PROJECT MANUAL

RENOVATION OF THE GEORGIA SECRETARY OF STATE OFFICE BUILDING

237 Coliseum Drive
Macon, Georgia
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RENOVATION OF THE GEORGIA SECRETARY OF STATE OFFICE BUILDING  
BTBB #15-030

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NOTE: SPECIFICATIONS FOR CIVIL, MECHANICAL, ELECTRICAL, AND PLUMBING WORK ARE SHOWN ON THE DRAWINGS
SECTION A
INVITATION TO BID

Notice is hereby given that the Macon-Bibb County Urban Development Authority will receive sealed bids at the offices of the Georgia Secretary of State Office, 237 Coliseum Drive, Macon, Georgia 31217, until 2:00 P.M., at the time legally prevailing in Macon, Georgia on Thursday, June 23, 2016, for the “RENOVATION OF THE GEORGIA SECRETARY OF STATE OFFICE BUILDING”. NO BID WILL BE ACCEPTED AFTER THIS DESIGNATED TIME.

Bids will be publicly opened and read at the offices of the Georgia Secretary of State Office, 237 Coliseum Drive, Macon, Georgia, on Thursday, June 23, 2016, at 2:00 P.M.

Bid documents may be examined and obtained at the office of the Architect, BTBB inc., 609 Cherry Street, Suite A / Macon, Georgia 31201 / Phone (478) 742-1208.

- At a designated date and time, the building and area affected by the work of this project will be open for bidders to visit.
- Bid documents will be provided by the Architect on CD-ROM in PDF format to interested bidders upon payment of fifty dollar ($50). Bidders are responsible for all charges associated with shipping bid documents.
- The CD-ROM(s) provided by the Architect contains a full and complete set of plans and specifications for bidding this project. Bidders shall examine all bid documents carefully in order to prepare a complete bid for the project.
- All parties receiving CD-ROM(s) are deemed by receipt to acknowledge the Architect’s copyright to the documents contained on the CD-ROM(s). The documents may be used only for the purpose of preparing a bid for the Renovation of the Georgia Secretary of State Office Building, 237 Coliseum Drive, Macon, Georgia. Use of these documents for any other purpose is not permitted under any circumstances.

Announcement of this Invitation for Bids may also be posted on the Macon-Bibb County Urban Development page www.maconbibbuda.com and/or the Georgia Procurement Registry website at http://ssl.doas.state.ga.us/PRSapp/PR_index.jsp.

In order to be considered, bids must be accompanied by a bid bond, payable to the Owner, in amount not less than five-percent (5%) of the total base bid. The bid security shall become payable to the Owner only if the bidder, to whom award is made, should fail to execute a contract with the Owner and furnish bond and insurance in accordance with the terms of the contract within ten (10) days after notification of award.

Bid envelopes are to be sealed and identified on the outside as “RENOVATION OF THE GEORGIA SECRETARY OF STATE OFFICE BUILDING” and delivered to:

Georgia Secretary of State Office
Attn: Lisa Durden, Executive Director
Professional Licensing Board
237 Coliseum Drive
Macon, Georgia 31217

No bid may be withdrawn for a period of sixty (60) days after time has been called on date of bid opening.
The contract, if awarded, will be based on a lump sum price. Guidelines in the award of the contract will be Section 36-10-2.2, Official Code of Georgia Annotated. Upon award of the Contract, a pre-construction meeting will be held to discuss the project and to establish a schedule of work.

The bidder to whom award is made shall submit a Payment Bond and a Performance Bond, both in an amount of one hundred percent (100%) of the contract price. The bonding company/surety must be rated B+ or better in current Key Rating Guide as issued by A.M. Best Company, Oldwick, New Jersey. Bonds shall be executed by a company licensed and authorized to do business in the State of Georgia; and be accompanied by a power of attorney certifying that the persons executing the bond have the authority to do so.

A Pre-Bid Meeting will be held on Tuesday, June 7, 2016, at 10:00 A.M. in the Georgia Secretary of State Office, 237 Coliseum Drive, Macon, Georgia 31217. Potential bidders are encouraged to attend.

MACON-BIBB COUNTY URBAN DEVELOPMENT AUTHORITY
SECTION B
BID FORM

PROJECT: Renovation of the Georgia Secretary of State Office Building
237 Coliseum Drive
Macon, Georgia  31217

DATE: Thursday, June 23, 2016

TIME: 2:00 P.M.

PLACE: Georgia Secretary of State Office
237 Coliseum Drive
Macon, Georgia  31217

Proposal of ______________________________________________________________

(hereinafter called Bidder) organized and existing under the laws of the State of Georgia doing business as a ____________________________.*

To Macon-Bibb County Urban Development Authority, hereinafter called "Owner".

Gentlemen:

The Bidder, in compliance with your invitation for bids for the RENOVATION OF THE GEORGIA SECRETARY OF STATE OFFICE BUILDING in Macon, Bibb County, Georgia, having carefully examined the Specifications entitled “Renovation of the Georgia Secretary of State Office Building”, and the Drawings similarly entitled, all dated May 26, 2016, related documents, and the site of the proposed Work, and being familiar with all of the conditions surrounding this project, including the availability of materials and labor, hereby bid to furnish all labor, materials, and supplies, and to complete the project in accordance with the Contract Documents, within the time set forth herein, and at the prices stated hereinafter. These prices are to cover all expenses incurred in performing the Work required under the Contract Documents, of which this proposal is a part.

Bidder acknowledges receipt of the following addenda (list each addendum number and date of each addendum):

Addendum No._______ Dated_______________
Addendum No._______ Dated_______________
Addendum No._______ Dated_______________

*Insert a corporation, a partnership, or an individual as applicable.
AMOUNTS: Amounts shall be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.

BASE PROPOSAL: The Bidder agrees to perform all of the work described in the Specifications and shown on the Plans (inclusive of all materials, labor, equipment, and other necessary provisions) for the sum set forth below:

TOTAL BASE PROPOSAL FOR RENOVATION OF THE GEORGIA SECRETARY OF STATE OFFICE BUILDING, THE SUM OF:

$ ____________________________

Amount in Words

UNIT PRICE: The undersigned further proposes that a change in scope of work (either increase or decrease) due to unforeseen conditions will be performed, and shall include all costs associated with the tasks:

1: Overlay existing wall(s) with 1/4" gypsum board, where required (Section 09260), THE SUM OF:

$ ____________________________

Amount in Words

Bidder hereby agrees to commence actual physical work on site, with an adequate force and equipment under this contract within ten (10) calendar days of a date to be specified in a written order from the Owner and to fully complete all Work within ______________________ (     ) consecutive calendar days from and including said date.

The Bidder agrees that this bid may not be revoked or withdrawn after the time set for the opening of bids but shall remain open for acceptance for a period of sixty (60) calendar days following such time.

In case of written notification by mail, telegraph, or delivery of the acceptance of this bid within sixty (60) days after the time set for the opening of bids, we agree to execute within ten (10) days a Contract for the Work for the above stated compensation and at the same time to furnish and deliver to the Owner a Performance Bond and a Payment Bond, both in an amount equal to one-hundred-percent (100%) of the Contract Sum.

Enclosed herewith is a Bid Bond in the amount of five-percent (5%) of the total base bid. We agree that the above stated amount is the proper measure of liquidated damages that the Owner will sustain by failure of the undersigned to execute the Contract and to furnish the Performance Bond and the Payment Bond.

If this bid is accepted within sixty (60) days after the date set for the opening of bids and the bidder fails to execute the Contract within ten (10) days after written notice of such acceptance or fails to furnish both a Performance Bond and a Payment Bond, the obligation of the bond will remain in full force and affect and the money payable thereon shall be paid into the funds of the Owner as liquidated damages for such failure; otherwise, the obligation of the bond will be null and void.

The bidder hereby certifies they have not, nor has any member of the firm(s) or corporation(s), either directly or indirectly, entered into any agreement, participated in any collusion, nor otherwise taken any action in restraint of free competitive bidding in connection with this submitted bid.
Respectfully Submitted,

 Authorized Signature: ________________________________

 Typed Signature: ___________________________ Title: ____________________

 Company Name: ________________________________

 Company Address: ____________________________________________

 _______________________________________________________

 Telephone Number: ___________________________ Dated: ____________________

 Federal Tax ID Number: ___________________________

 DUNS # ________________________________
BIDDER QUALIFICATION

Company Name: __________________________________________________________________

Address: _________________________________________________________________________

When Organized: ______________ Where Incorporated: ________________________________

How many years have you engaged in business under the present firm name? ______________

Credit available for this contract? _____________________________________________________

Contracts now in hand? _____________________________________________________________

Has bidder ever refused to execute a contract at the original bid amount? ______________________

Has bidder ever been declared in default on a contract? _________________________________

Comments: _______________________________________________________________________

Company Name: __________________________________________________________________

Authorized By (typed name): _________________________________________________________

Authorized Signature: ______________________________________________________________

Title: ________________________________________   Date: _____________________________

References

Following is a reference list of contracts that are similar to this project:

<table>
<thead>
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<th>LOCATION</th>
<th>CONTACT</th>
<th>PHONE #</th>
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</table>

SUBSCRIBED AND SWORN
BEFORE ME ON THIS THE

______ DAY OF ________________, 201__   My Commission Expires: __________________________

_____________________________________  [NOTARY SEAL]

Notary Public
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### BIDDER INFORMATION

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<th>Information</th>
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<tr>
<td>Company Address</td>
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<td>Authorized By (typed or printed name):</td>
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</tr>
<tr>
<td>Title</td>
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<tr>
<td>Authorized Signature:</td>
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<tr>
<td>Date</td>
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<td>Fax Number</td>
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<td>Email Address</td>
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<td>Company’s Web Page</td>
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### REMITTANCE INFORMATION (where payments should be sent)

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### PURCHASE ORDER INFORMATION (where purchase orders should be sent)

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<td>Woman-Owned</td>
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<td>Not-Applicable</td>
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FINANCIAL & LEGAL STABILITY STATEMENT

Please check appropriate item(s):

_____ Firm has the financial capability to undertake the work and assume the liability required if awarded this solicitation.

_____ Firm has the legal capability to undertake the work and assume the responsibilities required if awarded this solicitation. Pending litigations (if any) will not affect the firm’s ability to perform on this contract, if awarded.

Company Name: __________________________________________________________

Authorized By (typed name): ______________________________________________

Authorized Signature: _____________________________________________________

Title: __________________________ Date: ________________________________

SUBSCRIBED AND SWORN
BEFORE ME ON THIS THE

_____ DAY OF _______________, 201___ My Commission Expires: ______________

____________________________________  [NOTARY SEAL]
Notary Public
GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT AFFIDAVIT

Contract No. and Name: __________________________________________

Name of Contracting Entity: _______________________________________

By executing this affidavit, the undersigned person or entity verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm, or corporation which is contracting with Bibb County has registered with, is authorized to participate in, and is participating in the federal work authorization program commonly known as E-Verify,* in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91.

The undersigned person or entity further agrees that it will continue to use the federal work authorization program throughout the contract period, and it will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the undersigned with the information required by O.C.G.A. § 13-10-91(b).

The undersigned person or entity further agrees to maintain records of such compliance and provide a copy of each such verification to Bibb County at the time the subcontractor(s) is retained to perform such service.

_____________________________________  _______________________
EEV/E-Verify™ User Identification Number  Date of Authorization

_____________________________________  ________________________
By: Authorized Officer or Agent    Date
(Name of Person or Entity)

_____________________________________  ________________________
Title of Authorized Officer or Agent   Printed Name of Authorized Officer or Agent

SUBSCRIBED AND SWORN
BEFORE ME ON THIS THE

_______ DAY OF _________________, 201__

My Commission Expires: _________________

_____________________________________________________________________
Notary Public

* or any subsequent replacement operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603.
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INSURABILITY STATEMENT

Please check appropriate item(s):

_____ By submission of this form, this firm confirms the ability to acquire and maintain the required levels of insurance as outlined in the bid document. It is the understanding of this firm that proof of insurance must be provided prior to contract execution and maintained throughout the entire term of the contract.

Company Name:________________________________________________________

Authorized By (typed name):____________________________________________

Authorized Signature:____________________________________________________

Title:_________________________ Date:_________________________

SUBSCRIBED AND SWORN
BEFORE ME ON THIS THE

_____ DAY OF _______________, 201___ My Commission Expires: _____________

______________________________ [NOTARY SEAL]
Notary Public
SECTION C
INSTRUCTIONS TO BIDDERS

C.1 DEFINITIONS: All definitions set forth in the Contract for Construction, are applicable to this Instructions to Bidders. Bidding documents include the Invitation for Bids, Instructions to Bidders, the Bid Form and the proposed Contract Documents including but not limited to, Drawings, Project Manual, and any Addenda issued prior to receipt of bids.

A. Addenda are written or graphic instruments issued prior to the execution of the Contract which modify or interpret the requirements of the bidding documents, by additions, deletions, clarifications, or corrections. Addenda will become part of the Contract Documents when the Construction Contract is executed.

C.2 EXAMINATION OF BIDDING DOCUMENTS: Each bidder shall examine the bidding documents carefully. Should the bidder find discrepancies in or omissions from the documents, he shall at once notify the Architect.

A. All requests for information shall be emailed to the Architect at psteinberg@btbbinc.com no later than 5:00 P.M. on Thursday, June 16, 2016.

B. All interpretations or corrections will be issued to all bidders and plan holders in the form of addenda to the plans and specifications by the Architect. Only written interpretation or correction issued by addenda will be binding. No bidder shall rely upon any interpretation or correction given by any other method. All addenda shall be enumerated in the Bid Form.

C.3 BIDS:

A. Bids shall be submitted on forms identical to the form included in the Specifications and must be signed (see Section B).

B. All blanks must be filled in by typewriter or manually in ink numbers shall be written in English words and in Arabic numbers.

C. Bids are to be addressed to the Owner at the address shown on the Invitation to Bid and must be enclosed in an opaque, sealed envelope with the name of the project and identified with the words "Renovation for the Georgia Secretary of State Office Building". Bids are to reach the address designated in the Invitation to Bid no later than the hour and date named. After that time, no bids may be received.

1. If an addition or deduction is listed, it must be placed inside the sealed envelope.

D. In order for bids to be considered, the complete bid document package shall be submitted including each of the following completed documents:

1. Bid Bond in amount of 5% of the total base bid
2. Bid Form
3. Bidder Qualification Form
4. Bidder Information
5. Financial & Legal Stability Statement
6. Georgia Security and Immigration Compliance Act Affidavit
7. Insurability Statement
E. Bid together with the full bid security accompanying same may be withdrawn by bidders prior to the time set for Official opening. After time has been called, no bid may be withdrawn for a period of sixty (60) days after the TIME and DATE of opening. Negligence or error on the part of any bidder in preparing his bid confers no right of withdrawal or modification of his bid after time has been called.

C.4 SUBMISSION OF POST-BID INFORMATION:

A. Upon request by the Architect, the selected bidder shall, within fourteen (14) days thereafter submit the following:

1. A statement of costs for each major item of work included in the bid.
2. A designation of the work to be performed by the bidder with his own forces.
3. A list of names of the subcontractors proposed for the principal portions of the work.

B. Prior to the award of the Contract, the Architect will notify the bidder in writing if either the Owner or the Architect, after due investigation, has reasonable and substantial objection to any person or organization on the list. If the Owner or Architect has a reasonable and substantial objection to any person or organization on such list, the bidder may, at his option, submit a substitute with an increase in his bid price to cover the difference in cost occasioned by such substitution. The Owner may, at his discretion, accept the increased bid price or he may disqualify the bidder.

C. Subcontractors and other persons and organizations proposed by the bidder and accepted by the Owner and the Architect must be used on the work for which they were proposed and shall not be changed except with the written approval of the Owner and the Architect.

C.5 CONTRACT FORM AND BONDS:

A. Form of Agreement: AIA Document A101™ - 2007, Standard Form of Agreement Between Owner and Contractor (refer to draft copy of the Agreement following this section).

B. Performance Bond and Labor and Material Payment Bond shall be submitted in the amount of one hundred percent (100%) of the contract price and in a form acceptable to the Owner.

C.6 OWNER: Wherever the term "Owner" occurs in these Specifications, it shall mean Macon-Bibb County Urban Development Authority.

A. The space to be renovated is occupied by the Georgia Secretary of State Offices.

B. Some references to "Owner" may also refer to the building tenant, Georgia Secretary of State.

C.7 ARCHITECT: Wherever the term "Architect" occurs in these Specifications, it shall mean BTBB inc., 609 Cherry Street, Suite A, Macon, Georgia 31201. The term “Architect” and/or “Engineer” may also refer to the Architect’s Engineering Consultants.

C.8 WORK: Wherever the term “work” occurs in these Specifications, it shall mean the work as defined herein, including all materials, equipment, transportation, labor, and supervision necessary to complete the full scope of work identified in the drawings and specifications.
C.9  RESERVATIONS: The bidder acknowledges that the Owner reserves full freedom (in addition to the right to reject any and all bids) in awarding bids to consider all available factors including, but not limited to, price, the provision of needed and unneeded features, usefulness to the using agency and prior experience.

   A. The bidder recognizes the right of the Owner to reject a bid if the bidder failed to furnish any required submittals on the date required by the bidding documents, or if the bid is in any way incomplete or irregular.

   B. The Owner may award bids to other than the lowest bidder if in the judgment of the Board of Commissioners the interest of the County will be best served by award to another.

C.10  SURETY AND INSURANCE COMPANIES: The Contract provides that the surety and insurance companies must be acceptable to the Owner. The bonding company/surety must be registered with The Surety Association of America (SAA) and be certified by the Secretary of the United State Department of Treasury pursuant to the Act of July 30, 1947 (61 Stat. 646, as amended; 6 U.S.C. 6-13). Bonds shall be executed by a company licensed and authorized to do business in the State of Georgia; and be accompanied by a power of attorney certifying that the persons executing the bond have the authority to do so.

END OF SECTION
AGREEMENT made as of the « » day of « » in the year « »
(In words, indicate day, month and year.)

BETWEEN the Owner:
(Name, legal status, address and other information)

«Macon-Bibb County Urban Development Authority»« »
«200 Cherry Street
Suite 300
Macon, GA  31201»
« »
« »

and the Contractor:
(Name, legal status, address and other information)

« »« »
« »
« »
« »

for the following Project:
(Name, location and detailed description)

«Georgia Secretary of State Office Building»
«237 Coliseum Drive
Macon, GA  31217»
«Office Building Renovation»

The Architect:
(Name, legal status, address and other information)

«BTBB inc.»« »
«609 Cherry Street
Suite A
Macon, GA  31201»
« »
« »

The Owner and Contractor agree as follows.
TABLE OF ARTICLES

1 THE CONTRACT DOCUMENTS
2 THE WORK OF THIS CONTRACT
3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION
4 CONTRACT SUM
5 PAYMENTS
6 DISPUTE RESOLUTION
7 TERMINATION OR SUSPENSION
8 MISCELLANEOUS PROVISIONS
9 ENUMERATION OF CONTRACT DOCUMENTS
10 INSURANCE AND BONDS

ARTICLE 1 THE CONTRACT DOCUMENTS
The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9.

