

Specifications for:

Common Area Flooring Replacement Wilmington Hi-Rise OH5-17, AMP 4

958 Wilmington Avenue
Dayton, OH 45420



Prepared for:

Greater Dayton Premier Management

400 Wayne Avenue
Dayton, Ohio 45410
937.910.7500

Website posting at www.gdpm.org

Prepared by:



RDA GROUP ARCHITECTS

7662 PARAGON ROAD | DAYTON, OH 45459 | 937.610.3440

**RE-Bid Set
October 19, 2023**

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00 41 13 - BID FORM

To: GREATER DAYTON PREMIER MANAGEMENT
400 Wayne Avenue
Dayton, OH 45410

Project: **Common Area Flooring Replacement – Wilmington Hi-Rise OH5-17**

Bidder: _____

Date: _____

OFFER

Having examined the Place of The Work and all matters referred to in the Bid Documents and Contract Documents, GDPM General Terms and Conditions for Construction Services, HUD Documents, and related forms and affidavits, prepared by RDA Group Architects on behalf of Greater Dayton Premier Management for the above mentioned project, we the undersigned, hereby proposed to furnish all labor, specified materials, equipment and services required for Common Area Flooring Replacement at Wilmington Hi-Rise, all in accordance with and for the sum of:

ADDENDA:

Addendum No.	Date of Receipt
_____	_____
_____	_____
_____	_____

BID ITEM #1: COMMON AREA FLOORING REPLACEMENT AT WILMINGTON HI-RISE: ALL LABOR, MATERIALS, EQUIPMENT and PERMIT FEES for the sum of

Base Bid Amount	\$ _____
Contingency Allowance –	<u>\$10,000</u>
Permit Allowance –	<u>\$1,000</u>

Total Bid Amount including All Allowances

\$ _____	\$ _____
[FIGURES]	[WORDS]

Contractors Note the Following:

1. Project is intended for award to one contractor for the base bid amount with consideration of the alternates listed/selected by the GDPM. GDPM intends to award the project providing it is within the funding limits, available budget, and overall estimate for the project.
2. The selection of the lowest and best bidder is based on the lowest with any required alternates that are required to be removed. Lowest and best bidder can also include factoring in MBE/DBE participation and consideration of MBE prime contractors. Section 3 preference may also be considered.

ALTERNATES: NONE

UNIT PRICES: NONE

SECURITY

Security in the sum of: _____ (\$ _____) in the form of a _____ is submitted herewith in accordance with the specifications.

ACCEPTANCE

In submitting this bid, it is understood that the right is reserved to reject any and all bids. If written notice of the acceptance of this bid is mailed, telegraphed, or delivered to the undersigned within one hundred twenty (120) days after the opening thereof, the undersigned agrees to execute and deliver a contract in the prescribed form and furnish the required bonding within ten (10) days after the contract is presented for signature.

Greater Dayton Premier Management reserves the right to reject any and all bids or award only a portion of the project as it bests fits with the goals of GDPM.

PROJECT CHANGES

Contractor shall indicate the amount of overhead and profit to be added to changes to the project.

For ADDS to the work: **Overhead** _____% **Profit** _____%

For DEDUCTS to the work: **Overhead** _____% **Profit** _____%

GDPM reserves the right to negotiate Contractor Overhead and Profit Margins with the selected Bidder.

CONTRACT TIME

Work shall be completed within _____ calendar days from Notice to Proceed.
Maximum 60 calendar days.

BIDDER CERTIFICATIONS

The Bidder hereby acknowledges that the following representations in this bid are material and not mere recitals:

1. The undersigned, having carefully read and examined the "Notice to Bidders", "Instructions to Bidders", "General Conditions", "General Requirements", "Specifications", "Plans" and any addendum for: **Common Area Flooring Replacement at Wilmington Hi-Rise** - as prepared by RDA Group Architects, LLC., and having inspected the premises and all conditions affecting the work, the undersigned proposes to furnish all materials and perform all labor necessary for the performance and completion of the work indicated below, all in compliance with the documents named above, and further agrees that each separate item or trade or employment entered in this Proposal shall be considered as a separate bid for that kind of work. The undersigned further agrees that, if any or all of said bids are accepted, he will enter into a Contract according to the

form required by the Owner for the faithful performance of the labor and the furnishing of all materials included in such bid or bids so accepted.

2. In submitting this bid it is understood that the Greater Dayton Premier Management reserves the right to reject any and all bids. It is agreed that this bid may not be withdrawn for a period of one hundred twenty (120) days subsequent to the opening of bids without the consent of Greater Dayton Premier Management.
3. Attached hereto is an affidavit in proof that the undersigned has not entered into collusion with any person in respect to this bid or any other bid or the submitting of bids for the contract for which this bid is submitted. Also attached is a statement of Contractor's qualifications.
4. Bidder hereby agrees to comply with all City, State and Federal Statutes relating to Liability Insurance, Working Hour, Safety and Sanitary Regulations. Bidder further agrees that their bid amount includes all fees for permits, taxes, and insurance required or applicable to the work.
5. The Bidder will sign his bid on the line indicated below; if it will be a partnership the firm name will be signed, followed by the signature of the partner signing, his own name to be signed on the line beginning with the work "By"; if a corporation, name will be signed followed by the signature and the official title of the officer signing name
6. The Bidder has read and understands the Contract Documents and agrees to comply with all requirements of the Contract Documents, regardless of whether the Bidder has actual knowledge of the requirements and regardless of any statement or omission made by the Bidder which might indicate a contrary intention.
7. The Bidder represents that the bid is based upon the Standards specified in the Contract Documents.
8. The Bidder has visited the project site, become familiar with the local conditions and has correlated personal observations about the requirements of the Contract Documents. The Bidder has no outstanding questions regarding the interpretation or clarification of the Contract Documents.
9. The Bidder and each person signing on behalf of the Bidder certifies, and in the case of a joint or combined bid, each party thereto certifies as to such parties organization, under penalty of perjury, that to the best of the undersigned's knowledge and belief: a) the Base Bid, any Unit Prices and any Alternate Bid in the bid having been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition as to any matter relating to such Base Bid, Unit Prices or Alternate Bid, with any other; b) unless otherwise required by law, the Base Bid, any Unit Prices and any Alternate bid in the bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to the bid opening, directly or indirectly, to any other Bidder who would have any interest in the Base Bid, Unit Prices or Alternate Bid; c) no attempt has been made or will be made by the Bidder to induce any other individual, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.
10. The Bidder will enter into and execute the Contract with Greater Dayton Premier Management (GDPM). If a Contract is awarded on the basis of this bid, and if the Bidder does not execute a Contract for any reason, other than as authorized by law, the Bidder and the Bidder's Surety are liable to GDPM as indicated in the Instructions to Bidders and in the General Conditions of the Contract.
11. The Bidder certifies that upon the award of a Contract, the Contractor will make a good faith effort to ensure that all of the Contractor's employees, while working on the project site, will not purchase, transfer, use or possess illegal drugs or alcohol or abuse prescription drugs in any way.
12. GDPM reserves the right to reject any/all bids for any reason.
13. Bid Bond or Certified Check is included as part of Contractor's bid submittal:

_____ Yes _____ No Bidder Initials _____

14. Affidavit of Intent to Store Materials is included as part of Contractor's bid submittal:

_____ Yes _____ No Bidder Initials _____

15. MBE Participation: GDPM has established goals of twenty-five (25%) Minority Business Enterprise Participation. To achieve this goal, contractors are encouraged to engage in joint ventures with MBE's to include MBE's as subcontractors, and utilize other initiatives that enhance opportunities for MBE's. Should the contractor be unable to achieve this goal, supporting documentation and notarized affidavits, indicating MBE's date of notification, MBE's date of response, nature of response or no response. Provide conclusion as to why the bid submitted does not meet MBE requirements. The bid submittal includes a minimum of 25% MBE Participation:

_____ Yes _____ No Bidder Initials _____

BID FORM SIGNATURES

If the Bidder is a Corporation, partnership or sole proprietorship, an officer, partner or principal of the Bidder, as applicable, shall print or type the legal name of the Bidder on the line provided and sign the Bid Form. If the Bidder is a joint venture, an officer, partner or principal, as applicable, of each member of the joint venture shall print or type the legal name of the applicable member on the line provided and sign the Bid Form. All signatures must be original.

Bidder/Company Name: _____

Authorized Signature: _____

Print name: _____

Title: _____

Mailing Address: _____

Telephone Number: _____

Facsimile Number: _____

Where Incorporated: _____

Federal Tax ID#: _____

If the bid is a joint venture or partnership, add additional forms of execution for each member of the joint venture in the appropriate form or forms as above.

END OF DOCUMENT

SECTION 01 00 00 - GENERAL REQUIREMENTS

PART 1 GENERAL

1.1 DESCRIPTION OF THE PROJECT DOCUMENTS

- A. The work covered by these specifications consists of furnishing all labor, equipment and materials necessary in connection with a Flooring Replacement Project at Wilmington Hi-Rise for Greater Dayton Premier Management. Work includes items as shown, subject to the terms and conditions of the contract, specifications and the drawings as listed.

1.2 CONTRACT DESCRIPTION

- A. Project Identification: **Common Area Flooring Replacement
Wilmington Hi-Rise**
- B. Project Location: WILMINGTON HI-RISE OH5-17, AMP4
958 Wilmington Avenue
Dayton, OH 45420
- C. Owner: Greater Dayton Premier Management
400 Wayne Avenue
Dayton, OH 45410
- D. Architect: RDA Group Architects, LLC
7662 Paragon Road
Dayton, OH 45459
937.610.3440 phone
- E. Perform Work of Contract under a stipulated sum contract with Owner in accordance with Conditions of Contract.

1.3 SCOPE OF WORK

- A. Work of the Project includes the flooring replacement at the common areas of Wilmington Hi-Rise as outlined / located on the Drawings.
1. All specific scope items shall be coordinated and reviewed on the drawings and specifications as applicable.
 2. Removal of damaged VCT flooring and rubber base.
 3. Removal of gyp-crete floor topping complete to the top of the original subfloor.
 4. Installation of new plywood overlayment [in multiple layers as applicable to match original floor system thickness].
 5. Installation of new luan underlayment.
 6. Installation of new LVP flooring [glue down] and rubber base.
 7. Installation of new accessible thresholds at unit entrance and common area doors.
 8. Repair of existing gypsum board finishes at the corridors.
 9. Prep and paint gypsum board walls, soffits, and ceilings at the areas of work.
 10. Prep and paint existing hollow metal doors and frames and casing at the areas of work.
 11. Ancillary work required to accomplish the work scope as intended.
- B. Contractor shall provide all materials and labor for work as noted herein for a complete project.
1. **IMPORTANT:** Contractor shall field verify all existing conditions, and coordinate all applicable requirements as related to the scope of the work.
 2. Drawings indicate general diagrammatic areas/extent of work, but in no way indicate the intricate nature of the work required for the successful completion of the project.
 3. Conditions will vary between various areas of the building. All conditions shall be verified to ensure the scope is captured completely.

- C. Contractor shall provide any and all ancillary work related to the above work scope including repair of any contractor damaged finishes within the work area.
- D. Contractor shall be responsible for the appropriate coordination with GDPM.

