services.

Bidders shall comply with the requirements set forth in Section 0200 - Instruction to Bidders.

Contract Documents may be obtained from the City of Myrtle Beach website, www.cityofmyrtlebeach.com, under the Purchasing Department.

Direct any questions on this matter to Lauren Harrelson, Tych & Walker Architects at 843-651-7151, or Lauren@tychwalker.com.

Refer to other bidding requirements described in Document 0200 - Instructions to Bidders.

Bidders are required to submit their bid on the Bid Form provided. Bidders may not supplement this form unless otherwise directed. The Owner reserves the right to accept or reject any or all bids. Lowest bid may not prevail. Award of the bid will be based on the bid prices, references, past performance of bidder and any proposed subcontractor with projects of comparable scope, complexity, and time constraints.

Questions should be submitted in accordance with the timeline, following the mandatory pre-bid meeting scheduled on **Wednesday, October 17, 2018 at 10:00 AM at the Job Site**. All interpretations, clarifications, or changes will be made in the form of written Addenda. See 3.04.D. page 0200-4.

Bidders shall comply with the requirements set forth in Section 0200 - Instruction to Bidders.

Bidders shall include bid security in the sum of no less than five percent (5%) of the bid price.

Refer to other bidding requirements described in Document 0200 - Instructions to Bidders.

The Owner shall have the right to accept Alternates in any order or combination, and to determine the low bidder on the basis of the sum of the Base Bid and alternates accepted.

Questions shall be submitted in writing to: Lauren@tychwalker.com. A copy of the response will be provided to all parties requesting a copy of the bid package.

Time Line:

Item		Time	Location*
Advertised Date of Issue:	Tuesday, October 2, 2018	n/a	n/a
Mandatory Pre-Bid Conf & Site Inspection	Wed., October 17, 2018	10:00AM ET	ON SITE*
Material Substitution Cut-Off Time:	Wed., October 24, 2018	3:00PM ET	n/a
Inquiry Cut-Off Time:	Wed., October 24, 2018	3:00PM ET	n/a
Bids Must be Received on/or Before:	Wed., October 31, 2018	2:00PM ET	City Purchasing
Public Bid Opening:	Wed., October 31, 2018	2:00PM ET	City Purchasing

*** Project site address is 851 Broadway Street, Myrtle Beach, SC 29577.**

END OF SECTION

SECTION 0100A

SPECIAL INSTRUCTIONS TO BIDDERS

1. The work under this contract includes the furnishing of all material, labor, tools and equipment necessary for the project: Renovations at the City of Myrtle Beach Train Depot
2. The successful contractor must have approval and coordinate with the City of Myrtle Beach their scheduled working hours. Once the project begins, work will be continuous and conducted without delay for any contractor reason (s).
3. The contractor shall provide any and barricades and signage for the project or portion of the project within which operations are being conducted. All operations and material and equipment stockpiles shall be adequately barricaded and lighted. Access all work areas must be maintained at all times.
4. The contractor shall take proper measures to protect adjacent and adjoining areas of the existing train depot that might be damaged by any process of the work in the contract. In case of damage the contractor shall restore, at its expense, the property to a similar or equal condition to that existing before damage was done.
5. The contractor is wholly responsible for the safety of the project and associated hazards/liability of the work performed. Sound safety practices will be adhered to.
6. Upon completion of the work, the contractor shall clean the entire area to a normal level or “first class” condition.
7. Train Depot operations are to be maintained and operational during construction. The remainder of the building and site needs to be secure and off-limits from construction work, and secure at night.

END OF SECTION

SECTION 0200

INSTRUCTIONS TO BIDDERS

1. SUMMARY

1.01 DOCUMENT INCLUDES:

- A. Invitation
 - 1. Bid Submission
 - 2. Work Identified in the Contract Documents
 - 3. Contract Time and Liquidated Damages

- B. Bid Documents and Contract Documents
 - 1. Definitions
 - 2. Availability
 - 3. Examination
 - 4. Queries/Addenda
 - 5. Product/System Substitutions
 - 6. Contract Documents

- C. Site Assessment
 - 1. Site Examination

- D. Qualifications
 - 1. Evidence of Qualifications
 - 2. Subcontractors/Suppliers/Others

- E. Bid Submission
 - 1. Submission Procedure
 - 2. Bid Ineligibility

- F. Bid Enclosures/Requirements
 - 1. Security Deposit
 - 2. Performance Assurance
 - 3. Bid Form Requirements
 - 4. Bid Form Signature

- G. Offer Acceptance/Rejection
 - 1. Duration of Offer
 - 2. Acceptance of Offer

1.02 RELATED DOCUMENTS

- A. Document 0100 - Notice to Bidders
- B. Document 0300 - Bid Forms
- C. Document 0550 - General Provisions
- D. Document 0650 - Architect/Engineer's Supplementary Conditions
- E. Document 0700 - Contract Forms

2. INVITATION

2.01 BID SUBMISSION

- A. Bids will be received by the City of Myrtle Beach (herein called the “Owner/Architect/Engineer”), at the Procurement Office located on 3231 Mr. Joe White Avenue, Myrtle Beach, South Carolina before **October 31, 2018 at 2 pm**, at which time they will be publicly opened and read aloud.
- B. Bids submitted after the time and date set for the receipt will be returned to the Bidder unopened.
- C. Amendments to the submitted offer will be permitted if received in writing prior to Bid closing and if signed by the same party or parties who signed and sealed the original bid.

2.02 WORK IDENTIFIED IN THE CONTRACT DOCUMENTS

- A. The work includes all work described in the Contract Documents.
- B. Location: City of Myrtle Beach Train Depot, 851 Broadway Street, Myrtle Beach.
- C. The Owner reserves the right, to reject any and/or all Bids or lines in the bids. Award will be to the lowest bid on the items accepted. The Owner shall have the right to accept Alternates in any order or combination, and to determine the low bidder on the basis of the sum of the Base Bid and alternates accepted.

2.03 CONTRACT TIME AND LIQUIDATED DAMAGES

- A. Contractor shall complete all work within 90 days. Liquidated damages of **\$250/ day** will be assessed for each day thereafter.

3. BID DOCUMENTS AND CONTRACT DOCUMENTS

3.01 DEFINITIONS

- A. Bid Documents: Contract Documents, Bid Forms, Supplements-to-Bid Forms, and Bid Securities identified herein.
- B. Contract Documents: Defined in the Agreement Form.
- C. Bid: Act of submitting a sealed offer.
- D. Bid Price: Total cost to perform the work submitted by the Bidder in the Bid Form.

3.02 AVAILABILITY

- A. Bid Documents may be obtained at the City of Myrtle Beach website..
- B. Bid Documents can be obtained by Bidders upon payment by cash or certified check. Such payment is non-refundable.
- C. Bid Documents are made available only for the purpose of submitting a bid for this project.

3.03 EXAMINATION

- A. Each Bidder must satisfy themselves of the accuracy of the estimated quantities in the Bid Schedule by examination of the site, a review of the drawings, and by reading and being thoroughly familiar with the Contract Documents including Addenda. The failure or omission of any Bidder to do any of the foregoing shall in no way relieve any Bidder from any obligation in respect to its Bid.
- B. Bid Documents may be viewed at the office of the Architect/Engineer.
- C. Upon receipt of Bid Documents, verify that documents are complete. Notify Architect/Engineer should the documents be incomplete.
- D. Immediately notify the Architect/Engineer upon finding discrepancies or omissions in the Bid documents.

3.04 QUERIES/ADDENDA

- A. Direct all questions to the Architect via email at Lauren@tychwalker.com. A copy of the response will be provided to all parties requesting a copy of the bid package.
- B. Addenda may be issued during the Bidding period. All Addenda shall become part of the Contract Documents. Include any resultant cost adjustments in the Bid Price.
- C. Verbal instructions or comments are not binding on any party.
- D. Clarifications requested by Bidders must be in writing as per timeline. The reply will be in the form of an Addendum, a copy of which will be forwarded to known recipients.

3.05 PRODUCT/SYSTEM SUBSTITUTIONS

- A. Where the Bid Documents stipulate a particular product/system, substitutions will be considered unless otherwise stated in the Contract Documents. See Section 01600 Material/Product Substitution Form.
- B. Bidders shall include in their Bid, any changes required in the Work to accommodate such substitutions. A later claim by the Bidder for an addition to the Contract Time or Contract Price because of changes in Work necessitated by use of substitutions shall not be approved.

3.06 CONTRACT DOCUMENTS

- A. The Contract Documents contain the provisions required for the completion of the work. Information obtained from an officer, agent, or employee of the Owner or any other person shall not affect the risks or obligations assumed by the Contractor or relieve him from fulfilling any of the conditions of the contract.

4. SITE ASSESSMENT

4.01 SITE EXAMINATION

- A. The Bidder is responsible to inspect the project site before submitting a Bid in order to become familiar with site and all existing conditions.
- B. The project site is open for examination by Bidders.

- C. Contractors shall be respectful of adjacent property owners and their concerns. The City will assist in coordinating in site investigations prior to bid opening and during construction.

5. QUALIFICATIONS

5.01 EVIDENCE OF QUALIFICATIONS

- A. Bidders must be licensed to perform work in the State of South Carolina and shall include their license number on the Bid Documents.
- B. Evaluation of Bidders will concentrate on their experience with projects of comparable scope and complexity. Bidders shall indicate prior projects that exhibit these qualities in their statement of experience. Additional attachments exhibiting such experience must be included with the bid.

5.02 SUBCONTRACTORS/SUPPLIERS/OTHERS

- A. The Owner reserves the right to reject a proposed Subcontractor.
- B. Information on subcontractors shall be furnished by the Bidder to the Owner as required in the Contract Documents.
- C. All Subcontractors must be approved in writing by the Owner prior to the performance of any work.

6. BID SUBMISSION

6.01 SUBMISSION PROCEDURE

- A. Each Bid must be submitted in a sealed envelope, addressed to the City of Myrtle Beach, at 3231 Mr. Joe White Ave, Myrtle Beach, South Carolina 29577. If delivered by hand the Bid shall be delivered to the Procurement Office at 3231 Mr. Joe White Avenue, Myrtle Beach, South Carolina.
- B. Each sealed envelope containing a Bid must be plainly marked on the outside as Bid for the City of Myrtle Beach, South Carolina and the envelope should bear on the outside the name of the Bidder, his address, his bidder's license number and the name of the project for which the Bid is submitted.
- C. Bidders shall be solely responsible for the delivery of their Bids in the manner and time prescribed.
- D. Bids mailed shall be enclosed in another envelope. Insert the closed and sealed Bid Form in the envelope to be mailed.
- E. A summary of submitted Bids will be made available to all Bidders within seven (7) working days.

6.02 BID INELIGIBILITY

- A. Bids that are incomplete, unsigned, improperly signed or sealed, conditional, illegible, obscure, contain arithmetical errors, erasures, alterations, or irregularities of any kind, will at the discretion of the Owner, be declared non-responsive.

B. Bid bonds and bids must be signed to be considered.

7. BID ENCLOSURES/REQUIREMENTS

7.01 SECURITY DEPOSIT

- A. Bids shall be accompanied by a security deposit as follows:
 - 1. Bid Bond of a sum no less than **five (5%)** percent of the Bid Price. (Include Power of Attorney).
 - 2. Certified check in the amount of **five (5%)** percent of the Bid Price.
 - 3. Other types of security may be allowed if pre-approved in writing by the Owner.
- B. Bids shall be submitted on the required form and shall include: Bid Proposal, Non-collusion Affidavit, Bidder's Representation, Statement of License Certificate, and Statement of Experience of the Bidder, Project Superintendent, and List of Subcontractors.
- C. The Bid Bond shall name the Owner as obliged, and be signed and sealed by the Contractor as principal as well as the Surety.
- D. Bid securities will be returned to all Bidders upon receipt by the Owner of the required Insurance, Performance, and Payment Bonds from the successful Bidder.
- E. Include the cost of Bid security in the Bid Price.
- F. All Bid securities will be returned to the respective Bidders.
- G. If no contract is awarded, all Bid securities will be returned.

7.02 PERFORMANCE ASSURANCE

- A. Successful Bidder: Shall provide the stipulated insurance, along with the Performance and Payment Bonds as described in the Contract Documents.
- B. Include the cost of bonding in the Bid Price.
- C. Attorneys-in-Fact who sign bid bonds or payment bonds and performance bonds must file with each bond a certified and effective dated copy of their power of attorney.

7.03 BID FORM REQUIREMENTS

- A. Complete all requested information in the Bid Form and Appendices.
- B. All Bids shall be submitted on the required Bid Form. All blank spaces for Bid prices must be filled in, in ink or typewritten, and the Bid Form must be fully completed and executed when submitted. Only one copy of the Bid Form is required.
- C. Bidders must satisfy themselves of the accuracy of the estimated quantities in the Bid Schedule by examination of the site and a review of the Contract Documents. After Bids have been submitted, the Bidder shall not assert that there was a misunderstanding concerning the quantities or nature of the Work.

7.04 BID FORM SIGNATURE

- A. The Bid Form shall be signed by the Bidder, as follows:
 - 1. Sole Proprietorship: Signature of sole proprietor in the presence of a witness who will also sign. Insert the words "Sole Proprietor" under the signature. Affix seal.

2. Partnership: Signature of all partners in the presence of a witness who will also sign. Insert the word "Partner" under each signature. Affix seal to each signature.
3. Corporation: Signature of a duly authorized signing officer(s) in their normal signatures. Insert the officer's capacity in which the signing officer acts under each signature. Affix the corporate seal. If the Bid is signed by officials other than the President and Secretary of the company, or the President/Secretary/Treasurer of the company, a copy of the by-law resolution of the Board of Directors authorizing them to do so must also be submitted with the Bid Form.
4. Joint Venture: Each party of the joint venture shall execute the Bid Form under their respective seals in a manner appropriate to such party as described above, similar to the requirements of a Partnership.

8. OFFER ACCEPTANCE/REJECTION

8.01 DURATION OF OFFER

- A. Bids shall remain irrevocable for a period of **thirty (30) days** after the Bid closing date.
- B. Should there be reasons why the contract cannot be awarded within the specified period; the time may be extended by mutual agreement between the owner and the successful Bidder.