ARTICLE 2 THE WORK OF THIS CONTRACT
The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION
§ 3.1 The date of commencement of the Work shall be the date of this Agreement unless a different date is stated below or provision is made for the date to be fixed in a notice to proceed issued by the Owner.

(Insert the date of commencement if it differs from the date of this Agreement or, if applicable, state that the date will be fixed in a notice to proceed.)

« The commencement date will be fixed in a notice to proceed. »

If, prior to the commencement of the Work, the Owner requires time to file mortgages and other security interests, the Owner’s time requirement shall be as follows:

« »

§ 3.2 The Contract Time shall be measured from the date of commencement.

§ 3.3 The Contractor shall achieve Substantial Completion of the entire Work not later than « » (« ») days from the date of commencement, or as follows:

(Insert number of calendar days. Alternatively, a calendar date may be used when coordinated with the date of commencement. If appropriate, insert requirements for earlier Substantial Completion of certain portions of the Work.)

« »
Portion of Work | Substantial Completion Date

, subject to adjustments of this Contract Time as provided in the Contract Documents.

(Insert provisions, if any, for liquidated damages relating to failure to achieve Substantial Completion on time or for bonus payments for early completion of the Work.)

« »

ARTICLE 4 CONTRACT SUM

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor’s performance of the Contract. The Contract Sum shall be « » ($ « »), subject to additions and deductions as provided in the Contract Documents.

§ 4.2 The Contract Sum is based upon the following alternates, if any, which are described in the Contract Documents and are hereby accepted by the Owner:

(State the numbers or other identification of accepted alternates. If the bidding or proposal documents permit the Owner to accept other alternates subsequent to the execution of this Agreement, attach a schedule of such other alternates showing the amount for each and the date when that amount expires.)

« »

§ 4.3 Unit prices, if any:

(Identify and state the unit price; state quantity limitations, if any, to which the unit price will be applicable.)

| Item | Units and Limitations | Price Per Unit ($0.00) |

§ 4.4 Allowances included in the Contract Sum, if any:

(Identify allowance and state exclusions, if any, from the allowance price.)

| Item | Price |

ARTICLE 5 PAYMENTS

§ 5.1 PROGRESS PAYMENTS

§ 5.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

« »

§ 5.1.3 Provided that an Application for Payment is received by the Architect not later than the « » day of a month, the Owner shall make payment of the certified amount to the Contractor not later than the « » day of the « » month.

If an Application for Payment is received by the Architect after the application date fixed above, payment shall be made by the Owner not later than « » (« ») days after the Architect receives the Application for Payment.

(Federal, state or local laws may require payment within a certain period of time.)

§ 5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor’s Applications for Payment.
§ 5.1.5 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.1.6 Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

.1 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the Contract Sum allocated to that portion of the Work in the schedule of values, less retainage of « » percent ( « » %). Pending final determination of cost to the Owner of changes in the Work, amounts not in dispute shall be included as provided in Section 7.3.9 of AIA Document A201™–2007, General Conditions of the Contract for Construction;

.2 Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), less retainage of « » percent ( « » %);

.3 Subtract the aggregate of previous payments made by the Owner; and

.4 Subtract amounts, if any, for which the Architect has withheld or nullified a Certificate for Payment as provided in Section 9.5 of AIA Document A201–2007.

§ 5.1.7 The progress payment amount determined in accordance with Section 5.1.6 shall be further modified under the following circumstances:

.1 Add, upon Substantial Completion of the Work, a sum sufficient to increase the total payments to the full amount of the Contract Sum, less such amounts as the Architect shall determine for incomplete Work, retainage applicable to such work and unsettled claims; and (Section 9.8.5 of AIA Document A201–2007 requires release of applicable retainage upon Substantial Completion of Work with consent of surety, if any.)

.2 Add, if final completion of the Work is thereafter materially delayed through no fault of the Contractor, any additional amounts payable in accordance with Section 9.10.3 of AIA Document A201–2007.

§ 5.1.8 Reduction or limitation of retainage, if any, shall be as follows: (If it is intended, prior to Substantial Completion of the entire Work, to reduce or limit the retainage resulting from the percentages inserted in Sections 5.1.6.1 and 5.1.6.2 above, and this is not explained elsewhere in the Contract Documents, insert here provisions for such reduction or limitation.)

« »

§ 5.1.9 Except with the Owner’s prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.2 FINAL PAYMENT

§ 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

.1 the Contractor has fully performed the Contract except for the Contractor’s responsibility to correct Work as provided in Section 12.2.2 of AIA Document A201–2007, and to satisfy other requirements, if any, which extend beyond final payment; and

.2 a final Certificate for Payment has been issued by the Architect.

§ 5.2.2 The Owner’s final payment to the Contractor shall be made no later than 30 days after the issuance of the Architect’s final Certificate for Payment, or as follows:

« »

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 This Paragraph Deleted
§ 6.2 BINDING DISPUTE RESOLUTION
For any Claim subject to, but not resolved by, mediation pursuant to Section 15.3 of AIA Document A201–2007, the method of binding dispute resolution shall be as follows:
(\textit{Check the appropriate box. If the Owner and Contractor do not select a method of binding dispute resolution below, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.})

\begin{itemize}
\item [\textbullet\textcircled{X}] Arbitration pursuant to Section 15.4 of AIA Document A201–2007
\item [\textbullet\textcircled{ } ] Litigation in a court of competent jurisdiction
\item [\textbullet\textcircled{ } ] Other (Specify)
\end{itemize}

ARTICLE 7  TERMINATION OR SUSPENSION
§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201–2007.

§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2007.

ARTICLE 8  MISCELLANEOUS PROVISIONS
§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2007 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.2 Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.
\textit{(Insert rate of interest agreed upon, if any.)}

\begin{itemize}
\item [\textbullet\textcircled{ } ] \textbullet\textcircled{ } % \textbullet\textcircled{ } \textbullet\textcircled{ }
\end{itemize}

§ 8.3 The Owner’s representative:
\textit{(Name, address and other information)}

\begin{itemize}
\item [\textbullet\textcircled{ } ] \textbullet\textcircled{ } \textbullet\textcircled{ } \textbullet\textcircled{ } \textbullet\textcircled{ } \textbullet\textcircled{ } \textbullet\textcircled{ }
\end{itemize}

§ 8.4 The Contractor’s representative:
\textit{(Name, address and other information)}

\begin{itemize}
\item [\textbullet\textcircled{ } ] \textbullet\textcircled{ } \textbullet\textcircled{ } \textbullet\textcircled{ } \textbullet\textcircled{ } \textbullet\textcircled{ } \textbullet\textcircled{ }
\end{itemize}

§ 8.5 Neither the Owner’s nor the Contractor’s representative shall be changed without ten days written notice to the other party.

§ 8.6 Other provisions:
ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS
§ 9.1 The Contract Documents, except for Modifications issued after execution of this Agreement, are enumerated in the sections below.

§ 9.1.1 The Agreement is this executed AIA Document A101–2007, Standard Form of Agreement Between Owner and Contractor.

§ 9.1.2 The General Conditions are AIA Document A201–2007, General Conditions of the Contract for Construction.

§ 9.1.3 The Supplementary and other Conditions of the Contract:

<table>
<thead>
<tr>
<th>Document</th>
<th>Title</th>
<th>Date</th>
<th>Pages</th>
</tr>
</thead>
</table>

§ 9.1.4 The Specifications: (Either list the Specifications here or refer to an exhibit attached to this Agreement.)

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Date</th>
<th>Pages</th>
</tr>
</thead>
</table>

§ 9.1.5 The Drawings: (Either list the Drawings here or refer to an exhibit attached to this Agreement.)

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Date</th>
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§ 9.1.6 The Addenda, if any:

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Pages</th>
</tr>
</thead>
</table>

Portions of Addenda relating to bidding requirements are not part of the Contract Documents unless the bidding requirements are also enumerated in this Article 9.

§ 9.1.7 Additional documents, if any, forming part of the Contract Documents:

1. AIA Document E201™–2007, Digital Data Protocol Exhibit, if completed by the parties, or the following:

2. Other documents, if any, listed below: (List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201–2007 provides that bidding requirements such as advertisement or invitation to bid, Instructions to Bidders, sample forms and the Contractor’s bid are not part of the Contract Documents unless enumerated in this Agreement. They should be listed here only if intended to be part of the Contract Documents.)
ARTICLE 10  INSURANCE AND BONDS
The Contractor shall purchase and maintain insurance and provide bonds as set forth in Article 11 of AIA Document A201–2007.
(State bonding requirements, if any, and limits of liability for insurance required in Article 11 of AIA Document A201–2007.)

<table>
<thead>
<tr>
<th>Type of insurance or bond</th>
<th>Limit of liability or bond amount ($0.00)</th>
</tr>
</thead>
</table>

This Agreement entered into as of the day and year first written above.

OWNER  (Signature)  
(Part printed name and title)

CONTRACTOR  (Signature)
(Part printed name and title)
D.1 EXAMINATION OF SITE:

A. Each bidder by making his bid represents that he has visited the site and familiarized himself with the local conditions under which the work is to be performed and that he has read and understands the bidding documents. Bidders shall examine the areas wherein work of this project is to be carried out and shall take into consideration all conditions that might affect his work.

1. Arrangements to examine the existing building and areas affected by the work of this project, other than at the time of the pre-bid meeting must be scheduled through:

Darren Mickler  
Executive Director of Maintenance  
Georgia Secretary of State Office  
237 Coliseum Drive  
Macon, GA 31217  
(478) 207-1455 / dmickler@sos.ga.gov

B. Failure of the bidder to inspect first-hand the areas affected by work in this project shall not relieve him of the obligation to comply fully with the scope of the work as defined herein.

C. No consideration will be given any claim based on lack of knowledge of existing conditions, except where the Contract Documents make definite provisions for adjustment of cost or extension of time due to existing conditions that cannot be readily ascertained.

D.2 SCOPE OF WORK: In general, the scope of work involves all labor and materials necessary for the partial renovation of an existing 3-story Building “A” with partial lower level and penthouse (approximately 52,000 SF) and approximately 17,255 SF on the main floor of Building “B”, located at 237 Coliseum Drive, Macon, Georgia. The project involves some exterior work at Building “A”, interior work (primarily cosmetic) at both buildings “A” and “B”, and some site work.

D.3 CONSTRUCTION SEQUENCE:

A. The building will remain occupied during construction. The Contractor shall at all times ensure the protection of the employees, their property, and visitors. The Owner shall have the authority and discretion to direct the Contractor to stop work immediately if the health and/or safety of the employees, visitors, or property is or could be endangered.

1. The Contractor shall confine his operations to the areas where work in this project is required, storing materials only in areas to be designated by the Owner.

2. The Contractor shall be responsible for moving all loose furnishings, files, shelves, and other items that are not built-in at spaces to be renovated. The building occupants will move any computer equipment, personal effects, etc.

3. The Contractor shall not cause damage or permit conditions which may cause damage to the buildings, contents, furnishings, etc. All costs associated with any such damages will be the responsibility of the Contractor.
4. The Contractor shall make every effort to minimize inconveniences to the employees and visitors while the work is underway.

5. The Contractor shall be responsible for all preparation as necessary to provide suitable surfaces for the specified work.

6. The Contractor shall work with the building occupants to develop a schedule for the renovation and to coordinate the availability and sequencing of spaces to be renovated.
   a. The work can be done during normal business hours. The Contractor may, at the building occupant’s discretion, perform portions of the work after-hours, on weekends, etc.

D.4 UTILITIES AND FACILITIES:
   A. Power and water are available for the Contractor’s use.
   B. The Contractor shall provide job telephone(s) with local number(s), fax, and email at his own expense.
   C. Toilet Facilities: At beginning of work, the Contractor shall provide on premises, in approved locations, adequate, temporary enclosed toilet and washing facilities for use of employees. Facilities shall be maintained in a clean and sanitary condition throughout period of project. Existing toilet facilities shall not be used by employees of the Contractor or the Subcontractors.
   D. The Contractor shall, at his own expense, provide whatever measures he deems necessary to secure the site, the building, stored materials, etc.

D.5 PROJECT SCHEDULE: Within fourteen (14) days of Notice to Proceed from the Owner, the Contractor shall submit to the Architect for approval, a complete schedule for completing the work.

D.6 TESTS: Unless specifically required otherwise, a recognized testing agency / Geotechnical Engineer will be selected by the Contractor and the costs of all testing, except as otherwise specifically required, will be paid for by the Contractor. All reports shall be furnished to the Architect and the Owner.

D.7 LAYING OUT WORK: The Contractor shall verify all existing conditions and contiguous work and lay out his work therefrom, providing for himself all other necessary measurements, lines and levels, and shall assume the responsibility for the correctness of the laying out of the work.

D.8 WORK AREAS: The Contractor shall confine his operations to as small an area as possible.
   A. The Contractor shall take the necessary precautions to keep operations from impacting or damaging adjacent properties, other tenants, etc.
   1. Should damage occur, the Contractor shall restore, at his expense, any such property damage or injuries by his operations to a condition equal to that existing before such damage or injury was done, by repairing, rebuilding or otherwise restoring as may be directed by, and to the satisfaction of the Owner.
   2. In case of failure on the part of the Contractor to restore such property, or make good such damages or injury, the Owner may, after forty-eight (48) hours written notice, proceed to repair, rebuild, or otherwise restore such property as may be deemed necessary, and the cost thereof shall be deducted from any monies due or which may become due the contractor under this contract.
D.9 VANDALISM: The Contractor shall take every precaution not to leave equipment and materials where they can be reached and used for defacing new or existing work at any time and in particular at night and on weekends.

D.10 HAZARDOUS MATERIALS:

A. Architect’s and Engineer’s Responsibility: Specifications have been prepared by the Architect for the Owner without the Architect having conducted investigation as to the presence of asbestos or hazardous waste on the project. The Architect has not charged any fees and has not and will not advise the Owner with regard to the detection of any hazardous waste. The removal of all hazardous materials and encapsulation of remaining surfaces is the sole responsibility of the Owner and, if encountered, will be handled by a separate contract.

B. Friable Materials: If the Contractor observes the existence of a potentially hazardous material which must be disturbed during the course of this work, Contractor shall promptly notify Owner and Architect. Owner shall make all arrangements regarding testing and removal or encapsulation of any hazardous material present. The Contractor shall not perform any work pertinent to hazardous material prior to receipt of special instructions from the Owner.

D.11 DEBRIS DISPOSAL: All loose materials present at the time work commences, plus all debris resulting from the demolition and subsequent construction shall become the property of the Contractor.

A. The Contractor shall allow no debris to accumulate and shall maintain a neat, clean site. All building materials and debris shall be disposed of off the premises. Burning of material on the site will not be permitted. All costs of removing debris shall be borne by the Contractor. Place and method of disposal is the Contractor’s responsibility, and all debris shall be disposed of in accordance with Federal, State, and Local laws.

B. The Contractor shall submit landfill tickets to the Owner. In the event regulated materials exist, the Contractor shall file a Uniform Hazardous Waste Manifest from proper landfill site for each load of regulated materials removed, copies of which shall be submitted to the Owner.

C. Transportation of waste shall be in accordance with applicable Dept. of Transportation (DOT) requirements.

D.12 EXTENSION OF TIME: In the event the work under this project is delayed by neglect, delay, or default of any other Contractor or the Owner, or by any damage which is the result of an Act of God, or by a general strike of the employees, the Contractor shall have reason to claim for delay and request an extension of time to complete the contract. Any such requests shall be filed promptly to the Architect.

D.13 INSPECTION

A. The Owner may appoint inspectors to inspect all materials used and all work performed. Such inspection may extend to all or any part of the work and to the preparation of manufacture of the materials to be used. The inspectors will not be authorized to revoke, alter, enlarge or relax the provisions of this specification, nor will they be authorized to approve or accept any portion of the completed work or to issue instruction contrary to the plans and specifications. The inspector shall have authority to reject defective material and to suspend work that is being improperly done, subject to the final decision of the Architect.
B. It is mutually agreed between the parties to the contract that to prevent all disputes and misunderstandings between them in relation to any of the provisions contained in these specifications, or their performance by either of said parties, the Architect shall serve as the referee to decide all matters of construction of the specifications and of the terms of the contract, and as to all matters arising or growing out of said contract and his decision shall be final and binding upon both parties.

C. The Architect, Owner, and Owner’s inspectors shall have free access to all parts of the work, and to all material intended for use in the work. The work will be inspected as it progresses, but failure to reject or condemn defective work at the time it is done will in no way prevent its rejection whenever it is discovered before the work is finally accepted and approved, nor will final acceptance and approval constitute waiver by the Owner of any right of action for defective work or the failure to perform the contract according to its terms.

D.14 PERMITS, LICENSES, AND FEES:

(a) The Contractor will be responsible for securing all permits and licenses necessary for construction of this project and shall pay all applicable fees. The Contractor is also responsible for paying any and all inspection fees due to authorities having jurisdiction during construction.

(b) The Contractor shall arrange for necessary inspections required by the City, County, State and other authorities having jurisdiction, and submit certificates of approval to the Architect.


D.16 CODES, ORDINANCES, AND REGULATIONS: All work to be performed as part of this specification shall comply with all codes, ordinances, and regulations applicable to the contract, including, but not limited to:

- Environmental Protection Agency (EPA)
- Occupational Safety and Health Administration (OSHA)
- International Building Code
- State and Local Air Pollution Control Authorities/Agencies
- State and Local Solid Waste or Hazardous Waste Authorities/Agencies
- State and Local Building Code Authorities/Agencies
- Southern Standard Building Code
- State and Local Building Code
- Other Federal, State, or Local Codes

D.17 STANDARDS:

A. Any material specified by reference to the number, symbol, or title of a specific standard, such as a commercial standard, a federal specification, a trade association standard, shall comply with the requirements thereof and any amendment, supplement, or revision in effect on the date of Invitation for Bids. The standards referred to, except as modified in the specifications, shall have full force and effect as though printed in the specifications.
B. Whenever a material, article, or piece of equipment is identified in the specifications by reference to manufacturer’s or vendor’s names, trade names, catalog numbers, or the like, it is so identified for the purpose of establishing a standard, and any material, article, or piece of equipment of other manufacturers or vendors which will perform adequately the duties imposed by the general design will be considered equally acceptable provided the material, article, or piece of equipment so proposed is, in the opinion of the Architect, of equal substance, appearance, and function. It shall not be purchased or installed by the Contractor without the Architect’s written approval.