1.4 CONTRACTOR'S USE OF PREMISES

- A. Provide and maintain a safe living environment for Residents of the building at all times during the course of work. Other portions of the building not impacted by proposed work will remain housed in the building.
- B. The dwelling units in the area of work will be temporarily vacated off-site during the course of the work. GDPM shall be responsible for the coordination and providing accommodations for the residents being temporarily relocated.
 - 1. Contractor shall provide a clearly defined project schedule to GDPM for the work of this contract.
 - 2. It is anticipated that the work will be executed on a floor by floor basis. All work shall be coordinated to efficiently move from floor to floor in a logical manner.
 - 3. Contractor shall be responsible for the appropriate notification of GDPM and Residents. Coordinate with GDPM as appropriate.
- C. Contractor shall provide all required temporary protection to minimize the spread of dust, dirt, and debris to other portions of the building.
- D. Contractor shall provide temporary protection of adjacent flooring / finishes from the work areas to the building entrance / door being utilized for the removal of existing materials and delivery of new materials.
- E. Use of the elevators is permitted. Contractor shall be responsible to provide protection of the elevator to prevent damages.
- F. It is the Contractor's responsibility to determine how the various disciplines work together and are scheduled to permit the work as outlined.
- G. Work Hours: 8 AM to 5 PM Monday thru Friday, unless work outside of these hours and days is requested and granted by Owner.
- H. Contractor shall provide a detailed construction schedule with specific dates, activities, etc. to GDPM to coordinate with residents.
 - 1. Coordinate with GDPM to minimize conflict, and to facilitate residents as necessary.
 - 2. Update schedules as appropriate for weather delays, progress, etc.
- I. Daily work wrap up: The Contractor shall plan the work and provide enough manpower to this contract to ensure that work progresses in an orderly manner.
- J. Project shall be staffed every day with a full crew capable of timely completion of work.
- K. Contractor shall have all in-house and sub-contractors staffing scheduled, materials, accessories, etc. on-site and ready for installation prior to beginning work for any particular day. Advise project team if there are issues with scheduling prior to starting of work.

1.5 CONTRACT PERIOD / TIME OF COMPLETION

- A. Contract Period
 - 1. Upon issuance of a contract from the Owner, Supply a work start date within [5] working days. A start date and completion date will be negotiated and a notice to proceed will be issued stating those dates.
 - 2. Consideration for material lead-times will be given for establishing the NTP dates as applicable.
 - 3. Notify the Architect, in writing, upon determination of any delay in material delivery.

- B. The time for completion of this contract work is SIXTY [60] calendar days from the date of the Notice to Proceed.
 - 1. The start date established on the notice to proceed will be communicated and agreed to between GDPM and the Contractor upon execution of the Owner-Contractor Agreement.
 - 2. Final schedule and phasing will be coordinated with the contractor.
 - 3. The Contractor shall anticipate that all units currently occupied and scheduled for relocation will be made available on a floor by floor basis.
- C. The Contractor shall notify GDPM in writing fourteen [14] days prior to the Contract Completion date if an extension of contract time is necessary with a request for the extension and the reasoning for such request.
 - 1. Failure to comply may result in enforcement of liquidated damages, cancellation of the contract, and possible disablement from future bidding opportunities.
- D. The Contractor shall notify GDPM in writing seven [7] days prior to substantial completion of the project.
- E. It is anticipated that the work of this contract will be accomplished Summer 2023. It will be up to the contractor's responsibility to expedite submittals process and order materials to accommodate the construction schedule.
- F. Coordinate construction schedule/activities with holidays, etc. so as to not inconvenience residents unnecessarily over holiday weekends, etc.
- G. Failure to complete work in the specified contract period will be cause for enforcement of liquidated damages per GDPM requirements.
- H. Coordinate schedule / activities so as not to inconvenience the Owner unnecessarily.

1.6 PROJECT ALLOWANCES

- A. Building Systems Allowance: include **\$10,000 [ten hundred thousand dollars]** in the base bid amount of the project for use as a project contingency allowance.
- B. Building Permit Allowance: include **\$1,000 [one thousand dollars]** in the base bid amount of the project for use in obtaining required building permits. All trade permits shall be included by the trade contractor. Unused funds shall be credited back to the Owner.
- C. Contingency funds shall only be used at the approval of RDA and Owner.
- D. Actual expenditures shall be tracked over the duration of the project with any unused funds deducted from the contract at the end of the project.
- E. All expenditures shall be identified and documented as they occur, not afterward. Work commenced without the approval of the Owner shall be at the Contractor's risk.

1.7 INSTRUCTIONS/RESPONSIBILITIES OF THE CONTRACTOR

- A. Protect all finishes and equipment scheduled to remain.
- B. Contractor shall commence and complete work as noted in the contract.
- C. Contractor shall furnish labor, materials, equipment, and management required to complete the project.
- D. Contractor shall furnish all required logistics required to accomplish the work – including lifts, scaffolding, ladders, trash chutes, safety equipment, etc.
 - 1. All Contractor staging areas and layout areas, etc. shall be coordinated and approved by the Owner prior to the start of the project.
 - 2. Provide protection of all existing pavement, turf, etc. from lifts, lulls, etc. which may be utilized on the project.

- E. Contractor shall visit the site to become thoroughly familiar with all working conditions, check and verify all dimensions, and site conditions. Any dimensions given or referred to in the specification or drawing is to be used purely as approximate and not as a basis for exact amounts for bidding. Contractor shall promptly advise the Architect of any discrepancies, errors with the specifications and drawings before bidding the work.
- F. Contractor to provide a valid Certificate of Insurance, follow all Workman's Compensation requirements and regulations, and conduct all work according to OSHA recognized safe work practices.
- G. All bonds, payment schedule, insurance shall be as noted in the contract documents.
- H. The plans and specifications are intended to depict the general scope, layout and quality of workmanship required, they are not intended to show or describe in detail every item necessary for the proper installation of the work.
- I. Special care shall be taken not to allow dust and debris to fall onto any equipment, material, personnel, or any room below the deck.
- J. The contractor shall provide Safety Data Sheets (SDS) on all products used.
 - 1. Submit directly to Owner. RDA does not review nor approve SDS.
- K. The term 'Architect' as referenced in these contract documents is RDA Group Architects.
- L. The term 'Owner' as referenced in this specification is Piqua City Schools.

1.8 WORK BY THE OWNER

- A. Not Applicable
- B. Contractor shall coordinate all aspects of Work by Owner as they interface with Work.

1.9 APPLICABLE REFERENCES, CODES, AND PERMITS

- A. References will be found in each section that applies to that section. In addition, Contractor shall comply with the Ohio Building Code requirements as they relate to the work.
- B. Contractor shall procure at his own expense all necessary permits from municipal or other agencies and give all notices required. Fines levied due to non-compliance shall be paid by the contractor.

1.10 WAGES

- A. Refer to Section 01 29 00.

1.11 TAXES

- A. Refer to Section 01 29 00.

1.12 SMOKING

- A. Smoking is not permitted on HUD property-- inside or outside of any facility.
- B. Contractor or crewmembers found to be smoking on the jobsite will be subject to a \$500 fine per occurrence. Any habitual offenders will be dismissed from the project site.

1.13 CONTRACTOR / GENERAL REQUIREMENTS

- A. Visit the project sites to verify general and pertinent conditions and take measurements necessary for bidding purposes. Arrangements to visit the site may be made by contacting Kevin Arnold or Glen Moss at GDPM.
- B. Pay for all building permits, trade permits, ROW permits, and any other required permits and inspections necessary to complete all work related to these specifications. Comply with Federal,

State, and Local Codes. All work shall comply with HUD General Conditions of the Contract for Construction [HUD Form 5370]

- C. Taxes: Contractor shall pay all applicable taxes, including applicable sales and use taxes, and other taxes as required by governing law.
 - 1. GDPM is a tax-exempt entity.
 - 2. Tax Exempt forms shall be provided upon request.
- D. Contractor shall provide dumpsters or trash containers needed and shall not use GDPM dumpsters or trash containers at any time for removal of materials, trash, or debris related to the Contractor's work. Debris shall be removed from the site regularly and be placed within appropriate trash receptacles. All work areas shall be kept neat at all times. Trash shall not be permitted to be left around the site. All considerations must be taken for resident safety. No trash or debris shall be left on the ground.
 - 1. Run magnet around work areas daily to pickup stray nails, etc. when appropriate.
- E. Contractor is responsible for furnishing workers with potable drinking water and any/all sanitary requirements for the workers during the project. Use of GDPM facilities and property is prohibited.
- F. Contractor shall provide portable generator or required equipment as needed for the completion of the work. Contractor shall not use GDPM and/or resident electricity.
- G. A Contractor, working under a contractual agreement with **GDPM, MUST BE IN COMPLIANCE WITH OSHA STANDARDS 1926 – REGULATIONS FOR CONSTRUCTION**. Any and all sub-contractors, doing work on this project, **MUST ALSO BE IN COMPLIANCE WITH OSHA STANDARDS**. Non-compliance shall be a basis for making a bid non-responsive. And, if a Contractor or sub-contractor is found to be in **VIOLATION (NON-COMPLIANCE) AT ANY TIME**, this could be a basis for termination of the purchase order/contract. Comply with all Safe Work Practices.
- H. Failure to show or mention petty details shall not be warranted for the omission of anything necessary for the proper completion of the work.
- I. Contractor shall not take advantage of any clerical errors, omissions, contradictions, or conflicts that may develop in plans, specifications, or details. Such errors, ambiguities and discrepancies shall be reported to the Architect immediately for clarification, revision, or correction prior to the submission of bids. If no notification is given, it shall be assumed that all specifications and conditions will be met.
- J. Contract Period
 - 1. If an extension of time is necessary, a request in writing must be submitted to the Owner at least [14] days prior to the contract completion date.
 - 2. Notify the Architect, in writing, upon determination of any delay in material delivery.
- K. Security: Contractor's Liability for Vandalism
 - 1. Contractor shall be responsible at the Contractor's cost and expense, for the securing and protection of the project which is under the control of the Contractor, and for the repair and replacement of the work until that portion of the work is accepted as completed by the Owner. The Contractor shall take the measures necessary to provide such security.
- L. Qualifying Contractors and Sub-Contractors: The Owner may require the contractor/sub-contractor to provide references of similar projects, past performance, financial disclosures, etc. in the interest of selection of the lowest and best bidder for the project.
 - 1. The Contractor is responsible for all work performed by Sub-Contractors.
 - 2. The Owner has the final authority to request a particular sub-contract not be engaged in the project. If this occurs, The Owner and Contractor shall determine if there is an impact to the Contract amount, and negotiate, if necessary, to an adjustment in the Contract amount.

- a. No change to the Contract amount will be permitted if there is a change to the sub-contractor due to them utilizing alternate manufacturers or products that were not approved substitution requests.

1.14 CONTRACTOR QUALIFICATIONS

- A. The Contractor and/or Sub-contractors must establish their qualifications with GDPM for their ability to complete this type of work. Qualifications may be established by:
 1. Provide references of similar projects, past performance, financial disclosures, etc. in the interest of selection of the lowest and best bidder for the project.
 2. Providing a letter of approval for the installation of the products from the manufacturer.
 - a. Contractor must be properly trained and approved by the manufacturer for the installation of the products.
 3. Providing a recommendation from the supplier of the products.
 4. Demonstrating to GDPM the capability to do the work. The Contractor will have a minimum of five years documented experience in similar work.
- B. The Contractor will be responsible for all work performed by the Sub-contractors.

1.15 RESPONSIBILITIES OF THE CONTRACTOR

- A. Protect all finishes and equipment scheduled to remain.
- B. Contractor shall commence and complete work as noted in the contract.
- C. Contractor shall furnish labor, materials, equipment, and management required to complete the project.
- D. Contractor shall furnish all required logistics required to accomplish the work – including lifts, scaffolding, ladders, trash chutes, safety equipment, etc.
 1. All Contractor staging areas and layout areas, etc. shall be coordinated and approved by the Owner prior to the start of the project.
- E. Contractor shall visit the site to become thoroughly familiar with all working conditions, check and verify all dimensions, and site conditions. Any dimensions given or referred to in the specification or drawing is to be used purely as approximate and not as a basis for exact amounts for bidding. Contractor shall promptly advise the Architect of any discrepancies, errors with the specifications and drawings before bidding the work.
- F. Contractor to provide a valid Certificate of Insurance, follow all Workman's Compensation requirements and regulations, and conduct all work according to OSHA recognized safe work practices.
- G. All bonds, payment schedule, insurance shall be as noted in the contract documents.
- H. The plans and specifications are intended to depict the general scope, layout and quality of workmanship required, they are not intended to show or describe in detail every item necessary for the proper installation of the work, nor are the documents an instruction manual of how to accomplish the work.
- I. The contractor shall provide Safety Data Sheets [SDS] on all products used.
 1. Submit directly to Owner. RDA does not review nor approve SDS.