8.02 ACCEPTANCE OF BID

- A. The Owner reserves the right to accept or reject any or all bids. Lowest bid may not prevail. Award of the bid will be based on the bid prices, references, past performance of bidder and any proposed subcontractor with projects of comparable scope, complexity, and time constraints.
- B. The Owner shall have the right to accept Alternates in any order or combination, and to determine the low bidder on the basis of the sum of the Base Bid and alternates accepted.
- C. After determining the lowest responsive bidder, but prior to the Notice of Award to any bidder, the City may elect to open negotiations with the selected responsive and responsible bidder in an effort to improve the bid for a period of 15 working days. In these negotiations, the City may address scope of work, unit pricing, or any other subject fairly contained within the bid documents. In the event that the apparent responsive and responsible low bidder should decline to negotiate or should negotiations commence but fail, the City shall reject all bids.
- D. The Owner may make such investigations as he deems necessary to determine the ability of the Bidder to perform the Work, and the Bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Agreement and to complete the Work contemplated therein.
- E. The party to whom the contract is awarded will be required to execute the Agreement and obtain the Performance Bond, Payment Bond, and Certificate of Insurance within **ten (10) calendar days** from the date when Notice of Award is delivered to the Bidder. The Notice of Award shall be accompanied by the necessary Agreement, Bond forms, and Certificate of Insurance. In case of failure of the Bidder to execute the Agreement, the Owner may at his option consider the Bidder in default, in which case the Bid Bond accompanying the proposal shall become the property of the Owner.
- F. The Owner within ten (10) days of receipt of acceptable Performance Bond, Payment Bond, Certificate of Insurance and Agreement signed by the party to whom the Agreement was awarded shall sign the Agreement and return to such party an executed duplicate of the Agreement. Should the Owner not execute the Agreement within such period, the Bidder may by written notice

withdraw his signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the Owner.

END OF SECTION

SECTION 0300

Renovations at the
City of Myrtle Beach Train Depot
Bid # 19-B0047
For the
CITY OF MYRTLE BEACH

BIDDER'S REPRESENTATION

By the act of submitting a bid for the proposed contract, the Bidder represents that:

1. The Bidder and all subcontractors the Bidder intends to use have carefully and thoroughly reviewed the Contract Documents and have found them complete and free from ambiguities and sufficient for the purpose intended; and
2. The Bidder and all workmen, employees and subcontractors the Bidder intends to use are skilled and experienced in the type of work represented by the Contract Documents; and
3. Neither the Bidder nor any of the Bidder's employees, agents, intended suppliers or subcontractors have relied upon any verbal representations, of the Owner, or the Owner's employees or agents including architects, Architect/Engineers or consultants, in assembling the bid; and
4. The bid figure is based solely upon the Contract Documents and not upon any other oral or written representation.

By: _____

Title: _____

Subscribed and sworn to before me

this _____ day of _____, 20____.

My commission expires on: _____.

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

State of South Carolina)
County of Horry)

being first duly sworn, deposes and says that:

- (1) He is _____ of _____, the Bidder that has submitted the attached Bid:
- (2) He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid:
- (3) Such Bid is genuine and is not a collusive or sham Bid;
- (4) Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the Owners or any person interested in the proposed Contract; and
- (5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed) _____

(Title)

Subscribed and sworn to before me this ____ day of _____,
20__.

_____. My commission expires

on: _____ (Title) _____

STATEMENT OF LICENSE CERTIFICATE

EACH CONTRACTOR BIDDING SHALL FILL IN AND SIGN THE FOLLOWING:

This is to certify that _____ have fully complied with all the requirements of the South Carolina Licensing Board for Contractors. The Contractor's license number and date of registration shall appear on the envelope containing the bid, otherwise the bid will not be considered.

_____ was issued Certificate No. _____

on _____, 20____ by the State Board for licensing General Contractors.

Signed: _____

Title: _____

STATEMENT OF EXPERIENCE OF THE BIDDER

The bidder is requested to state below what work of similar scope and complexity he has completed, and to give references that will enable the Owner to judge his experience, skill and business standing and his ability to conduct the work as completely and as rapidly as required under the terms of the contract.

	<u>Project and Location</u>	<u>Reference with Current Phone No.</u>
1)	_____	_____
	_____	_____
2)	_____	_____
	_____	_____
3)	_____	_____
	_____	_____
4)	_____	_____
	_____	_____
5)	_____	_____
	_____	_____
6)	_____	_____
	_____	_____
7)	_____	_____
	_____	_____

Dated: _____ Bidder: _____

Signed: _____

Title: _____

PROJECT SUPERINTENDENCE

The Undersigned states that the following employee will assume the role of project superintendent representing the Contractor on this Project. The undersigned further states that this individual, whose qualifications are presented below (attach additional sheets, if necessary), will have authority to speak for the Contractor and will not be removed from this Project or temporarily substituted for on this Project without the written consent of the Owner and Project Architect/Engineer.

Project Superintendent's Name: _____

Years of Experience: _____

Brief but Complete Description of Experience Relevant to this Project: _____

References from Owners where work of similar scope, and complexity has been accomplished under Proposed Superintendent's direct supervision.

1. _____ 2. _____ 3. _____ 4. _____ 5. _____

(Phone) (Phone) (Phone) (Phone) (Phone)

"I consent to the disclosure of my qualifications and other applicable personal data for the purpose of evaluating proposals under this solicitation."

Employee's Signature

Date

"I certify to this employee's role in this Project and that the qualifications presented herein are accurate, complete and current."

Bidder: _____

Date: _____

Signed: _____

Title: _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned, _____ as _____ PRINCIPAL, and _____ as SURETY are hereby held and firmly bound unto _____, as OWNER, in the penal sum of _____, for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and assigns.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that Whereas the Principal has submitted to the City of Myrtle Beach a certain BID, attached hereto and hereby made a part hereof to enter into a contract in writing, for the _____

NOW, THEREFORE,

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

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

THE SURETY, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

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

_____(L.S.)
Principal

Surety

By: _____

Date: _____

IMPORTANT - Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

SECTION 0300

PROPOSAL

Proposal of _____ (hereinafter called "BIDDER"),
organized and existing under the laws of the State of _____
doing business as _____*.

To the City of Myrtle Beach, South Carolina, (hereinafter called "OWNER").

In compliance with your Advertisement for Bids, BIDDER hereby proposes to perform all WORK for the renovations at the Train Depot in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to his own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete the PROJECT within the time constraints as set forth in Section 0200, Paragraph 2.03 - Contract Time and Liquidated Damages; Section 0650, Paragraph 1.20 - Project Schedule, and; as further stated herein. BIDDER further agrees to pay as liquidated damages, the sum of **\$250** for each consecutive calendar day thereafter as provided in Section 0200, Paragraph 2.03 and Section 0650, Paragraph 1.20.

BIDDER acknowledges receipt of the following ADDENDUM:

Addendum No. _____,	Dated: _____
Addendum No. _____,	Dated: _____
Addendum No. _____,	Dated: _____

*Insert "a corporation", "a partnership", or "an individual" as applicable.

BIDDER agrees to perform the work described in the CONTRACT DOCUMENTS for the following unit bid price.

BID SCHEDULE

Item	Description	Qty	Unit	Unit Price	Amount
Renovations at the Train Depot					

LUMP SUM PRICE

TOTAL BID: _____

(In Words)

ALTERNATE #1 ADD Accessibility Ramp along the west side of the building as indicated on the Construction Documents. Work to include all labor and materials for the ramp, foundation and handrails.

ADD _____

ALTERNATE #2 ADD to Provide 6" of #57 stone the width of the boxcar to the road

ADD _____

NOTE: Bids shall include sales tax and all other applicable taxes and fees.

Respectfully submitted:

Signature

Address

Title

Date

License Number (if applicable)

SEAL (if BID is by a corporation)

Attest: _____

SECTION 0550

CITY OF MYRTLE BEACH DEPARTMENT OF PUBLIC WORKS

GENERAL PROVISIONS

I. REQUIREMENTS

A. Definitions

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

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

11. "Contractor", -- The person, firm, or corporation with whom Owner has entered into the Agreement.
12. "Day", -- A calendar day of twenty-four hours measured from midnight to the next midnight.
13. "Defective", -- An adjective which when modifying the word Work refers to Work that is unsatisfactory, faulty, or deficient, or does not conform to the Contract Documents or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or has been damaged prior to Architect/Engineer's recommendation of final payment.
14. "Drawings", -- The Drawings which show the character and scope of the work to be performed and which have been prepared or approved by Architect/Engineer and are referred to in the Contract Documents.
15. "Effective Date of the Agreement", -- The date indicated in the Agreement on which it becomes effective, but if no such date is indicated it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
16. "Architect/Engineer", -- City of Myrtle Beach Architect/Engineering Division.
17. "Field Order", -- A written order issued by Architect/Engineer which orders minor changes in the Work but which does not involve a change in the Contract Price or the Contract Time.
18. "Final Acceptance", -- The date when the construction of the project is complete in accordance with the Contract Documents so that the entire project can be utilized for the purposes for which it is intended and all monies due Contractor have been paid him in the final Application for Payment.
19. "General Requirements", -- Officially recognized materials and workmanship specifications of the Owner.
20. "Inspector", -- The Architect/Engineering or technical inspector duly authorized or appointed by Architect/Engineer or by Owner, limited to the particular duties entrusted to him.
21. "Major Equipment", -- The major equipment items listed by name in the Contract Documents which are to be furnished and installed under the Contract.
22. "Modification", -- (a) A written amendment of the Contract Documents signed by both parties, (b) a Change Order, or (c) a Field Order. A modification may only be issued after the effective date of the Agreement.
23. "Notice of Award", -- The written notice by Owner to the successful Bidder stating that upon compliance with the conditions precedent enumerated therein, and within the time specified, Owner will sign and deliver the Agreement.
24. "Notice to Proceed", -- A written notice given by Owner to Contractor, (with a copy to

Architect/Engineer), fixing the date on which the Contract Time will commence to run and on which Contractor shall start to perform Contractor's obligation under the Contract Documents and the date on which all work scheduled under the Contract shall be completed.

25. "Owner", -- The City of Myrtle Beach, South Carolina.
26. "Project", -- The total construction of which the work to be provided under the Contract Documents may be the whole or a part, as indicated in the Contract Documents.
27. "Provide", -- As used in the Specifications means furnish and install.
28. "Shop Drawings", -- All drawings, diagrams, illustrations, schedules, and other data which are specifically prepared by or for Contractor to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams, and other information prepared by a supplier and submitted by Contractor to illustrate material or equipment for some portion of the Work.
29. "Specifications", -- Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.
30. "Sub-Contractor", -- An individual, firm, or corporation having a direct contract with Contractor or with any other Sub-Contractor for the performance of a part of the work.
31. "Substantial Completion", -- The Work (or a specified part thereof) which has progressed to the point where, in the written opinion of Architect/Engineer, it is sufficiently complete, in accordance with the Contract Documents, so that the Work (or specified part) can be utilized for the purpose for which it was intended. The terms "substantially complete" and "substantially completed" , as applied to any Work, refer to Substantial Completion thereof.
32. "Supplier", -- A manufacturer, fabricator, supplier, distributor, materialman, or vendor.
33. "Work", -- The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor, and furnishing and incorporating materials and equipment into the construction, all as required by the Contract Documents.

B. ABBREVIATIONS

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

UNIT OF MEASURE

CY	Cubic Yard
Ft.	Feet
Lbs.	Pounds
M	One Thousand
MFBM	One Thousand Feet Board Measure
C	Centigrade

F	Fahrenheit
HP	Horsepower
KVA	Kilovolt Ampere
BTU	British Thermal Unit
LF	Linear Feet

TYPES AND UNITS

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

ORGANIZATIONS AND PUBLICATIONS

AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AIEE	American Institute of Electrical Architect/Engineers
AISC	American Institute of Steel Construction
ASA	American Standards Association, Inc.
ASME	American Society of Mechanical Architect/Engineers
ASTM	American Society for Testing and Materials
AWWA	American Waterworks Association
AWS	American Welding Society
MISS	Manufacturers Standardization Society of the Valve and Fitting Industry
NBFU	National Board of Fire Underwriters
NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
PCA	Portland Cement Association
UL	Underwriters Laboratory
UBC	Uniform Building Code

C. CONTRACTOR'S BONDS

- (1) Faithful Performance Bond: As a part of the execution of this Contract, the Contractor shall furnish to the Owner, a bond payable to the City of Myrtle Beach in the form of Faithful Performance Bond set forth herein, secured by a surety company acceptable to the Owner, conditioned upon the faithful performance of all covenants and stipulations under this contract. Attorney in fact of Power of Attorney signature on bonds is permissible. The amount of the bond shall be not less than one hundred percent (100%)

of the total contract amount as set forth in the Agreement.

- (2) Labor and Material Bond: As a part of the execution of this Contract, the Contractor shall furnish to the Owner, a bond of surety company acceptable to the Owner in a sum of one hundred percent (100%) of the total contract amount, as set forth in the Agreement for the payment in full of all persons, companies or corporations who perform labor upon or furnish material to be used in the work under this Contract.
- (3) Bid Bond: 5% of total Contract.
- (4) Notification of Surety Companies: The Contractor shall advise the surety companies and other signers of the bonds listed above to familiarize themselves with all of the conditions and provisions of this Contract, and they shall waive the right of special notification of any change or modification to this Contract or of extension of time, or of decreased or increased work, or of the cancellation of the Contract or of any other act or acts by the Owner or its authorized employees and agents, under the terms of this Contract and failure to so notify the aforesaid surety companies of changes shall in no way relieve the surety companies of their obligations under this Contract.

D. CONTRACTOR'S INSURANCE

- (1) Public Liability and Property Damage.

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

- (2) Automobile Liability.

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

- (3) Workers' Compensation Insurance.

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

- (4) Excess Liability Policy.

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

(5) Builders Risk Insurance.

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

(6) Policy Endorsements.

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

(a) General Liability and Automobile Liability

1. "It is understood and agreed that in consideration of the terms and conditions of this policy to which this endorsement is attached, the City of Myrtle Beach, its officials, agents and employees are recognized as additional named insureds under the policy and as such will be provided thirty (30) days written notice of non-renewal, exhaustion of aggregate limit, modifications of coverage or cancellation for any reasons and the company hereby agrees to provide such notice. Failure of the company to provide the required notice shall cause the coverage to continue in force for the benefit of the Owner, its officials, agents, and employees until proper notification as required herein is provided, the provisions of the policy or any certificate of insurance to the contrary notwithstanding."