D.18 GUARANTEE: If, within one year after the date of substantial completion or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any of the work is found to be defective or not in accordance with the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. The guarantee shall include all materials, labor, and workmanship.

D.19 FIELD VERIFICATION OF DIMENSIONS: Reasonable efforts have been put forth by the Architect and Engineer to accurately establish existing conditions and dimensions and thereby provide a basis for design and arrangement of the new work to be performed. It shall be the responsibility of the Contractor, and he shall include the cost thereof in the contract price, to field survey the work following award of the contract to the extent necessary to determine actual conditions and dimensions. If discrepancies are found which cause significant changes (plus/minus 5% maximum variation of dimensions scaled or shown) in member dimensions, it will be the responsibility of the Contractor to notify the Architect immediately for further instructions before proceeding.

END OF SECTION
PART 1 - GENERAL

1.1 Quality Assurance:

A. Reference Standards: Unless specifically modified hereinafter or in pertinent other sections of this Project Manual, the Contractor shall comply with the requirements of Article 13 of the Contract for Construction.

B. Definitions: Unless specifically noted otherwise hereinafter or in pertinent other sections of this Project Manual, all definitions shall be as enumerated in Article 3 of the Contract for Construction.

C. Submittals: Unless specifically noted otherwise in pertinent other sections of this Project Manual, make all submittals to Architect and in sufficient number as to allow the Architect to retain two (2) copies of the submittals, except for submittals relating to Structural, Plumbing, HVAC, and Electrical Systems and related information for which the Architect shall retain three (3) copies of all submittals.

1. Timing of Submittals: Make all submittals far enough in advance of scheduled dates of installation to allow at least twenty (20) full working days for review following Architect's receipt of the submittal.

2. Forward all submittals / samples requiring color selections at one time. All color selections shall be made together at one time and released as a complete color schedule.

3. Delays: Cost of delays occasioned by tardiness of submittals may be back charged to the Contractor and shall not be borne by the Owner.

PART 2 - PRODUCTS (OMITTED)

PART 3 - EXECUTION

3.1 Detail Requirements:

A. Identification: Completely identify each submittal by showing at least the following:

1. Name of Project and Architect as they appear on the Project Manual cover.

2. Name and address of submitter.

3. Sheet Number and/or Project Manual Section Number to which submittal applies.

4. Whether the submittal is an original submittal or a resubmittal.
B. Grouping: Unless otherwise permitted by the Architect, make all submittals in groups, containing all associated items. The Architect may reject partial submittals as not complying with the contract documents.

1. All submittals requiring exterior color selections shall be submitted together so that exterior color selections shall all be made at one time and a Color / Finish Schedule for the complete project shall follow.

2. All submittals requiring interior color selections shall be submitted together so that interior color selections shall all be made at one time and a Color / Finish Schedule for the complete project shall follow.

C. Contractor’s Approval: The Contractor shall affix his stamp and signature to all submittals, indicating his approval of the submittal. Submittals that do not bear the stamp and signature of the Contractor will not be reviewed by the Architect.

END OF SECTION
SECTION 01800
PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 Quality Assurance:

A. Qualifications of Workmen: Contractor shall designate one workman in his employ who shall maintain all Project Record Documents and who shall record all changes to the original contract documents.

B. Identification of Documents: All project record documents shall be clearly marked PROJECT RECORD COPY, not used for construction purposes and available to the Architect or his representative.

1.2 Submittal:

A. General: At least 10 days prior to date of final inspection and as a condition of acceptance of the work, submit all project record documents to the Architect.

PART 2 - PRODUCTS

2.1 Project Record Documents:

A. Description: Project record documents include but are not limited to:

1. Drawings
2. Project Manual
3. Addenda
4. Approved Shop Drawings / Product Data / Submittal (Section 01300)
5. Change Orders
6. Field Orders
7. Construction Drawings
8. Operation/Maintenance Manuals
9. Test Reports/Certifications/Inspection Reports
10. Agency Approvals secured by Contractor

PART 3 - EXECUTION

A. Marking: Mark the most appropriate document within twenty-four (24) hours of receipt of information to show.

1. Changes made during construction.
2. Details not shown on original Contract Documents.
3. Location of Underground Utilities and Appurtenances, Reference to permanent surface improvements.
4. Location of all Internal Utilities and Appurtenances concealed in the building structure, referenced to visible and accessible features of the structure.
**B. Method of Marking and Recording:**

1. Using colored markers for graphic work, conform to following:
   a. Electrical Work - Red

2. Use a red pen for all written work.

**C. Quality Control:** Documents shall be kept current; no work shall be concealed before required information has been recorded and documents shall be clearly marked "PROJECT RECORD DOCUMENTS", not used for construction purposes and available to Architect and/or his representative at all times.

1. Progress Payments nor Final Payment will be made until the Architect is satisfied that the status of documents is current.

**D. Final Submittal of Project Record Documents:** The Contractor shall submit the following to the Architect:

1. One (1) complete set of plans showing all information as noted in this section.

2. One (1) digital copy (.pdf format) on CD of all documents, organized and labeled as noted below. Files shall be named such that the documents are clearly identifiable as to their content.
   a. As-Built Drawings
   b. Project Specifications, including addenda
   c. Approved Change Orders
   d. Approved Shop Drawings
   e. Warranties: Label per project specifications.

(1) For manufacturer’s warranties, include all required documentation required by the manufacturer (i.e. proof of purchase, invoice, etc.) should the Owner need to submit a claim.

(2) All warranty forms shall be filled out completely by the Contractor (include dates of installation, serial and model numbers, etc.).

3. The Contractor shall pay all costs for scanning/reproducing marked-up as-built plans and closeout documents into digital format.

END OF SECTION
DIVISION 02000
CIVIL

CIVIL SPECIFICATIONS ARE NOTED ON THE DRAWINGS WITH THE EXCEPTION OF THE DEMOLITION SPECIFICATIONS, WHICH ARE INCLUDED IN THIS PROJECT MANUAL.
PART 1 - GENERAL

1.1 Quality Assurance:

A. Qualifications of Workmen: Provide at least one person who shall be present at all times during demolition operations and who shall be thoroughly familiar with the requirements of this portion of the work and the methods by which the same is accomplished.

B. Codes and Standards: In addition to complying with all pertinent codes and regulations, comply with the requirements of those insurance carriers providing coverage for this work.

C. Contractor’s Responsibility: It shall be the Contractor’s responsibility to protect all existing construction designated to remain and to provide for the public safety during all demolition operations.

D. Damage to Existing Construction: In the event of damage to any construction and/or equipment not scheduled to be demolished or removed, the Contractor shall immediately make all repairs and replacements necessary to the approval of the Architect and at no additional cost to the Owner.

E. Dust Control: Use all means necessary to prevent the spread of dust during the performance of the work of this section.

F. Burning: On-site burning will not be permitted.

G. Refer to Section D, Par. D.10 - Hazardous Materials.

PART 2 - PRODUCTS

2.1 Materials:

A. Barricades: Use only new and solid lumber and plywood of utility grade or better for the construction of all temporary barricades.

B. Miscellaneous: All other materials, not specifically described but required for the proper execution of the work of this section shall be selected by the contractor, subject to approval by the Architect.

PART 3 - EXECUTION

3.1 Preparation:

A. Notification: Notify the Architect at least two full working days prior to commencing the work of this section.

B. Site Inspection: Prior to all work of this section, carefully inspect the entire site and all objects designated to be removed and to be preserved.
C. The Contractor shall determine the full extent of items to be removed as necessary to install new work as shown and described on the plans.

3.2 Field Quality Control:

A. Temporary Barricade: Construct temporary barricades and fencing as necessary to protect existing construction and the public from damage or harm caused by the work of this section; barricades shall be constructed in accordance with all pertinent codes and regulations.

B. Demolition: Demolish existing construction designated to be removed on the drawings or as determined under Article 3.1,C. in its entirety.

C. Disposal of Debris: Remove from the site all debris resulting from the demolition operations; burning of debris on site will not be permitted; place of disposal for demolished items shall be the Contractor's responsibility. Refer to Section D, par. D.11.

END OF SECTION
SECTION 03300
CAST IN PLACE CONCRETE

PART 1 - GENERAL

1.1 Reference Standards:

A. Incorporated herein by reference and made a part hereof is American Concrete Institute Standard Nos. 318-99 and 301 (latest edition) in their entirety, with modifications, exclusions and/or supplements noted hereinafter.

B. Items noted thus (*---) refer to indicated section of ACI 301 but shall not be construed to render inapplicable the other sections or subdivisions of the same section unless they are options.

C. Copies of the reference standard are obtainable at a nominal cost from the American Concrete Institute, P.O. Box 9094, Farmington Hills, MI 48333-9094. A copy of these standards shall be kept on hand in the job site office at all times.

D. Where the reference standards make reference to "approved" or "approval", or the like, the wording shall be changed to "reviewed" or "review".

E. Referenced ASTM Standards shall be of the latest edition, except as noted.

1.2 Shop Drawings:

A. Submit shop drawings in accordance with Section 01300. Obtain final corrections from review prior to fabrication. Review shall not relieve the Contractor from responsibility to comply with requirements of the Contract Documents. The drawings provided as part of the Contract Documents shall not be used in a reproducible form as part of the reinforcing steel shop drawings.

B. Reinforcing Steel: Show dimensions, schedules, bending details, bar lists, and placing plans.

C. Checking: The Contractor shall require that the material supplier submit a signed written statement in conjunction with the shop drawing submittal, that the drawings have been checked for compliance with the contract requirements. Such checking shall not be limited to size, shape, length, quantity and location. The checking shall have been performed by a person or persons regularly engaged in drawing checking and shall not be the person or persons who prepared the drawings.

PART 2 – PRODUCTS

2.1 Materials:

A. Admixtures: Air-entraining admixtures, ASTM Designation C260, will be required in all concrete and coarse grout. No other admixture (i.e. water reducing agents and accelerators) will be permitted without approval of architect. No materials with free chloride ions will be permitted.

B. Drainage fill under slabs on grade: Clean, uncoated gravel or crushed stone, free from shale or other soft material, ranging from 3/4-inches to 1 1/2-inches (No. 57) in size and screened of all fines. Aggregates shall conform to ASTM C33.

C. Polyethylene Film: 6 mils thickness.
D. Reinforcing steel shall conform to ASTM Designation A615, Grade 60, of 60 ksi yield point strength. Welded wire fabric shall be plain wire and shall conform to ASTM A185 (*3.2.1.1, 3.2.1.5.a).

E. Premolded expansion joint filler shall be recycled rubber conforming to ASTM Designation D1751, non-extruding type, 1/2" and 1/4" thickness as noted. (*2.2.1.4, 2.3.1.11, 2.3.1.12)

F. Fibrous Concrete Reinforcement: 100 percent virgin polypropylene, fibrillated fibers containing no reprocessed olefin materials and specifically manufactured for use as concrete secondary reinforcement. Volume per cubic yard shall equal a minimum of 0.1 % (1.5 pounds). Fibers shall be minimum 3/4" length, 80 ksi minimum tensile strength, sp.gr. of 0.9 and less than 100 denier. "Fibers are for the control of cracking due to drying, shrinkage and thermal expansion/contraction, reduction of permeability, increased impact capacity, shatter resistance, abrasion resistance, and added toughness. Fiber manufacturer must document compliance with applicable building codes and ASTM C1116 Type III 4.1.3 and ASTM C1116 (Ref. ASTM C1018), Performance Level I/5 outlined in Section 21, Note 17.

1. Manufacturers:
   a. Fibermesh by Fibermesh Company
   b. FORTA CFP by Forta Corp.
   c. Grace Fibers by W.R.Grace Co.

2.2 Mix Designs:

A. Submit mix designs and test reports thereof for review at no added cost to the Owner. Proportioning shall be established on the basis of previous field experience or of trial mixtures. Cement content shall be not less than 550 pounds per cubic yard of concrete for concrete of normal weight. Determination of design mixes shall be at no extra cost to the Owner and shall be submitted for Architect's review. (*4.1, 4.2, 4.3)

B. Concrete shall develop 3000 psi compressive strength at 28 days and shall be of normal weight (150 pcf) unless indicated otherwise on drawings. (*4.2.2.8).

C. Durability: Concrete exposed to weather shall contain an air-entraining agent for protection against potentially destructive exposure. (*4.2.2.4)

D. Slump may be a maximum of 5-inches at the point of placement. The concrete supplier shall indicate on each trip ticket the amount of water that may be added to each load, which shall not exceed that listed herein. No water in excess of the amount indicated will be allowed. The amount of water, if any, added to the mix after delivery to the site shall be noted on the trip ticket. No water may be added to the mix without first performing a slump test. Under any circumstances, not more than 15 gallons of water may be added to a full eight cubic yard load (or same proportion for other size loads) to obtain a 5" slump. No water may be added to the design mix at the site unless the water gauge on the delivery vehicle is readable and functioning correctly.

E. Coarse grout shall be normal weight (150 pcf) and shall develop 2500 psi compressive strength at 7 days on a standard 2 inch cube and shall develop 4000 psi compressive strength at 28 days.

1. Proportioning shall be in accordance with "Mortar and Grout for Reinforced Masonry (ASTM C476-99)".
2. Slump shall be a maximum of 8 inches when measured using a 12 inch cone in accordance with "Slump of Portland Cement Concrete (ASTM C143)".

3. Sand, if used, shall conform to "Standard Specification for Aggregate for Masonry Mortar (ASTM C144)" except that gradation may be modified as necessary to obtain workability. Maximum size of aggregate shall be limited to 3/8 inch diameter.

2.3 Formwork:

A. Earth cuts may be used as forms for footings only where sides of cut will stand without danger of caving.

PART 3 – EXECUTION

3.1 Placing:

A. Drainage fill: Roll thoroughly and tamp to level of at least the thickness shown when tamped and cover with polyethylene film laid in greatest practicable lengths, lapped at least 8-inches and sealed.

B. Premolded expansion joint filler: Provide at intersections of grade slabs and masonry walls, at intervals not to exceed 20 feet in outside walks and elsewhere as shown. Interior PEJ filler shall be 1/2" or 1/4" thick, exterior PEJ filler shall be 1/4" thick. Exterior PEJ shall be recessed 1/2" below finished surface of slab and edges rounded. Concrete curbs and gutter shall have 1/2 inch P.E.J. filler at 40 feet on center. (*2.3.1.11)

C. Fiber Reinforced Concrete (FRC): All concrete for slabs-on-grade and elsewhere indicated shall contain fiber reinforcing material at the rate of 1.5 pounds per cubic yard of concrete. Fiber reinforcing shall be placed in the concrete mix at the batch plant. All additions, mixing, finishing, curing or other operations related to use of the fiber material, shall be in strict accordance with manufacturer's printed instructions. Contractor shall schedule placement of this concrete and shall have a qualified technical representative of the manufacturer present, at no added cost to the Owner at the initial placement of the fiber reinforced concrete (FRC). This representative shall have had field experience in the use of FRC and shall be able to instruct the Contractor in proper techniques in all aspects of concrete construction where FRC is designated.

D. Concrete in footings and slabs shall not be vibrated unless slump is 4 inches or less.

E. Coarse grout shall be placed within one hour from time of first mixing. Grout shall not be placed in lifts greater than five (5) feet in walls and pilasters. Coarse grout shall be provided at the following locations:

1. Concrete block lintels, bond beams and pilasters.
2. Cavity and cores of foundation walls.
3. Sound walls and concrete block toilet partitions.
4. Other locations noted on drawings and specifications.

F. At outside walks and platforms where ¼" expansion joint is used to separate pours, no more than 2 units long and 2 units wide may be placed simultaneously. See architectural plans for layout of expansion joints (EJ) and control joints (CJ).
3.2 Jointing:

A. Interior slabs on grade shall have control joints where noted. Where joints are not located on drawings, the following criteria shall be used to locate joints:

1. Slab areas between joints shall not exceed 1200 square feet.
2. Length of any section shall not exceed 35 feet.
3. Ratio of length to width shall not exceed 1.5:1.
4. Joints preferably shall be located at face of walls.
5. Location of joints is subject to review of Architect prior to placement of any slabs.

Provide either metal (to be left in place) or wood key-ways of contours shown (*2.2.2.5.b). Forms shall be securely held in place. Paint both faces of joint with form release agent to prevent bonding (*2.2.1.3, 2.3.1.13). Discontinue reinforcing across joint. If permanent metal forms are used, adjacent areas not more than 2 units long and/or wide may be placed simultaneously. Where pours are terminated, do not place adjacent areas sooner than 48 hours apart. Metal keys shall extend full depth of concrete shown. At outside walks and platforms, score joints in mechanically true alignment, using jointing tool and straightedge guide; round perimeter edges similarly to approximately 1/4-inch radius.

B. Concrete slabs with key-ways:

1. Metal key-ways (left in place) shall be securely held in place with sufficient number of steel stakes to provide a level, stable, and straight line. Paint both faces of metal key-way with form oil immediately before placing concrete to prevent bonding. Discontinue reinforcing across joint. Pours shall be checker boarded with no sides of adjacent units touching. Metal key-ways shall extend full depth of concrete section shown.

2. Wood key-ways (3/4” plywood and shaped 2x4 unless noted otherwise) shall be securely held in place with sufficient number of stakes to provide a level, stable, and straight line. Before placement of the adjacent pour paint face of concrete and/or wood key-way with form oil immediately for placing concrete to prevent bonding. Discontinue reinforcing across joint. Pours shall be checker boarded with no sides of adjacent units touching. Key-ways shall extend full depth of concrete section shown.

3.3 Workmanship:

A. Flatwork: Any floor whose out-of-plane dimension exceeds tolerances permitted for Class B Finish shall be ground and/or filled to meet them. Finishes with Class B tolerances shall be true planes within 1/4” in 10 feet as determined by a 10 foot straightedge place anywhere on the slab in any direction. Filling shall be accomplished through use of an approved epoxy-base patching compound applied in strict accordance with manufacturer’s recommendations; strength of compound shall be not less than 5000 psi in 7 days and compound shall be suitable for forming feather edges. Manufacturer and Contractor shall furnish a written guarantee covering strength of compound and its bonding to base concrete without separation. Failure to correct defective areas of concrete slab which are in excess of out of plane limits specified shall cause for removal of the finish material.

1. Exterior concrete work shall have a light broom finish.

3.4 Field and Laboratory Testing (*1.6):

A. The Contractor will select a recognized commercial testing laboratory and will pay the costs of concrete testing services. Reports shall be filed promptly with the Owner and Architect.
B. The following functions shall be performed by qualified personnel who have been qualified as ACI Concrete Technician Grade I by the Concrete Advisory Board of Georgia, Inc.