1.16 SPECIFICATION CONVENTIONS

- A. These specifications are written in imperative mood and streamlined form. This imperative language is directed to the Contractor, unless specifically noted otherwise. The words "shall be" are included by inference where a colon (:) is used within sentences or phrases.

1.17 APPLICATIONS FOR PAYMENT

- A. Refer to Section 01 29 00.

1.18 CHANGE PROCEDURES

- A. The Architect or Owner may issue a Proposal Request including a detailed description of proposed change with supplementary or revised Drawings and specifications, a change in Contract Time for executing the change. Contractor will prepare and submit estimate within 7 days.
- B. On Owner's approval of a proposal from Contractor, Owner will issue a Change Order for all changes to Contract Sum and for all changes to the Contract Time.
- C. Stipulated Sum/Price Change Order: Based on Proposal Request and Contractor's fixed price quotation.
- D. Unit Price Change Order: For contract unit prices and quantities, the Change Order must be executed prior to beginning any work. The Order will be based on fixed unit price basis provided in the Bid Form.
- E. Construction Change Order: Architect may issue directive, on AIA / HUD Forms signed by Owner, instructing Contractor to proceed with changes in the Work. Document will describe changes in the Work, and designate method of determining any change in Contract Sum/Price or Contract Time. Promptly execute change.
- F. Change Order Forms: AIA / HUD Approved Forms with all required backup documentation.
- G. Correlation Of Contractor Submittals:
 - 1. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as separate line item and adjust Contract Sum/Price.
 - 2. Promptly revise progress schedules to reflect change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
 - 3. Promptly enter changes in Project Record Documents.
- H. The Architect will advise of minor changes in the Work not involving adjustment to Contract Sum/Price or Contract Time by issuing supplemental instructions on Architect's approved forms.
- I. Important: All change orders must be fully executed prior to beginning any work. Failure to comply will result in contractor request being denied and completed at no cost to the Owner.

1.19 UNIT PRICES

- A. Owner will take measurements and compute quantities accordingly. Provide and assist in taking of measurements.
- B. Unit Price Schedule:
 - 1. None
- C. Unit Price includes: Full compensation for required labor, products, tools, equipment, plant and facilities, transportation, services, and incidentals; erection, application or installation of item of the Work; overhead and profit.
- D. Final payment for Work governed by unit prices will be made on basis of actual measurements and quantities accepted by Architect multiplied by unit price for Work incorporated in or made necessary by the Work.

1.20 ALTERNATES

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option.
- B. Coordinate related Work and modify surrounding Work as required.

- C. Schedule of Alternates:
 - 1. None

1.21 COORDINATION

- A. Coordinate scheduling, submittals, and Work of various sections of specifications to ensure efficient and orderly sequence of installation of interdependent construction elements.
- B. Verify utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, operating equipment.
- C. Coordinate space requirements, supports, and installation of mechanical and electrical Work indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D. In finished areas, conceal pipes, ducts, and wiring within construction. Coordinate locations of fixtures and outlets with finish elements.
- E. Coordinate completion and clean-up of Work of separate sections in preparation for Substantial Completion.
- F. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

1.22 QUALITY CONTROL

- A. Monitor quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturer's instructions.
- C. When manufacturers' instructions conflict with Contract Documents, request clarification from Architect/Owner before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform Work by persons qualified to produce required and specified quality.
- F. Verify field measurements are as indicated on Shop Drawings or as instructed by manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

1.23 TOLERANCES

- A. Monitor fabrication and installation tolerance control of installed Products over suppliers, manufacturers, Products, site conditions, and workmanship, to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply fully with manufacturer's tolerances.

1.24 REFERENCES

- A. Conform to reference standards by date of issue current as of date of Contract Documents.
- B. When specified reference standard conflicts with Contract Documents, request clarification from Architect before proceeding.

1.25 LABELING

- A. Attach label from agency approved by authority having jurisdiction for products, assemblies, and systems required to be labeled by applicable code.
- B. Label Information: Include manufacturer's or fabricator's identification, approved agency identification, and the following information, as applicable, on each label.
 - 1. Model number.
 - 2. Serial number.
 - 3. Performance characteristics.

1.26 PRECONSTRUCTION MEETING

- A. Owner/RDA will schedule preconstruction meeting after Notice of Award for affected parties.
- B. Owner, RDA, Contractor Project Manager, and Foreman shall be in attendance.
- C. Agenda:
 - 1. Execution of Owner-Contractor Agreement.
 - 2. Submission of executed bonds and insurance certificates.
 - 3. Distribution of Contract Documents.
 - 4. Submission of list of Subcontractors, list of products, schedule of values, and progress schedule.
 - 5. Designation of personnel representing parties in Contract, and Architect.
 - 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 - 7. Scheduling.
 - 8. Use of premises by Owner and Contractor.
 - 9. GDPM requirements for procedures and inspections
 - 10. Construction facilities and controls provided by Owner.
 - 11. Security and housekeeping procedures.
 - 12. Application for payment procedures.
 - 13. Procedures for maintaining record documents.
 - 14. Requirements for start-up of equipment.
 - 15. Inspection and acceptance of equipment put into service during construction period.
- D. Architect will record minutes and distribute copies via email within two days after meeting to participants and those affected by decisions made.

1.27 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work as applicable to the work at weekly intervals.
- B. Architect will make arrangements for meetings, prepare agenda with copies for participants, and preside at meetings.
- C. Attendance Required: Job superintendent, major subcontractors and suppliers, Architect, Owner, as appropriate to agenda topics for each meeting.
- D. Agenda:
 - 1. Review minutes of previous meetings.
 - 2. Review of Work progress.
 - 3. Field observations, problems, and decisions.
 - 4. Identification of problems impeding planned progress.
 - 5. Review of submittals schedule and status of submittals.
 - 6. Review of off-site fabrication and delivery schedules.
 - 7. Maintenance of progress schedule.
 - 8. Corrective measures to regain projected schedules.

9. Planned progress during succeeding work period.
10. Coordination of projected progress.
11. Maintenance of quality and work standards.
12. Effect of proposed changes on progress schedule and coordination.
13. Other business relating to Work.

- E. Architect shall record minutes and distribute copies via email within two days after meeting to participants and those affected by decisions made.

1.28 PRE-INSTALLATION MEETINGS

- A. Contractor shall determine any and all necessary pre-installation meetings and shall schedule the same.
- B. When required in individual Specification Sections, convene preinstallation meetings at Project Site one week before starting Work of specific Section.
- C. Require attendance of parties directly affecting, or affected by, Work of specific Section.
- D. Prepare agenda and preside over meeting:
- E. Review conditions of installation, preparation, and installation procedures.
- F. Review coordination with related Work.
- G. Record minutes and distribute to participants after meeting, and those affected by decisions made.

1.29 CONTRACT ADMINISTRATION

- A. RDA is providing contract administration services for this project to the Owner. However, it shall be the responsibility of the Contractor and Owner to coordinate the proposed work, schedules, installations, permits, inspections, etc. as RDA is not on-site every day.
- B. It is the Contractor's responsibility to contact the RDA for clarification should there be questions regarding the interpretation or intent of the documents, field discovery, etc. that would impact or affect the work as proposed. RDA shall not be liable for deviations, field changes, and Owner changes during construction.
- C. It is the Contractor's responsibility to field confirm all existing conditions, proposed installations and how they interface to ensure the systems can be installed per the intent of the documents and to meet applicable building and zoning codes, local requirements, Owner requirements, provide a watertight detail, meet aesthetic requirements, etc.
- D. It is the Contractor's responsibility to meet all applicable building and zoning codes requirements whether specifically noted herein or not. Building codes represent the minimum acceptable standard.
- E. It is the Contractor's responsibility to install all products, materials, installations, and the like in accordance with applicable industry standards, applicable manufacturer's details and instructions, in accordance with best practices, and building code provisions. The manufacturer details / requirements are the minimum acceptable standard, RDA drawings may require additional work.

1.30 CUTTING AND PATCHING

- A. Employ skilled and experienced installer to perform cutting and patching new Work; restore Work with new Products.
- B. Submit written request in advance of cutting or altering elements affecting:
 1. Structural integrity of element.
 2. Integrity of weather-exposed or moisture-resistant elements.
 3. Efficiency, maintenance, or safety of element.

4. Visual qualities of sight exposed elements.
 5. Work of Owner or separate contractor.
- C. Execute cutting, fitting, and patching [including excavation and fill,] to complete Work, and to:
 1. Fit several parts together, to integrate with other Work.
 2. Uncover Work to install or correct ill-timed Work.
 3. Remove and replace defective and non-conforming Work.
 4. Remove samples of installed Work for testing.
 5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.
 - D. Execute work by methods to avoid damage to other Work, and to provide proper surfaces to receive patching and finishing.
 - E. Cut masonry and concrete materials using masonry saw or core drill. Restore Work with new Products in accordance with requirements of Contract Documents.
 - F. Fit Work tight to adjacent elements. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
 - G. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
 - H. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
 - I. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated materials, to full thickness of penetrated element. Follow applicable UL assemblies.
 - J. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for assembly, refinish entire unit. For painted surfaces, paint entire wall from corner to corner, floor to ceiling.
 - K. Identify hazardous substances or conditions exposed during the Work to Architect for decision or remedy.

1.31 CONSTRUCTION PROGRESS SCHEDULES

- A. Utilize Microsoft Project Schedule or similar spreadsheet with separate line for each major section of Work or operation, identifying first work day of each week.**
- B. Illustrate order and interdependence of activities and sequence of work; how start of given activity depends on completion of preceding activities, and how completion of activity may restrain start of subsequent activities. Illustrate complete sequence of construction by activity, identifying work of separate buildings/units.
- C. Submit initial progress schedule in duplicate within three [3] days prior to the Preconstruction meeting for Architect/Owner review. Schedule will be reviewed and approved at the Preconstruction Meeting by all project team members.
- D. Submit revised schedules with each Application for Payment, identifying changes since previous version. Indicate estimated percentage of completion for each item of Work at each submission.
- E. Participate in joint review and evaluation of project schedule with Architect/Owner at each submittal.
- F. Evaluate project status to determine work behind schedule and work ahead of schedule. Indicate changes required to maintain Date of Substantial Completion.
- G. After review, revise project schedule incorporating results of review, and resubmit electronically to all parties within 3 days.

1.32 SUBMITTAL PROCEDURES

- A. Refer to Section 01 33 00.

1.33 MOCK-UPS

- A. Accomplish mockups as directed by the Owner / RDA.
- B. Accepted mock-ups are representative of quality required for the Work.
- C. Where mock-up has been accepted by Owner / RDA and is specified in product specification sections to be removed; remove mock-up and clear area when directed to do so.

1.34 TEMPORARY UTILITIES

- A. Refer to GDPM's Terms and Conditions
- B. Utilize existing utilities at the building as required to facilitate work. Maintain existing utilities operational throughout the duration of the project. If systems need to be out of service, schedule this work for off-hours, coordinate with Owner. DO NOT use Resident utilities.
- C. Provide temporary lighting for construction operations as required by conditions and where existing lighting has been removed to facilitate work.
- D. Provide temporary emergency egress and exit signage as required by conditions and where existing has been temporarily removed to facilitate work.
- E. Coordinate with fire sprinkler system and fire alarm system / monitoring company to maintain systems operational. This includes temporary protection and coordination of monitoring company to put system in test mode as applicable to the work.
 - 1. Provide and maintain a proper fire watch within the building at any time when systems are in test mode.