Contractor's insurance shall be primary to any insurance or self-insurance maintained by the Owner, its officials, agents or employees, which is considered excess and non-contributing for the purpose of this Agreement".

3. "The company shall not have recourse against the Owner for payment of any premiums, deductibles or for payment of any premiums, deductibles or for assessments under this policy."

4. "Failure of any named insured to comply with the reporting requirements of the policy shall not affect the coverage provided to the Owner as an additional insured."
5. If the Contractor, to meet the obligations of the Contract, obtains any endorsement to its General Liability Policy not specifically required by this Contract, the Contractor shall be required to have the Owner, as an additional insured, covered by the same endorsements or otherwise, including, but not limited to, completed operations coverage.

(b) Workers' Compensation

1. "Underwriters have no right of recovery of subrogation against the Owner for losses which result from work performed under this Agreement."
2. The cancellation provision is hereby amended to provide that the Owner will be provided thirty **(30) days** written notice in the event of coverage cancellation.

(7) Subcontractors.

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

(8) Notifications of Insurance Companies.

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

(9) Certificates of Insurance.

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

(10) Coverage Cancellation or Unsatisfactory Coverage.

If at any time any of the foregoing policies shall be or become unsatisfactory to the Owner, as to form or coverage, or if a company issuing any such policy shall be or become unsatisfactory to the Owner, the Contractor shall, upon notice to that effect from the Owner, promptly obtain a new policy and submit the same for approval to the Owner.

Upon failure of the Contractor to furnish, deliver and maintain the insurance coverages required herein, this Agreement, at the sole discretion of the Owner, may be forthwith declared suspended, discontinued or terminated. Failure of the Contractor to take out and/or maintain any required insurance shall not relieve the Contractor from any liability under this Agreement, nor shall the insurance requirements be construed to conflict with or otherwise limit the obligations of the Contractor concerning indemnification.

(11) Hold Harmless.

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

The Contractor also agrees to pay all attorney's fees, court fees, expert fees, and all other cost of litigation which are incurred by the Owner, which relate in whole or in part to any suit, arbitration, mediation, alternative dispute resolution, dispute, enforcement, default, declaratory judgment action, or other action in law or in equity, including appeals between Owner and Contractor, regardless of fault, which arise out or, in whole or in part, this agreement and or the performance hereof.

E. LOCATION OF EXISTING UTILITIES AND PIPING

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

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

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

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

F. LABOR PROVISIONS

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

G. NOTICE OF STARTING WORK

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

H. EFFECT OF EXTENSION OF TIME

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

I. EXTRA WORK

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

J. ASSIGNMENT OF CONTRACT

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

L. DISCREPANCIES

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

M. LIABILITY OF OWNER'S REPRESENTATIVES AND OFFICIALS

No official or employee of the Owner, nor the Architect/Engineer, nor any authorized assistant or agent of either, shall be responsible for construction means, methods, techniques, sequences or procedures, time of performance or for safety precautions and programs in connection with the

work. The Architect/Engineer shall not be responsible for the failure of the Contractor to carry out the work in accordance with the Contract Documents. The Architect/Engineer shall not be responsible for acts or omissions of the Contractor, any Subcontractor(s), or any of their agents or employees, or any other persons performing the work.

N. EFFECT OF INSPECTION AND PAYMENT

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

II. LEGAL RELATIONS AND RESPONSIBILITY

A. LAWS TO BE OBSERVED

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

B. PROVISIONS OF LAW

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

III. RESPONSIBILITIES AND RIGHTS OF CONTRACTORS

A. ATTENTION TO WORK

The Contractor shall direct the work using his best skill and judgment and shall give his personal attention to and shall supervise the work to the end that it shall be performed faithfully, and when he is not personally present on the work, he shall at all times be represented by a competent superintendent or foreman who shall be present at the work and who shall receive and obey all instructions or orders given under this Contract, and who shall have full authority to execute the same, and to supply materials, tools and labor without delay and who shall be the legal

representative of the Contractor. The Contractor shall be solely responsible for all construction means, methods, techniques, sequences and procedures, time of performance and for safety precautions and programs and for coordinating all portions of the construction. The Contractor shall be liable for the faithful observance of any instructions delivered to him or to his authorized representative.

B. ACCESS TO WORK

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

C. WORK SITE

(1) Use of Work Site. The Contractor shall confine his equipment, apparatus, the storage of materials, and operations of his workers to limits indicated by the law, ordinance, permit, Contract Documents or directions of the Owner.

The Contractors shall not load or permit any part of a structure to be loaded with weight that will endanger its safety. The Contractor shall observe and enforce the Owner's instructions regarding signs, advertisements, fires and smoke, unless such instructions are non-permissible in accordance within the jurisdiction of another authority.

(2) Use of Private Land. The Contractor shall not use any vacant lot or private land as a plant site, depository for materials, or as a spill site, or for any other purpose without the written authorization of the person(s) owning the property and the written approval of the Owner for the use of such property. A copy of the written Agreement between the property owner and the Contractor shall be provided to the Owner.

(3) The hard surfaced playground area is accessible for Contractor laydown area but must be protected to prevent damage to existing surface

D. SIGNS

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

E. LIABILITY OF CONTRACTOR

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

his employees, and all other persons performing any of the work under a contract with the Contractor.

F. ASSUMPTION OF RISKS

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

G. RESPONSIBILITY FOR DAMAGE

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

H. PROTECTION OF PERSONS AND PROPERTY

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

The Contractor shall furnish such watchmen, guards, fences, warning signs, lights and walkways, and shall take all other precautions as shall be necessary to prevent damage to persons or property. All structures and improvements in the vicinity of the work shall be protected by the Contractor, and if such property is damaged, injured or destroyed by the Contractor, his employees, Subcontractors, or agents, it shall be restored to a condition as good as when he entered upon the work.

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

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

I. PROTECTION OF CONTRACTOR'S WORK AND PROPERTY

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

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

J. PROTECTION OF EXISTING STRUCTURES

Unless otherwise indicated in the Contract Documents or unless otherwise taken care of by the

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

K. MAINTENANCE OF TRAFFIC

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

L. PRESERVATION OF STAKES AND MARKS

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

M. APPROVAL OF CONTRACTOR'S PLAN

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

N. SUGGESTIONS TO CONTRACTOR

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

O. LICENSES, PERMITS AND REGULATIONS

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

P. TAXES

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

of the Project.

Q. CONSTRUCTION UTILITIES

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

R. COORDINATION

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

S. SUBCONTRACTORS

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

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

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

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

T. UNSATISFACTORY SUBCONTRACTORS

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

U. REMOVAL OF CONDEMNED MATERIALS AND STRUCTURES

The Contractor shall remove from the work site all rejected or condemned materials or structures of any kind brought to the work site or incorporated in the work. Upon his failure to do so, or to make satisfactory progress in so doing within forty-eight (48) hours after the service of a written notice from the Architect/Engineer or Owner, the rejected or condemned material or work may be removed by the Owner and the cost of such removal shall be subtracted from monies that may be

due or may become due to the Contractor on account of or by virtue of this Contract. No such rejected or condemned material shall again be offered for use by the Contractor under this Contract.

V. ERRORS AND OMISSIONS

If the Contractor, in the course of the work, finds any errors or omissions in the Contract Documents or in the layout as given by survey points and instructions, or if he finds any discrepancy between the Contract Documents and physical conditions of the work site he shall immediately notify the Architect/Engineer, in writing for correction. Any work done after such discovery, until authorized, will be done at the Contractor's risk.

W. PROOF OF COMPLIANCE WITH CONTRACT

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

X. CLEANING UP

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

Y. FINAL GUARANTY

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

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

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

Z. PATENTS

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

AA. LEGAL RESPONSIBILITY OF CONTRACTOR IN PERFORMING WORK

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

BB. WARRANTY OF TITLE

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

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

IV. RESPONSIBILITIES AND RIGHTS OF OWNER

A. RIGHTS-OF-WAY

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

B. AUTHORITY OF THE ARCHITECT/ARCHITECT/ENGINEER

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

D. INSPECTION

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

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

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

Properly authorized inspectors shall be considered to be the representatives of the Owner, limited to the duties and power entrusted to them. Inspectors shall be authorized to inspect materials and workmanship of those portions of the work to which they are assigned, either individually or

collectively, and under instructions of the Architect/Engineer and Owner are to report any and all deviations from the Contract Documents which may come to their notice. Any inspector shall have the right to order the work stopped if, in his judgment, such action is necessary to (a) allow proper inspection, (b) avoid irreparable damage to the work, or (c) avoid subsequent condemnation of work which could not be readily replaced or restored to an acceptable condition. Such stoppage shall be for a period reasonably necessary for a determination by the Architect/Engineer that the work will in fact proceed in due fulfillment of all Contract requirements.

E. RETENTION OF DEFECTIVE WORK

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

F. CHANGES IN WORK

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

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

G. ADDITIONAL DRAWINGS

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

H. EMERGENCY PROTECTION

In the event of any emergency which threatens loss, damage or injury to persons or property, and which requires immediate action to remedy, the Owner, with or without notice to the Contractor, may provide suitable protection to the said property and persons by causing such work to be performed and such material to be furnished as shall provide such protection as the Owner may

consider necessary and adequate. The cost and expense of such work and material so furnished shall be borne by the Contractor, and if the same shall not be paid on presentation of the bills therefore, such costs shall be deducted from any amounts due or to become due the Contractor.

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

I. SUSPENSION OF WORK

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

J. RIGHT OF OWNER TO TERMINATE CONTRACT

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

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

K. PLACING PORTIONS OF WORK IN SERVICE

If desired by the Owner, portions of the work may be placed in service as completed, and the

Contractor shall give proper access to the work for this purpose. Use and operation shall not constitute an acceptance of the total Project.

V. WORKMANSHIP, MATERIALS AND EQUIPMENT

A. WORKMANSHIP

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

B. INTERPRETATION OF SPECIFICATIONS AND DRAWINGS

The Technical Specifications and the Drawings are intended to be explanatory of each other. Any work indicated on the Drawings and not in the Technical Specifications, or vice versa, shall be brought to the attention of the Architect/Engineer for verification of the actual intent. Contradictions of this nature not brought to the attention of the Architect/Engineer for correction or verification, and acted upon by the Contractor shall be considered "At the Contractor's Risk", and if necessary, corrected by the Contractor at his expense. All work shown on the Drawings, the dimensions of which are not labeled, shall be determined by the Architect/Engineer. Should it appear that the work to be done, or any of the matters relative thereto, is not sufficiently detailed or explained in these Contract Documents, including the Drawings, the Contractor shall apply to the Architect/Engineer for such further explanations as may be necessary and shall conform thereto as part of this Contract. In the event of any doubt or question arising respecting the true meaning of the Contract Documents, reference shall be made to the Owner and the decisions thereon shall be final.

C. GENERAL QUALITY OF MATERIALS

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

D. MATERIALS AND EQUIPMENT SPECIFIED BY NAME

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

Owner prior to incorporation into the work.

E. APPROVAL OF MATERIALS AND EQUIPMENT

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

F. DRAWINGS OF EQUIPMENT AND FABRICATED MATERIALS

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

All drawings and details described herein, when submitted, shall bear the stamp of the Contractor and initials of his authorized representative indicating that the Contractor has reviewed and approved such drawings as meeting his interpretation of the requirements of the Contract.

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

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

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

G. SUBSTITUTIONS

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

project requirements.

H. SAMPLES

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

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

Substitutions and Product Options

Written requests for changes in products, materials, equipment and methods of construction required by the Contract Documents shall be submitted to the Owner prior to bidding in accordance with the timeline provided and using the Material Substitution Request form provided As Exhibit L and in accordance with *The Project Manual, Division 1, Section 01600, Product Requirements Section 1.6*.

I. TESTS

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

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

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

J. MATERIAL TESTS

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

available.

K. STORAGE OF MATERIALS & EQUIPMENT

Materials shall be stored so as to ensure the preservation of their quality and fitness for the work and to allow access for proper inspection.

L. OPERATING AND MAINTENANCE DOCUMENTATION

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

M. COMPLIANCE WITH STATE SAFETY CODE

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

VI. PROSECUTION OF WORK

A. EQUIPMENT AND METHODS

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

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

B. TIME OF COMPLETION

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

C. AVOIDABLE DELAYS

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

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

D. UNAVOIDABLE DELAYS

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

E. NOTICE OF DELAYS

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

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

F. EXTENSION OF TIME

(1) UNAVOIDABLE DELAYS: For delays which are unavoidable, as determined by the Owner, the Contractor will be allowed, upon Contractor application, an extension of time beyond the time specified for completion elsewhere in the Contract Documents, proportionate to the length of such unavoidable delay. No liquidation damages or Architect/Engineering and inspection costs as are charged in the case of extensions of time for avoidable delays, will be assessed for unavoidable delays.

(2) AVOIDABLE DELAYS: If the work called for under this Contract is not finished and completed in all parts and in accordance with all requirements, within the time specified for completion in the Contract Documents (including extensions of time granted because of unavoidable delay), or if at any time it shall appear to the Owner that the Contractor will be unable to finish and complete the work, the Owner may grant the Contractor such extensions of time as the Owner deems in its best interest.

If such extension of time for Avoidable Delay is not granted, the provisions of the Contract Document, at the discretion of Owner, may be followed. However, at the option of the Owner and where the delay may be of such a duration not to inflict serious injury to the operations of the Owner in regard to the project, the Owner may assess liquidated damages for each calendar day delay exceeding the contract completion date. The sum of liquidated damages on a per day basis will be stipulated in the Contract Documents.

G. UNFAVORABLE WEATHER AND OTHER CONDITIONS

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

VII. PAYMENTS AND CONTRACT COMPLETION

A. PROGRESS ESTIMATES AND PAYMENTS

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

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

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

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

B. ALTERATIONS, OMISSIONS AND EXTRA WORK

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

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

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

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

C. OWNER'S RIGHT TO WITHHOLD CERTAIN AMOUNTS

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

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

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

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

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

D. UNIT PRICE CONSTRUCTION ITEMS

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

E. COMPENSATION FOR EXTRA WORK AND WORK OMITTED

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

- (1) By Unit Price contained in the Contractor's original Proposal and incorporated in the Contract with a change in quantity.
- (2) By a supplemental schedule of prices contained in the Contractor's original Proposal and incorporated in the Contract.
- (3) By an acceptable lump sum of the following five items as full and proper compensation:
 - (a) The necessary reasonable cost to the Contractor of the material required for the work as furnished and delivered by the Contractor at the site of the work.
 - (b) The necessary cost to the Contractor of the labor required to incorporate all of said material into the work and to finish the work in accordance with directions.