1. Sampling fresh concrete and making compression test specimens.
2. Performing tests for slump, air content, temperature, and unit weight of concrete as are required by the project specifications.
3. Protecting and curing tests specimens.
4. Transporting or preparing and shipping test specimens to laboratory.
5. Completing field test data sheet for each set of concrete test specimens and transmitting same to designated laboratory. Data sheets shall include slump, air content and unit weight and the name of the person responsible for their preparation.

C. One composite sample shall be taken from each fifty (50) yards or fractions thereof for each day's placement (*1.6.4.2.d). Mold and cure four (4) cylinders from each sample in accordance with ASTM C31 (*1.6.4.2.e). Test cylinders in accordance with ASTM C39. Test one specimen at 7 days for advance information, two specimens at 28 days for acceptance, and hold one cylinder to be tested at the request of the architect.

3.5 Curing and Hardener:

A. Use of curing compounds is prohibited for initial curing. Initial curing shall be by ponding, continuous sprinkling, sand kept moist or moisture retaining cover (6 mil. poly). Initial curing procedure shall continue for at least 7 days after concrete is placed (*5.3.6.4). After final curing, treat interior floors scheduled as sealed concrete, with 3 full even applications of liquid floor hardener according to manufacturer's written instructions using Davison Chemical's Concrete Hardener; Euclid Chemical Company's Euco; A. C. Horn Products' Hornolith; or Sonneborn Building Products' Lapidolith or W.R. Meadows Sealant Pena-Lith.

3.6 Concrete Placement In Cold Weather (*5.3.2.1.b):

A. Concrete shall be placed only when the temperature is a minimum of 35 degrees and rising. The surface to receive concrete and reinforcing shall be free of frost and ice. (*4.2.2.7, 5.3.2.1.b).

3.7 Concrete Placement in Hot Weather (*5.3.2.1.c):

A. Place concrete according to recommendations in ACI 305R and as follows, when hot-weather conditions exist:

1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F (32 deg C) at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water.
2. Cover steel reinforcement with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.
3.8 Placement of Reinforcing:

A. All bar reinforcing in slabs and footings shall be held in its design position by short lengths of No. 3 bars at 4 feet o.c. driven into the ground and secured with wire ties.

B. Corner bars of same size as reinforcing shall be provided at the corners of all slab areas, interior and exterior. Column anchor bolts and templates shall be held in their design position by wood framing staked in earth walls of footing trench or by short lengths of No. 3 bars driven into the ground and secured with wire ties. Metal chairs of correct height spaced 4’ o.c. may be used to hold slab reinforcing at areas adjacent to interior footings whose top elevation is eight (8) inches below finish floor elevation.

END OF SECTION
PART 1 - GENERAL

1.1 Quality Assurance:

   A. Industry Standards:

       1. Some products and execution are specified in this section by reference to published specifications or standards (with respective abbreviations used). These referenced publications may be subject to special conditions or limitations where specified hereinafter.


1.2 Related Sections:

   A. Section 03300, Cast-in-Place Concrete
   B. Section 10420, Letters and Signage

1.3 Product Handling:

   A. Delivery and Storage:

       1. Cementitious materials and masonry reinforcement shall be delivered to the project site in manufacturer's original, unopened packaging with labels.

       2. Cementitious materials and metal items shall be stored in a housed, dry and ventilated area on a platform at least 12 inches above ground floor.

1.4 Job Conditions:

   A. Temperature: Erect no masonry unless the ambient temperature is at least 40 degrees F and rising.

PART 2 - PRODUCTS

2.1 Materials:

   A. Face Brick Type 1: Face brick, meeting ASTM C216.

       1. Cash Allowance: The contractor shall allow the net release sum of Three Hundred Fifty Dollars ($350.00) per thousand for the purchase and delivery of the face brick to the project site. Special shape, solid and building brick are not to be included in this allowance, but shall be included in the contract sum. Brick selection shall match existing building brick as closely as possible.

       2. Overhead, profit and cost of installation of face brick shall be included in the contract sum and not as a part of the cash allowance.

       3. The contract sum will be adjusted by Change Order, based upon actual cost of face brick purchased.
4. Special Shaped Brick: Same as face brick used and in full color range.

5. Solid Brick: Same as face brick used and in full color range.

B. Face Brick Type 2: Face brick, meeting ASTM C216.

1. Cash Allowance: The contractor shall allow the net release sum of **Five Hundred Dollars ($500.00)** per thousand for the purchase and delivery of the face brick to the project site. Special shape, solid and building brick are not to be included in this allowance, but shall be included in the contract sum. Brick selection shall match existing building brick as closely as possible.

2. Overhead, profit and cost of installation of face brick shall be included in the contract sum and not as a part of the cash allowance.

3. The contract sum will be adjusted by Change Order, based upon actual cost of face brick purchased.

4. Special Shaped Brick: Same as face brick used and in full color range.

5. Solid Brick: Same as face brick used and in full color range.

C. Hollow Concrete Masonry Units:

1. Below grade and where exposed to weather: Normal weight, Type 1, Grade N-1, manufactured to meet ASTM C90.

2. Above grade exposed to interior:

   a. Light weight, two-cell type, meeting ASTM C90, Type 1 moisture controlled units; nominal face dimensions of 8-inches high x 16-inches long; thickness as required on the drawings; manufacturer’s standard color and face texture.

3. Special Shapes: Specially moulded units as required to meet conditions (i.e. lintel blocks, sash blocks, etc.) of same type as units with which used (i.e. normal weight/light-weight).

D. Masonry Reinforcement: Truss Type 2, 3, or 4 rod as required for width of masonry, fabrication from No. 9 deformed rod, hot-dip galvanized after fabrication in accordance with ASTM A153, Class B-2.

E. Wall Ties:

1. Wall Ties: Equal to “2-Seal Thermal Wing-Nut Tie” as manufactured by Hohman & Barnard, Inc., organic polymer coated carbon steel single screw dual-diameter barrel veneer tie with factory-installed EPDM washers; with 3/16" Byna-Lok wire tie, length as required to adhere fully to steel studs and face brick a minimum of 3”.

F. Rebar: As described on drawings.

G. Vertical Bar Positioner: Galvanized wire type, designed to hold vertical rebar in proper position.
H. Horizontal Bar Positioner: Galvanized wire type designed to hold horizontal rebar in proper position.

I. Vertical Bar Connectors: Galvanized metal type, designed to provide proper overlap of vertical rebar and allowing rebar placement after block has been laid.

J. Tie Wire: 16 gauge, annealed.


L. Water: Clean and potable.

M. Hydrated Lime: ASTM C207, Type S.

N. Portland Cement: ASTM C150 and be of one manufacturer.

O. Aggregate for Cement Grout: Fine aggregate conforming to ASTM C404.

P. Non-Shrink: One of the following:
   1. Sonogrout as manufactured by Sonneborn Building Products, Minneapolis, MN.
   2. Supreme as manufactured by Gifford-Hill and Company, Charlotte, NC.
   3. No. 588 as manufactured by W.R. Meadows, Inc., Elgin, IL.

Q. Masonry Mortars: ASTM C270, Type M and Type S, water-proof as tested by method of ASTM E514.

R. Colored Mortar: ASTM C270, Type S, pre-mixed color. Color shall match existing building mortar as closely as possible.

S. Weep Ventilators as manufactured by Hohmann & Barnard, Inc., or equal.
   1. Weep Holes: #341 w/s medium density polyethylene with wick and screen.

T. Cleaning Solution for Clay Masonry Units: One of the following:
   1. Sure Kleen No. 600 or Vana-Trol as manufactured by ProSoCo, Inc., Kansas City, KS.
   2. Brick-Klene as manufactured by Ecolab, Inc., St. Paul MN.
   3. Shield Clean 88 as manufactured by Shield Chemical.

2.2 Measurement and Mixing:

A. General:
   1. Mortars shall be mixed in a power mixer, adding 1/2 the sand and water to the mixer, followed by the entire amount of masonry cement, mixing for approximately 3 minutes, followed by adding the balance of the sand and water; continue mixing for not more than five minutes nor less than three minutes after all materials are in the mixer; mortars used in exterior work shall have an internal water repellant included in their mix design.
   2. Mortar used in exposed to view face brick shall be of color as hereinbefore described.
B. Masonry Mortars:

1. Type 1: Proportioned to produce a Type M mortar complying with ASTM C270, 2,500 psi.

2. Type 2: Proportioned to produce a Type S mortar complying with ASTM C270, 1,800 psi.

3. Type 3: Pre-mixed color as described hereinbefore and complying with ASTM C270, 1,800 psi.

C. Pointing Mortar: By volume one part non-staining cement, two parts white sand, and sufficient lime or lime putty to make as stiff a mixture as can be worked; prepare one to two hours before using and do not retemper; pigment shall be added to match adjacent mortar where exposed to view in finish work.

D. Cement Grout: By volume in accordance with ASTM C476-83, one part Portland cement and one-tenth part lime to aggregate proportioned at not less than two and one-fourth to three times the sum of volumes of cementitious materials used.

E. Non-Shrink Grout: Mix prepared product with water as directed by its manufacturer to give a minimum compressive strength of 6,800 psi at 28 days.

PART 3 - EXECUTION

3.1 Installation:

A. Preliminary Requirements:

1. Cutting Wheel: Prior to commencing masonry work, a power operated carborundum cutting wheel shall be set up on the site and used for cutting off-sets, cut-outs, miters and for sizing units.

2. Layout:

   a. Horizontal coursing shall be laid out as shown on the drawings; lay up one course of unit masonry so that masonry jamb lines for all openings can be accurately located and marked on footing top and/or floor slab; after all guide lines and bond dimensions have been thus established, permanent work may then commence.

   b. Vertical coursing shall be laid out as shown on the drawings; use storey pole, marked with all courses to maintain uniformity.

B. Precautionary Measures:

1. Cold Weather Erection:

   a. No masonry shall be erected when temperature is below the established minimum of 40 degrees F and rising.

   b. Masonry shall be protected from freezing for at least 48 hours after it is in place.

   c. No frozen materials shall be built upon or allowed to remain in the wall, but shall be removed and reconstructed.
2. Hot Weather Erection:
   a. Do not wet concrete masonry units.
   b. If suction due to dryness of concrete masonry units is excessive, use high water-retentive mortar.

3. Protection of Unit Masonry During Erection:
   a. Scaffolding shall be so constructed as to permit mortar droppings to fall clear of wall.
   b. At end of each work period and at the stoppage of work at any time, install non-staining tarpaulins or heavy gauge, untorn, plastic membrane across top.
   c. Care shall be exercised at all times not to smear mortar on face of unit masonry work, and no mortar shall be allowed to drop in cavity between face material and back-up material.

C. Laying Unit Masonry:

1. General:
   a. Unit masonry shall be laid true to line, level, and plumb.
   b. Coursing shall continue, unbroken, above and below openings.
   c. Joints shall be filled solid with mortar as each course is laid.
   d. Do not use chipped or broken units.

2. Mortars:
   a. Lay below grade masonry in Type 1 (M) Mortar.
   b. Lay above grade masonry other than face brick in Type 2 (S) Mortar.
   c. Lay face brick in Type 3(S) Mortar.

3. Masonry Joints:
   a. Joints in exposed to view face brick shall be uniform 3/8 inch wide, tooled “beaded”.
   b. Joints in unexposed to view masonry (i.e. below grade or not exposed in finished work) shall have uniform 3/8" wide joints, struck flush.
   c. Joints in concrete block exposed to view shall have uniform 3/8-inch wide tooled vee-joint.

4. Masonry Bond: Unless specifically shown otherwise on the drawings, all unit masonry shall be laid in “Common Running Bond”.

5. Horizontal Concrete Masonry Reinforcement:
   a. Install masonry reinforcement every 16 inches o.c. vertically and in the top course, beginning at top of first course above top of finish floor slab.
b. Wall openings shall be reinforced in the first two courses above and in the first course below, and shall extend not less than 12 inches past each jamb.

c. At splice point, lap reinforcement 6 inches minimum.

6. Miscellaneous Built-in Items: Miscellaneous built-in items such as angle lintels, flashings, anchors, frames and all other items called for in other sections or on the drawings shall be installed as the masonry work progresses.

7. Vertical Bar Positioners: Locate at top of first course and course below top of masonry with maximum of 4 feet between positioners.

8. Horizontal Bar Positioners: Locate where horizontal rebars occur (i.e. bond beams) and space as per manufacturer for size bar being positioned.

9. Wall Ties for Brick Masonry: Install ties not-to-exceed 16" o.c. horizontally and 16" o.c. vertically.

10. Miscellaneous Built-in Items: Miscellaneous built-in items such as angle lintels, flexible flashings, anchors, frames and all other items called for in other sections of this Project Manual or on the drawings shall be installed as the masonry work progresses.


12. Anchoring of Items to Masonry Units: Where items are shown on the drawings or described in other sections of this Project Manual to be anchored through the masonry units, fill two cells above and one cell below with 3,000 psi concrete as described in Section 03300 of this Project Manual; hold concrete in place with standard galvanized hardware cloth.

D. Cleaning:

1. Face Brick:
   a. After laying and as soon as practical, brush wall down with soft bristle brush (metal bristles not allowed).
   b. A final cleaning shall take place after all masonry is complete using the herein specified cleaner, applied in accordance with the manufacturer's recommendations.
   c. Protect adjacent work and materials from damage during cleaning operations.
   d. Should damage occur, make all repairs or replacements at no additional cost to the Owner.

E. Cleaning of Concrete Block:

1. Mortar droppings which stick to hollow concrete masonry shall be allowed to dry before removing with trowel.
2. Remaining mortar shall be removed by brushing down with dry fiber brushes (metal bristles not allowed) and rubbing with small piece of concrete masonry.

3. Check entire building for efflorescence, mildew, etc., prior to project close-out. Clean as required in accordance with the Brick Institute of America "Technical Notes on Construction."

END OF SECTION
PART 1 – GENERAL

1.1 Quality Assurance:

A. General Provisions:

1. The work covered by this section consists of furnishing for all labor and materials and performing all operations in connection with the restorative cleaning of all existing exterior brick, limestone, concrete/cast stone, sheet metal and wrought iron at existing building facades.

   a. Cooperate and coordinate all other trades in executing the work described in this section.

2. The work covered by this section consists of furnishing all labor and materials and performing all operations in connection with the restorative cleaning of all existing exterior brick, limestone, stucco and concrete / cast stone surfaces.

B. Scope of Work:

1. The contractors involved with work covered by this section shall have had a minimum of five years experience using specified restorative cleaning techniques.

2. Tradesmen must be competent and experienced and shall demonstrate reasonable care during performance of cleaning operation described in this section.

3. The work to be done includes furnishing all labor, materials, and equipment necessary for the restoration, cleaning, and repairing of older exteriors.

4. This specification describes a cleaning system designed to effectively clean and restore the exterior surfaces. The system combines the application of a restorative cleaner with high pressure water rinsing and has proven safer and less damaging to the masonry and surrounding surfaces than traditional sandblasting/steam cleaning methods.

5. Cleaning systems are described which will effectively remove atmospheric carbon and dirt, paint oxidation, embedded clay and mud stains, rust smoke, algae, tar and paint spills from older masonry surfaces. Selection of the specific cleaner(s) to be used shall be dependent on the type substrate and its condition and the results of tests conducted at the job site as later described.

6. Sandblasting and/or use of non-proprietary acids, powdered or liquid, will not be permitted.

1.2 Related Specifications:

A. Section 09900 - Painting
PART 2 – PRODUCTS

2.1 Materials:

A. Masonry Surfaces:

1. Cleaning materials for purposes of removing atmospheric carbon and dirt, paint oxidation, embedded clay and mud stains, rust, smoke algae, etc., from brick and other types of masonry surfaces shall be Sure Klean Restoration Cleaner.
   a. Form: Clear Liquid
   b. pH: 2.2 at 1:3 Dilution
   c. Specific Gravity: 1.050
   d. Wt/Gal.: 8.75 lbs.

2. Cleaning materials for purposes of removing severe atmospheric staining with heavy deposits of carbon and dirt, paint oxidation, embedded clay and mud stains, rust, smoke, algae, etc., from brick and other types of masonry surfaces shall be Sure Klean Heavy Duty Restoration Cleaner.
   a. Form: Clear Liquid
   b. pH: 2.2 at 1:3 Dilution
   c. Specific Gravity: 1.132
   d. Wt/Gal.: 9.42 lbs.

B. Masking:

1. Materials for purposes of protecting glass, non-porous metal and polished stone surfaces from the damaging effect of acidic cleaning materials will be Sure Klean Strippable Masking - a liquid, film forming, strippable masking material.
   a. Chemical Resistance:
      (1) Acids: Good
      (2) Alkalines: Good
      (3) Gasolines: Good
      (4) Oil: Good
      (5) Alcohol: Good
      (6) Aromatics: Fair
      (7) Ketones: Poor
   b. Drying time: Ten minutes (to touch).

C. Sufficient cleaning materials to complete the entire project shall be purchased by the contractor and stored in factory sealed containers at the job site. Containers shall be available for inspection by the Architect.

PART 3 - EXECUTION

3.1 Preparation:

A. It is recommended that all cleaning procedures outlined herein be completed prior to installation of new paint finishes. Failure to do so will make it necessary to protect all such finishes from contact with the cleaning and paint stripping agents.
B. Protect all surrounding landscape and lawn areas from contact with the cleaning solutions. Landscape and lawn areas may be best protected by keeping them as wet as possible through use of lawn soaker hoses which provide a slow but steady mist of water to adjacent to masonries being cleaned.

C. All building openings and existing windows to remain shall be protected with sheets of polyethylene, or other proven protective materials, firmly fixed and sealed to the surface. Non-masonry surfaces which are not protected shall be kept running-wet with clean water throughout the cleaning process of adjacent masonries.

D. All surfaces not to be cleaned shall be tested for possible detrimental effect of the cleaning solutions and protected as determined necessary by test results.

E. All open joints shall be temporarily caulked otherwise protected to prevent intrusion of washing waters into the wall structure or building interior.

3.2 Cleaning Process:

A. Protection:

1. Protect or avoid contact to auto and pedestrian traffic.

2. Aluminum surfaces must be protected from exposure to the cleaning solution. Plants and shrubbery should also be protected.

3. Applicators shall wear safety goggles, rubber gloves, plastic or rubber rain suits so as to avoid splash to skin or eyes.

4. No masonry cleaning shall be performed during winds sufficiently strong to spread sprayed compound to adjacent unprotected surfaces.

5. No masonry cleaning shall be performed at temperatures below 40 degrees F or when local Weather Service Reports indicate temperatures below 40 degrees F during the ensuing 24 hours unless heated rinse water is used.

B. Safety: The Contractor shall require applicators to observe all Federal and State Agency, industry and manufacturer recommended safety regulations and precautions.