1.35 TEMPORARY HEATING / COOLING / VENTILATION

- A. Shut down HVAC systems during dusty activities. Provide and maintain filtration media at all HVAC systems.
- B. Ventilate enclosed areas to achieve curing of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- C. Provide temporary fan units as required to maintain clean air for construction operations.

1.36 TEMPORARY SANITARY FACILITIES

- A. Provide temporary sanitary facilities for use during construction. Maintain daily in clean and sanitary condition.
 - 1. Contractor may not use resident toilet facilities for temporary facilities.
- B. Provide potable drinking water for workers.

1.37 TEMPORARY BARRICADES

- A. Erect temporary barricades as applicable to the work to maintain security, dust control, etc.
- B. Temporary barricades during summer break when Contractor has full access to the construction area: polyethylene zip walls, etc. as required to maintain dust control and/or limit access.
- C. Provide all applicable signage to limit non-construction personnel from entering the construction area.

1.38 STAGING AREA / MATERIAL STORAGE

- A. Contractor shall assume no storage / staging space exists at the building. Any on-site storage must be accomplished by the Contractor.

- B. Contractor shall provide secured, portable storage containers as necessary for the proper execution of the work for the duration of the project. Coordinate location of storage containers with Owner. Protect / restore site as applicable to the conditions to original conditions.
- C. Exterior project staging area if provided shall be enclosed with a minimum of a 6' high chain link fence to the satisfaction of the Owner.

1.39 FIELD OFFICES AND SHEDS

- A. Provide securable on-site space for storage as required by the Contractor. Contractor shall coordinate with GDPM for approved location of such storage space.
- B. Provide field office for construction operations as deemed necessary by Contractor. Contractor shall pay for field offices and related expenses.

1.40 VEHICULAR ACCESS

- A. Utilize existing street parking / driveways / parking areas for construction activities. Contractor shall not block or prohibit vehicular access to adjacent buildings / parking areas. Do not allow driving/parking in turf areas.
- B. Provide unimpeded access for emergency vehicles. Maintain 20 feet wide driveways with turning space between and around combustible materials.
- C. Provide and maintain access to fire hydrants and control valves free of obstructions.

1.41 PARKING

- A. Use of designated existing on-site driveways / street parking used for construction traffic is permitted. Tracked vehicles not allowed on paved areas. Do not block resident vehicles or those of adjacent buildings with a shared driveway.
- B. Use of designated areas of existing parking facilities used by construction personnel is permitted.
- C. Do not allow heavy vehicles or construction equipment in parking areas.
- D. Maintenance:
 - 1. Maintain traffic and parking areas in sound condition free of excavated material, construction equipment, products, mud, snow, and ice.
 - 2. Maintain existing and permanent paved areas used for construction; promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original, or specified, condition.
- E. Removal, Repair:
 - 1. Repair existing and permanent facilities damaged by use, to original or specified condition.

1.42 PROGRESS CLEANING AND WASTE REMOVAL

- A. Collect and maintain areas free of waste materials, debris, and rubbish. Maintain site in clean and orderly condition to the satisfaction of the Owner. Clean up shall occur on a daily basis.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing spaces.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Failure to provide routine and daily cleanup may result in a back charge from the Owner to accomplish this work.
- E. Provide dumpsters or trash containers needed for the proper removal of project materials, trash, or debris related to the Work. Keep all work areas and project sites neat and free of trash and clutter at all times. Take all considerations for safety.

1.43 FIRE PREVENTION FACILITIES

- A. Establish fire watch for cutting and welding and other hazardous operations capable of starting fires. Maintain fire watch before, during, and after hazardous operations until threat of fire does not exist.
- B. Portable Fire Extinguishers: NFPA 10; 10 pound capacity, 4A-60B: C UL rating.
 - 1. Provide one fire extinguisher at each project site during work operations.
 - 2. Supplement as necessary per the local fire department requirements for construction operations.

1.44 PROTECTION OF INSTALLED WORK

- A. Protect installed Work and provide special protection where specified in individual specification sections.
- B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- C. Protect finished pavement, concrete, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- D. Prohibit traffic or storage upon waterproofed or roofed surfaces, finished surfaces, etc as is applicable to the work. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer and provide all required protection as determined necessary. Any damage caused shall be repaired to like new condition.
- E. Prohibit traffic from landscaped areas.

1.45 SECURITY

- A. Security Program:
 - 1. Protect Work and existing premises from theft, vandalism, and unauthorized entry.
 - 2. Maintain program throughout construction period until Owner occupancy
- B. Entry Control:
 - 1. Restrict entrance of persons into Project site.
 - 2. Allow entrance only to authorized persons with proper identification.
 - 3. Maintain log of workers and visitors, make available to Owner on request.

1.46 DUST CONTROL

- A. Execute work by methods to minimize raising dust from Construction operations.
- B. Provide positive means to prevent air-borne dust from dispensing into atmosphere and to other areas of the project as applicable.
- C. Provide temporary visqueen dust control measures to minimize the spread of dust and debris. Provide drop cloths, protective coverings as necessary.
- D. Provide protection of existing HVAC / distribution systems.

1.47 DELIVERY, HANDLING, STORAGE, AND PROTECTION

- A. Deliver, handle, store, and protect Products in accordance with manufacturer's instructions.
- B. Contractor shall be responsible for storage and safekeeping of all materials, including company's personal property. All damaged materials shall be removed from the site.
- C. Coordinate material delivery to avoid Owner involvement.

1.48 FINAL CLEANING

- A. Execute final cleaning on an area by area basis at completion of work in each unit prior to final project assessment / punch list inspection.
 - 1. Clean interior and exterior surfaces exposed to view.
 - 2. Remove manufacturer or temporary labels, stains, and foreign substances from surfaces.
 - 3. Polish transparent and glossy surfaces.
 - 4. Vacuum carpeted and soft surfaces.
 - 5. Clean interiors of all cabinetry.
 - 6. Clean all fixtures and finishes.
 - 7. Replace filters of operating equipment.
 - 8. Clean equipment and fixtures to sanitary condition with cleaning materials appropriate to surface and material being cleaned.
 - 9. Clean site; sweep paved areas, rake clean landscaped surfaces.
 - 10. Remove waste and surplus materials, rubbish, and construction facilities from site.
- B. Restore all work staging and lay-out areas to pre-construction conditions, including but not limited to, removal of debris, temporary facilities, grading and grass seeding and cleaning or repair of impacted structures.

1.49 STARTING OF SYSTEMS

- A. Coordinate schedule for start-up of various equipment and systems.
- B. Notify RDA and GDPM seven [7] days prior to start-up of each item.
- C. Verify each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions which may cause damage.
- D. Verify tests, meter readings, and specified electrical characteristics agree with those required by equipment or system manufacturer.
- E. Verify wiring and support components for equipment are complete and tested.
- F. Execute start-up under supervision of applicable Contractor's personnel in accordance with manufacturer's instructions.

1.50 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of Products to Owner's personnel two weeks prior to date of Substantial Completion.
- B. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
- C. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at scheduled times, at equipment location.
- D. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owner's personnel in detail to explain all aspects of operation and maintenance.
 - 1. Prepare and insert additional data into the operations and maintenance manuals when the need for additional data becomes apparent during instruction.

1.51 TESTING, ADJUSTING, AND BALANCING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

1.52 PROTECTING INSTALLED CONSTRUCTION

- A. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.

- B. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- C. Prohibit traffic or storage upon waterproofed or roofed surfaces. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- D. Prohibit traffic from landscaped areas.

1.53 POLLUTION AND ENVIRONMENTAL CONTROL

- A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.
- B. Provide dust control, erosion and sediment control, etc. to allow for proper execution of the Work.
- C. Provide protective coverings, etc. as necessary to protect work.

1.54 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove existing utilities, connections, finishes, etc. as applicable to the work. Remove back to the nearest termination, junction box, etc. as applicable to the work. Coordinate with requirements on the drawings.
- B. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion review.
- C. Clean and repair damage caused by installation or use of temporary work.
- D. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

1.55 CLOSE OUT PROCEDURES

- A. Refer to Section 01 77 00

1.56 PROJECT RECORD DOCUMENTS

- A. Refer to Section 01 77 00

1.57 OPERATION AND MAINTENANCE DATA

- A. Refer to Section 01 77 00.

1.58 WARRANTIES

- A. Refer to Section 01 77 00.

PART 2 PRODUCTS

2.1 GENERAL REQUIREMENTS

- A. Contractor shall follow all applicable requirements of the Owner's Terms and Conditions. If there should be a conflict between the Owner Requirements and those herein, the higher standard shall apply.**
- B. Required Inspections by GDPM
 1. Contact GDPM Project Manager to:
 - a. Inform GDPM when the job is actually going to start to allow resident notification.
 - b. Mockup inspections.
 - c. Inspection at random or when problems / field conditions arise.
 - d. Final Inspection.
 - e. Punchlist requirements.
 - f. Acceptance of the project by GDPM.

2.2 MANUFACTURED PRODUCTS

- A. Where a particular system, product, or material is specified by name it shall be considered a standard and most satisfactory for its particular purpose. Any other product or material considered equal or better in all respects must be approved by the Architect prior to bidding.
- B. All products used on this project shall be new, unless otherwise noted on the drawings or as specified herein.

2.3 PRODUCTS

- A. Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work, but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components specifically identified for reuse.
- B. Do not use materials and equipment removed from existing premises, except as specifically identified or allowed by the Contract Documents.
- C. Provide interchangeable components of same manufacturer for components being replaced.
- D. Furnish products of qualified manufacturers suitable for intended use. Furnish products of each type by single manufacturer unless specified otherwise.
- E. **Products shall be ordered in the first 30 days of the contract. Provide documentation of orders upon request.**
- F. **It shall be solely the Contractor's responsibility to order products to allow timely delivery for installation. The failure to order materials early in the project shall not be a reason for a contract time extension or additional costs related to expedited shipping and/or delivery. Nor shall this be a reason for a product substitution.**

2.4 LABELING

- A. Attach label from agency approved by Authority having Jurisdiction for products, assemblies, and systems required to be labeled by Applicable Code.
- B. Label information: include manufacturer's or fabricator's identification, approved agency information, and the following information, as applicable, on each label.
 - 1. Model number
 - 2. Serial number
 - 3. Performance characteristics

2.5 DELIVERY, HANDLING, STORAGE, AND PROTECTION

- A. Deliver, handle, store, and protect Products in accordance with manufacturer's instructions.
- B. Contractor shall be responsible for storage and safekeeping of all materials, including company's personal property. All damaged materials shall be removed from the site.
- C. Coordinate material delivery to avoid Owner involvement.
- D. Locations of ground level storage and waste dumpster must be approved by the Owner.
- E. All materials shall be properly secured to prevent blow off during weather, wind, etc.

2.6 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any Product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed.

- C. Products Specified by Naming One or More Manufacturers with Provision for Substitutions:
Submit request for substitution for manufacturers not named.

2.7 SUBSTITUTIONS

- A. Refer to Section 01 25 00.

2.8 EXTRA MATERIALS

- A. Provide attic stock of finish materials totaling 5% [or as noted herein] of the total installation.
 - 1. Each finish floor type
 - 2. Each finish base type.
- B. Provide minimum of [1] gallon of each finish paint color.
- C. Coordinate turnover of extra materials to Owner, assist in placing materials in a location suitable to the Owner.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work.
Beginning new Work means acceptance of existing/job-site conditions.
- B. Verify utility services are available, of correct characteristics, and in correct location.
- C. Contact OUPS a minimum of 48 hours prior to beginning work to verify location of existing utilities, coordinate requirements as applicable.
 - 1. Contact private utility locating services as required by the conditions. It is the Contractor's responsibility to locate all public and private utilities that may be impacted by the work.