- (c) The necessary reasonable cost to the Contractor for the use of equipment used for the work.
- (d) The cost of Workers' Compensation, insurance premiums, State Unemployment and Federal Social Security payments on the labor included in Item (b).
- (e) Fifteen percent (15%) of the sum of items (a), (b), (c), and (d), which shall be considered as covering all other expenses and profit.

Under method (3) described above, in order that a proper determination may be made by the Architect/Engineer of the cost of labor and materials incorporated into extra work, the Contractor shall furnish weekly an itemized statement of material and labor supplied, together with the cost vouchers for quantities and prices of such labor, materials or work. In the event the Contractor fails to comply with the above provisions, no claim for compensation shall be made against the Owner.

F. ACCEPTANCE OF WORK

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

G. FINAL ESTIMATE AND PAYMENT

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

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

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

END OF GENERAL PROVISIONS OF CONTRACT

SECTION 0650

ARCHITECT/ENGINEER'S SUPPLEMENTARY CONDITIONS

1.01 PROJECT DESCRIPTION: Renovations at the Train Depot

1.02 DEFINITIONS:

- A. Owner: City of Myrtle Beach
Post Office Drawer 2468
Myrtle Beach, S.C. 29578
- B. Architect: Tych & Walker Architects, LLP
PO Box 509
Pawleys Island, SC 29585

1.03 SCOPE OF WORK: upfits to an existing box car and caboose that are located at the existing historic train depot. Work to include leveling of the existing cars, and interior upfit to include PME services.

1.04 PLANS & SPECIFICATIONS: The Successful Contractor will receive two (2) sets of exhibits and specifications to complete the work.

1.05 CONSTRUCTION STAKE OUT:

- A. Alignment and Control: The Architect/Engineer will provide a base line for construction alignment and a bench mark for the elevation datum.
- B. Stake Out: The Contractor shall furnish and perform all construction stake out from the Control Points furnished, and shall be totally responsible to construct the work in accordance with the plans and specifications. The Architect/Engineer's checking of grade and offset stake out shall in no way relieve the Contractor of this responsibility.

1.06 WORK SCHEDULE: The Contractor shall, upon notice of award, or as otherwise requested, furnish the Architect/Engineer a job schedule showing the various components of work and the anticipated beginning and completion date for each particular phase of the project.

1.08 REQUIRED RECORDS ON SALES AND USE TAX: In order that the Owner may substantiate a refund claim for sales and use taxes, the Contractors shall furnish certified statements in triplicate, setting forth the cost of construction materials, supplies and fittings, and equipment which becomes a part of, or are annexed to any building or structure being erected, altered, or repaired under contract, with the Owner and the amount of sales and/or use taxes paid thereon.

1.09 EXISTING CONDITIONS: The Contractor, in submitting a proposal and in signing this contract, acknowledges that he has thoroughly investigated the existing conditions and has examined the plans and specifications, understanding clearly their requirements and the requirements necessary to construct all to

completion the improvements contracted for; that he is fully prepared to sustain all losses and damages incurred by the actions of elements; is prepared to provide all necessary tools, appliances, machinery, skilled and unskilled workmen, and all necessary materials to successfully complete the work.

1.12 PROJECT SCHEDULE: The Contractor is hereby made aware that time is of the essence in that the timely completion of the work is essential. The Contractor is also made aware that the Owner has priorities in the completion of the work. All that work shown in the Contract Documents must be completed and accepted within **90 days**. In the event that the Contractor does not complete the project in the prescribed time, he agrees to pay liquidated damages in the sum of **\$250** for each consecutive calendar day thereafter.

1.13 ENVIRONMENTAL REGULATIONS: Contractor is responsible for ensuring that his forces comply with environmental regulations on site. Should construction forces violate laws, ordinances or regulations causing delays or adverse consequences on the site, the Contractor shall be held responsible for said actions.

1.14 UNIT PRICES: Unit prices in the bid package are to be used only in paying for items by the unit installed, constructed, and completed for periodic payment purposes and for preparing change orders. This contract will be awarded as a **lump sum**.

1.15 CONSTRUCTION STAGING AREA: The Construction Staging Area for this Project will be located at the discretion of the Contractor with prior written consent by the Owner.

1.16 RESOLUTION OF CLAIMS AND DISPUTES: The Architect/Engineer will review claims and take one or more of the following preliminary actions within ten (10) calendar days of receipt of a claim: (1) Request additional supporting data from the claimant; (2) Submit a schedule to the parties indicating when the Architect/Engineer expects to take action; (3) Reject the claim in whole or in part, stating the reason for rejection; (4) Recommend approval of claim by the other party or (5) Suggest a compromise. The Architect/Engineer may also, but is not obligated to, notify the surety, if any, of the nature and amount of the claim.

If a claim has been resolved, the Architect/Engineer will prepare or obtain appropriate documentation.

If a claim has not been resolved, the party making the claim shall, within ten (10) days after the Architect/Engineer's preliminary response, take one (1) or more of the following actions: (1) Submit additional supporting data requested by the Architect/Engineer; (2) Modify the initial claim or (3) Notify the Architect/Engineer that the initial claim stands.

If a claim has not been resolved after consideration of the foregoing and of further evidence presented by the parties or requested by the Architect/Engineer, the Architect/Engineer will notify the parties in writing that the Architect/Engineer's decision will be made within seven (7) days, which decision shall be final and binding on the parties but subject to resolution through the South Carolina judicial system. Upon expiration of such time period, the Architect/Engineer will render to the parties the Architect/Engineer's written decision relative to the claim, including any change in Contract Sum or Contract Time or both. If there is a surety and there appears to be a possibility of a Contractor's default, the Architect/Engineer may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

When functioning as interpreter and judge under the preceding paragraphs, the Architect/Engineer will not show partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

1.17 SALES TAX: The sales tax within the City of Myrtle Beach is 9%.

1.18 PERMITS: The building permit issued by the City of Myrtle Beach is a **NO COST** permit. All Contractors and Subcontractor's must obtain a Business License from the City of Myrtle Beach

1.19 WORKING HOURS: will be 8am -8pm. Any exceptions will require prior approval from the Architect/Engineer.

1.20 EXISTING EQUIPMENT: The Owner will be responsible for moving all moveable equipment and supplies. Any fixed equipment will remain in place and must be protected by the General Contractor.

1.21 ON SITE ARCHITECT/ENGINEERING: Any on site Architect/Engineering and or structural inspection will be the responsibility of the Owner / Design Team.

END OF SECTION

AGREEMENT

FOR City of Myrtle Beach Bid # 17-B0073

This AGREEMENT, made this _____ day of _____, 20____, by and between City of Myrtle Beach, hereinafter called "OWNER", and _____ doing business as (an individual,) or (a partnership,) or (a corporation) hereinafter called "CONTRACTOR".

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete the construction of: Renovations at the Train Depot, herein after called "PROJECT".
2. The CONTRACTOR will furnish all of the material, supplies, tools, equipment, labor and other services necessary for the construction and completion of the PROJECT described herein.
3. The CONTRACTOR will commence the work required by the CONTRACT DOCUMENTS within Ten (10) calendar days after the date of the NOTICE TO PROCEED and will complete the same within **90 days calendar days**, or unless the period for completion is extended otherwise by the CONTRACT DOCUMENTS.
4. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for the sum of \$_____ or as shown in the BID schedule.
5. The term "CONTRACT DOCUMENTS" means and includes the following:
 - A. Notice to Bidders
 - B. Instructions to Bidders
 - C. Proposal
 - D. Bid Bond
 - E. Agreement
 - F. General Provisions
 - G. Architect/Engineer's Supplementary Conditions
 - H. Contract Forms - Payment/Performance Bonds
 - Insurance Certificates
 - Tentative Notice of Award
 - Notice of Award
 - Notice to Proceed
 - Change Orders
 - I. GENERAL REQUIREMENTS prepared or issued by The City of Myrtle Beach.
 - J. TECHNICAL SPECIFICATIONS prepared or issued by The City of Myrtle Beach.
 - K. ADDENDA:

No. _____, dated _____
No. _____, dated _____
No. _____, dated _____

L. CONTRACT DRAWINGS prepared by Tych & Walker Architects, LLP.

6. The OWNER will pay to the CONTRACTOR in the manner and at such times and in such amounts as required by the CONTRACT DOCUMENTS.
7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.
8. CONTRACTOR agrees to commence WORK under the contract on or before a date specified in the NOTICE TO PROCEED and to fully complete the PROJECT within **90 days calendar days**. CONTRACTOR further agrees to pay as liquidated damages, the sum of **\$250** for each consecutive calendar day thereafter as provided in the Contract Document.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in four (4) counter parts, each of which shall be deemed an original on the date first above written.

CITY OF MYRTLE BEACH:

BY: _____
Name: _____
Title: _____

(SEAL)

ATTEST: _____
TITLE: _____

BY: _____
Name: _____
Title: _____

(SEAL)
ATTEST: _____
TITLE: _____

NOTICE OF AWARD

To: _____

PROJECT Description: Renovations at the Train Depot

The OWNER has considered the BID submitted by you for the above described WORK in response to its Notice to Bidders dated _____ and Instruction to Bidders.

You are hereby notified that your BID has been accepted for items in the amount of \$ _____.

You are required by the Instruction to Bidders to execute the Agreement and furnish the required CONTRACTOR'S Performance BOND, Payment BOND, and certificates of insurance within ten (10) calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said BONDS within ten (10) days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER'S acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

Dated this _____ day of _____, 20 ____.

Owner: **The City of Myrtle Beach**
Owner

By _____

Title _____

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged

by _____

this the _____ day of _____, 20 ____.

By _____ Title _____

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____ hereinafter called Principal, and
(Corporation, Partnership or Individual)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto _____

(Name of Owner)

(Address of Owner)

hereinafter called OWNER, in the penal sum of _____ Dollars,
(\$ _____) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, 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:

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 or modification thereof, including all amounts 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 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 four (4) counterparts, each one of

which shall be deemed an original, this the _____ day of _____, 20

_____.

ATTEST:

(Principal) Secretary

[SEAL]

Principal

By _____ (S)

(Address)

Witness as to Principal

(Address)

Surety

ATTEST:

By _____
Attorney-in-Fact

Witness as to Surety

(Address)

(Address)

NOTE: Date of BOND must not be prior to date of Contract.
If CONTRACTOR is Partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the PROJECT is located.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____ hereinafter called Principal,
and _____
(Corporation, Partnership, or Individual)

(Name of Surety)

(Address of Surety)

hereinafter called SURETY, are held and firmly bound unto _____

(Name of Owner)

(Address of Owner)

hereinafter called OWNER, in the sum of _____
_____ Dollars,(\$ _____)

in lawful money of the United States, for the payment of which sum well and truly to be made, we

bind ourselves, successors, and assigns, 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:

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 during the one year guaranty period, 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, 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 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 four (4) counterparts, each one of which shall be deemed an original, this the _____ day of _____, 20

ATTEST:

Principal

By _____(s)

(Principal) Secretary

[SEAL]

(Witness as to Principal)

(Address)

(Address)

Surety

ATTEST:

(Surety) Secretary [SEAL]

By

Witness as to Surety

Attorney-in-Fact

(Address)

(Address)

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

If CONTRACTOR is Partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the PROJECT is located.

NOTICE TO PROCEED

To: _____

Date: _____

Project: Renovations at the Train Depot

You are hereby notified to commence WORK in accordance with the Agreement dated _____, 20_____, on or before _____, 20_____, and you are to complete the work within _____90_____ consecutive calendar days thereafter. The date of completion of all WORK is therefore _____, 20_____.

The City of Myrtle Beach
Owner

By _____

Title _____

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by:

_____ this the _____ day of _____, 20_____.

By _____

Title _____

MATERIAL/PRODUCT SUBSTITUTION REQUEST

**BID #19-B0047
Renovations at the Train Depot
(Mandatory Bid Submittal Form)**

Date: _____

We hereby submit for your review the following PRODUCT SUBSTITUTION of the specified material for the above listed project.

Section: _____

Paragraph: _____

Specified Material: _____

Attached is complete technical data of the PRODUCT SUBSTITUTION. Included is complete information on changes to the Project Manual Documents required by the proposed PRODUCT SUBSTITUTION for its proper installation.

A request constitutes a representation that Trade Contractor:

- Has investigated proposed product and determined that it meets or exceeds quality level of specified product.
- Will provide same warranty for Substitution as for specified product.
- Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner.
- Waives claims for additional costs or time extension which may subsequently become apparent.
- Will reimburse Owner and Architect/Engineer for review or redesign services associated with re-approval by authorities having jurisdiction or additional time expended by Architect/Engineer to review information.

It is understood that if the Architect approves an approved substitution prior to receipt of bids in accordance with the project timeline, such approval will be set forth in an addendum. Bidders shall not rely upon approvals made in any other manner. If substitution requests are not addressed in the addendum, the substitution request shall be considered not approved. Architect's decision of approval or disapproval of proposed substitution shall be final without dispute.

THE UNDERSIGNED Trade Contractor states that the function, appearance, and quality of the PRODUCT SUBSTITUTION are equivalent or superior to the specified item. In addition, I, as the Trade Contractor will assume all responsibility for any impact or delay the review and evaluation of the alternate product may cause. Your approval of the Substitute Product in no way will relieve me as the Trade Contractor of my responsibilities to conform with all requirements of the Contract Documents.

Submitted By: _____

SECTION 06100
ROUGH CARPENTRY

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Grounds, nailers, blocking, furring, sheathing.
- B. Miscellaneous framing and sheathing – framing above top plate of metal stud walls
- C. Telephone and electrical panel boards.
- D. Concealed wood blocking for support of toilet and bath accessories, wall cabinets, and wood trim.
- E. Window/door opening flashing wall seam – membrane

1.2 REFERENCES

- A. ALSC - American Lumber Standards Committee: Softwood Lumber Standards.
- B. APA: American Plywood Association.
- C. AWWPA (American Wood Preservers Association) C1 - All Timber Products Preservative Treatment by Pressure Process.
- D. NFPA: National Forest Products Association.
- E. SPIB: Southern Pine Inspection Bureau.
- F. WWPA: Western Wood Products Association.
- G. ANSI A117.1: Providing Accessibility and Usability for Physically Handicapped People.
- H. American Disability Act.