1. Follow manufacturer’s requirements and safety regulations to ensure proper use and to ensure that no environmental hazard or harmful run-off occurs.

C. Tests and Approvals:

1. The fundamental consideration for selection of appropriate cleaning procedures shall be that the materials and techniques adopted do minimal or no damage to the masonry substrates while achieving the desired degree of cleaning.

2. Test areas shall be selected by the Architect.

3. The test areas shall be cleaned with the recommended Sure Klean cleaning material for the inspection of the Architect.
4. Testing shall be conducted on each building exposure in unobtrusive locations on representative staining conditions. Tests shall employ the cleansing agents and procedures proposed for the general cleaning operation and shall include evaluation of all surfaces to be cleaned.

5. Samples of adjacent non-masonry materials shall be tested for possible reaction with the cleaning materials.

6. Test procedures shall include evaluation of materials and techniques proposed for protection of surrounding and adjacent non-masonry surfaces from cleaning solutions and rinse waters.

7. The necessary water and electricity shall be furnished to the contractor by the building owner for these test areas.

8. A representative of the cleaning materials manufacturer shall be present during the preparation and application of all test areas.

9. The Architect shall approve all test areas and application procedures prior to the start of full-scale cleaning operations.

D. Cleaning Operations:

1. Cleaning operations will be conducted at a time of year when treated masonry surfaces will have adequate time to thoroughly dry without fear of freezing.

2. Any dilution of the cleaning materials will be with clean water according to the instructions on the manufacturer's printed label (container label).

3. All surfaces will be thoroughly prewet with clean water prior to application of all cleaning materials.
   a. The purpose of the prewetting is to limit the activity of the cleaning solution to the masonry surface and prevent the cleaning solutions from being too readily absorbed by the dry masonry. Failure to adequately prewet may result in streaking and other residual staining of the treated masonry.

4. High pressure rinsing equipment shall be employed for the prewetting and rinsing procedures described below. Pressures of 400-800 PSI and a flow rate of four to six gallons per minute have proved most effective.
   a. Pressure application of the cleaning materials is not recommended! This practice may drive the cleaning compounds deep into the masonry surface making it impossible to rinse treated surfaces free of all cleaning residues. If spray application of the cleaning solution is desired, apply cleaning agents with low pressure (50 PSI maximum spray equipment).

5. Sure Klean Restoration Cleaner shall be employed for removal of atmospheric staining on masonry surfaces and Sure Klean Heavy Duty Restoration Cleaner shall be employed for removal of severe atmospheric staining in the following manner unless otherwise indicated by testing.
   a. Thoroughly prewet the masonry to be cleaned with fresh water.
b. Apply cleaning solution liberally to the masonry surface using low pressure spray or densely packed, soft fibered masonry washing brush.

c. Allow the cleaning solution to remain on the wall for three to five minutes depending upon drying conditions. (Do not allow the cleaning solution to dry in.)

d. Reapply the cleaning solution in a scrubbing manner.

e. Rinse treated surfaces thoroughly with fresh water employing pressure washing equipment removing all cleaning compounds, dirt, etc.

f. Reapply as necessary.

6. Sure Klean Strippable Masking shall be employed for protection of glass, non-porous polished stone surfaces and metal surfaces in the following manner unless otherwise indicated by testing.

a. Test all surfaces to be coated to verify ease of removal before general application. Surfaces should be clean and free of contaminants.

b. Using brush or roller, apply material to glass or surface providing a build up from 1.5 to 2.0 mils of coating.

c. Allow to dry before exposing the coating to acid washing system, water pressure, etc.

d. Remove within 15 days (exterior) to 60 days (interior) by pulling a corner of the coating free of the surface and continue to pull coating from surface.

3.3 Field Quality Control:

A. Clean-Up:

1. Contractor shall be responsible for removal and disposal of necessary masking materials following completion of cleaning operation. Windows and non-masonry areas shall be left clean.

2. All residue washed from building surface shall be swept or flushed away from surrounding sidewalk and service areas nightly. All premises shall be clean and neat at all times.
PART 1 - GENERAL

1.1 Quality Assurance

A. Industry Standards:

1. Some products and execution are specified in this Section by reference to published specifications or standards (with respective abbreviations used). These referenced publications may be subject to special conditions where specified hereinafter.

2. Referenced Publications:
   b. Commercial Standards (CS)
   c. Federal Specifications (FS)
   d. National Institute of Justice (N.I.J.) 0108.01

1.2 Related Sections:

A. Section 06651, Solid Surface Fabrications
B. Section 07900, Sealants and Caulking

1.3 Submittals:

A. General: Make submittals in accordance with Section 01300.

B. Shop Drawings: Fully dimensioned drawings, showing profiles of all standing and running trim at full size; shop drawings shall show method of installation and relationship of the items described hereinafter with adjacent and abutting surfaces and finishes.

C. Catalog Cuts: Manufacturer's catalog cuts for all items of hardware described hereinafter.

D. Samples: Full color range available for laminated plastic.

1.4 Job Conditions:

A. Temperature: For a period of not less than ten days prior to commencing installation of products of this section, throughout installation and until date of Architect's Certificate of Substantial Completion, provide heat to maintain a temperature of not less than 50 degrees F.

B. Humidity: In spaces where the products are being installed, throughout installation and until date of Architect's Certificate of Substantial Completion and occupancy permit, maintain relative humidity of not more than 60%.
C. Coordination with Other Trades: Because equipment and fixtures scheduled to be installed in cabinetwork are furnished under other section of this Project Manual as is utility hook-ups, coordinate with all trades to ensure installation and anchorage of the equipment and fixtures and to insure provisions for the utility sizing and locations.

PART 2 - PRODUCTS

2.1 Material:

   A. Solid Wood Unexposed to View: AWI Section 100, Grade 11, Southern Yellow Pine, plain cut, kiln-dried with moisture content of not more than 11%.

   B. Plywood Underlayment: For solid surface fabrications, AWI Section 200, backing grade, mill option face veneers.

   C. Glue: Heavy-duty construction adhesive, meeting SouthCoast Air Quality Management District Rule 1168 VOC limits.

2.2 Fabrication:

   A. Cabinetwork:

      1. Fabricate all cabinet and counter work to the designs shown on the drawings and from the materials described hereinbefore or shown on the drawings.

      2. Fabrication shall be in accordance with AWI Section 400, Premium Grade for solid surface covered work.

PART 3 - EXECUTION

3.1 Installation:

   A. Cabinetwork:

      1. Install cabinetwork in the locations shown on the drawings, in accordance with the details shown thereon, and securely anchored in place; items shall be installed level, plumb and true to line.

      2. Cut-outs for Other Trades: Cut-outs for items described in other sections of this Project Manual shall be made by the fabricator at the job site after all cabinet work has been installed.

END OF SECTION
SECTION 06651
SOLID SURFACE FABRICATIONS

PART 1 - GENERAL

1.1 Summary:
   A. This Section includes vanity tops and faces.

1.2 Related Section:
   A. Section 06410, Cabinetwork

1.3 Definition:
   A. Solid surface is defined as nonporous, homogeneous material maintaining the same composition throughout the part with a composition of acrylic polymer, aluminum trihydrate filler and pigment.

1.4 Submittals:
   A. Product Data: Submit product data for each type of product indicated, in accordance with Section 01300.
   B. Shop Drawings: Show location of each item, dimensioned plans and elevations, large-scale details, attachment devices and other components.
      1. Show full-size details, edge details, thermoforming requirements, attachments, etc.
      2. Show locations and sizes of furring, blocking, including concealed blocking and reinforcement specified in other Sections.
      3. Show locations and sizes of cutouts and holes for plumbing fixtures, faucets, soap dispensers, waste receptacle and other items installed in solid surface.
   C. Samples: For each type of product indicated:
      1. Submit minimum 6-inch by 6-inch sample.
      2. Cut sample and seam together for representation of inconspicuous seam.
      3. Submit full range of color and pattern variation for selection by the Architect.
   D. Maintenance Data:
      1. Submit manufacturer’s care and maintenance data, including repair and cleaning instructions.
         a. Maintenance kit for finishes shall be submitted with close-out documents.

1.5 Quality Assurance:
   A. Qualifications: Shop that employs skilled workers who custom fabricate products similar to those required for this project and whose products have a record of successful in-service performance.
B. Fabricator/Installer Qualifications: Work of this section shall be by a certified fabricator/installer, certified in writing by the manufacturer.

C. Applicable Standards:
   1. Standards of the following, as referenced herein:
      a. American National Standards Institute (ANSI)
      b. American Society for Testing and Materials (ASTM)
      c. National Electrical Manufacturers Association (NEMA)
      d. NSF International

   2. Fire Test Response Characteristics:
      a. Provide with the following Class A (Class I) surface burning characteristics as determined by testing identical products per UL 723 (ASTM E84) or another testing and inspecting agency acceptable to authorities having jurisdiction:
         1) Flame Spread Index: 25 or less.
         2) Smoke Developed Index: 450 or less

1.6 Delivery, Storage, and Handling:
   A. Deliver no components to project site until areas are ready for installation.
   B. Store components indoors prior to installation.
   C. Handle materials to prevent damage to finished surfaces.
      1. Provide protective coverings to prevent physical damage or staining following installation for duration of project.

1.7 Warranty:
   A. Provide manufacturer’s warranty against defects in materials.
      1. Warranty shall provide material and labor to repair or replace defective materials.
      2. Damage caused by physical or chemical abuse or damage from excessive heat will not be warranted.

PART 2 - PRODUCTS

2.1 Manufacturers:
   A. Basis of Design: "Corian®" surfaces from the DuPont Company.
      1. Product information is listed for reference purposes to establish material characteristics, quality, and finish. Alternate manufacturer's products shall meet or exceed the listed product.
B. Materials:

1. Solid Polymer Components:
   a. Cast, nonporous, filled polymer, not coated, laminated or of composite construction with through body colors meeting ANSI Z124.3 or ANSI Z124.6, having minimum physical and performance properties specified.
   b. Superficial damage to a depth of 0.010 inch (.25 mm) shall be repairable by sanding and/or polishing.

2. Thickness: 1/2-inch

3. Edge Treatment: As selected by the Architect from the manufacturer's standard edges.

4. Performance Characteristics:

<table>
<thead>
<tr>
<th>Property</th>
<th>Typical Result</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength</td>
<td>6,000 psi</td>
<td>ASTM D 638</td>
</tr>
<tr>
<td>Tensile Modulus</td>
<td>$1.5 \times 10^{-6} \text{ psi}$</td>
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</tr>
<tr>
<td>Tensile Elongation</td>
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<td>ASTM D 638</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>10,000 psi</td>
<td>ASTM D 790</td>
</tr>
<tr>
<td>Flexural Modulus</td>
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<td>ASTM D 790</td>
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<tr>
<td>Hardness</td>
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</tr>
<tr>
<td></td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>Thermal Expansion</td>
<td>$3.02 \times 10^{-5} \text{ in./in./°C}$</td>
<td>ASTM D 696</td>
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<tr>
<td></td>
<td>($1.80 \times 10^{-5} \text{ in./in./°F}$)</td>
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<td>Gloss (60° Gardner) Light Resistance</td>
<td>5-75 (matte-highly polished) (Xenon Arc) No effect</td>
<td>ANSI Z124</td>
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<td></td>
<td></td>
<td>NEMA LD 3-2000 Method 3.3</td>
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<tr>
<td>Wear and Cleanability</td>
<td>Passes</td>
<td>ANSI Z124.3 &amp; Z124.6</td>
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<tr>
<td>Stain Resistance: Sheets</td>
<td>Passes</td>
<td>ANSI Z124.3 &amp; Z124.6</td>
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<tr>
<td>Fungus and Bacteria Resistance</td>
<td>Does not support microbial growth</td>
<td>ASTM G21 &amp; G22</td>
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<td>Boiling Water Resistance</td>
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<td>NEMA LD 3-2000 Method 3.5</td>
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<tr>
<td>High Temperature Resistance</td>
<td>No change</td>
<td>NEMA LD 3-2000 Method 3.6</td>
</tr>
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<td>Izod Impact (Notched Specimen)</td>
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<td>ASTM D 256</td>
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<tr>
<td>Ball Impact Resistance: Sheets</td>
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<td>NEMA LD 3-2000 Method 3.8</td>
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<td>Property</td>
<td>Typical Result</td>
<td>Test</td>
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<td>-----------------------------</td>
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<tr>
<td>Weatherability</td>
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<td>0.8% (1/4&quot;)</td>
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<td>Toxicity</td>
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<td>Pittsburg Protocol Test (<em>LC50</em> Test)</td>
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<td>66 (patterned colors)</td>
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<td>All colors (Class I and Class A)</td>
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<tr>
<td>Smoke Developed Index</td>
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</tr>
</tbody>
</table>

5. Plywood Underlayment: As specified in Section 06410.

2.2 Accessories:

A. Joint Adhesive: Manufacturer’s standard one or two part adhesive kit to create inconspicuous nonporous joints.

B. Sealant: Manufacturer’s standard mildew-resistant, FDA-compliant, NSF 51-compliant UL-listed silicone sealant in colors matching components.

2.3 Factory Fabrication:

A. Shop Assembly:

1. Fabricate components to greatest extent practical to sizes and shapes indicated, in accordance with approved shop drawings and manufacturer’s printed instructions and technical bulletins.

   a. Dimensions, shapes, and design shall conform with the counter details shown on the drawings.

2. Form joints between components using manufacturer’s standard joint adhesive without conspicuous joints.

   a. Reinforce with strip of solid polymer material, 2” wide.

3. Provide factory cutouts for plumbing fittings and bath accessories as indicated on the drawings.

4. Route and finish component edges with clean, sharp returns.

   a. Route cutouts, radii and contours to template.
   b. Smooth edges.
   c. Repair or reject defective and inaccurate work.
PART 3 – EXECUTION

3.1 Examination:
   A. Examine substrates and conditions, with fabricator present for compliance with requirements for installation tolerances and other conditions affecting performance of work.
   B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 Installation:
   A. Install components plumb, level and rigid, scribed to adjacent finishes, in accordance with approved shop drawings and product data.
      1. Provide product in the largest pieces available.
      2. Form field joints using manufacturer’s recommended adhesive, with joints inconspicuous in finished work.
         a. Exposed joints/seams shall not be allowed.
      3. Reinforce field joints with solid surface strips extending a minimum of 1-inch on either side of the seam with the strip being the same thickness as the top.
      4. Cut and finish component edges with clean, sharp returns.
      5. Route radii and contours to template.
      6. Anchor securely to base cabinets or other supports.
      7. Align adjacent countertops and form seams to comply with manufacturer’s written recommendations using adhesive in color to match countertop.
      8. Carefully dress joints smooth, remove surface scratches and clean entire surface.
      9. Install countertops with no more than 1/8-inch sag, bow or other variation from a straight line.
   B. Backsplashes and Applied Sidesplashes:
      1. Install applied backsplashes sidesplashes (as necessary to provide closure at walls) using manufacturer’s standard color-matched silicone sealant.
      2. Adhere applied backsplashes and sidesplashes to countertops using manufacturer’s standard color-matched silicone sealant.

3.3 Cleaning and Protection:
   A. Keep components clean during installation.
   B. Remove adhesives, sealants and other stains.

END OF SECTION
PART 1 - GENERAL

1.1 Quality Assurance:

A. Industry Standards:

1. Some products and execution are specified in this section by reference to published specifications or standards (with respective abbreviations used). These referenced publications may be subject to special conditions or limitations where specified hereinafter.

2. Reference Publications:
   b. Federal Specifications (FS).

1.2 Definitions:

A. Sealant: A weatherproof elastomer used in filling and sealing joints, having properties of adhesion, cohesion, extensibility under tension, compressibility and recovery.

B. Caulk: Term used to denote the process of filling and sealing the joints, without regard to type of material.

1.3 Submittals:

A. General: Make submittals in accordance with Section 01300.

B. Product Data: Manufacture's detailed descriptive and specification data for each type of sealant and joint filler described hereinafter; furnish color card showing full range of colors available.

C. Samples: For each type and color of sealant required accompanied by sample of joint filler.

1.4 Product Handling:

A. Delivery: Deliver the products of this section in manufacturer's original unopened packaging with labels intact and legible.

B. Storage and Protection: Store and protect products of this section in accordance with manufacturer's instructions.

1.5 Job Conditions:

A. Temperature: Do no caulking if ambient temperature is 32 degree F or below.
PART 2 - PRODUCTS

2.1 Materials:

A. Sealants:

1. Type 1: One-component acetoxy silicone, complying with FS TT-S-001543A, Type Non-Sag, Class A; white color - mildew resistant.

2. Type 2: Acrylic latex, gun grade, paintable, complying with ASTM C834-86; white color.

B. Joint Filler: Foam rod, approved by sealant manufacturer, sized to require 20% to 50% compression upon insertion.

C. Primer: Only that as recommended by the sealant manufacturer.

D. Application Equipment: Sealant application equipment shall be only such equipment as is specifically recommended by the manufacturer of the sealant being installed.

PART 3 - EXECUTION

3.1 Installation:

A. Preliminary Requirements:

1. Surface Preparation:

   a. Surfaces to be sealed shall be sound, clean, dry, frost free and free of contamination by laitance, form release agents, concrete curing compounds or other surface treatments.

   b. Masonry and concrete surfaces shall be wire brushed.

   c. Metal, glass and wood surfaces shall be wiped with methyl ethyl ketone.

2. Masking: Surfaces adjacent to joints shall be masked to obtain a neat sealant line.

3. Joint Filler: Joints exceeding the maximum allowable depth as hereinafter described shall be filled to within the allowable depth with the specified joint filler.

4. Primer: Apply primer to surfaces to be caulked as recommended by the manufacturer of the sealant being installed.

B. Locations:

1. As the work progresses caulk and seal all joints subject to movement or subject to passage of air or moisture.

2. At existing areas to receive new finishes, caulk existing material junctures (windows, door frames, trim, etc.) as necessary to provide neat, smooth, fully caulked perimeters, joints, etc.
3. Type 1 Sealant: Around plumbing fixtures, at walls and floors, and at ceramic tile.

4. Type 2 Sealant: Around perimeter of interior metal door frames, and at interior of building where caulking is called for (i.e. wood trim at doors and interior windows, where dissimilar materials abut, wherever casing beads occur, etc.).

C. Application of Sealant:

1. Install sealant under pressure to fill joint, taking care to produce beads of proper width and depth; tool as recommended by the manufacturer; immediately remove all surplus sealant.

2. Width and depth of sealed joint shall not exceed the proportions of 1/2 inch width x 1/2 inch diameter and 3/4 inch width x 1/4 inch diameter, except that metal thresholds and sills shall be set in full bed of specified sealant.

3.2 Field Quality Control:

A. Protection: To insure proper curing, sealed joints shall not be touched, washed or otherwise disturbed for 48 hours after installation unless specifically recommended otherwise by the sealant manufacturer.