3.2 FIELD VERIFICATION

- A. Prior to ordering materials, Contractor shall verify the actual dimensions of existing conditions and assume responsibility for workable solutions for all new work. Verification that the new work and items are workable for existing conditions while providing adequate clearances is the responsibility of the Contractor.

3.3 PROTECTION

- A. The work shall be accomplished in accordance with the provision of Federal, State American Standard Safety Code for Building Construction and OSHA safety requirements.
 - 1. Contractor shall be responsible for protective railings and guards, tie-offs, fall protection, and other safety measures as required by OSHA, even if not specified. Fall protection is required. RDA is not a safety consultant and as such does not direct the means and methods of compliance with safety regulations.
- B. The Contractor shall protect and maintain all building entrances, interior contents, building exterior and grounds.
 - 1. Return all surfaces to their original condition after all work is complete.
- C. In the event of damages of any kind caused by improper protection. The Contractor shall replace/repair the damages [including interior or exterior equipment] at no expense to the Owner.
- D. Contractor shall comply with all regulations of the Local Fire Department and the Owner's requirement regarding storage and handling of flammable materials, etc. It is the responsibility of the Contractor performing any hot /torch work to comply with the safety provisions of the National Fire Codes pertaining to such work and the contractor shall be responsible for all damage or fines resulting from failure to so comply.

3.4 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

3.5 DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements.
- B. If, in the opinion of the Architect/Owner, it is not practical to remove and replace the Work, the Architect/Owner will direct appropriate remedy.
- C. Authority of Architect/Owner to assess defects and identify payment adjustments is final.
- D. Non-Payment For Rejected Products: Payment will not be made for rejected products.

3.6 JOB SUPERINTENDENT/EMPLOYEES

- A. Each prime contractor shall have a qualified foreman on the project at all times when work is being accomplished. [ALL Shifts]
- B. Employees shall refrain from fraternization with building occupants.
- C. The Contractor shall furnish the Owner with a list of personnel with phone numbers that will be working on the project and emergency contacts names and numbers that has the authority to handle emergencies on a 24 hour/seven days a week.

3.7 SAFETY PROGRAM

- A. Contractor must have a written safety program for all operations/ work performed on this project. The documents must be at the job site and be made available to the Owner or RDA when requested.
- B. The Contractor assumes all responsibility for project safety, ways, and means and methods of constructing the project.
- C. In addition, the Owner may require special safety requirements to be performed by the Contractor, these requirements will be provided prior to commencement of work.

3.8 DAILY JOB LOGS

- A. Maintain a daily job log that indicates the personnel on-site and activities performed (including all sub-contractors)
- B. Indicate any safety concerns and incidents.
- C. Indicate weather conditions.
- D. Indicate any visitors or other personnel visiting the project site.
- E. Job log shall be accessible to GDPM and Architect upon request.
 - 1. Email GDPM with daily reports upon request.

3.9 REMOVALS AND CLEANUP

- A. Contractor shall be responsible for the removal, dismantling of items that are required for proper completion of the work as applicable in each section. All debris resulting from the work not designated for reuse becomes the property of the contractor unless stated otherwise.
- B. At the completion of each day, the Contractor shall maintain the work area clean of all debris to the satisfactory of the Owner, including all the subcontractors work area.

- C. Provide dumpsters or trash containers needed for the proper removal of project materials, trash, or debris related to the work. Keep all work areas and project sites neat and free of trash and clutter at all times.
 - 1. No Debris, materials, etc. may be left unprotected on the grounds.
 - 2. All exterior staging / dumpster areas shall be fenced / protected.

3.10 SPECIAL PROCEDURES

- A. Materials: As specified in product sections; match existing with new products for patching and extending work.
- B. Employ skilled and experienced installer to perform alteration work.
- C. Cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion.
- D. Remove unsuitable material not marked for salvage, including rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished Work.
- E. Remove debris and abandoned items from area and from concealed spaces.
- F. Prepare surface and remove surface finishes to permit installation of new work and finishes.
- G. Remove, cut, and patch Work in manner to minimize damage and to permit restoring products and finishes to original or specified condition.
- H. Refinish existing visible surfaces to remain in renovated rooms and spaces, to renewed condition for each material, with neat transition to adjacent finishes.
- I. Where new Work abuts or aligns with existing, provide smooth and even transition. Patch Work to match existing adjacent Work in texture and appearance.
- J. When finished surfaces are cut so that smooth transition with new Work is not possible, terminate existing surface along straight line at natural line of division and submit recommendation to Architect for review.
- K. Patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.
- L. Finish surfaces as specified in individual product sections.

3.11 GENERAL PROJECT REQUIREMENTS

- A. Equipment delivery and equipment staging must be coordinated with Owner prior to start of project. The Contract shall anticipate no on-site storage being provided by Owner.
- B. Safety is paramount and all personnel on site must wear appropriate personal protection equipment [PPE]. The Contractor is responsible for means and methods to ensure that proper PPE is provided. Failure to comply may result in dismissal from site.
- C. Barricade work area with appropriate construction grade barriers to establish boundaries of work area and assure safety for all workers and general public. All work areas must be properly barricaded from the general public prior to starting any work.
- D. Job sites will be maintained in an orderly and neat fashion at all times.
- E. **IMPORTANT: Failure to show or mention petty details shall not be warranted for the omission of anything necessary for the proper completion of the work.**
- F. **The plans and specifications are intended to depict the general scope, layout and quality of workmanship required. The documents are not an "instruction manual" to execute the work nor are they intended to show or describe in detail every item necessary for the proper installation of the work. The means and methods required to execute the work**

described is the sole responsibility of the Contractor. The Contractor shall include the ancillary work required, whether explicitly stated or not, for the proper completion of the work as intended. The Contractor is required to meet or exceed building code requirements, applicable industry standards, ASTM standards, and/or manufacturer installation requirements as they relate to the work.

- G. The plans and specifications represent a single complete design package indicating the intended scope of the project in its entirety. As such, the project is structured to be awarded to a single Prime Contractor. The documents do not delineate bid packages or assign responsibilities to any subsequent subcontractors, dictate construction sequencing, nor provide coordination between any “trades”. Such activities are the responsibility of the holder of the construction contract. In the event of a discrepancy within the drawings or between the drawings and the specifications, the more stringent requirement represented in the documents shall prevail.
- H. Contractor shall not take advantage of any clerical errors, omissions, contradictions, or conflicts that may develop in plans, specifications, or details. Such errors, ambiguities and discrepancies shall be reported to the Architect immediately for clarification, revision, or correction prior to the submission of bids. If no notification is given, it shall be assumed that all specifications and conditions will be met.
- I. Submission of a bid shall be considered the Contractor’s Certification that the bid is based upon equipment and/or materials that meet or exceed the standards set forth by specification or equipment and/or materials identification. Should a Contractor’s product be determined not equal to that specified, the Contractor shall be required to provide and install a product acceptable as equal by the Architect at no additional cost to the Owner.
- J. The submission of a bid shall indicate that the Contractor has visited the project site and is familiar with the conditions as they exist, and the modifications that may be necessary to provide a complete and professional finished project.
- K. There is a strict **NO SMOKING** policy for all work. Any worker found smoking on the jobsite will be subject to removal from the project. No exceptions. Habitual offenders may be subject to a fine in the amount of \$500 per occurrence.
- L. Security: Contractor’s Liability for Vandalism
1. Contractor shall be responsible at the Contractor’s cost and expense, for the securing and protection of the project which is under the control of the Contractor, and for the repair and replacement of the work until that portion of the work is accepted as completed by the Owner. The Contractor shall take the measures necessary to provide such security.
 2. Contractor shall be liable for and shall promptly repair or otherwise remedy any and all damages to said portion of the project and of the accepted construction work caused by vandalism up to \$5,000.00 per incident. Contractor shall indemnify and hold the Owner harmless from and against all damages, liabilities, costs and expenses, including, without limitation, reasonable attorney fees, which may be imposed upon or incurred by the Owner as a result of the Contractor’s failure to comply with the requirements of this section.
- M. Insurance: **Refer to GDPM Terms and Conditions.**
1. Contractor to provide copy of Certificate of Insurance to GDPM.
 2. Contractor to submit evidence of Worker’s Compensation insurance coverage and builder’s risk insurance.
- N. Damages: Any and all damages to Housing Authority Property or resident property shall be repaired equivalent to the existing by the Contractor at no cost to the Authority. **NO EXCEPTIONS.**
- O. Safety: The work will be accomplished within a high traffic area and the Contractor is responsible for taking all safety precautions necessary or directed to ensure public safety.

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1. RDA nor GDPM are safety consultants. Any and all safety provisions shall be managed and coordinated by the Contractor.
- P. Provide appropriate notification of Residents prior to starting work.

END OF SECTION

SECTION 01 25 00 – SUBSTITUTION PROCEDURES

PART 1 GENERAL

1.1 WORK INCLUDES

- A. Includes administration and procedural requirement for Substitutions.
 - 1. Substitutions' for Cause: Changes due to project conditions, such as unavailable of product.
 - 2. Substitutions' for Convenience: Changes that may offer advantages to the Owner.

1.2 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any Product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with Provision for Substitutions / Approved Equal: Submit request for substitution as outlined in this section for manufacturers not named.
 - 1. RDA/Owner is the decision maker if the proposed "approved equal" is in fact equal and approved. Any decision rendered is final.
 - 2. Any Contractor, Sub-contractor, or Supplier who makes their own judgement as to "approved equal" and includes within their bid without a formal approval is doing so at their own risk.

1.3 SUBSTITUTIONS PROCEDURES

- A. RDA will consider requests for Substitutions by the Bidder only [not materials suppliers, etc].
- B. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- C. A request constitutes a representation that the Bidder:
 - 1. Has investigated proposed product and determined that it meets or exceeds quality level of specified product.
 - 2. Will provide same warranty for Substitution as for specified product.
 - 3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner.
 - 4. Waives claims for additional costs or time extension which may subsequently become apparent.
- D. Substitution Procedure
 - 1. **Submit copy of request for Substitution for consideration to RDA no later than 7 days before bid opening date.**
 - 2. Submit shop drawings, product data, and applicable certified test results attesting to proposed product equivalence. Burden on proof is on proposer.
 - 3. RDA will notify Contractor in writing of decision to accept or reject request within 5 days of receipt of request or request additional information or documentation for evaluation.
- E. Substitutions will not be considered when they are indicated or implied on Submittals, without written request or when acceptance will require revision to the Contract Documents.
- F. If the Substitution will require modifications to the Contract / Bidding Documents, the cost for updating the documents shall be paid by the Contractor making the request.
- G. Substitutions will not be considered after award of the project without justification.
- H. Approved substitutions will be identified by Addenda.
 - 1. Bidders shall not rely upon approvals made in any other manner.

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END OF SECTION

SECTION 01 29 00 – PAYMENT PROCEDURES

PART 1 GENERAL

1.1 WORK INCLUDES

- A. Includes administration and procedural requirement for necessary to prepare and process Application for Payment.

1.2 SCHEDULE OF VALUES

- A. Submit schedule on AIA Form G703 or other approved HUD forms.
 - 1. Provide line items for each applicable CSI division / defined work scope such that the Owner and RDA can review and determine/confirm progress.
 - 2. Include line items for each allowance, alternates [as applicable], and general conditions.
- B. Submit Schedule of Values in duplicate three days prior to the Pre-Construction meeting for approval by Architect and Owner.
- C. Approved Schedule of Values will be signed at the Pre-Construction meeting.
- D. Format: Utilize Table of Contents of this Project Manual. Identify each line item with number and title of major specification Section. Identify site mobilization/general conditions, bonds and insurance.
 - 1. Schedule of values should be broken down by building and also by division / work scope for each building.
- E. Revise schedule to list approved Change Orders, with each Application for Payment.