1.3 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Provide technical data on wood preservative materials, and application instructions.
- C. Manufacturer's Certificate: Certify that Products meet or exceed specified requirements.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with the following:
 - 1. Lumber Grading Agency: Certified by DOC PS 20.
 - 1. Wood Structural Panel Grading Agency: Certified by EWA - The Engineered Wood Association.
 - 2. Lumber: DOC PS 20.

3. Wood Structural Panels: DOC PS 1 or DOC PS 2.
 - B. Surface Burning Characteristics:
 1. Fire Retardant Treated Materials: Maximum 25/450 flame spread/smoke developed index when tested in accordance with ASTM E84.
 - C. Apply label from agency approved by authority having jurisdiction to identify each preservative treated material.
 - D. Perform Work in accordance with State of South Carolina standards.
 - E. Maintain one copy of each document on site.
- 1.6 DELIVERY, STORAGE, AND HANDLING
- A. Deliver, store, protect, and handle products to site under provisions of Section 01600.

PART 2 PRODUCTS

2.1 LUMBER MATERIALS

- A. Lumber Grading Rules: NFPA, SPIB, and WWPA as applicable.
- B. Non-Structural Light Misc. Framing and Blocking: Southern Yellow Pine species, No. 2 grade, 19 percent maximum moisture content.
- C. Grounds and Blocking: Preservative; Wolman CCA Type C: Arch Wood Protection above ground, Southern Yellow Pine species, No. 2 grade, NIST PS 20, 19 percent maximum moisture content.

2.2 SHEATHING MATERIALS

- A. Plywood Roof Sheathing: APA Rated Sheathing, Span Rating 42/20; Exposure Durability 1; unsanded.
- B. Plywood Wall Sheathing: APA Rated Sheathing, Span Rating 32/16; Exposure Durability 1; unsanded.
- C. Plywood Floor Sheathing: APA Rated Sheathing, Span Rating 36/16; Exposure Durability 1, sanded.
- D. Telephone and Electrical Panel Boards: Plywood.

2.3 SHEATHING LOCATIONS

- A. Wall Sheathing: 1/2 inch thick, 48 x 96 inch sized sheets, square edges.
- B. Floor Sheathing: 3/4 inch thick, 48 x 96 inch sized sheets, tongue and groove edges.

2.4 ACCESSORIES

- A. Nails, Fasteners and Anchors:
 - 1. Nails and Fasteners; hot dipped galvanized or stainless steel see Structural Drawings. Must be compatible with wolmanized lumber (preservative treated).
 - 2. Anchors: Unless otherwise noted the following applies; Toggle bolt type for anchorage to hollow masonry. Expansion shield and lag bolt type for anchorage to solid masonry or concrete. Bolt or ballistic fastener for anchorages to steel.
- B. Joists Hangers and Connectors: Hot-dipped galvanized steel, size to suit framing conditions (U.N.O.).
- C. Glue: APA AFG-01, waterproof of water solvent base, air cure type, cartridge dispensed.
- D. Building Paper: ASTM D226, Type I and Type II asphalt saturated felt, plain untreated cellulose building paper. 15# on walls, the roof will receive a weatherproofing membrane.
- E. Straps and Connectors - By Simpson Strong Tie, galvanized with approved fasteners. Provide as noted on drawings and as required to meet uplift requirements.
- F. **Window and Door Opening Flashing: Perma-A-Barrier Wall Seam Tape by W.R. Grace and Co.. A 30 mil, cold applied self adhering membrane composed of a 2-1/2" mil high density, cross laminated polyethylene film coated on one side with a 27-1/2' mil layer of rubberized asphalt adhesive. To be applied at all window/door openings and at all exterior plywood seams.**

PART 3 EXECUTION

- 3.1 FRAMING - COORDINATE NAILING PATTERN WITH STRUCTURAL NOTES AND COMPLY WITH THE MOST STRINGENT (for all framing above the top plate of the metal stud walls)
 - A. Set structural members level and plumb, in correct position.
 - B. Make provisions for erection loads, and for sufficient temporary bracing to maintain structure safe, plumb, and in true alignment until alignment until completion of erection and installation of permanent bracing.
 - C. Place horizontal members flat, crown side up.
 - D. Construct framing members full length without splices
 - E. Construct double joist headers at floor and ceiling openings and under wall stud partitions that are parallel to floor joists. Frame rigidly into joists.
 - F. Bridge framing in excess of 8 feet span and/or at mid-span. Fit solid blocking and bridging at ends of members.

- G. Contractor is to confirm any cutting or drilling of joists, rafters, or studs with Architect prior to any installation of Electrical, Mechanical, or Plumbing work.
- H. Contractor shall provide a continuous path of uplift resistance from the roof to the foundation.
- I. Provide solid bridging at all wall and floor framing, at all plywood joints, glue and nail to sheathing.
- J. Draftstop/Firestop all holes in top plates of framed wall.
- K. Coordinate installation of wood blocking for support of all bathroom accessories with Architect prior to installation of Gypsum board.
- L. Building Felt - Provide 15 lb. felt for walls. Place building felt horizontally over wall sheathing weather lap edges a minimum of 2" and lap ends a minimum of 6". Fasten to wall with corrosive resistant nails. Provide an additional lap of felt to extend 12" from each corner at both the inside and outside. Provide a positive resistance to water flow with lapping.
- M. **At all window and door openings install Perm-A-Barrier wall seam tape as indicated on the opening details in accordance with the manufactures recommendation. The tape when install on the exterior casing flange of the window opening shall be set back from the exterior edge of the flange to assure proper sealant compatibility between the window casing and the wood trim. Submit data that illustrates that there compatibility with the sealant and the window casing. (see Section 07900).**
- N. Install all straps, connectors and fasteners as required by manufacturer.

3.2 SHEATHING

- A. Wall sheathing: Install with long dimensions or strength axis across supports. Allow 1/8" spacing at panel ends and edges. Fasten in accordance with the Structural Drawings - wall sheathing shall bridge discontinuities in all wall framing; i.e. plywood seam shall not align with seam of joint. Install Perm-A-Barrier wall seam membrane at all exterior plywood seams.
- B. Install telephone and electrical panel boards with plywood sheathing material where required. Over sized the panel by 12 inches on all sides.

3.3 TOLERANCES

- A. Framing Members: 1/4 inch from true position, maximum.
- B. Surface Flatness of Floor; 1/4 inch in 10 feet maximum, and 1/2 inch maximum in 30 feet.

END OF SECTION 06100

SECTION 08410

METAL-FRAMED STOREFRONTS

PART 1 GENERAL

1.1 SUMMARY

A.

1. Section includes aluminum-framed storefronts including aluminum and glass doors and frames including door hardware and glass infill panels and components for both interior and exterior wall applications.
2. Coordinate all hardware, panic hardware and electric strike locations

B. Related Sections:

1. Section 09900 - Paints and Coatings: Field painting of interior surface of infill panel surfaces.

1.2 REFERENCES

A. Aluminum Association:

1. AA ADM 1 - Aluminum Design Manual.

B. American Architectural Manufacturers Association:

1. AAMA 501 - Methods of Test for Exterior Walls.
2. AAMA 502 - Voluntary Specification for Field Testing of Windows and Sliding Glass Doors.
3. AAMA 503 - Voluntary Specification for Field Testing of Metal Storefronts. Curtain Wall and Sloped Glazing Systems.
4. AAMA 611 - Voluntary Specification for Anodized Architectural Aluminum.
5. AAMA 1503 - Voluntary Test Method for Thermal Transmittance and Condensation Resistance of Windows, Doors and Glazed Wall Sections.
6. AAMA 2603 - Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
7. AAMA 2604 - Voluntary specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels.
8. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels.
9. AAMA CW-10 - Care and Handling of Architectural Aluminum from Shop to Site.
10. AAMA MCWM-1 - Metal Curtain Wall Manual.
11. AAMA SFM-1 - Aluminum Store Front and Entrance Manual.

C. American Society of Civil Engineers:

1. ASCE 7 - Minimum Design Loads for Buildings and Other Structures.

D. ASTM International:

1. ASTM A36/A36M - Standard Specification for Carbon Structural Steel.

2. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
3. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
4. ASTM B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
5. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
6. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
7. ASTM E283 - Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen.
8. ASTM E330 - Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors By Uniform Static Air Pressure Difference.
9. ASTM E331 - Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors By Uniform Static Air Pressure Difference.
10. ASTM E547 - Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Differential.
11. ASTM E1105 - Standard Test Method for Field Determination of Water Penetration of Installed Exterior Windows, Curtain Walls, and Doors by Uniform or Cyclic Static Air Pressure Difference.

- E. National Fenestration Rating Council Incorporated:
1. NFRC 100 - Procedures for Determining Fenestration Product U-Factors.
- F. National Fire Protection Association:
1. NFPA 255 - Standard Method of Test of Surface Burning Characteristics of Building Materials.
- G. SSPC: The Society for Protective Coatings:
1. SSPC Paint 20 - Zinc-Rich Primers (Type I - Inorganic and Type II - Organic).
 2. SSPC Paint 25 - Red Iron Oxide, Zinc Oxide, Raw Linseed Oil, and Alkyd Primer.
- H. Underwriters Laboratories Inc.:
1. UL 723 - Tests for Surface Burning Characteristics of Building Materials.

1.3 SYSTEM DESCRIPTION

- A. Aluminum-framed storefront system includes tubular aluminum sections with supplementary internal support framing, aluminum and glass entrances, shop fabricated, factory finished, glass and glazing, related flashings, anchorage and attachment devices.
- B. System Assembly: Site assembled.

1.4 PERFORMANCE REQUIREMENTS

- A. System Design: Design and size components to withstand dead and live loads caused by positive and negative wind pressure acting normal to plane of wall,

including building corners.

1. As calculated in accordance with applicable code, as tested in accordance with ASTM E330.
- B. Deflection: Limit mullion deflection to 1/175 for spans under 13'-6" and 1/240 plus 1/4 inch for spans over 13'-6"; flexure limit of glass 3/4 inch of span; with full recovery of glazing materials.
- C. System Assembly: Accommodate without damage to components or deterioration of seals, movement within system, movement between system and peripheral construction, dynamic loading and release of loads, deflection of structural support framing.
- D. Air Infiltration: Limit air leakage through assembly to 0.06 cfm/min/sq ft of wall area, measured at reference differential pressure across assembly of 1.57 psf as measured in accordance with AAMA 501.
- E. Air and Vapor Seal: Maintain continuous air barrier and vapor retarder throughout assembly, primarily in line with inside pane of glass and heel bead of glazing compound.
- F. Vapor Seal: Limit vapor seal with interior atmospheric pressure of 1 inch sp, 72 degrees F, 40 Percent RH without seal failure.
- G. Condensation Resistance Factor: CRF of not less than 45 when measured in accordance with AAMA 1503.
- H. Water Leakage: None, when measured in accordance with AAMA 501, ASTM E331 and ASTM E547 with test pressure difference of 20 percent of design pressure, with minimum differential of 2.86 lbf/sq ft and maximum of 12.00 lbf/sq ft.
- I. Thermal Transmittance of Assembly (Excluding Entrances): Maximum U Value of 0.69 Btu/sq ft per hour per deg F when measured in accordance with AAMA 1503.
- J. Expansion / Contraction: Provide for expansion and contraction within system components caused by cycling temperature range of 170 degrees F over 12 hour period without causing detrimental effect to system components and anchorage.
- K. System Internal Drainage: Drain water entering joints, condensation occurring in glazing channels, or migrating moisture occurring within system, to exterior by weep drainage network.

1.5 SUBMITTALS

- A. Section 01330 - Submittal Procedures: Submittal procedures.
- B. Shop Drawings: Indicate system dimensions, framed opening requirements and tolerances, affected related Work and expansion and contraction joint location and details to include entrance door hardware.
- C. Product Data: Submit component dimensions, describe components within assembly, anchorage and fasteners, glass and infill, [door hardware,] and internal drainage details.

- D. Samples: Submit two samples 12 x 12 inches in size illustrating finished aluminum surface, glass units and glazing materials.
- E. Design Data: Indicate framing member structural and physical characteristics, calculations, and dimensional limitations.
- F. Manufacturer's Certificate: Certify products meet or exceed specified requirements.

1.6 QUALITY ASSURANCE

- A. Perform Work in accordance with AAMA MCWM-1 - Metal Curtain Wall, Window, Store Front and Entrance - Guide Specifications Manual.
- B. Surface Burning Characteristics:
 - 1. Foam Insulation: Maximum 75/450 flame spread/smoke developed index when tested in accordance with ASTM E84.
- C. Apply label from agency approved by authority having jurisdiction to identify each foam plastic insulation board.
- D. Perform Work in accordance with State of South Carolina standards.
- E. Maintain one copy of each document on site.

1.7 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing aluminum glazing systems with minimum three years documented experience.

1.8 PRE-INSTALLATION MEETINGS

- A. Section 01300 - Administrative Requirements: Pre-installation meeting.
- B. Convene minimum one week prior to commencing work of this section.

1.9 DELIVERY, STORAGE, AND PROTECTION

- A. Section 01600 - Product Requirements: Product storage and handling requirements.
- B. Handle Products of this section in accordance with AAMA MCWM-1 - Curtain Wall Manual #10.
- C. Protect finished aluminum surfaces with strippable coating. Do not use adhesive papers or sprayed coatings which bond when exposed to sunlight or weather.

1.10 ENVIRONMENTAL REQUIREMENTS

- A. Section 01600 - Product Requirements.
- B. Do not install sealants nor glazing materials when ambient temperature is less than 40 degrees F during and 48 hours after installation.

1.11 COORDINATION

- A. Section 01300 - Administrative Requirements: Coordination and project conditions.
- B. Coordinate the Work with installation of firestopping, air barrier, and components or materials.

1.12 WARRANTY

- A. Section 01700 - Execution Requirements: Product warranties and product bonds.
- B. Furnish five year manufacturer warranty for glazed units.

PART 2 PRODUCTS

2.1 ALUMINUM-FRAMED STOREFRONTS

- A. Manufacturers:
 - 1. **Kawneer Co., Inc.** (basis of design, no substitutions)
- B. Furnish materials in accordance with the State of South Carolina standards.