END OF SECTION
SECTION 08110
STEEL FRAMES

PART 1 - GENERAL

1.1 Quality Assurance:

A. Industry Standards:

1. Some products and execution are specified in this Section by reference to published specifications or standards (with respective abbreviations used). These referenced publications may be subject to special conditions where specified hereinafter.

2. Referenced Publications:

a. American Society for Testing and Materials (ASTM)
b. Commercial Standards (CS)
c. National Association of Architectural Metal Manufacturers (NAAMM)
d. National Fire Protection Association (NFPA)
e. Underwriter's Laboratories, Inc. (UL)
f. Steel Door Institute (SDI)

1.2 Related Sections:

A. Section 08211, Solid Core Flush Wood Doors
B. Section 08800, Glass and Glazing
C. Section 09900, Painting

1.3 Submittals:

A. General: Make submittals in accordance with Section 01300.

B. Shop Drawings: Fully dimensioned, showing method of installation and relationship to abutting materials and finished.

C. Hardware Templates: Contractor shall obtain templates from the manufacturers of the finish hardware (Section 08710) and furnish same to manufacturer of the metal frames along with one (1) copy of the approved "Finish Hardware Schedule".

1.4 Product Handling:

A. Delivery: Deliver products of this section in manufacturer's original packaging with labels intact and legible.

B. Storage and Protection: Store products in a housed, dry and ventilated area and protect from damage as per their manufacturer's instructions.
PART 2 - PRODUCTS

2.1 Materials:

A. Metal Drywall Frames:

1. Comply with CS 242-62

2. Frames shall be knock-down type, of sizes and designs shown on the drawings.

3. All frames shall be formed with 5/8" depth integral stops, unless detailed otherwise on drawings, and rabbets and shall have a double return on the back bend to allow frame to be erected after wall is in place and shall be designed so as to grip wall firmly.

4. Corners shall be mitered and reinforced and locked with sheet metal screws on the headbar return to insure positive locking and rigid corners.

5. Hardware Reinforcements:

   a. Frames shall be mortised, reinforced, drilled and tapped at the factory for fully templated hardware only, in accordance with approved hardware schedule and templates provided by the contractor; where surface-mounted hardware is to be applied, frames shall have reinforcing plates only; all drilling and tapping shall be done at the project site under Section 08710.

   b. Minimum thickness of hardware reinforcing plates shall be as follows:

      | Hardware Type    | Thickness |
      |------------------|-----------|
      | Hinge            | 7 gauge   |
      | Strike           | 10 gauge  |
      | Flush Bolt       | 12 gauge  |
      | Closer           | 12 gauge  |
      | Surface Mounted Hardware | 12 gauge |

6. Jambs shall be further strengthened by two heavy gauge stiffeners to provide proper gripping action and bearing surface against the wall.

7. Anchors (jamb, sill) shall be Manufacturer's Standard; sill anchors shall require no notching of wallboard.

8. There shall be no visible fastening devices along face of rabbets.

9. Each door frame stop shall be punched on the strike side to receive rubber silencers (3 per frame for single doors and 4 per frame for double doors).

10. Dust Cover: Shall be provided for strike and hinge reinforcing.

11. Loose stops shall be as shown on drawings and fastened according to manufacturer's recommendations.

12. Label Frames: Comply with NFPA A80 and bear visible UL label called for on the drawings.

13. Factory Priming: After manufactured all tool marks and surface imperfections shall be dressed, filled and sanded to make all surfaces smooth, level and free of all irregularities and then chemically treated, to insure maximum paint adhesion, and coated with a rust-inhibitive primer, standard with the manufacturer of the drywall metal frames.
PART 3 - EXECUTION

3.1 Installation:

A. Frames: Install in prepared openings, in locations shown on the drawings, true to line, level and plumb, and in accordance with their manufacturer's details and instructions.

B. Glazing: Tempered glass, as specified in Section 08800, in interior view windows.

C. Label Frames: Comply with NFPA 80.

3.2 Field Quality Control:

A. Touch-Up Priming: Immediately after installation, sand smooth any rusted or damaged areas of prime coat and apply touch-up of compatible air-drying primer.

END OF SECTION
PART 1 - GENERAL

1.1 Quality Assurance:

A. Qualifications of Manufacturer: All solid core flush wood doors shall be of the same manufacturer.

B. Industry Standards:

1. Some products and execution are specified in this section by reference to published specifications or standards (with respective abbreviations used). These referenced publications may be subject to special conditions where specified hereinafter.

2. Referenced Publications:

   a. American National Standards Institute, Inc. (ANSI)
   c. National Wood Window & Door Manufacturer's Association (W.D.M.A.)
   d. Commercial Standards (CS).
   f. Underwriters Laboratories, Inc. (UL).

1.2 Related Sections:

A. Section 08110, Steel Frames
B. Section 08710, Finish Hardware

1.3 Definitions:

A. Definitions and terms shall be as described in the referenced standards.

1.4 Submittals:

A. General: Make submittals in accordance with Section 01300.

B. Shop Drawings: Fully dimensioned, showing all cut outs and details.

C. Futen Sample: Of size necessary to show veneer proposed to be used on door. Once approved all doors will be judged against the approved sample and any veneers showing extremes greater than in the approved flitch will not be acceptable.

D. Product Data: Manufacturer's detailed material and fabrication specifications and installation recommendations.
E. Warranty: Manufacturer’s Standard Lifetime.

1.6 Product Handling:
A. Delivery: Deliver the products of this section in manufacturer’s original unopened packaging with labels intact and legible.
B. Storage and Protection: Store and protect products of this section in accordance with their manufacturer’s instructions.

1.5 Job Conditions:
A. Environmental Requirements: For a period of ten days prior to the installation of any interior doors, throughout the installation and until date of substantial completion, provide heat to maintain a temperature of not less than 50 degrees F.

PART 2 - PRODUCTS

2.1 Materials:
A. Basis of Design: Equal to Marshfield “Signature” Series.
   1. Product information is listed for reference purposes to establish material characteristics, quality, and finish. Alternate manufacturer's products shall meet or exceed the listed product.
B. Door Construction:
   1. Face Veneers: For transparent finish, AWI Section 1300, 5-ply, Select Red Oak, quarter-sliced or species as required to best match existing doors.
   2. Core: AWI Section 1300.
      a. For non-rated doors – PC-5, particle core.
      b. For fire-rated doors – FD-5 non-combustible, mineral core, as required for ratings specified on the drawings.
         (1) Supply innerblocking for all surface applied hardware (through-bolts not accepted).
B. Product information is listed for reference purposes to establish material characteristics, quality, and finish. Alternate manufacturer's products shall meet or exceed the listed product.
C. Vertical Edges: AWI Section 1300 to match face veneer.
D. Top and Bottom Edges: Mill option hardwood or manufacturer’s standard.
E. Cross Bands: Mill option hardwood.
F. Adhesive: Type 1
2.2 Fabrication:

A. Non-Labeled Doors: Manufacture to the designs shown on the drawings, in accordance with AWI Section 1300, Premium Grade, transparent or opaque finish (as scheduled).

B. Factory finish doors in accordance with AWI Division 1500-S-4 – Finish System Standards. Factory finish to be water based stain and ultraviolet (UV) cured polyurethane to comply with EPA Title 5 guidelines for Volatile Organic Compound (VOC) emissions limitations. Finish must meet or exceed performance standards of TR-6 catalyzed polyurethane.

1. Finishes shall be selected from manufacturer’s standard finishes for transparent finishes, to most closely match existing doors.

PART 3 - EXECUTION

3.1 Installation:

A. Finish Hardware: Finish hardware and its installation are described in Section 08710.

B. Non-Labeled Doors: Install in frames, in locations shown on the drawings or called for in the schedule, hanging square, plumb and level.

END OF SECTION
PART 1 - GENERAL

1.1 Summary:

A. Section includes door hardware for new door.

B. Specific Omissions: Hardware for toilet accessories, including grab bars, is specified elsewhere.

1.2 Warranty:

A. Part of respective manufacturers’ regular terms of sale. Provide manufacturers’ warranties:

1. Locksets: Three years.
2. Closers: Ten years mechanical, two years electrical.
3. Hinges: Life of Building.
4. Other Hardware: Two years.

PART 2 - PRODUCTS

2.1 Manufacturers:

A. Listed acceptable alternate manufacturers: submit for review products with equivalent function and features of scheduled products.

<table>
<thead>
<tr>
<th>ITEM:</th>
<th>MANUFACTURER:</th>
<th>ACCEPTABLE SUB:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hinges</td>
<td>(IVE) Ives</td>
<td>Bommer, Stanley</td>
</tr>
<tr>
<td>Locks</td>
<td>(SCH) Schlage</td>
<td></td>
</tr>
<tr>
<td>Closers</td>
<td>(LCN) LCN</td>
<td></td>
</tr>
<tr>
<td>Silencers</td>
<td>(ROC)</td>
<td>Hager, Ives</td>
</tr>
<tr>
<td>Stops &amp; Holders</td>
<td>(IVE) Ives</td>
<td>Hager, Rockwood</td>
</tr>
</tbody>
</table>

2.2 General:

A. Lockset Design: Schlage, lever handles.

B. Finishes: Finish of hardware items shall match existing hardware.

C. Furnish and install specified hardware.

2.3 Closers:

A. Surface Closers:

1. Full rack-and-pinion type cylinder with removable non-ferrous cover and cast iron body. Double heat-treated pinion shaft, single piece forged piston, chrome-silicon steel spring.
2. ISO 2000 certified. Units stamped with date-of-manufacture code.

3. Independent lab-tested 10,000,000 cycles.


5. Plates, brackets and special templating when needed for interface with particular header, door and wall conditions and neighboring hardware.

6. Advanced Variable Backcheck (AVB): where scheduled, these units commence backcheck at approximately 45 degrees.

7. Opening pressure: Exterior doors 8.5 lb., interior doors 5 lb., labeled fire doors 15 lb, per CBC 1133B.2.5.

8. Separate adjusting valves for closing speed, latching speed and backcheck, fourth valve for delayed action where scheduled.

9. Extra-duty arms (EDA) at exterior doors scheduled with parallel arm units. EDA arms: rigid main and forearm, reinforced elbow.

2.4 Other Hardware:

A. Door Stops: Provide stops to protect walls, casework or other hardware.

1. Unless otherwise noted in Hardware Sets, provide floor type with appropriate fasteners. Where floor type cannot be used, provide wall type. If neither can be used, provide overhead type.

2.5 Finish:

A. Finish shall match existing door hardware.

B. Door Closers: Factory powder coated to match other hardware, unless otherwise noted.

PART 3 - EXECUTION

3.1 Acceptable Installers:

A. Experienced craftsperson with a resume of successful projects. Can readily differentiate between number 2 and number 3 phillips-drive screws and screwdrivers. Can readily differentiate between #10-24 machine screws and drywall screws, and can explain correct usages of these items.

3.2 Preparation:

A. Ensure that walls and frames are square and plumb before hardware installation.

B. Locate hardware per SDI-100 and applicable building, fire, life-safety, accessibility, and security codes.

1. Notify Architect of any code conflicts before ordering material.
2. Locate levers, key cylinders, t-turn pieces, touchbars and other operable portions of latching hardware between 30 inches to 44 inches above the finished floor, per CBC Section 1133B.2.5.1.

3. Where new hardware is to be installed near existing doors/hardware scheduled to remain, match locations of existing hardware.

   C. Overhead stops: before installing, determine proposed locations of furniture items, fixtures, and other items to be protected by the overhead stop's action.

   D. Existing frames and doors scheduled to receive new hardware: carefully remove existing hardware, tag and bag, and turn over to Owner.

3.3 Installation:

   A. Install hardware per manufacturer's instructions and recommendations. Do not install surface-mounted items until finishes have been completed on substrate. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate for proper installation and operation. Remove and reinstall or replace work deemed defective by Architect.

1. Gaskets: install jamb-applied gaskets before closers, overhead stops, rim strikes, etc; fasten hardware over and through these seals. Install sweeps across bottoms of doors before astragals, cope sweeps around bottom pivots, trim astragals to tops of sweeps.

2. When hardware is to be attached to existing metal surface and insufficient reinforcement exists, use RivNuts, NutSerts or similar anchoring device for screws.

3. Use manufacturers' fasteners furnished with hardware items, or submit Request for Substitution with Architect.

4. Replace fasteners damaged by power-driven tools.

   B. Locate floor stops no more that 4 inches from walls and not within paths of travel. See paragraph 2.2 regarding hinge widths, door should be well clear of point of wall reveal. Point of door contact no closer to the hinge edge than half the door width. Where situation is questionable or difficult, contact Architect for direction.

   C. Locate overhead stops for minimum 90° and maximum allowable degree of swing.

   D. Drill pilot holes for fasteners in wood doors and/or frames.

   E. Lubricate and adjust existing hardware scheduled to remain. Carefully remove and give to Owner items not scheduled for reuse.

3.4 Adjusting:

   A. Adjust and check for proper operation and function. Replace units, which cannot be adjusted to operate freely and smoothly.

1. Hardware damaged by improper installation or adjustment methods to be repaired or replaced to Owner's satisfaction.
2. Adjust doors to fully latch with no more than 1 pound of pressure.

3. Adjust delayed-action closers on fire-rated doors to fully close from fully-opened position in no more than 10 seconds.

B. Inspection: Use hardware supplier. Include supplier’s report with closeout documents.

3.5 Protection/Cleaning:

A. Cover installed hardware, protect from paint, cleaning agents, weathering, carts/barrows, etc. Remove covering materials and clean hardware just prior to substantial completion.

B. Clean adjacent wall, frame and door surfaces soiled from installation/reinstallation process.

3.6 Hardware Schedule:

<table>
<thead>
<tr>
<th>HW SET: 1</th>
<th>NEW DOOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>EACH TO HAVE:</td>
<td></td>
</tr>
<tr>
<td>3 EA HINGE</td>
<td>5BB1 4.5 X 4.5 652 IVE</td>
</tr>
<tr>
<td>1 EA SURFACE CLOSER</td>
<td>1261 RW/PA 689 LCN</td>
</tr>
<tr>
<td>1 EA DOME STOP</td>
<td>FS438 626 IVE</td>
</tr>
<tr>
<td>1 EA WALL STOP</td>
<td>WS407CCV 630 IVE</td>
</tr>
<tr>
<td>3 EA SILENCER, METAL DOOR</td>
<td>608 GRY ROC</td>
</tr>
</tbody>
</table>

NOTE: OTHER HARDWARE TO BE FURNISHED AND INSTALLED BY SECURITY CONTRACTOR UNDER SEPARATE CONTRACT.

END OF SECTION
PART 1 - GENERAL

1.1 Quality Assurance:

   A. Referenced Publications:

      1. American National Standards Institute, Inc. (ANSI)
      4. Federal Specifications (FS)

   B. Related Sections:

      1. Section 08110, Steel Frames

1.2 Submittals:

   A. General: Make submittals in accordance with Section 01300.

   B. Product Data: Manufacturer's data describing product characteristics, installation instructions and recommendations, and maintenance procedures.

1.3 Product Handling:

   A. Delivery: Deliver products of this section in manufacturer's original packaging with label intact and legible.

   B. Storage and Protection: Store products as recommended by their manufacturer to prevent damage to glass edges and to prevent damage due to temperature changes, sunlight and moisture.

1.4 Job Conditions:

   A. Temperature: Do no glazing when the ambient temperature is below 40 degrees F.

   B. Sequencing: Carefully coordinate and schedule with other trades to insure that glazing operations are done at the appropriate time and in the proper sequence.

PART 2 - PRODUCTS

2.1 Materials:

   A. One-way Reflective Glass: 2-pieces of Type I, Class 1, Quality q3, tempered glass, laminated together with a clear 0.030" thick polyvinyl butyl interlayer, total 3/8" thick, coated on the No. 2 face with a hard, adherent film of chromium or other approved coating of equal durability. Glass shall transmit not more than 14% of total incident visible light and shall reflect from front surface of the coating not less than 33% of the total incident visible light.

   B. Glazing Compound: Conform to FS TT-G-410.
C. Glazing Tape: 100% solid Polyisobutylene Butyl, 1/8" thick, medium bronze color, reinforced with removable paper back.

D. Glazing Blocks: Neoprene, EPDM or silicone.
   1. Setting Blocks: 30 to 90 shore hardness.
   2. Spacers: As required to provide face and edge clearances recommended by FGMA.

E. Backer Rod: Flexible, non-absorbent, compressible polyurethane from, either open-cell or non-gassing closed-cell, unless otherwise restricted by the sealant manufacturer; performed to size and shape required.

F. Sealant: One part silicone construction sealant meeting FS TT-S-00230C (COM-NBS) Type II, Class A.

2.2 Fabrication:
   A. General: Fabrication glass to sizes and designs shown on the drawings with bite edge clearance dimensions, including tolerances, as recommended by glass manufacturer and FGMA.

PART 3 - EXECUTION

3.1 Installation:
   A. Preliminary Requirements:
      1. Check frames prior to glazing. Openings shall be square, plumb, and with uniform face and edge clearances. Maintain 1/8" minimum bed clearance between glass and frame on both sides, unless otherwise required by glass manufacturer.
      2. Clean surfaces to be glazed. Any defects affecting satisfactory installation of glass shall be corrected before start of glazing.
      3. Steel surfaces and frames shall be sealed or primed before glazing. Do not set glass in steel frames until paint is dry.

   B. Glazing:
      1. Apply structural glazing compound, glazing sealant and glazing tape uniformly with formed corners and bevels. Use only recommended thinners, cleaners, and solvents. Do not cut or dilute glazing compounds or sealants. Make continuous contact with glass and frame when glazing and facing off.
      2. Remove excess compound and sealant from glass and adjoining surfaces as work progresses.
      3. Place setting blocks at quarter points of sills, buttered with compound or sealant and allow to set before installing glass.
      4. Install glass in frames with glazing tape and sealant, retained by the removable stops specified to be furnished with the doors and frames.
a. Cut tape to length and apply first to entire width of stops at head and sill. Set vertical strips at jambs butted to head and sill pieces. Do not overlap tapes. Remove paper from tape and crimp butt joints with the aid of glazing knife to insure welded corners.

b. Place setting blocks on the sill at quarter points, and place spacer shims around perimeter of glass spaced not over 24” apart.

c. Set glass on setting blocks, align edges, and press into tape.

d. Apply a heel bead of glazing sealant around perimeter of glass, maintaining a 3/16” minimum bite to the glass and a positive bond to the frame. The void around the glass shall be sealed. Bead sealant must be large enough so that some of it will partially fill the channel between the glass and removable stops when they are set.

5. Secure stops in place. The entire glazing rabbet shall be filled with glazing sealant to sight line. Strip excess sealant from glass and frame.