1.3 APPLICATIONS FOR PAYMENT

- A. Use AIA form G702 and G703 [or other approved HUD forms] for Application for payment as required by Owner.
- B. Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
- C. Complete every entry, notarize and execute by a person authorized to sign document on behalf of the contractor. Include amounts for work completed following previous Application for Payment whether or not payment has been received, include amounts of Change Orders issued before last day of construction period covered by application.
 - 1. Stored materials included in application must have supporting documentation that verifies amount required, do not include overhead and profit on stored material.
 - 2. Submit to RDA for review and processing.
 - a. E-mail submittal is acceptable unless otherwise directed by the Owner. Verify hard copies with Owner if required.
- D. Each application for payment following the initial Application for Payments shall be consistent for payment with previous applications.
- E. Payment Period: Monthly. First pay application at 30 days into contract period.
- F. Submit updated construction schedule with each Application for Payment as applicable to the work. Failure to submit the updated construction schedule can delay the processing of the Application for Payment.
- G. Submit all required waivers of lien/partial release of lien, payroll reports as required by GDPM, etc. Failure to submit required paperwork can delay the processing of the Application for Payment

1.4 RETAINAGE

- A. Refer to GDPM Terms and Conditions.

1.5 PREVAILING WAGE / PAYROLL REPORTS

- A. The work of this project is subject to Davis-Bacon Prevailing Wages.
- B. Include in the bid amount all applicable prevailing wages.
- C. Provide payroll reports indicating compliance to the Owner on a monthly basis.
 - 1. Pay Applications will not be processed without approved payroll reports submitted to the Owner.

1.6 TAXES

- A. GDPM is tax exempt. Tax Exempt Certificates will be provided upon request.
- B. GDPM will not compensate the Contractor for any taxes paid on the project.

1.7 SUBMITTAL PROCEDURES

- A. Submit [1] copy of each payment application on AIA Form G702 and G703, in PDF format
 - 1. Pencil copy to RDA for review/acceptance. RDA will review and provide any comments or questions.
 - 2. Submit final payment application in PDF format to RDA for processing.
 - 3. RDA will certify and process the payment application and will forward to Owner for payment.
- B. Submit all required waivers of lien / partial release of lien [including vendors and subcontractors as requested by Owner], payroll reports, etc. as required by the Owner. Failure to submit required paperwork can delay processing of Application for Payment.

1.8 FINAL APPLICATION FOR PAYMENT

- A. Refer to provisions in Section 01 77 00 for Application for Payment at Substantial Completion.

END OF SECTION

SECTION 01 33 00 – SUBMITTALS

PART 1 GENERAL

1.1 WORK INCLUDES

- A. Review of shop drawings and product data by RDA / Owner.

1.2 SUBMITTAL PROCEDURES

- A. Contractor to submit product data and shop drawings for all applicable components of the project. Refer to individual sections for additional requirements.
 - 1. Contractor to provide a submittal log at the beginning of the project for review by RDA / Owner. Submittal log shall identify proposed submittals by Spec Section.
 - 2. RDA review of the submittals will be general in nature and does not relieve the Contractor in any way of the responsibility in compliance with the contract requirements, manufacturer requirements, and/or applicable codes.
- B. Submittals shall be accomplished in a digital [PDF format].
 - 1. Any hard copies received will be scanned and returned electronically.
 - 2. Provide those submittals required to maintain orderly progress of the work and those required for early lead time for manufacturer fabrication.
 - 3. Mark each component to identify applicable products, models, options, and other data. Supplement manufacturer's standard data to provide information unique to this project. Non-identified submittals will be rejected.
- C. Submittals shall have a Submittal form / cover sheet to identify Project, Contractor, subcontractor or supplier; and pertinent Contract Document references.
- D. Apply Contractor's stamp, signed or initialed, certifying that review, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with requirements of the Work and Contract Documents.
- E. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of completed Work.
- F. Revise and resubmit submittals as required; identify changes made since previous submittal.
- G. All submittals shall be accomplished at the beginning of the project to allow the proper ordering of materials for the project.
 - 1. Failure by the Contractor to provide submittals in a timely fashion does not change the project start date nor contract period.
- H. Any materials on the job site that have not been reviewed as part of the submittal process are subject to rejection / removal from the job-site. Any work undertaken without review of the submittal data is at the Contractor's risk and subject to rejection or replacement at no cost to the Owner if submittals are not in conformance with the project documents.
- I. Schedule submittals to expedite Project, and deliver to Owner. Coordinate submission of related items.
- J. For each submittal for review, allow seven [7] days excluding delivery time to and from Contractor.
- K. Allow space on submittals for Contractor and Architect review stamps.
- L. When revised for resubmission, identify changes made since previous submission.
- M. Distribute copies of reviewed submittals as appropriate (electronically as appropriate). Instruct parties to promptly report inability to comply with requirements.
- N. All submittals shall be completed within the first 30 days of the project.

1.3 SUBMITTALS / PRODUCT DATA / SHOP DRAWINGS

- A. Product Data/Shop Drawings:
 - 1. Submitted to RDA for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
 - 2. All shop drawings shall be to scale, submit drawings on sheets no larger than 24-inch x 36 inch, all other product data can be on 8 ½ X 11-inch sheets.
- B. Samples for Review:
 - 1. Submitted to RDA for review and selection for aesthetic, color, or finish.
 - 2. Submit samples of finishes from full range of manufacturer's standard colors, textures, and patterns for Owners selection.
 - 3. Submit samples to illustrate functional and aesthetic characteristics of Product.
- C. Personnel/Other Contractors
 - 1. Submit a list of all subcontractors and on-site personnel with the list of lead contact and associated phone numbers.
 - 2. Submit emergency contact sheet with contacts for an emergency – 24/7 call list.
- D. Contract Items:
 - 1. Submit Certificate of Insurance, Worker's Comp Certificates as required by Owner.
 - 2. Submit bonds if applicable to the contract.
 - 3. Submit a written Construction Schedule / Implementation and Sequencing Plan outlining starting points and length of time to complete work in each section.
- E. Safety Data Sheets: Submit Safety Data Sheets [SDS] on all products to the Owner.
 - 1. Owner shall be responsible to provide to employees as applicable.
 - 2. Owner's representative /RDA does not review / approve any SDS sheets.
- F. Site Specific Safety Plan
 - 1. Provide to Owner for their Review.
- G. Site Logistics Plan
 - 1. Provide to Owner for their Review.

1.4 SAMPLES

- A. Physical Samples: Submit to Architect for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.
 - 1. Physical samples are required to allow Architect to make selections for color and finish. Electronic images of colors/finishes, etc. are not sufficient.
- B. Samples For Selection as Specified in Product Sections:
 - 1. Submit to Architect for aesthetic, color, or finish selection.
 - 2. Submit samples of finishes from full range of manufacturers' standard colors, textures, and patterns for Architect selection.
- C. Submit samples to illustrate functional and aesthetic characteristics of Products, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
- D. Include identification on each sample, with full Project information.
- E. Submit 2 copies of each sample, Architect will retain 1 copy.
- F. Reviewed samples which may be used in the Work are indicated in individual specification sections.

1.5 PROPOSED PRODUCTS LIST

- A. Within 5 days after date of Notice to Proceed, submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.

- B. All products for the project shall be ordered in the first 30 days of the contract. Contractors' failure to order materials is not a reason for a time extension or selection of an alternate material. This is imperative to allow work as scheduled.
- C. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

1.6 MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual specification sections, submit manufacturer printed instructions for delivery, storage, assembly, installation, [start-up,] adjusting, and finishing, in quantities specified for Product Data.

1.7 MANUFACTURER'S CERTIFICATES

- A. When specified in individual specification sections, submit certifications by manufacturer to Owner, in quantities specified for Product Data.
- B. Indicate material or Product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

1.8 CONSTRUCTION PHOTOGRAPHS

- A. Provide digital photographs of construction throughout progress of Work as taken by project superintendent as applicable to document the existing conditions, work in progress, completed work, project wrap up, etc. It is in the best interest of the contractor to document the conditions as this is an occupied unit project.
- B. Deliver photographs to Architect/Owner upon request on CD. Catalog and index in chronological sequence with date indexed.

END OF SECTION

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SECTION 01 40 00 - QUALITY REQUIREMENTS/PROJECT INSPECTION

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Quality control and control of installation.
- B. GDPM Construction Inspection Procedures
- C. Tolerances
- D. References.
- E. Mock-up requirements.
- F. Examination & Inspection.

1.2 QUALITY CONTROL AND CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. When manufacturers' instructions conflict with Contract Documents, request clarification from Architect/Owner before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Perform Work by persons qualified to produce required and specified quality.
- F. Verify field measurements are as indicated on Shop Drawings or as instructed by manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

1.3 GDPM CONSTRUCTION INSPECTION PROCEDURES

- A. GDPM Staff have clear goals with regard to the importance of thorough construction inspection that ensures compliance with the bid documents. The compliance documents shall include the project specifications, drawings, contract, notice to proceed, codes, regulations and ordinances.
- B. GDPM intends for a GDPM Staff (Project Manager) and an A/E representative to routinely monitor the Contractor's work and progress on all projects. Quality control is an important element which is the responsibility of the Contractor. The Contractor shall provide full cooperation with all inspection steps through the construction process and include such coordination in the base bid of the project.
- C. Accessibility to the work shall be arranged by the Contractor. The necessary ladders, scaffolding, hoisting, etc shall be provided by the Contractor in order to make all areas of the work available to the construction inspector and consultant. The contractor shall have his authorized representative (superintendent) available to interface with and assist with the inspection process.
- D. Acceptance of Conditions:
 - 1. The construction inspector and consultant shall not allow work to proceed when there is a construction deficiency document in place that has not been cleared.

2. The construction inspector and consultant shall not allow work to proceed that requires mock-ups until such mock up is acceptable. Subsequent work in like kind shall be equal to or better than the mock-up.
- E. Prior to final completion, the contractor is to be required to inspect all of his work. He shall correct any deficiencies and enter a document that all of the contracted for work has been completed within the scope of the contract and request "final inspection" by the GDPM representative.**
- F. The final inspection shall result in either complete acceptance or generation of a punch list that is to be corrected in a timely manner and back punched by GDPM and the consultant.
- G. After review by GDPM Project Manager, GDPM will review project acceptance with site and senior staff for final acceptance of the project. This review may prompt additional punchlist work that may need to be completed.**
- H. If work that is clearly not complete, the Punchlist will be suspended until such time that it is evident that the Contractor has completed and reviewed/inspected their own work.**
- I. The final inspection acceptance shall include approval and sign-off by the construction inspector, construction coordinator and consultant. Sign off approvals
- J. The warranty blanketing the contract will not be allowed to commence until all work under the contract is completed and accepted for beneficial use by GDPM.
 1. This will be accomplished on a building by building basis.
- K. An anniversary inspection for the one year interval following acceptance of the project shall be performed and documented by the construction coordinator and consultant.

1.4 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. When manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

1.5 REFERENCES

- A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current on date of Contract Documents, except where specific date is established by code.
- C. Obtain copies of standards where required by product specification sections.
- D. When specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.
- E. Neither contractual relationships, duties, nor responsibilities of parties in Contract nor those of Architect shall be altered from Contract Documents by mention or inference otherwise in reference documents.

1.6 MOCK-UP REQUIREMENTS

- A. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.

- B. Accepted mock-ups shall be comparison standard for remaining Work follow requirements of individual sections.
- C. Provide mockups of the work as directed / required by the Architect / GDPM.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify existing substrate is capable of structural support or attachment of new Work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Verify utility services are available, of correct characteristics, and in correct locations.