2.2 COMPONENTS

- A. Extruded Aluminum: ASTM B221; 6063 alloy, T5 temper typical, 6061 alloy, T6 temper for extruded structural members.
- B. Sheet Aluminum: ASTM B209, 5005 alloy, H15 or H34 temper.
- C. Sheet Steel: ASTM A653/A653M; galvanized to minimum G90.
- D. Steel Sections: ASTM A36/A36M; shaped to suit mullion sections, galvanized.
- E. Glass: Specified in Section 08800.
- F. Glazing Materials: As specified in Section 08800.
- G. Infill Panels:
- H. Insulated Panels: Manufacturer's standard insulated panel construction with aluminum outer and inner faces and special insulating core; 1 inch thick.
Entrance System (at exterior locations for Doors 100):
 - 1. Aluminum Entrances: **Series 350 Entrances**, Entrance member profile: 3-1/2" vertical stile, 3-1/2" top rail, 6-1/2" bottom rail with 1" insulated glass.
 - 2. Hardware: Standard Intermediate Pivot (Rixson M-19)
Door-O-Matic 1490 concealed vertical rod
LCN 2030 concealed overhead/single acting closer with hold open
CO-9 single acting pull

3. Brake metal at aluminum store front as indicated on the drawings. Same finish and thickness as storefront system.
 4. Provide corner, junction, base, and miscellaneous shapes as defined on drawings for a complete installation.
 5. Hardware: Furnish manufacturer's standard hardware for types of doors and applications indicated, and as specified below:
 6. Weather Stripping: Wool pile, continuous and replaceable.
 7. Sill Sweep Strips.
 8. Threshold: Extruded aluminum, one piece for each door opening, ribbed, non-slip surface.
 9. Pivots: Offset type: top, intermediate, and bottom.
 10. Panic Device: Rim with profile type to fit door stiles; push pad type.
 11. Closer: Fully adjustable overhead, surface mount, modern style overhead closer.
 12. Finish: Exposed hardware to match hardware finishes specified in Section 08710.
 13. Lock Cylinders and Pulls: Specified in Section 08710
- I. System
1. Aluminum Entrance System: **Tri-Fab 451**, 4-1/2" deep with 2" sight line, 1/4" tempered glass, center pane glass application, flush glazed, screw spline fabrication
 2. Brake metal at aluminum store front as indicated on the drawings.
 4. Provide corner, junction, base, and miscellaneous shapes as defined on drawings for a complete installation.
 5. Hardware: Furnish manufacturer's standard hardware for types of doors and applications indicated, and as specified below:
- J. Flashings: Minimum 0.032 inch thick aluminum to match mullion sections where exposed.
- K. Firestopping: Specified in Section 07840.
- L. Sealant and Backing Materials:
1. Sealant Used Within System (Not Used for Glazing): Manufacturer's standard materials to achieve weather, moisture, and air infiltration requirements.
 2. Perimeter Sealant: Specified in Section 07900.
- M. Fasteners: Stainless steel.

2.3 FABRICATION

- A. Fabricate components with minimum clearances and shim spacing around perimeter of assembly, yet enabling installation and dynamic movement of perimeter seal.
- B. Accurately fit and secure joints and corners. Make joints flush, hairline, and weatherproof.
- C. Prepare components to receive anchor devices. Fabricate anchors.
- D. Arrange fasteners and attachments to conceal from view.
- E. Reinforce interior horizontal head rail to receive blind track brackets and attachments.
- F. Prepare components with internal reinforcement for door hardware.
- G. Reinforce framing members for imposed loads.

2.4 SHOP FINISHING

- A. Color Anodized Aluminum Surfaces: AAMA 611, AA-M10C22A44 non-specular as fabricated mechanical finish, medium matte chemical finish, and Architectural Class I 0.7 mils **#40 Dark Bronze**.
- B. Concealed Steel Items: Galvanized to ASTM A123/A123M; [minimum 2.0 oz/sq ft coating thickness; galvanize after fabrication. Primed with iron oxide paint.
- C. Apply bituminous paint to concealed aluminum and steel surfaces in contact with cementitious or dissimilar metals.
- D. Shop and Touch-Up Primer for Steel Components: SSPC Paint 25 red oxide.
- E. Touch-Up Primer for Galvanized Steel Surfaces: SSPC Paint 20 zinc rich.
- F. Extent of Finish:
 - 1. Apply factory coating to surfaces exposed at completed assemblies.
 - 2. Apply finish to surfaces cut during fabrication so no natural aluminum is visible in completed assemblies, including joint edges.
 - 3. Apply touch-up materials recommended by coating manufacturer for field application to cut ends and minor damage to factory applied finish.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Section 01300 - Administrative Requirements: Coordination and project conditions.
- B. Verify dimensions, tolerances, and method of attachment with other Work.
- C. Verify wall openings and adjoining air and vapor seal materials are ready to receive Work of this Section.

3.2 INSTALLATION

- A. Install wall system in accordance with AAMA MCWM-1 - Window, Store Front and Entrance - Guide Specifications Manual.
- B. Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.
- C. Provide alignment attachments and shims to permanently fasten system to building structure.
- D. Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances, aligning with adjacent Work.
- E. Provide thermal isolation where components penetrate or disrupt building insulation.
- F. Install sill flashings. Turn up ends and edges; seal to adjacent Work to form water tight dam.
- G. Coordinate attachment and seal of perimeter air and vapor retarder materials.
- H. Pack fibrous insulation in shim spaces at perimeter of assembly to maintain continuity of thermal barrier.
- I. Install integral flashings and integral joint sealers.
- J. Set thresholds [in bed of mastic and] secure.
- K. Install hardware using templates provided. Refer to Section 08710 for installation requirements.
- L. Coordinate installation of glass with Section 08800 ; separate glass from metal surfaces.
- M. Coordinate installation of perimeter sealants with Section 07900.
- N. Install hardware using templates provided. Refer to Section 08710 for installation requirements. Coordinate all hardware applications with Section 08710 Hardware Supplier.

3.3 ERECTION TOLERANCES

- A. Section 01400 - Quality Requirements: Tolerances.
- B. Maximum Variation from Plumb: 0.06 inches every 3 ft non-cumulative or 1/16 inches per 10 ft, whichever is less.
- C. Maximum Misalignment of Two Adjoining Members Abutting in Plane: 1/32 inch.

3.4 FIELD QUALITY CONTROL

- A. Section 01400 - Quality Requirements, 01700 - Execution Requirements: Field inspecting, testing, adjusting, and balancing.
- B. Inspection to monitor quality of installation and glazing.
- C. Test to AAMA 502 or 503, ASTM E1105 and AAMA 501.

3.5 ADJUSTING

- A. Section 01700 - Execution Requirements: Testing, adjusting and balancing.
- B. Adjust operating hardware for smooth operation.

3.6 CLEANING

- A. Section 01700 - Execution Requirements: Final cleaning.
- B. Remove protective material from pre-finished aluminum surfaces.
- C. Wash down surfaces with solution of mild detergent in warm water, applied with soft, clean wiping cloths. Take care to remove dirt from corners. Wipe surfaces clean.
- D. Remove excess sealant by method acceptable to sealant manufacturer.

3.7 PROTECTION OF INSTALLED CONSTRUCTION

- A. Section 01700 - Execution Requirements: Protecting installed construction.
- B. Protect finished Work from damage.

END OF SECTION 08410

SECTION 09260
GYPSUM BOARD SYSTEMS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Metal stud wall framing
- B. Wall/Floor/Ceiling Sprayfoam insulation
- C. Gypsum board: Level 5 finish
- D. Taped and sanded joint treatment
- E. FRP Panels

1.2 RELATED SECTIONS

- A. Section 06100 – Rough Carpentry
- F. Section 09900 - Painting: Surface finish.

1.3 REFERENCES

- A. ASTM C36 - Gypsum Wallboard.
- B. ASTM C475 - Joint Treatment Materials for Gypsum Wallboard Construction.
- C. ASTM C514 - Nails for the Application of Gypsum Wallboard.
- D. ASTM C630 - Water Resistant Gypsum Backing Board.
- E. ASTM C645 - Non-Load (Axial) Bearing Steel Studs, Runners (Track), and Rigid Furring Channels for Screw Application of Gypsum Board.
- F. ASTM C665 - Mineral Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing.
- G. ASTM C754 - Installation of Framing Members to Receive Screw Attached Gypsum Wallboard, Backing Board, or Water Resistant Backing Board.
- H. ASTM C840 - Application and Finishing of Gypsum Board.
- I. ASTM C1002 - Steel Drill Screws for the Application of Gypsum Board.
- J. ASTM E90 - Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions.
- K. ASTM E119 - Fire Tests of Building Construction and Materials.
- L. GA-201 - Gypsum Board for Walls and Ceilings.
- M. GA-216 - Recommended Specifications for the Application and Finishing of Gypsum Board.

- N. GA-600 - Fire Resistance Design Manual.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01330.
- B. Product Data: Provide data on metal framing, gypsum board, joint tape.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with ASTM C840, GA-201, GA-216 and GA-600.
- A. Perform Work in accordance with State of South Carolina standards.
- B. Maintain one (1) copy of each document on site.
- C. **Single Source Responsibility for the Metal Stud Framing Section 05400, Gypsum Board installation Section 09260 and Spray Foam Insulation.**

1.6 QUALIFICATIONS

- A. Applicator: Company specializing in performing the work of this section with minimum ten (10) years experience. The specialized company cannot be the General Contractor without receiving prior approval from the Architect. Approval will require documented information of previous installations and previous purchasing of materials on a consistent basis for the duration required.

1.7 REGULATORY REQUIREMENTS

- A. Conform to applicable code for fire rated assemblies as follows:
 - 1. Fire Rated Partitions: Listed assembly by UL No. 306, one hour fire rated partition.

PART 2 PRODUCTS

2.1 MANUFACTURERS - GYPSUM BOARD SYSTEM

- A. U.S. Gypsum.
- B. Gold Bond. Building Products Division National Gypsum Co.
- C. Georgia - Pacific Corporation.

2.02 FRAMING MATERIALS

- A. Studs: ASTM A525, non-load bearing rolled steel, channel shaped, punched for utility access, as scheduled.
- B. Runners: Of same material and thickness as studs, bent leg retainer notched to receive studs. Ceiling Runners; with extended leg retainer.

- C. Furring and Bracing Members: Of same material as studs; thickness to suit purpose.
- D. Fasteners: Self drilling, self tapping screws.
- E. Sheet Metal Backing: 18 gage steel for reinforcement as required or as indicated on Structural Drawings, whichever is more stringent.
- F. Anchorage Devices: Power actuated, drilled expansion bolts.
- G. Acoustic Sealant: As specified in Section 09260.

2.3 GYPSUM BOARD MATERIALS

- A. Standard Gypsum Board: ASTM C36; 5/8 inch thick, maximum permissible length; ends square cut, tapered edges.
- B. Fire Rated Gypsum Board: ASTM C36; fire resistive type, UL rated; 5/8 inch thick, maximum permissible length; ends square cut, tapered edges.
- C. Moisture Resistant Gypsum Board: ASTM C630; 5/8 inch thick, maximum permissible length; ends square cut, tapered edges. (install at caboose car and bathroom)
- D. Exterior Gypsum Board.

2.4 ACCESSORIES

- A. Acoustical Insulation: ASTM C665; preformed glass fiber, friction fit type, unfaced as indicated on drawings. Owens Corning, sound attention batt fiberglass 3-1/2" thickness, or to accommodate associated wall thickness.
- B. Acoustical Sealant: Non-hardening, non-skinning, for use in conjunction with gypsum board.
- C. Corner Beads: Metal.
- D. Edge Trim: GA 201 and GA 216;
- E. Joint Materials: ASTM C475; GA 201 and GA 216; reinforcing tape, joint compound, adhesive, and water.
- F. Fasteners: ASTM C1002, Type GA-216.
- F. Reglets: Fry Reglet; as indicated on drawings.

2.5 FRP Panels (fiberglass reinforced wallpanels)

- A. Prefinished polyester glass reinforced plastic sheets adhered to unfinished gypsum board
- B. Manufacturer
 - 1. Marlite: Standard FRP
 - 0.090 Thick
 - 4'0" Wide
 - 8'-0" Length
 - Color: P100 White
 - Adhesive: Marlite C551 FRP, adhesive, water resistand non-flammable

- 2.6 Spray Foam
- A. QuikShield 112XC by SWD Urethane: 2 lb closed cell spray applied rigid polyurethane foam system
 - B. R value 1" = 6.3 Provide a minimum of 3" of spray foam at wall/roof and floor areas.
 - C. Clean all existing and new surfaces in accordance with manufacturer to maintain proper adhesion.
 - D. Apply in accordance with manufacturer recommendation.
 - E. Provide a consistent insulation at the structure envelope around all surfaces.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify site conditions under provisions of Section 01039.
- B. Verify that site conditions are ready to receive work.
- C. The existing wallpaper shall be removed and the existing Gypsum Board shall be prepared to receive a Level 5 finish as defined below.

3.2 METAL STUD FRAMING INSTALLATION

- A. Align and secure top and bottom runners at 16 inches o.c..
- B. Place two beads of acoustic sealant between runners and substrate.
- C. Install studs vertically at 16 inches o.c. unless otherwise noted.
- D. Align stud web openings horizontally.
- E. Secure studs to tracks using fastener method. Do not weld.
- F. Stud splicing not permissible.
- G. Fabricate corners using a minimum of three studs.
- H. Double stud at wall openings, door and window jambs, not more than 2 inches (50 mm) from each side of openings.
- I. Brace stud framing system rigid.
- J. Coordinate erection of studs with requirements of door frames, window frames, and install supports and attachments.
- K. Coordinate installation of wood bucks, anchors, and wood blocking with electrical, mechanical work and fire extinguishers to be placed within or behind stud framing.
- L. Blocking: Secure wood blocking to studs. Secure steel channels to studs. Install blocking for support of plumbing fixtures, toilet partitions, wall cabinets, toilet accessories, hardware to meet ADA, ANSI 1117.1 (86) requirements for supportive devices and height for handicapped.

- M. Refer to drawings for indication of partitions extending to finished ceiling only and for partitions extending through the ceiling to the structure above. Maintain clearance under structural building members to avoid deflection transfer to studs.
Provide extended leg ceiling runners.
- N. Coordinate placement of insulation in stud spaces made inaccessible after stud framing erection.

3.3 INSTALLATION TOLERANCES

- A. Maximum Variation From True Position: 1/8 inch.
- B. Maximum Variation of any Member from Plane: 1/8 inch.
- C. Maximum Variation From Plumb: 1/8 inch.