C. Glazing Schedule: Refer to drawings and referenced specification sections for locations of openings and glazing.

3.2 Field Quality Control:

A. Protection: Protect glass from damage during subsequent construction operations.

B. Replacement: Replace damaged glass at no additional cost to Owner.

C. Cleaning:

1. Remove dirt, contaminants, staining agents and other deposits promptly, using manufacturer’s recommended procedures.

2. Remove excess sealant as work progresses, using methods that will not damage glass.

3. Wash both sides of glass, using manufacturer’s recommended procedures, not more than two (2) days before final inspection.

END OF SECTION
PART 1 - GENERAL

1.1 Quality Assurance:

A. Reference Publications:
   1. American Society for Testing and Materials (ASTM)
   2. Federal Specifications (FS)
   3. Underwriter's Laboratories, Inc., (UL)

1.2 Submittals:

A. General: Make submittals in accordance with Section 01300.
B. Product Data: Manufacturer's detailed descriptive and specification data, and installation instructions for the products described hereinafter.
C. Material List: Furnish a complete list of materials to be used in this work.

1.3 Product Handling:

A. Delivery: Deliver materials in original and unopened packages, containers or bundles with brand names and manufacturer's labels intact and legible.
B. Storage and Protection:
   1. Store materials in dry location, fully protected from weather and direct exposure to sunlight.
   2. Stack gypsum board products flat and level, properly supported to prevent sagging or damage to ends and edges.
   3. Store corner bead and other metal and plastic accessories to prevent sagging, discoloration, or other mechanical damage.

1.4 Job Conditions:

A. Temperature: Maintain temperature in areas of installation between 50 and 70 degrees F for at least 24 hours before installation begins and for not less than 48 hours after joint finishing has been completed.
B. Ventilation: Provide controlled ventilation during joint finishing operations, to eliminate excessive moisture. Avoid drafts during hot, dry weather to prevent excessively fast drying of joint compound.

1.5 Related Sections:

A. Section 07900, Sealants and Caulking
B. Section 09900, Painting
C. Section 10800, Toilet Accessories
PART 2 - PRODUCTS

2.1 Materials:

A. Metal Furring Channels: 16 gauge cold rolled steel, "C" shape, of sizes required by the drawings or described hereinafter.

B. Metal Studs: Channel type, roll formed from galvanized steel, designed for screw attachment of gypsum wallboard of sizes required by the drawings and of gauges required by stud size, height and spacing shown on the drawings, but in no case less than 20 gauge; allowable deflection L/360; studs to have 1¼-inch diameter service hole, 8-inches from end.

C. Gypsum Wallboard:
   1. 5/8 inch thick, tapered edge, fire-rated, meeting requirements of ASTM C36 for Type "X" panels and fire endurance test as outlined in ASTM C-473.
   2. 1/4" thick, tapered edge, meeting the requirements of ASTM C36.

D. Fasteners:
   1. For attaching gypsum wallboard to metal framing, fasteners shall be 1-7/8 inches, Type S, Bugle Head screws, cadmium plated.
   2. For attaching metal channels to concrete or masonry shall be power actuated type capable of withstanding 192 pounds of single shear and 200 pounds bearing force without exceeding allowable stress design of fastener or member being fastened.
   3. For attaching framing members together shall be Type S, pan-head screws in sizes recommended by the metal stud manufacturer for applications required.

E. Accessories:
   1. Outside Corner Bead: All metal, hot-dipped galvanized, 1" x 1" and weighing not less than 114 pounds per MLF.
   2. Casing Bead: All metal, hot-dipped galvanized, 7/8 inch flange, "C" shaped, capable of being taped and finished and weighing not less than 165 pounds per MLF.

F. Tape: Perforated fiber tape with chamfered wafer-thin edges, 2-1/16" wide and meeting ASTM C475.

G. Joint Compound: Ready-mixed compound, meeting ASTM C475.

H. Sealant: Sealant is furnished under Section 07900.

PART 3 - EXECUTION

3.1 Installation:

A. Installation of Metal Framing:
   1. Position full length framing vertically. Attach with specified fasteners.
2. In general framing shall be spaced at 16 inches o.c.

B. Installation of Gypsum Wallboard:
   1. Install wallboard in accordance with manufacturer's printed installation instructions, except where more stringent requirements are specified.
   2. Use wallboard of maximum lengths to minimize end joints.
   3. Stagger end joints when they occur.
   4. Abut wallboards without forcing. Fit ends and edges of wallboard. Do not place butt ends against tapered edges.
   5. Support end and edges of wallboard panels on framing or furring members.
   6. At ceilings, apply wallboard with long dimension at right angles to framing.
   7. At walls and columns, apply wallboard horizontally, attaching upper board first; stagger end joints on opposite sides of partitions.
   8. Fasten wallboard to framing members, using the specified fasteners spaced as recommended by the manufacturer of the wallboard being installed for the specific installation.
   9. All gypsum board shall be 5/8" Type "X" gypsum board except as noted otherwise herein.

C. Installation of Accessories:
   1. Install corner beads at all outside corners.
   2. Install metal casing beads at exposed edges of wallboard at door and window openings, at intersections with other materials and at other location shown on the drawings.

D. Installation of Sealant: Caulk all perimeter joints, electrical boxes and penetrations with specified sealant.

3.2 Joint Treatment:

A. Taping or Embedding Joints:
   1. Apply compound to this uniform layer to all joints and angles. Center tape over joint and set tape into compound; leave approximately 1/16 inch to 1/32 inch compound under tape to provide bond.
   2. Apply skim coat following tape embedment, but not to function as fill or second coat; fold tape and embed in angles to provide true angle. Dry embedding coat prior to application of fill coat.

B. Filling:
   1. Apply joint compound over embedding coat to cover tape. Feather out fill coat beyond tape and previous joint compound line.
   2. Do not apply fill coat on interior angles.
3. Allow fill coat to dry prior to application of finish coat.

C. Finishing:
      a. Spread joint compound over and beyond fill coat on all joints. Feather to smooth uniform finish.
      b. Apply finish coat to taped angles to cover tape and taping compound.
      c. Sand final application of compound to provide smooth surface ready.

D. Finishing Beads and Trim:
   1. First Fill Coat: Apply joint compound to beads and trim. Feather out from ground to plane of the surface; dry compound prior to application of second fill coats.
   2. Second Fill Coat: Apply joint compound in same manner as first fill coat. Extend beyond first coat onto face of wallboard; dry compound prior to application of finish coat.
   3. Finish Coat: Apply joint compound to bead and trim; extend beyond second fill coat; feather finish coat from ground to plane of surface; sand finish coat to provide flat surface ready for decoration.

E. Filling and Finishing Depressions:
   1. Apply joint compound as first coat to fastener depressions; apply at least two additional coats of compound after first coat is dry.
   2. Leave filling and finished depressions level with plane of wallboard.

F. Preparation of Walls to be Painted where Existing Wallcovering is Scheduled to be Removed:
   1. Carefully remove existing wallcovering, taking precautions to protect adjacent surfaces/finishes to remain. Scrape walls to remove adhesives.
   2. Per par. 3.2 above, re-tape existing joints, fill depressions and other blemishes/joints, etc., and apply smooth finish to entire wall surface, and finish beads and trim.
   3. Where existing wall surfaces are not suitable for finish, notify the Architect to examine the conditions.
      a. Where the Architect agrees that such conditions exist, the Contractor shall overlay the existing wall(s) with 1/4" gypsum board and finish as specified herein. (Based on Unit Price identified in Section B.)

G. Remove existing signage, wall conference centers (as noted on plans), and toilet accessories, etc. Patch / repair existing gypsum board as necessary.

END OF SECTION
PART 1 - GENERAL

1.1 Quality Assurance:

A. Industry Standards:

1. Some products and execution are specified in this section by referenced to published specifications or standards (with respective abbreviations used); these referenced publications may be subject to special conditions where specified hereinafter.


1.2 Related Sections:

A. Section 09260, Gypsum Board System
B. Section 09680, Carpet

1.3 Submittals:

A. General: Make Submittals in accordance with Section 01300.

B. Product Data: Manufacturer's detailed descriptive and specification data and installation instructions for each product described hereinafter.

C. Samples: Complete color line available for resilient base.

D. Maintenance Guides: Furnish manufacturer's printed maintenance instructions for each product described hereinafter.

E. Certification: Furnish written certification that the products installed comply with the requirements of this section.

F. Extra Stock: After work is complete, deliver to Owner extra stock as follows:

1. Resilient Base: Not less than 15 linear feet of base, plus two (2) outside corners for each color and type installed. Extra stock shall be from same manufactured lot as material installed, boxed and labeled.

1.4 Product Handling:

A. Delivery: Deliver products of this section in manufacturer's original packaging with labels intact and legible.

B. Storage and Protection: Store in a housed, dry and ventilated area and protect from damage from any cause.
1.5 Job Conditions:

A. Temperatures: For a period of at least 24 hours before commencing installation, during installation for at least 48 hours after installation is complete, maintain a temperature of at least 70 degrees F.

B. Sequencing: Do not begin installation of the products of this section until painting has been completed in each area.

PART 2 - PRODUCTS

2.1 Material:

A. Resilient Base: Set-on cove type, 4" high x 1/8" thick, of homogeneous resilient and conforming to FF SS-W-40a, Type II with outside corners.

B. Adhesive: Only that recommended by the manufacturer of the resilient material being installed.

C. Colors: As selected by Architect from manufacturer's standards.

PART 3 - EXECUTION

3.1 Preliminary Requirements:

A. Surface Preparation:

1. Surfaces scheduled to receive resilient materials shall be level and straight with the allowance variations of 1/8 inch in 10 feet and 5/64 inch in 1 foot.

3.2 Installation:

A. Application of Adhesives: Apply in accordance with their manufacturer's instructions.

B. Resilient Base: Install where called for on the drawings in lengths as recommended by the base manufacturer, with preformed outside corners and mitered or cope inside corners and with tight and even joints, adhering to substrate as recommended by the manufacturer of the treads.

3.3 Field Quality Control:

A. Cleaning: Upon completion of the installation, remove excessive adhesives from all surfaces, using a neutral type cleaner.

END OF SECTION
PART 1 - GENERAL

1.1 Quality Assurance:
   A. Industry Standards:
      1. Some products and execution are specified in this section by reference to published specifications and standards (with respective abbreviations used). These referenced publications may be subject to special conditions or limitations where specified hereinafter:
      2. Reference Standards:
         a. American Society for Testing and Materials (ASTM)
         b. The Carpet and Rug Institute (CRI)

   B. Qualifications:
      1. Manufacturer: Not less than 5 years continued experience in the manufacture of carpet.
      2. Installer: Not less than 5 years continuous experience in the installation of carpet and related items.

1.2 Related Section:
   A. Section 09650, Resilient Flooring

1.3 Extra Stock:
   A. Upon completion of the work, deliver to the Owner extra stock as specified for each color and type of carpet installed in the project; securely wrap and label each package for proper identification; extra stock shall be from same lot as the material installed.
      1. Carpet: Minimum 48 tiles of each pattern used.

1.4 Product Handling:
   A. Delivery: Deliver products in original packaging with labels intact and legible.
   B. Storage and Protection: Store and protect products from damage as per their manufacturer's instructions.

1.5 Removal of Existing Floorcovering:
   A. The Contractor shall be responsible for removing existing floorcovering at all areas specified to receive new floorcovering.
PART 2 - PRODUCTS

2.1 Materials:

A. Basis of Design: Product information is listed for reference purposes to establish material characteristics, quality, colorways, and patterns. Alternate manufacturer's products shall meet or exceed the list products.

B. Carpets – Type 1 and Type 2: Shaw Contract Group

<table>
<thead>
<tr>
<th></th>
<th>Carpet Type 1</th>
<th>Carpet Type 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color Name</td>
<td>Image</td>
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<tr>
<td>Color Number</td>
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<td>Style Name</td>
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<tr>
<td>Style Number</td>
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<td>5T127</td>
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<tr>
<td>Construction</td>
<td>Multi-Level Pattern Loop</td>
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<tr>
<td>Fiber</td>
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<td>Eco Solution Q® Nylon</td>
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<td>Stitches per Inch</td>
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<td>Finished Pile Thickness</td>
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<td>Average Density</td>
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<td>Product Size</td>
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<tr>
<td>Secondary Backing</td>
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<tr>
<td>Protective Treatments</td>
<td>SSP® Shaw Soil Protection</td>
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<td>Radiant Panel</td>
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<tr>
<td>NBS Smoke</td>
<td>(ASTM E 662) less than 450</td>
<td>(ASTM E 662) less than 450</td>
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<td>Electrostatic Propensity</td>
<td>(AATCC 134) less than 3.5kv, built-in permanent conductive fiber</td>
<td>(AATCC 134) less than 3.5kv, built-in permanent conductive fiber</td>
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<td>Warranty</td>
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<tr>
<td>Insulation Pattern</td>
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<td>BRICK</td>
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</table>

C. Carpet – Type 3: Shaw Contract Group

1. Same specifications as Carpet Type 2 (without tile backing) in a 6-ft. broadloom product (for use on stairs).

D. Accessories:

1. Reducers: Equal to MacKlanburg-Duncan, Gainesville, GA; color(s) as selected by Architect from manufacturer's standard colors.
E. Adhesives: Only that as recommenced by the manufacturer of product being installed. Adhesives for carpet shall meet ERI Green Label program standards.

F. Cleaning Products: All cleaning products shall meet Green Seal Standard GS-11 and shall be approved by the manufacturer for the product to be cleaned.

PART 3 - EXECUTION

3.1 Preliminary Requirements:

A. Surface Preparation:

1. Floors scheduled to receive carpet shall be smooth and free of dust, grease, wax, paint, and other foreign matter.

2. Fill any cracks, holes or irregularities; high points shall be sanded or ground down, low areas shall be floated with leveling underlayment, as approved by the carpet manufacturer.

B. Tests: Perform tests at ground floor spaces to receive new carpet as follows. Results shall be submitted to the manufacturer to determine the appropriate adhesives and assure compliance with the manufacturer’s warranties for floorcovering products.

1. Perform calcium chloride sets per ASTM F-1869, bond test, and other tests as recommended by the manufacturer to determine moisture vapor transmission rate of the concrete prior to installation of flooring material.

2. Perform Relative Humidity (RH) test per ASTM F-2170-11, using SITU probes.

3.2 Installation:

A. Carpet: Install in strict accordance with the manufacturer's printed installation instructions and the approved layout.

B. Reducers: Install reducers in locations where carpet is higher than contiguous flooring, applying adhesive in accordance with the manufacturer's instructions contained in the adhesive packaging material; reducers shall be accurately aligned, with tight joints at abutting surfaces; intermediate joints in reducers will be permitted.

3.3 Field Quality Control:

A. Cleaning:

1. Reducers: Upon completion of the installation, remove excess adhesive and blemishes from the reducers and adjacent surfaces.

2. Carpet: Upon completion of the installation, remove adhesive from face of carpet and adjacent surfaces; vacuum all carpets with a commercial machine with rotating agitator or beater in nozzle; remove soiled spots using only cleaner which is recommended by the manufacturer of the carpet installed; remove blemishes from adjacent surfaces.

END OF SECTION
PART 1 - GENERAL

1.1 Quality Assurance:
   A. Manufacturers: All paints/stains selected for the coating and finishing system for each type of surface shall be the product of a single manufacturer and as described hereinafter.

1.2 Related Sections:
   A. Section 07900, Sealants and Caulking
   B. Section 08110, Steel Frames and Doors
   C. Section 09260, Gypsum Board Systems

1.3 Definitions:
   A. Paint: Term used in a general sense and has reference to sealers, primer, stains, oils, alkyd, latex, epoxy and enamel type paints.
   B. Painting: Term used in a general sense and has reference to the application of "paint" without regard to the type of material, to an item.
   C. Back Prime: Terms used in a general sense and has reference to the application of "paint" (first coat), without regard to the type of material, to the back side (unexposed to view) of an item.

1.4 Submittals:
   A. General: Make submittals in accordance with Section 01300.
   B. Material List: Prior to delivery of any paint materials to the project site, submit a complete list of all paint materials to be used in this project as described hereinafter.
   C. Manufacturer's Data: Accompanying the materials list, furnish the paint manufacturers detailed descriptive and specification data and application instructions for each type of paint required including INTERIOR Green Seal Standard GS-11 compliance:

   Architectural Paints:  
   - Flats: 50 g/L
   - Non-flats: 150 g/L
   - Coatings and Primers: 150 g/L

   D. Color Cards: Manufacturer's full range of colors available for each finish described hereinafter in the "Painting Systems Schedule".
   E. Color Samples:
      1. After review of the material list color cards and manufacturer's data, but prior to delivery of any paint to the project site, submit color samples, not less than 12" x 12" each, for each type and color of finish required.
2. Wherever possible, the material upon which the sample colors are applied shall be the same material as that on which the paint will be applied in the project.

1.5 Product Handling:

A. Delivery: Deliver the products of this section in manufacturer's original unopened packaging with labels intact and legible.

B. Storage and Protection: Store products of this section in a housed, dry and ventilated area, and protect from damage.

1.5 Job Conditions:

A. Temperature: Maintain a constant temperature of not less than 65 degrees F during interior painting and drying operations.

B. Ventilation: Provide ventilation to allow for the proper drying of the paint materials by using either of the following:

1. Temporary air circulators (spark proof)

2. Air conditioning system.

PART 2 - PRODUCTS

2.1 Materials:

A. Manufacturers:

1. The use of manufacturer's names and products are for reference only to indicate characteristics of the material and the finished required.

2. Subsequent to the requirements of these specifications, acceptable manufacturers include:

   a. Glidden Professional GP
   b. Benjamin Moore BM
   c. Devoe D
   d. Pratt & Lambert PL

B. Colors: Colors shall be selected.

C. Accessory Equipment: Ladders, scaffolding, drop clothes, scrapers, dusters and similar items are not required to be new, but they shall be safe, adequate and acceptable of producing the results for which they are intended.

D. Application Equipment: Brushes, rollers, spray apparatus and similar application equipment are not required to be new, but they shall be capable of producing the required results specified hereinafter.

E. Thinners: Only those recommended for that purpose by the manufacturer of the material being installed.
PART 3 - EXECUTION

3.1 Installation:

A. Surface Preparation:

1. General: Do not begin painting on any surface until it has been inspected and is in condition to receive the paint as specified herein. Should any surface be found unsuitable to produce a proper paint finish, the Architect shall be notified in writing and no material shall be applied until the unsuitable surfaces have been made satisfactory. Absence of such notification shall be construed as acceptance of such surface to receive paint. Later claims of defects in surfaces prior to painting shall not relieve the Contractor from his responsibility for compliance with the requirements of the Specifications.