3.2 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

END OF SECTION

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SECTION 01 77 00 - CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.1 WORK INCLUDES

- A. Close-out of the actual work, including warranties, maintenance manuals and final cleaning. Close-out of all contract obligations.

1.2 CLOSE-OUT PROCEDURES

- A. Contractor shall notify Owner five [5] days prior to the work being complete to establish the desired inspection date. Owner / RDA will either proceed with the inspection or notify Contractor of unfulfilled requirements.
 - 1. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for punch list inspection.
- B. Owner / RDA shall inspect the completed project and notify the Contractor of any deficiencies. Deficiencies will form 'punch list' for final acceptance.
- C. Provide submittals to Owner required by authorities having jurisdiction.
- D. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.

1.3 PUNCHLIST REQUIREMENTS

- A. The Contractor shall review and inspect all work prior to notifying the Owner for a Punchlist inspection of the work. Provide written documentation certifying review along with documentation of Contractor generated Punchlist.
- B. If work is clearly not complete, the Punchlist will be suspended until such time that it is evident that the Contractor has completed and reviewed/inspected their own work.**
 - 1. RDA anticipates [1] punchlist inspection and [1] back-punch / final inspection as part of our services to the Owner.
 - 2. Failures by the Contractor to complete the work, complete punchlists, etc. may result in a backcharge to the Contractor for the additional time to closeout the project.
- C. The Contractor shall review and provide the noted repairs and corrective work necessary at each of the Punchlist inspections to allow project close out.
 - 1. Back-punch walk through may result in additional punchlist items which need to be addressed by the Contractor.
- D. The Contractor shall provide adequate time in the construction schedule to accomplish punchout work within the overall contract period indicated within the bid documents.
- E. The failure to identify any punchlist item during a walk through / inspection does not release the Contractor from contractual responsibility to address any item during the warranty period.

1.4 SUBSTANTIAL COMPLETION

- A. Certificate of Substantial Completion will be issued upon completion of all the work.

1.5 PREREQUISITES TO FINAL ACCEPTANCE AND PAYMENT

- A. Prior to acceptance and final payment, all claims or disputes must have been resolved and the Contractor must have provided the following items to the Owner:
 - 1. Notarized affidavit of waiver of liens [contractor of record], sub-contractors and material suppliers
 - 2. Certificates of release from authorities having jurisdiction over permitting.
 - 3. Final statement of charges [100% application for payment].

- a. Submit a final Application for Payment according to Section 01 29 00, Payment Procedures.
4. Documented evidence of completing 'punch list' as applicable.
5. Manufacturer's original warranties, including contractor maintenance agreements and warranties as applicable.
6. Evidence that claims have been settled.
7. O+M Manuals
8. Manufacturer's maintenance and repair instructions.
9. Record Drawings.
10. Final cleaning of all work areas.
11. Restore all work staging and lay-out areas to pre-construction conditions, including but not limited to, removal of debris, temporary facilities, grading and grass seeding and cleaning or repair of impacted structures.

1.6 PHOTOGRAPHIC DOCUMENTATION

- A. When requested by the Owner, photos of the completed punch list along with any supporting documentation can be submitted, in lieu of a final walkthrough.

1.7 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 1. Drawings.
 2. Specifications.
 3. Addenda.
 4. Change Directives/Orders and other modifications to the Contract.
 5. Reviewed Shop Drawings, Product Data, and Samples.
 6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress, not less than weekly.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 1. Manufacturer's name and product model and number.
 2. Product substitutions or alternates utilized.
 3. Changes made by Addenda and modifications.
- F. Submit documents to Architect.

1.8 WARRANTIES AND GUARANTEES

- A. General: The warranty and guarantee provisions of the General Conditions apply to all work of the contract, including but not limited to the following specific categories related to individual units of work specified in various sections of these specifications:
 1. **Refer to GDPM Contract Requirements / Terms and Conditions for additional information / requirements.**
 2. Special Project Warranty (Guarantee): A warranty specifically written and signed by the Contractor for a defined portion of the work, and, where required, countersigned by subcontractor, installer, manufacturer, or other entity engaged by the Contractor.
 3. Specified Product Warranty: A warranty which is required by the contract documents, to be provided for a manufactured product incorporated in the Work, regardless of whether manufacturer has published a similar warranty without regard for specific incorporation into the work, or has written and executed a special project warranty as a direct result of contract document requirements.

4. Coincidental Product Warranty: A warranty which is not specifically required by the Contract Documents (other than as specified in this Section); but which is available on a product incorporated into the work, by virtue of the fact that the manufacturer of the product has published a warranty in connection with purchases and users of the product without regard for specific applications except as otherwise limited by terms of the warranty.
- B. All work undertaken as part of the project shall be warranted for a period of not less than [1] year. Individual sections / products may have specific additional warranty requirements.
- C. Provide notarized copies of warranty documents to the Owner.
 1. Execute and assemble transferable warranty documents from subcontractors, suppliers, and manufacturers.
- D. Original warranties are required to be provided to the Owner prior to final payment.

1.9 OPERATION AND MAINTENANCE DATA

- A. Submit TWO sets prior to final inspection, bound in 8-1/2 x 11 inch text pages, three D side ring binders with durable plastic covers.
 1. **Submit one copy for review by the Architect/Owner, electronic submission preferred.** Submit at 75% of overall gross contract completion. Failure to submit O+M at this point will delay Applications for Payment.
 2. Prepare one final copy upon approval and correction of any missing or deficient items by the Architect/Owner.
 3. Provide (2) CDs of the O+M Manual in PDF format that is formatted and organized to match the hard copy.
- B. Prepare binder cover with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS" and title of project. Label on the front and spine of the binder.
- C. Internally subdivide binder contents with permanent page dividers, logically organized, with tab titles legibly printed under reinforced laminated plastic tabs.
- D. Contents:
 1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, subcontractors, and major equipment suppliers.
 2. Part 2: Permit and Inspection Information
 3. Part 3: Project submittals, organized by CSI division
 4. Part 4: Operation and maintenance instructions, arranged by system.
 - a. Building Products, Equipment, Applied Materials, and Finishes: Include product data, with catalog number, size, composition, and color and texture designations.
 - b. Each Item of Equipment and Each System: Include description of unit or system, and component parts. Identify function, normal operating characteristics, and limiting conditions. Include performance curves, with engineering data and tests, and complete nomenclature and model number of replaceable parts.
 - c. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and special operating instructions.
 - d. Instructions for Care and Maintenance: Include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
 - e. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and trouble shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
 - f. Include original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
 - g. Include original shop drawing submittals, fold larger submittals to fit into binder.

5. Part 5: Project documents and certificates.
 - a. Obtain warranties and bonds executed in duplicate by responsible subcontractors, suppliers, and manufacturers.
6. Part 6: Colors / finishes / samples
7. Part 7: Other documentation required.

1.10 FINAL CLEANING AND SITE REPAIR

- A. Final cleaning of all work areas:
 1. Execute final cleaning prior to final inspection.
 2. Clean interior and exterior surfaces exposed to view. Vacuum carpeted and soft surfaces.
 3. Clean interiors of all cabinetry.
 4. Clean all fixtures and finishes.
 5. Replace filters of operating equipment.
 6. Remove waste and surplus materials, rubbish, and construction facilities from site.
- B. Restore all work staging and lay-out areas to pre-construction conditions, including but not limited to, removal of debris, temporary facilities, grading and grass seeding and cleaning or repair of impacted structures.

END OF SECTION

SECTION 02 41 16 - SELECTIVE DEMOLITION

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Demolishing designated building equipment and fixtures.
 - 2. Demolishing designated construction.
 - 3. Cutting and alterations for completion of the Work.
 - 4. Removing designated items for salvage by GDPM.
 - 5. Protecting items designated to remain.
 - 6. Removing demolished materials.

1.2 CLOSEOUT SUBMITTALS

- A. Project Record Documents: Record actual locations of capped utilities, concealed utilities, discovered during demolition and any subsurface obstructions or conditions that require noting.

1.3 QUALITY ASSURANCE

- A. Conform to applicable code for demolition work, dust control, protection, products requiring electrical disconnection and re-connection
- B. Conform to applicable code for procedures when hazardous or contaminated materials are discovered.
- C. Obtain required permits from authorities having jurisdiction.

1.4 SCHEDULING

- A. Schedule Work to coincide with proposed alterations and improvements.
- B. Coordinate Work with Work by Others and Work by Owner as needed.
- C. Coordinate utility and building service interruptions with Owner.
 - 1. Do not disable or disrupt site fire or life safety systems without three days prior written notice to Owner.
- D. Schedule tie-ins to existing systems to minimize disruption.

1.5 PROJECT CONDITIONS

- A. Cease operations immediately if structure appears to be in danger and notify Architect. Do not resume operations until directed.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 PREPARATION

- A. Notify affected utility companies before starting work and comply with their requirements.
- B. Call Local Utility Line Information service not less than three working days before performing Work.
 - 1. Request underground utilities to be located and marked within and surrounding construction areas. Supplement with private locator company as is applicable and required to fully locate and identify existing underground utilities, including both public and private.

- C. Mark location and termination of utilities.
- D. Erect, and maintain temporary barriers and security devices including warning signs and lights, and similar measures, for protection of the public, Owner, and existing improvements indicated to remain.
- E. Erect and maintain weatherproof closures for exterior openings as applicable to work/scope.
- F. Erect and maintain temporary partitions.
- G. Prevent movement of structure; provide temporary bracing and shoring as required.
- H. Provide appropriate temporary signage.
- I. Do not close or obstruct building egress path.
- J. Do not disable or disrupt building fire or life safety systems without **three** days prior written notice to Owner. Coordinate with Fire Department / Building Official.
- K. Protect existing structure / items to remain.

3.2 SALVAGE REQUIREMENTS

- A. Coordinate with Owner to identify building components and equipment required to be removed and delivered to Owner.
- B. Tag components and equipment Owner designates for salvage.
- C. Protect designated salvage items from demolition operations until items can be removed.
- D. Carefully remove building components and equipment indicated to be salvaged.
- E. Disassemble as required to permit removal from building.
- F. Package small and loose parts to avoid loss.
- G. Mark equipment and packaged parts to permit identification and consolidation of components of each salvaged item.
- H. Prepare assembly instructions consistent with disassembled parts. Package assembly instructions in protective envelope and securely attach to each disassembled salvaged item.
- I. Deliver salvaged items to location identified by GDPM. Obtain signed receipt from GDPM.

3.3 DEMOLITION

- A. Provide all demolition and removals necessary for the proposed work. Field coordinate all conditions with the design intended on the drawings.
 - 1. Drawings are diagrammatic and may not reflect the full extent of demolition / removals required to accomplish the proposed scope of work.
 - 2. The Contractor shall coordinate design intent and verify that all demolition work and restoration / repair work required is included in the scope of the project, regardless of specifically being noted on the drawings.
 - 3. Work includes abandoned furnishings, equipment, and building components that are required to be removed to render rent ready.
 - 4. Confirm with GDPM personnel prior to demolition to verify any items to be salvaged and turned over to GDPM.
- B. Provide abatement of hazardous materials from the buildings as applicable for the completion of the work.
- C. Conduct demolition to minimize interference with adjacent and occupied buildings/units.
- D. Maintain protected egress from and access to adjacent existing buildings/units at all times.

- E. Cease operations immediately when structure appears to be in danger and notify Architect/Engineer.
- F. Disconnect and remove utilities within demolition areas, refer to Drawings.
- G. Cap and identify abandoned utilities at termination points when utility is not completely removed.
- H. Do not close or obstruct roadways or sidewalks without permits.
- I. Demolish in orderly and careful manner. Protect existing improvements.
- J. Carefully remove building components indicated to be reused.
- K. Disassemble components as required to permit removal.
- L. Box and label contents for all items scheduled to salvage. Obtain sign off.
- M. Remove demolished materials from site except where specifically noted otherwise. Do not burn or bury materials on site.
- N. Remove materials as Work progresses.
- O. Upon completion of Work, leave areas in clean condition.
- P. Remove temporary Work.