3.4 GYPSUM BOARD INSTALLATION

- A. Install gypsum board in accordance with GA-201, GA-216, GA-214 and GA-600 and manufacturer's instructions. All new and existing walls shall be prepared to receive a **Level 5** finish. No marks or ridges. Entire surface covered with skim coat of compound which shall completely cover the paper and ready to for drywall primer before applying finish painting.
 - 1. **Level 5** – All appropriately prepared gypsum board surfaces shall have one coat of drywall primer applied to yield a properly painted surface. Two separate coats of topcoat material shall be applied over the drywall primer to yield a properly painted surface. Paint shall be applied to the mil film thickness and application conditions specified by the paint manufacturer. Note that this level is recommended where the best paint finish is required, such as under critical lighting conditions or when paints that have a glossy surface are used.
- B. Erect single layer standard gypsum board in most economical direction, with ends and edges occurring over firm bearing unless conflicting with UL assembly requirements.
- C. Erect single layer fire rated gypsum board vertically, with edges and ends occurring over firm bearing.
- D. Use screws when fastening gypsum board to metal furring or framing.
- E. Treat cut edges and holes in moisture resistant gypsum board with sealant.
- F. Place corner beads at external corners as indicated. Use longest practical length. Place edge trim where gypsum board abuts dissimilar materials.
- G. Install sound insulation where indicated, prior to gypsum board.
- H. Where sound insulation is installed in partitions. Seal construction at perimeters, openings and penetrations with a continuous bead of acoustical sealant including a bead at both faces of partitions.

3.05 JOINT TREATMENT

- A. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.

- B. Feather coats onto adjoining surfaces so that camber is maximum 1/32.
- C. Erect in accordance with manufacturer's instructions.

3.06 TOLERANCES

- A. Maximum Variation of Finished Gypsum Board Surface from True Flatness:
1/8 inch in 10 feet in any direction.

END OF SECTION 09260

SECTION 09651

RESILIENT TILE FLOORING

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Resilient tile flooring and accessories.

1.1 RELATED SECTIONS

- A. Section 06100 - Rough Carpentry: Plywood subflooring and underlayment.

1.2 REFERENCES

- A. American Association of Textile Chemists and Colorists, AATCC 134 - Electrostatic Propensity of Carpets.
- B. ASTM International (ASTM):
 1. ASTM C 1028 - Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method.
 2. ASTM D 2859 - Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials.
 3. ASTM D 3884 - Standard Guide for Abrasion Resistance of Textile Fabrics (Rotary Platform, Double-Head Method), Abrasion Wheels- H18 with 1000grams load.
 4. ASTM E 492 - Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine.
 5. ASTM E 662 - Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials.
 6. ASTM E 648 - Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source.
 7. ASTM E 989 - Standard Classification for Determination of Impact Insulation Class (IIC).
 8. ASTM F 137 - Standard Test Method for Flexibility of Resilient Flooring Materials with Cylindrical Mandrel Apparatus.
 9. ASTM F 386 - Standard Test Method for Thickness of Resilient Flooring Materials Having Flat Surfaces.
 10. ASTM F 925 - Standard Test Method for Resistance to Chemicals of Resilient Flooring.
 11. ASTM F 970 - Standard Test Method for Static Load Limit.
 12. ASTM F 1514 - Standard Test Method for Measuring Heat Stability of Resilient Flooring by Color Change.
 13. ASTM F 1515 - Standard Test Method for Measuring Light Stability of Resilient Flooring by Color Change.
 14. ASTM F 1700 - Standard Specification for Solid Vinyl Floor Tile.
 15. ASTM F 1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
 16. ASTM F 1914 - Standard Test Methods for Short-Term Indentation and Residual Indentation of Resilient Floor Covering.
 17. ASTM F 2055 - Standard Test Method for Size and Squareness of Resilient Floor Tile by Dial Gage Method.
 18. ASTM F 2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes.
 19. ASTM F 2199 - Standard Test Method for Determining Dimensional Stability

of Resilient Floor Tile after Exposure to Heat.

1.3 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Provide detailed data on each product to be used including but not limited to the following information as applicable:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
 - 4. Maintenance recommendations.
- C. Selection Samples: For each finish product specified, two sets of each type, colors and finish of resilient flooring and accessory required, indicating full range of color and pattern variation.
- D. Verification Samples: For each finish product specified, two sets of each type, colors and finish of resilient flooring and accessory required, indicating color and pattern of actual product, including variations, as proof of application compliance.
- E. Closeout Submittals: Submit three copies of the following:
 - 1. Maintenance and operation data includes - methods for maintaining installed products, and precautions against cleaning materials and methods detrimental to finishes and performance.
 - 2. Documentation of warranty specified herein.
- F. Flame Spread Certification: Submit manufacturer's certification that resilient flooring furnished for areas indicated to comply with required flame spread rating has been tested and meets or exceeds indicated or required standard.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum two years experience and completed at least three projects of similar magnitude, material and complexity. Upon request, provide project references including contact names and telephone numbers for three projects.
- B. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship, color, sheen and finished appearance are approved by Architect.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Flooring material and adhesive shall be acclimated to the installation area for a minimum of 48 hours prior to installation.
- C. Store cartons of tile products flat and squarely on top of one another, not on edge.
- D. Store tubes of feature strips and borders in a horizontal position. Storage in a vertical or inclined position causes uneven weight distribution, which will spaghetti the ends of the feature strips. Store all tubes laying flat.

1.6 PROJECT CONDITIONS

- A. Environmental Requirements/Conditions: In accordance with manufacturer's recommendations. Areas to receive flooring shall be clean, fully enclosed, weather tight with the permanent HVAC set at a uniform temperature of at least 65 degrees F (18 degrees C) and less than 85 degrees (30 degrees C) 48 hours prior to and during and for not less than 48 hours after installation. The flooring material shall be conditioned in the same manner prior to installation.
- B. Close spaces to traffic during resilient flooring installation and for a period of time after installation as recommended in writing by the manufacturer.
- C. Install resilient flooring materials and accessories after other finishing operations, including painting, have been completed.
- D. Where demountable partitions and other items are indicated for installation on top of sheet resilient flooring material, install flooring material before these items are to be installed.
- E. Concrete substrates should not exceed 82 percent RH and/or 6 lbs. X 24 hrs. X 1000 sf. moisture vapor emissions rate tested in accordance to ASTM F 2170 and ASTM F 1869.
- F. Store tubes of feature strips and borders in a horizontal position. Storage in a vertical or inclined position causes uneven weight distributions, which will spaghetti the ends of the feature strips. Store all tubes laying flat.

1.7 WARRANTY

- A. Warranty Period: Manufacturer's standard warranty against manufacturing defects and wearing for flooring and as follows:
 - 1. 10 year commercial warranty.

1.8 EXTRA MATERIALS

- A. Deliver to Owner extra materials from same production run as products installed. Package products with protective covering and identify with descriptive labels. Comply with Division 1 closeout submittals requirements.
 - 1. Quantity: Furnish quantity of flooring units equal to 2 percent of amount installed. Storage and Protection: Comply with Owner's requirements for delivery, storage and protection of extra materials.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Mohawk Select Step Luxury Vinyl Tile, which is located at: 160 S. Industrial Blvd, Calhoun, GA 30701; Toll Free Tel: 888-740-6936; Web: www.mohawkgroup.com
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 RESILIENT TILE FLOORING (LVT)

Resilient Tile Flooring: Mohawk Select Step Luxury Vinyl Tile (Basis of Design)

- 1. Dimensions: 48 inches by 6 inches
- 2. Material Compliance: ASTM F 1700, BS EN 649, BSEN 654.
 - a. Reaction to Fire: ASTM E 662, ASTM E 648.

- b. Slip Resistance: ASTM C 1028, R9 classification.
3. Antimicrobial Properties: AATCC Method 174, Part 174.
4. Wear Layer Thickness: 20 mil (0.5 mm).
5. Tile Thickness: 3 mm.
6. Edge: Non-beveled edge.
7. Item Number and Name:
 - a. TBD from standard colors

2.3 ACCESSORIES

- A. Manufacturer's Floor Care Kit with cleaning and maintenance products in quantities appropriate to size and scope of resilient flooring application are available but not required.
- B. Adhesive: Manufacturer's recommended adhesive as follows.
 1. Manufacturer's Epoxy adhesive.
 - a. Provide manufacturer's recommended concrete floor sealer for high moisture applications.
 2. Manufacturer's 332 acrylic "wet set" adhesive.
 - a. Provide manufacturer's recommended concrete floor sealer for high moisture applications.
 3. Manufacturer's pressure sensitive adhesive.
 - a. Provide manufacturer's recommended concrete floor sealer for high moisture applications.
- C. Portland based cementitious base leveler. Gypsum based not acceptable.
- D. Manufacturer approved substrate board

PART 3 EXECUTION

3.1 EXAMINATION

- A. Inspect floor to be installed immediately upon arriving at job site; perform a moisture test.
- B. Do not begin installation until substrates have been properly prepared.
- C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- D. The installation of the resilient flooring shall not begin until the work of all other trades has been completed, particularly wet and overhead trades.
- E. Areas to receive flooring shall be adequately lighted during all phases of the installation process.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Using Portland based cementitious base leveler fill and cover all seams, nail heads, voids, cracks, and expansion joints. Achieve smooth, even, firmly attached substrate for best finish results. Gypsum based underlayment not acceptable with Vinyl Flooring unless it is first properly prepared.
 1. Encapsulate the gypsum with a premium latex primer/sealer.
 2. Float with a Portland cement compound using a latex additive (as recommended by the manufacturer) instead of water.
 3. Once substrate levelness is achieved continue with the next step.

- C. Apply concrete floor sealer to substrate in accordance with manufacturer's recommendations.
- D. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- E. Concrete Substrates: The Contractor shall verify to the Owner and install a minimum of 30 days prior to the scheduled resilient flooring installation the following substrate conditions. All substrate testing shall be documented and submitted to the Architect and Owner before commencement of the flooring installation.
 - 1. Verify that substrates are dry, free of debris, and that all curing compounds, sealers, and hardeners have properly cured.
 - 2. Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by manufacturer. Do not use solvents.
 - 3. Alkalinity and Adhesion Testing: Perform tests recommended by manufacturer. Proceed with installation only after substrates pass testing.
 - 4. Moisture Testing: Perform tests recommended by manufacturer and as follows. Proceed with installation only after substrates pass testing.

3.3 INSTALLING RESILIENT TILES AND PLANKS

- A. General:
 - 1. Permanent HVAC system shall be turned on and set to a minimum of 65 degrees F (20 degrees C) for a minimum of 48 hours prior to, during and 48 hours after installation. After the installations, the maximum temperature should not exceed 125 degrees F (37 degrees C).
 - 2. All products must be allowed to acclimate at least 24 to 48 hours before installation. This means product must be placed in the same room as the install that is taking place and removed from its factory packaging.
 - 3. Material shall be visually inspected prior to installation.
 - 4. Ensure that all recommendations for sub-floor and jobsite conditions are met prior to beginning the installation. Once the installation is started, Contractor and installer have accepted those conditions.
 - 5. Install in accordance with manufacturer's installation instructions for each product type and application specified.
- B. Layout and Installation:
 - 1. In order to achieve a random natural wood look, take planks and cut nominal lengths to be used on the first course; example: 10 inches, 40 inches, 15 inches, 25 inches, 8 inches. At the end of the first course, all cut planks remaining should be used on the next course. Position planks so the end seams are no closer than the width of the plank being installed. Maintain this approach to staggering the planks throughout the entire installation.
 - 2. Center tiles or planks in rooms and hallways so borders are not less than half a tile or plank when possible.
 - 3. Cut edges shall always be installed against a wall.
 - 4. Install using tile and plank installation techniques recommended by manufacturer.
 - 5. Install tiles, planks, borders and feature strips in locations and configurations indicated on the Drawings.
- C. Adhesive Application:
 - 1. Any spread glue has to be covered with material and rolled within the recommended time frame described on the adhesive container.
 - 2. If troweled adhesive skims over, scrape up and reapply.
 - 3. Install in accordance with adhesive manufacturer's recommendations.

4. Refer to manufacturer's literature for selection criteria for trowel size, type.
5. Using proper trowel size, apply adhesive in accordance with label on adhesive.
6. Spread a 4 inch wide band of adhesive around the perimeter of the area designated as an extreme condition area.
7. An additional 4 inch band should be spread at approximately 10 foot (3 m) intervals.
8. For transitional areas, from loose lay to another floor covering of a different height, a 4 inch band of adhesive should be spread across the length of the transition.

3.4 CLEANING

- A. Wipe off any adhesive on floor as installation proceeds. Wait 48 hours before applying the cleaning and maintenance products.
- B. Prior to installation of permanent fixtures or furniture, remove all dirt, debris, or residual adhesive and clean the floor. If desired, a protective coating may be applied at this time. Specific products and instructions are available from the manufacturer.

3.5 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

3.6 MAINTENANCE

- A. Comply with manufacturers instructions for proper cleaning and maintenance of the products.

3.7 SCHEDULE

- A. Refer to the Room Finish Schedule on the architectural drawings for VCT2.

END OF SECTION

SECTION 09900
PAINTS AND COATINGS

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes surface preparation and field application of paints, stains, varnishes, and other coatings.
- B. Paint and stain all surfaces that are primed for painting. Do not paint any surfaces that are factory primed unless noted otherwise.
- C. Related Sections:
 - 1. Section 04810 - Unit Masonry Assemblies
 - 2. Section 05500 - Metal Fabrications: Shop primed items.
 - 3. Section 05510 - Metal Stairs and Ladders: Shop primed items.
 - 4. Section 08111 - Standard Steel Doors and Frames
 - 5. Section 08310 - Access Panels and Doors
 - 6. Section 09260 - Gypsum Wallboard Assemblies
 - 7. Section 09720 - Wall Covering: Primer and sealer under wall covering.
 - 8. Section 15075 - Identification for Plumbing Piping and Equipment.
 - 9. Section 15076 - Identification for HVAC Piping and Equipment.
 - 10. Section 16075 - Identification for Electrical Systems.
 - 11. Section 16076 - Identification for Communications Systems.