2. Steel and Iron: Remove grease, dirt, mud, rust and scale. Touch up any chipped or abraded places on items that have been shop coated. Where steel and iron have a heavy coating of scale, it shall be removed by de-scaling or wire brushing to produce a smooth surface for painting.

3. Masonry: Masonry surfaces to be painted shall be prepared by removing all dirt, dust, oil and grease stains, mortar droppings, and efflorescence.

4. Plaster Surfaces: Fill all holes and cracks with spackling compound. Before painting any plaster, the surfaces shall first be tested for dryness with a moisture testing device especially designed for this purpose. No paint or sealer shall be applied on plaster when the moisture content exceeds 12% as determined by the testing device. Test sufficient areas in each space as often as necessary to determine the proper moisture content for painting. When requested, testing shall be done in the presence of the Architect, or his representative. If the moisture content is between 8% and 12% prime, with alkali resistant primer. If 85 or less, prime with the primer specified under "Schedule of Painting". Remove the dry salts deposits from all plaster surfaces by brushing with a stiff brush before painting.

5. Wood Surfaces: Primed and finish-coated as specified in the painting schedule herein. Wood surfaces shall be cleaned of all dirt, oil, or foreign substances with mineral spirits, scraper, sandpaper and/or wire brush. Finished surface exposed to view shall be made smooth by sandpapering. Small, dry, seasoned knots shall be surface scraped and cleaned and shall be given a thin coat of knot sealer before application of the priming coat. Pitch on large, open, unseasoned knots and on all other beads or streaks of pitch shall be scraped off, or if still soft, shall be removed with mineral spirits or turpentine and the resinous area thinly coated with knot sealer. After priming, all holes and imperfections in finish surface shall be filled with putty or plastic wood filler colored to match the finish coat, allowed to dry and sandpapered smooth. Painting shall proceed only when the moisture content of the wood does not exceed 12% as measured by a moisture meter. All wood trim shall be backed primed.

6. Exposed pipes and conduit shall be cleaned using mechanical cleaning and/or solvents, mineral spirits or other paraffin-free solvents having a flash point no higher than 100 degrees F. and shall be painted in accordance with the Painting Systems Schedule.

7. Hardware, hardware accessories, lighting fixtures, switch and outlet plates, in place and not to be painted shall be removed prior to surface preparation and painting operations or protected. Following completion of painting of each space, removed items shall be reinstalled.
8. Existing Wallcovering to be Painted:

   a. Repair existing loose seams, corners, etc., using Suregrip Seam and Repair Adhesive or similar product. Thoroughly wipe down any repairs to leave no excess adhesive drips, etc.

B. Application and Instructions:

   1. The proportions of all ingredients in all paints and stains mixed on the site shall be in accordance with the recommendations of the paint manufacturer printed on the container applicable to the particular use for which the specific mixture is intended. No thinner or flattening oil will be used in the last coat. Screen out all lumps and impurities during mixing using clean containers, and protect against dirt or trash entering the mix. Stir until uniform consistency is procured.

   2. During the actual application and drying of the paint, and until normal occupancy of the building occurs, a minimum temperature of 65 degrees F. shall be maintained. This temperature shall be held as constant as possible to prevent condensation. Ventilation shall be provided at all times so that the humidity cannot rise above the dew point of the coldest wall.

   3. Do not apply exterior paint in damp rainy weather or until the surface has dried thoroughly from the effects of such weather.

   4. Surface to be stained or painted shall be clean, dry and smooth. Each coat of paint shall be smoothly applied, worked out evenly and allowed to dry before the subsequent coat is applied.

   5. Enamel or varnish undercoats on wood surfaces and on steel surfaces shall be sanded smooth prior to recoating. Undercoats on steel and iron shall be dusted prior to recoating.

   6. Finished work shall be uniform and of the specified color. It shall completely cover, be smooth and free from runs, sags, clogging or excessive flooding. Make edges of paint adjoining other materials or color, sharp and clean without overlapping. Where high gloss enamel is used, lightly sand undercoats to obtain a smooth finish coat.

   7. Each coat of paint shall be slightly different shade then preceding coat. Final coat shall not be applied until the previous coat has been approved by the Contracting Officer.

   8. Paste wood filler, applied on open grain wood, when "set" shall be wiped across the grain of the wood, then with the grain to secure a clean surface.

   9. Correction of improper or damaged work may be by "spot touching" except that in final coat corrections, a re-coating of the entire surface between corners or "breaks" will be required without additional charge.

   10. Access panels, registers, and grilles (except aluminum) shall be painted the same color as adjacent walls or ceilings. Where adjacent surfaces do not require painting, use color as directed by the Architect.
11. Where open cabinets or shelves occur, room finish on wall shall not be omitted. However, painting on walls will not be required behind permanently built-in cabinets with closed back.

12. Prime coated butts shall be painted the same color as door trim to which they are attached.

13. Exposed piping, conduit, duct work and hangers in finished spaces, shall be painted a color and texture to match walls or ceilings adjacent to them. Where adjacent surfaces are unpainted, use color as directed by the Architect.

14. The top and bottom edges of all wood and metal doors shall be finished with two coats of paint or varnish as used for finish coat. Apply after fitting and before faces are painted.

15. Cleaning: At completion of the work, clean all paint, coatings, oil and stain spots from all surfaces not required to be paint under this section. Remove all surplus materials and debris resulting from the work included herein.

16. Schedule indicates minimum number of coats. Additional coats shall be applied as required for full coverage.

C. Painting Systems Schedule:

1. Exterior Painting:
   a. Ferrous Metal:
      1) Primer – Multi Purpose Alkyd
         One coat (in addition to shop coat):
         GP Devguard 4160 Tank & Structural Primer
         BM IMC Alkyd Metal Primer M06
         D MIRROLAC All Purpose Metal & Galvanized Primer - DP13201
         PL Steeltech® Rust Inhibitive Metal Primer
      2) Finish - Rust Inhibitive Alkyd Gloss Industrial Enamel
         Two coats:
         GP Devguard 4308 Alkyd Industrial Enamel
         BM IMC Alkyd Urethane M22
         D BAR-OX Alkyd Gloss Enamel - DP581XX
         PL S4500 Techgard® Maintenance Gloss Enamel
   b. Galvanized Metal:
      1) Primer – Multi Purpose Alkyd Primer
         One coat:
         GP Devguard 4160 Tank and Structural Primer
         BM IMC Alkyd Metal Primer M06
         D MIRROLAC All Purpose Metal & Galvanized Primer - DP13201
         PL S4556 Steeltech® Rust Inhibitive Metal Primer
2) Finish - Gloss Acrylic Enamel:
   Two coats:
   GP  4216 Devflex Direct to Metal Gloss Acrylic Enamel
   BM  D.T.M. (Direct to Metal) Acrylic Gloss Enamel M28
   D
   PL  Z6611 Enducryl® Acrylic Gloss Enamel

2. Interior Painting: Interior Green Seal Standard GS-11
   Architectural Paints:
   Flats:  50 g/L
   Non-flats:  150 g/L
   Coatings and Primers  150 g/L

   a. Ferrous Metal:

   1) Primer – Waterborne Metal Primer
      One coat (in addition to shop coat):
      GP  4020 PF Devlex Direct to Metal Primer Flat Finish
      BM  Benjamin Moore® Super Spec HP® D.T.M. (Direct to Metal) Acrylic Semi-Gloss P29
      D  Mirrolac WB Waterborne DTM Flat Primer & Finish DP85XX
      PL  Z6650 Steeltech® Acrylic Prime or Finish

   2) Finish, Latex Semi-Gloss
      Two Coats:
      GP  1416 Glidden Ultra-Hide Latex Semi-Gloss
      BM  N333 Regal® Semi-Gloss Finish
      D  Wonder-Tones Semi-Gloss Interior Latex Enamel – Semi-Gloss Finish
      DR39XXN
      PL  Z2400 RedSeal® Interior Latex Semi-Gloss

   b. Galvanized Metal:

   1) Primer – Waterborne Metal Primer
      One coat (in addition to shop coat):
      GP  4020 PF Devlex Direct to Metal Primer Flat Finish
      BM  Benjamin Moore® Super Spec HP® D.T.M. (Direct to Metal) Acrylic Semi-Gloss P29
      D  Mirrolac WB Waterborne DTM Flat Primer & Finish DP85XX
      PL  Z6650 Steeltech® Acrylic Prime or Finish

   2) Latex Semi-Gloss
      Two Coats
      GP  1416 Ultra-Hide 150 Interior Latex Semi-Gloss
      BM  N333 Regal® Semi-Gloss Finish
      D  Wonder-Tones Semi-Gloss Interior Latex Enamel – Semi-Gloss Finish
      DR39XXN
      PL  Z2400 RedSeal® Interior Latex Semi-Gloss
c. Wood-Painted:

1) Primer, Acrylic bonding stain-killer Primer/Sealer
   One Coat:
   - GP 3210 Gripper Int/Ext Primer
   - BM Fresh Start® All-Purpose 100% Acrylic Primer 023
   - D Primz 220 Kilstain WB Interior/Exterior latex
     All Purpose Stain Killer/Primer/Sealer - DR5180X
   - PL Z6650 Steeltech® Acrylic Prime or Finish

2) Finish - Latex Semi Gloss:
   Two coats:
   - GP 1416 Ultra-Hide 150 Interior Latex Semi-Gloss
   - BM N333 Regal® Semi-Gloss Finish
   - D Wonder-Tones Semi-Gloss Interior Latex Enamel
     DR39XXN
   - PL Z2400 RedSeal® Interior Latex Semi-Gloss

d. Gypsum Board / Plaster

1) Primer, latex PVA
   One Coat:
   - GP 1030 PVA Latex Wall Primer Sealer
   - BM Moorcraft Super Craft® Interior Latex Primer 250
   - D Primz 220 Interior Latex PVA Wall Primer - DR53360
   - PL Z8190 Pro-Hide® Silver Interior Latex PVA Wall Primer

2) Primer (previously painted gypsum board/plaster), Acrylic bonding Stain Killer Primer/Sealer
   One coat:
   - GP 3210 Gripper Interior/Exterior Primer
   - BM 023 Fresh Start® All-Purpose 100% Acrylic Primer
   - D Primz 220 Kilstain WB Interior/Exterior Latex
     All Purpose Stain Killer/Primer/Sealer – DR5180X
   - PL Z6650 Steeltech® Acrylic Prim or Finish

3) Finish, Ceilings, Latex Flat
   Two coats:
   - GP 1210 Glidden Ultra-Hide 150 Interior Flat Latex
   - BM Moorcraft Super Hide® Latex Flat 282
   - D Wonder-Tones Interior Flat latex Wall Paint - Dr36xxn
   - PL RedSeal® Porcelain™ Interior Flat Acrylic Latex
     Wall Coating - Z3700/F3700

4) Finish, Walls, Acrylic Eggshell:
   Two coats:
   - GP 1410 Glidden Ultra-Hide 150 Low Sheen Eggshell
   - BM Moorcraft Super Hide® Latex Eggshell Enamel C286
   - D Wonder-Tones Flat Interior Latex Wall Paint - Dr36xxn
   - PL Z8290 Pro-Hide® Gold Interior Latex Eggshell
3.2 Field Quality Control:

A. Painting:

1. During progress of the work, do not allow the accumulation of empty containers or other excess items except in areas specifically set aside for that purpose.

2. Prevent accidental spilling of paint materials and, in event of such spill, immediately remove all spilled material and the waste or other equipment used to clean up the spill, and wash the surfaces to their original undamaged condition.

3. Upon completion of this portion of the work, visually inspect all surfaces and remove all paint and traces of paint from surfaces not scheduled to be painted.

END OF SECTION
SECTION 10165
PLASTIC LAMINATE TOILET COMPARTMENT HARDWARE

PART 1 - GENERAL

1.1 Quality Assurance:
   
   A. Qualification of Manufacturer: Manufacturer of the products of this section shall have been successfully engaged in the business of manufacturing and fabricating toilet partitions for a period of not less than five years immediately prior to furnishing the products of this section.

1.2 Submittals:
   
   A. General: Make submittals in accordance with Section 01300.
   
   B. Manufacturer's Data: Furnish manufacturer's detailed materials and fabrication specifications and installation recommendations; include catalog cuts of all hardware, anchors, and accessories.

1.3 Job Conditions:
   
   A. Sequencing: Prior to commencing installation of the products of this section, all finish flooring, wall finishes and plumbing fixtures shall be in place.

PART 2 - PRODUCTS

2.1 Materials:
   
   A. Toilet Compartment Hardware:
      
      1. Top hinge assembly (chrome plated steel)
      2. Bottom hinge assembly (chrome plated steel)
      3. Slide latch (chrome plated steel)
      4. Inswing bumper/keeper for inswing doors (chrome plated steel)
      5. Outswing door bumper for outswing doors (chrome plated steel)

PART 3 - EXECUTION

3.1 Installation:
   
   A. Replace all missing or damaged hinges, latches, and bumpers.

3.2 Field Quality Control:
   
   A. Adjustment: Upon completion of the installation, adjust all components for operation and alignment; adjust door hinges to hold door in 30 degree open position when compartment is not in use.
   
   B. Cleaning: Prior to final inspection, remove maskings and labels and clean all toilet partitions.

END OF SECTION
SECTION 10420
LETTERS AND SIGNAGE

PART 1 - GENERAL

1.1 Scope:

A. Furnish and install letters and signage and related items as shown on the drawings and related items as shown on the drawings and/or described hereinafter. This work does not include any signage described within other sections of these specifications.

1.2 Submittals:

A. General: Make submittals in accordance with Section E, General Conditions.

B. Manufacturer's Data: Material and fabrication specifications and installation recommendations for each product described herein.

C. Samples:

1. Letters: Full size for each type and size required in actual finish proposed.

2. Signage: Full size plaque showing color and letter style.

D. Color Card: Manufacturer's full range of colors and finishes available for each product described hereinafter.

PART 2 - PRODUCTS

2.1 Materials:

A. Interior Signage shall be furnished and installed by FASTSIGNS Atlanta (ph. 404.724.0700), an approved vendor for State of Georgia signage.

1. The Contractor shall include the net release sum of **Eleven Thousand Five Hundred Dollars ($11,500)** for the purchase (plus taxes), delivery, and installation of interior signage.

2. The contract sum shall be adjusted by Change Order, based upon the actual final cost of interior signage.

3. Interior signage will include:

   a. Restroom Signs: Approximately thirteen (13)
   
   b. Stair Identification Signs: Approximately seventeen (17)
   
   c. Elevator Identification Signs: Approximately eleven (11)
   
   d. Suite Identification Signs: Approximately twelve (12)
   
   e. Individual Office Identification Signs: Approximately sixty-one (61)
   
   f. Conference Room Identification Signs: Approximately twenty (20)
   
   g. Vending Room Identification Signs: Approximately one (1)
B. Exterior Signage shall be furnished and installed by FASTSIGNS Atlanta (ph. 404.727.0700), an approved vendor for State of Georgia signage.

1. The Contractor shall include the net release sum of **Thirty-Eight Thousand Dollars ($38,000)** for the purchase (plus taxes), delivery, and installation of exterior signage.

2. The contract sum shall be adjusted by Change Order, based upon the actual final cost of exterior signage.

3. Exterior signage will include:
   a. Custom-fabricated steel letters “Secretary of State” – stud-mounted, LED-lit (2-sets)
   b. Custom-fabricated steel letters “Professional Licensing Boards Division”, stud-mounted (2-sets)
   c. Custom-fabricated steel numbers “237” – stud-mounted, LED-lit (2-sets)
   d. Cast aluminum plaque, State of Georgia seal (2-each)
   e. Cast aluminum plaque “Brian P. Kemp, Secretary of State” (2-each)

PART 3 - EXECUTION

3.1 Installation:

   A. Locations: Verify with Architect exact locations prior to commencing installations; in the case of items to be built-in to construction or requiring back-up framing, verify locations early in progress of work in order to provide proper framing, blocking and like items at proper stage in work.

   B. Install items in accordance with manufacturer's instructions.

   1. Signage vendor shall coordinate exterior signage electrical rough-in during construction of exterior sign wall.

3.2 Field Quality Control:

   A. Cleaning: Just prior to final inspection, clean all items as recommended by their manufacturer.
SECTION 10800
TOILET ACCESSORIES

PART 1 - GENERAL

1.1 Quality Assurance:
   A. Manufacturer: Unless specifically noted otherwise all toilet accessories shall be the
   products of a single manufacturer.

1.2 Related Section:
   A. Section 09260, Gypsum Board Systems

1.3 Submittals:
   A. General: Make all submittals in accordance with Section 01300.
   B. Product Data: Manufacturer's detailed descriptive and specification data, and
   installation instructions for each item described hereinafter.

1.4 Product Handling:
   A. Delivery: Deliver products in original and unopened packaging, with brand names
   and manufacturer's labels intact and legible.
   B. Storage and Protection: Store and protect the products of this section as per their
   manufacturer's instructions.

1.5 Job Conditions:
   A. Sequencing: Prior to installation of the products of this section, all wall finishes and
   all plumbing fixtures shall be in place, as shall toilet compartments.

PART 2 - PRODUCTS

2.1 Toilet Accessories:
   A. Basis of Design: Products shall be either American Specialties, Inc. / Yonkers, NY,
   Bobrick Washroom Equipment / Jackson, TN, or Bradley Washroom Accessories / Menomonee
   Fall, WI. Model numbers used hereinafter unless specifically noted otherwise, are those of
   American Specialties, Inc.

   1. Product information is listed for reference purposes to establish material
   characteristics, quality, and finish. Alternate manufacturer's products shall meet or exceed the listed
   products.

   B. Schedule of Toilet Accessories:

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>CATALOG NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roll Paper Holder</td>
<td>0263-1</td>
</tr>
<tr>
<td>Robe Hook</td>
<td>7345</td>
</tr>
</tbody>
</table>
B. Fasteners: Anchors and fasteners shall be manufacturer's standard unless otherwise shown on the drawings.

PART 3 - EXECUTION

3.1 Installation:

A. General: Install accessories in the locations shown on the drawings, level, plumb and true to line, at the heights shown thereon and in accordance with their manufacturer's instructions contained within the product packaging.

   1. Replace all roll paper holders.
   2. Replace all broken or damaged robe hooks.

3.2 Field Quality Control:

A. Adjustment: After installation is complete check items for proper operation and make any necessary adjustments.

B. Cleaning: Just prior to final inspection, remove all masking and temporary label and clean all accessories as recommended by their manufacturer.

END OF SECTION
DIVISION 15000
MECHANICAL

MECHANICAL / PLUMBING SPECIFICATIONS ARE NOTED ON THE DRAWINGS
DIVISION 16000
ELECTRICAL

ELECTRICAL SPECIFICATIONS ARE NOTED ON THE DRAWINGS