1.2 REFERENCES

- A. ASTM International:
 - 1. ASTM D16 - Standard Terminology Relating to Paint, Varnish, Lacquer, and Related Products.
 - 2. ASTM D4442 - Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Base Materials.
 - 3. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- B. National Fire Protection Association:
 - 1. NFPA 255 - Standard Method of Test of Surface Burning Characteristics of Building Materials.
- C. Painting and Decorating Contractors of America:
 - 1. PDCA - Architectural Painting Specification Manual.
- D. SSPC: The Society for Protective Coatings:
 - 1. SSPC - Steel Structures Painting Manual.
- E. Underwriters Laboratories Inc.:
 - 1. UL 723 - Tests for Surface Burning Characteristics of Building Materials.

1.3 DEFINITIONS

- A. Conform to ASTM D16 for interpretation of terms used in this section.

- 1.4 SUBMITTALS
 - A. Section 01330 - Submittal Procedures: Submittal procedures.
 - B. Product Data: Submit data on finishing products. Samples:
 - 1. Submit color charts for selection by architect for review not less than four weeks before painting is scheduled to start.
 - C. Manufacturer's Installation Instructions: Submit special surface preparation procedures, substrate conditions requiring special attention.
- 1.5 CLOSEOUT SUBMITTALS
 - A. Section 01700 - Execution Requirements: Closeout procedures.
 - B. Operation and Maintenance Data: Submit data on cleaning, touch-up, and repair of painted and coated surfaces.
- 1.6 QUALITY ASSURANCE
 - A. Surface Burning Characteristics:
 - 1. Fire Retardant Finishes: Maximum 25/450 flame spread/smoke developed index when tested in accordance with ASTM E84.
 - B. Perform Work in accordance with State of South Carolina standards.
 - C. Maintain one copy of each document on site.
- 1.7 QUALIFICATIONS
 - A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum ten years documented experience.
 - B. Applicator: Company specializing in performing work of this section with minimum ten years documented experience and approved by manufacturer.
- 1.8 MOCKUP/FIELD SAMPLES
 - A. Section 01400 - Quality Requirements: Mock-up and Field Sample requirements.
 - B. Construct field sample on actual walls as directed by architect, 6 feet long by 6 feet wide, illustrating coating color, texture, and finish. Repaint field sample until all colors are selected. Provide a field sample for each color selected by the architect. Provide finish lighting conditions where sample is to be painted. Ample time to review the samples shall be incorporated.
 - C. Locate where directed by Architect/Engineer.
 - D. Incorporate accepted mockup as part of Work.
- 1.9 PRE-INSTALLATION MEETINGS
 - A. Section 01300 - Administrative Requirements: Pre-installation meeting.

- B. Convene minimum one week prior to commencing work of this section. **Do not proceed with remaining work until Architect approves of the mark-up samples.**

1.10 DELIVERY, STORAGE, AND HANDLING

- A. Section 01600 - Product Requirements: Product storage and handling requirements.
- B. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- C. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- D. Paint Materials: Store at minimum ambient temperature of 45 degrees F and maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.11 ENVIRONMENTAL REQUIREMENTS

- A. Section 01600 - Product Requirements.
- B. Do not apply materials when surface and ambient temperatures are outside temperature ranges required by paint product manufacturer.
- C. Do not apply exterior coatings during rain or snow when relative humidity is outside humidity ranges, or moisture content of surfaces exceed those required by paint product manufacturer.
- D. Minimum Application Temperatures for Latex Paints: 45 degrees F for interiors; 50 degrees F for exterior; unless required otherwise by manufacturer's instructions.
- E. Minimum Application Temperature for Varnish and Finishes: 65 degrees F for interior or exterior, unless required otherwise by manufacturer's instructions.
- F. Provide lighting level of 80 ft candle measured mid-height at substrate surface.

1.12 SEQUENCING

- A. Section 01100 - Summary: Work sequence.
- B. Sequence application to the following:
 - 1. Do not apply finish coats until paintable sealant is applied.
 - 2. Back prime wood trim before installation of trim.

1.13 WARRANTY

- A. Section 01700 - Execution Requirements: Product warranties and product bonds.
- B. Furnish five year manufacturer warranty for paints and coatings.

1.14 EXTRA MATERIALS

- A. Section 01700 - Execution Requirements: Spare parts and maintenance products.
- B. Supply 1 gallon of each color, type, and surface texture; store where directed.
- C. Label each container with color, type, texture, room locations, in addition to manufacturer's label.

PART 2 PRODUCTS

2.1 PAINTS AND COATINGS

- A. Manufacturers: Paint, Transparent Finishes, Stain, Primer Sealers, Block Filler, Field Catalyzed Coatings.
 - 1. Sherman Williams (basis for design)
 - 2. Devoe Paint Co.
 - 3. Duron Inc.
 - 4. The Glidden Co.
 - 5. PPG Architectural Finishes
 - 6. Substitutions: Section 01600 - Product Requirements

2.2 COMPONENTS

- A. Coatings: Ready mixed, except field catalyzed coatings. Prepare coatings:
 - 1. To soft paste consistency, capable of being readily and uniformly dispersed to homogeneous coating.
 - 2. For good flow and brushing properties.
 - 3. Capable of drying or curing free of streaks or sags.
 - 4. Exterior: GC-03
 - 5. Clear Wood Finishes: SCAQMD Rule 113
 - 6. Interior: Maximum Volatile Organic Compound Content in accordance with GS-11 with a maximum of 50 g/L for flat paints and coatings and 150 g/L for non-flat paints and coatings.
- B. Accessory Materials: Linseed oil, shellac, turpentine, paint thinners and other materials not specifically indicated but required to achieve finishes specified; commercial quality.
- C. Patching Materials: Latex filler.
- D. Fastener Head Cover Materials: Latex filler.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Section 01300 - Administrative Requirements: Coordination and project conditions.
- B. Verify surfaces and substrate conditions are ready to receive Work as instructed by product manufacturer.

- C. Examine surfaces scheduled to be finished prior to commencement of work. Report conditions capable of affecting proper application.
- D. Test shop applied primer for compatibility with subsequent cover materials.
- E. Measure moisture content of surfaces using electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:
 - 1. Plaster and Gypsum Wallboard: 12 percent.
 - 2. Masonry, Concrete, and Concrete Unit Masonry: 12 percent.
 - 3. Interior Wood: 15 percent, measured in accordance with ASTM D4442.
 - 4. Exterior Wood: 15 percent, measured in accordance with ASTM D4442.
 - 5. Concrete Floors: 8 percent.

3.2 PREPARATION

- A. Surface Appurtenances: Remove electrical plates, hardware, light fixture trim, escutcheons, and fittings prior to preparing surfaces or finishing.
- B. Surfaces: Correct defects and clean surfaces capable of affecting work of this section.
- C. Marks: Seal with shellac those which may bleed through surface finishes.
- D. Impervious Surfaces: Remove mildew by scrubbing with solution of tri-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.
- E. Aluminum Surfaces Scheduled for Paint Finish: Remove surface contamination by steam or high pressure water. Remove oxidation with acid etch and solvent washing. Apply etching primer immediately following cleaning.
- F. Asphalt, Creosote, or Bituminous Surfaces Scheduled for Paint Finish: Remove foreign particles to permit adhesion of finishing materials. Apply compatible sealer or primer.
- G. Insulated Coverings: Remove dirt, grease, and oil from canvas and cotton.
- H. Concrete Floors: Remove contamination, acid etch, and rinse floors with clear water. Verify required acid-alkali balance is achieved. Allow to dry.
- I. Copper Surfaces Scheduled for Paint Finish: Remove contamination by steam, high pressure water, or solvent washing. Apply vinyl etch primer immediately following cleaning.
- J. Copper Surfaces Scheduled for Natural Oxidized Finish: Remove contamination by applying oxidizing solution of copper acetate and ammonium chloride in acetic acid. Rub on repeatedly for required effect. Once attained, rinse surfaces with clear water and allow to dry.
- K. Gypsum Board Surfaces: Fill minor defects with filler compound. Spot prime defects after repair.
- L. Galvanized Surfaces: Remove surface contamination and oils and wash with solvent. Apply coat of etching primer.

- M. Concrete and Unit Masonry Surfaces Scheduled to Receive Paint Finish: Remove dirt, loose mortar, scale, salt or alkali powder, and other foreign matter. Remove oil and grease with solution of tri-sodium phosphate; rinse well and allow to dry. Remove stains caused by weathering of corroding metals with solution of sodium metasilicate after thoroughly wetting with water. Allow to dry.
 - N. Plaster Surfaces: Fill hairline cracks, small holes, and imperfections with latex patching plaster. Make smooth and flush with adjacent surfaces. Wash and neutralize high alkali surfaces.
 - O. Uncoated Steel and Iron Surfaces: Remove grease, mill scale, weld splatter, dirt, and rust. Where heavy coatings of scale are evident, remove by power tool wire brushing or sandblasting; clean by washing with solvent. Apply treatment of phosphoric acid solution, ensuring weld joints, bolts, and nuts are similarly cleaned. Spot prime paint after repairs.
 - P. Shop Primed Steel Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces. Prime metal items including shop primed items.
 - Q. Interior Wood Items Scheduled to Receive Paint Finish: Wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried; sand between coats.
 - R. Interior Wood Items Scheduled to Receive Transparent Finish: Wipe off dust and grit prior to sealing, seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after sealer has dried; sand lightly between coats.
 - S. Exterior Wood Scheduled to Receive Paint Finish: Remove dust, grit, and foreign matter. Seal knots, pitch streaks, and sappy sections. Fill nail holes with tinted exterior paintable caulking compound after prime coat has been applied.
 - T. Exterior Wood Scheduled to Receive Transparent Finish: Remove dust, grit, and foreign matter; seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes with tinted exterior caulking compound after sealer has been applied.
 - U. Wood Doors Scheduled for Painting: Seal wood door top and bottom edge surfaces with clear sealer.
 - V. Metal Doors Scheduled for Painting: Prime metal door top and bottom edge surfaces.
- 3.3 EXISTING WORK
- A. Extend existing paint and coatings installations using materials and methods compatible with existing installations and as specified.
- 3.4 APPLICATION
- A. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
 - B. Apply each coat to uniform appearance. Apply each coat of paint slightly darker than preceding coat unless specified otherwise.

- C. Sand wood and metal surfaces lightly between coats to achieve required finish.
- D. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- E. Where clear finishes are required, tint fillers to match wood. Work fillers into grain before set. Wipe excess from surface.
- F. Prime concealed surfaces of interior and exterior woodwork with primer paint.
- G. Prime concealed surfaces of interior wood surfaces scheduled to receive stain or varnish finish with gloss varnish reduced 25 percent with thinner.
- H. Finishing Mechanical And Electrical Equipment:
 - 1. Refer to Division 15 and Division 16 for schedule of color coding and identification banding of equipment, duct work, piping, and conduit.
 - 2. Paint shop primed equipment.
 - 3. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.
 - 4. Prime and paint insulated and exposed pipes, conduit, boxes, insulated and exposed ducts, hangers, brackets, collars and supports, except where items are shop finished.
 - 5. Paint interior surfaces of air ducts visible through grilles and louvers with one coat of flat black paint to visible surfaces. Paint dampers exposed behind louvers, grilles, to match face panels.
 - 6. Paint exposed conduit and electrical equipment occurring in finished areas.
 - 7. Paint both sides and edges of plywood backboards for electrical and telephone equipment before installing equipment.
 - 8. Color code equipment, piping, conduit, and exposed duct work in accordance with requirements indicated. Color band and identify with flow arrows, names, and numbering.
 - 9. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.5 FIELD QUALITY CONTROL

- A. Section 01400 - Quality Requirements and 01700 - Execution Requirements: Field inspecting, testing, adjusting, and balancing.

3.6 CLEANING

- A. Section 01700 - Execution Requirements: Final cleaning.
- B. Collect waste material which may constitute fire hazard, place in closed metal containers, and remove daily from site.

3.7 SCHEDULE - SHOP PRIMED ITEMS FOR SITE FINISHING

- A. Metal Fabrications (Section 05500): Exposed surfaces of lintels, elevator pit ladders.
- B. Metal Stairs (Section 05510): Exposed surfaces of stringers exposed vertical risers.

3.8 SCHEDULE - EXTERIOR SURFACES

- A. Pavement Markings: See Division Two
- B. Steel - Unprimed:
 - 1. One coat of Procryll primer.
 - 2. Two coats of alkyd enamel, semi-gloss.
- C. Steel - Shop Primed:
 - 1. Touch-up with Procryll primer.
 - 2. Two coats of alkyd enamel, semi-gloss.
- D. Steel - Galvanized:
 - 1. One coat All Surface latex Primer A41 Series.
 - 2. Two coats of alkyd semi-gloss.
- E. Steel – Existing Railings, post and ornamental work
 - 1. One coat of Procryll primer.
 - 2. Two coats of alkyd enamel, semi-gloss.
- F. Fiber Cementitious Siding & Trim – Brush Applied Only – No spray application allowed
 - 1. Unprimed: Prime with first coat 100% acrylic primer Loxon A24W300. Prime all cut edges in accordance with manufacturer's recommendations
 - 2. Topcoat: Two coats of Exterior Super Paint A80 series flat.
 - a. Trim Color will differ from siding color

3.9 SCHEDULE - INTERIOR SURFACES

- A. Steel - Unprimed:
 - 1. Touch-up with Procryll primer.
 - 2. Two coats of alkyd enamel, semi-gloss.
- B. Steel - Primed:
 - 1. Touch-up with Procryll primer.
 - 2. Two coats of alkyd enamel, semi-gloss.
 - 3. At Detention/Secure Areas : Two coats B70 water based catalyzed epoxy "semi-gloss"
- C. Steel - Galvanized:
 - 1. One coat All Surface latex Primer A41 Series.
 - 2. Two coats of alkyd semi-gloss.
- D. Gypsum Board Walls:
 - 1. One coat of SW Preprite primer 200 B28200 Series.
 - 2. Two coats of SW Cashmere Low Lustre D17 Series
- E. Gypsum Board Ceilings:
 - 1. One coat of SW Preprite primer 200 Series B28200.
 - 2. Two coats of SW Promar 400 Series B30W400 Flat.
- F. Interior wood trim
 - 1. One coat of SW Preprite primer 200 B28200 Series.
 - 2. Two coats of SW Cashmere Low Lustre D17 Series

3.10 SCHEDULE – COLORS

1. See Finish Schedule on the Drawings for rooms and spaces scheduled to receive paint and coatings.
2. A color schedule showing colors selected will be prepared after the Contract has been awarded. The Contractor is to allow for multiple selection of paint in multiple rooms. A maximum of five different wall colors is anticipated.

END OF SECTION 09900