3.4 CLEAN UP

- A. Remove demolished materials from site as work progresses.
- B. Leave areas of work in clean condition.

END OF SECTION

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SECTION 02 50 00 - HAZARDOUS MATERIALS SPECIFICATIONS

PART 1 GENERAL

1.1 HAZARDOUS MATERIALS

- A. There are no known hazardous materials in the area of work of this project.
- B. Existing asbestos containing materials were removed during the previous building modernization project in the mid-2000s. GDPM believes there to be no remaining hazardous materials in the building.

1.2 SUMMARY

- A. Contractors must comply with Occupational Safety and Health Administration regulation 29 CFR 1926.62 "Lead in Construction Standard" as well as the Environmental Protection Agency Lead, Renovation, Repair and Painting Rule.
- B. Contractor shall follow all applicable EPA rules and regulations when working with hazardous materials. It shall be the contractor's responsibility to remain in compliance at all times during the project.
- C. If any work person encounters any material which they suspect may be hazardous or toxic, they shall immediately advise the Owner. The Contractor shall take immediate and appropriate action to protect the building users and workers in accordance with federal, state, and local laws, codes and regulations. The architect and architect's consultants shall have no responsibility for the discovery, presence, handling, removal or disposal of or exposure of persons to hazardous materials in any form at the project site, including but not limited to asbestos, asbestos products, polychlorinated biphenyl (pcb) or other toxic substances.
 - 1. The contractor is hereby advised that RDA Group Architects, LLC is not a design professional in the determination of the presence of hazardous materials, nor is RDA a design professional involved in making recommendations regarding the testing, removal, encapsulation or other corrective measures pertaining to hazardous materials.
 - 2. If the work which is to be performed under the contract interfaces in any way with the existing components which contain hazardous materials, it is the contractor's responsibility to contact the owner's environmental consultant regarding the proper means & methods to be utilized in dealing with hazardous materials.
 - 3. By execution of the contract for construction, the contractor hereby agrees to bring no claim for negligence, breach of contract, indemnity or otherwise against the architect, his principles, employees, agents or consultants if such a claim in any way would involve the investigation of or remedial work related to hazardous materials in the project.
 - 4. By execution of the contract for construction, the contractor further agrees to defend, indemnify and hold the architect, his principles, employees, agents or consultants harmless from any such asbestos or other hazardous materials related claims that may be brought by the contractor's subcontractors, suppliers or other third parties who may be acting under the direction of the contractor pursuant to this project.

END OF SECTION

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SECTION 06 10 00 - ROUGH CARPENTRY

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes structural wall and roof framing, non-structural interior wall framing, subfloor sheathing; preservative and fire retardant treatment; blocking and related furring and framing materials.

1.2 REFERENCES

- A. American National Standards Institute:
 - 1. ANSI A135.4 - Basic Hardboard.
 - 2. ANSI A208.1 - Mat-Formed Wood Particleboard.
- B. American Wood-Preservers' Association:
 - 1. AWPA M4 - Standard for the Care of Preservative-Treated Wood Products.
 - 2. AWPA U1 - Use Category System: User Specification for Treated Wood.
- C. ASTM International:
 - 1. ASTM C1396/C1396M - Standard Specification for Gypsum Board.
 - 2. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 3. ASTM E119 - Standard Test Methods for Fire Tests of Building Construction and Materials.
 - 4. ASTM F1667 - Standard Specification for Driven Fasteners: Nails, Spikes, and Staples.
- D. Forest Stewardship Council:
 - 1. FSC Guidelines - Forest Stewardship Council Guidelines.
- E. Green Seal:
 - 1. GS-36 - Aerosol Adhesives.
- F. National Lumber Grades Authority:
 - 1. NLGA - Standard Grading Rules for Canadian Lumber.
- G. Northeastern Lumber Manufacturers Association:
 - 1. NELMA - Standard Grading Rules for Northeastern Lumber.
- H. South Coast Air Quality Management District:
 - 1. SCAQMD Rule 1168 - Adhesive and Sealant Applications.
- I. Southern Pine Inspection Bureau:
 - 1. SPIB - Standard Grading Rules for Southern Pine Lumber.
- J. U.S. Department of Commerce National Institute of Standards and Technology:
 - 1. DOC PS 1 - Construction and Industrial Plywood.
 - 2. DOC PS 2 - Performance Standard for Wood-Based Structural-Use Panels.
 - 3. DOC PS 20 - American Softwood Lumber Standard.
- K. West Coast Lumber Inspection Bureau:
 - 1. WCLIB - Standard Grading Rules for West Coast Lumber.
- L. Western Wood Products Association:
 - 1. WWPA G-5 - Western Lumber Grading Rules.

1.3 QUALITY ASSURANCE

- A. Perform Work in accordance with the following agencies:
 - 1. Lumber Grading Agency: Certified by DOC PS 20.

2. Wood Structural Panel Grading Agency: Certified by EWA - The Engineered Wood Association.
 3. Plywood Grading Agency: Certified by APA.
 4. Lumber: DOC PS 20.
 5. Wood Structural Panels: DOC PS 1 or DOC PS 2.
- B. Perform Work in accordance with Ohio Building Code.
- C. Apply label from agency approved by authority having jurisdiction to identify each preservative treated and fire retardant treated material.

PART 2 PRODUCTS

2.1 LUMBER MATERIALS

- A. Lumber Grading Rules: SPIB, ASLS.
- B. Non-structural Light Framing: Stress Group D, spruce, pine, fir species, 19 percent maximum moisture content.
- C. Studding: Stress Group D, spruce, pine, fir species, 19 percent maximum moisture content.

2.2 SHEATHING MATERIALS

- A. Subfloor Sheathing: APA Rated Sheathing Structural I, Span Rating 24/16, Exposure Durability 1, unsanded; 3/4 inch thickness; 48x96 inch sized sheets. Alternate: 1x6 lumber infill.

2.3 FIREBLOCKING AND FIRESTOPPING

- A. Fireblocking: Solid lumber, structural wood panel, or particleboard.
1. Solid lumber nominal 2 inches thick.
 2. Structural wood panel 23/32 inch thick with joints backed by structural wood panel.

2.4 ACCESSORIES

- A. Fasteners and Anchors:
1. Fasteners: ASTM A153/A153M, hot dipped galvanized steel for high humidity and treated wood locations, unfinished steel elsewhere.
 2. Nails and staples: ASTM F1667.
- B. Subfloor Glue: ASTM D3498, water base, waterproof.

2.5 WOOD TREATMENT

- A. Wood Preservative (Pressure Treatment): AWPA U1, Commodity Specification A-Sawn Products or F-Wood Composites using water-borne preservative with .25 pcf retention.
- B. Fire Retardant Treatment: Chemically treated and pressure impregnated, having flame spread of 25 or less when tested in accordance with ASTM E 84 and showing no evidence of significant progressive combustion when test is continued for an additional 20 minute period, Exterior or Interior Type.
- C. Moisture Content After Treatment: Kiln dried (KDAT).
1. Lumber: Maximum 19 percent.
 2. Structural Panels: Maximum 15 percent.

PART 3 EXECUTION

3.1 FRAMING

- A. Fasten framing in accordance with Ohio Building Code.

- B. Provide all required shoring and temporary bracing required to support structure prior to removing any load-bearing components.

3.2 SHEATHING

- A. Install sheathing over framing members in full size sheets in accordance with APA Construction Guide.
- B. Fasten sheathing in accordance with Ohio Building Code.
- C. Install subfloor sheathing with longer edge perpendicular to floor framing with end joints staggered. Secure sheet edges over firm bearing. Attach sheathing with subfloor glue and appropriate fasteners.
- D. Install underlayment in accordance with APA Construction Guide.
 - 1. 3d x 1 1/4" ring shank nails at 3" at perimeter and 6" in field. **No staples permitted.**
 - 2. Glue to subfloor as applicable by condition.
- E. Install new underlayment at areas of wood framed floor systems where required for new finish flooring. Remove all existing underlayment down to original subfloor as required.

3.3 FIREBLOCKING AND DRAFTSTOPPING

- A. Install fireblocking to cut off concealed draft openings as required.
 - 1. Concealed Framed Wall and Furred Spaces: Install fireblocking vertically at floor and ceiling levels and horizontally.
 - 2. Connections Between Horizontal and Vertical Spaces: Install fireblocking between vertical walls and partitions and the following:
 - a. Horizontal floor and roof framing.
 - b. Soffits, dropped ceilings, cove ceilings and other horizontal concealed spaces.

3.4 TOLERANCES

- A. Framing members: 1/4 inch from indicated position, maximum.

END OF SECTION

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SECTION 07 84 00 - FIRESTOPPING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Firestopping through-penetrations of fire rated assemblies.
 - 2. Firestopping joints in fire rated assemblies.
 - 3. Smoke sealing at joints between floor slabs and exterior walls.
 - 4. Smoke sealing penetrations and joints of smoke partitions.

1.2 REFERENCES

- A. ASTM International:
 - 1. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 2. ASTM E119 - Standard Test Methods for Fire Tests of Building Construction and Materials.
 - 3. ASTM E814 - Standard Test Method for Fire Tests of Through-Penetration Fire Stops.
 - 4. ASTM E1966 - Standard Test Method for Fire-Resistive Joint Systems.
- B. Forest Stewardship Council:
 - 1. FSC Guidelines - Forest Stewardship Council Guidelines.
- C. Intertek Testing Services (Warnock Hersey Listed):
 - 1. WH - Certification Listings.
- D. South Coast Air Quality Management District:
 - 1. SCAQMD Rule 1168 - Adhesive and Sealant Applications.
- E. Underwriters Laboratories Inc.:
 - 1. UL 263 - Fire Tests of Building Construction and Materials.
 - 2. UL 1479 - Fire Tests of Through-Penetration Firestops.
 - 3. UL 2079 - Tests for Fire Resistance of Building Joint Systems.
 - 4. UL - Fire Resistance Directory.

1.3 DEFINITIONS

- A. Firestopping (Through-Penetration Protection System): Sealing or stuffing material or assembly placed in spaces between and penetrations through building materials to arrest movement of fire, smoke, heat, and hot gases through fire rated construction.

1.4 PERFORMANCE REQUIREMENTS

- A. Conform to UL for fire resistance ratings and surface burning characteristics.

1.5 SUBMITTALS

- A. Product Data: Submit data on product characteristics, performance and limitation criteria.
- B. Manufacturer's Installation Instructions: Submit preparation and installation instructions.
- C. Manufacturer's Certificate: Certify products meet or exceed specified requirements and applicable code requirements.

1.6 QUALITY ASSURANCE

- A. Through Penetration Firestopping of Fire Rated Assemblies: UL 1479 or ASTM E814 with 0.10 inch water gage minimum positive pressure differential to achieve fire F-Ratings and temperature T-Ratings as indicated on Drawings, but not less than 1-hour.
 - 1. Floor / Wall Penetrations: Fire F-Ratings as indicated on Drawings, but not less than 1-hour.
- B. Through Penetration Firestopping of Non-Fire Rated Floor and Roof Assemblies: Materials to resist free passage of flame and products of combustion.
- C. Fire Resistant Joints in Fire Rated Floor, Roof, and Wall Assemblies: ASTM E1966 or UL 2079 to achieve fire resistant rating as indicated on Drawings for assembly in which joint is installed.
- D. Surface Burning Characteristics: Maximum 25/450 flame spread/smoke developed index when tested in accordance with ASTM E84.

1.7 ENVIRONMENTAL REQUIREMENTS

- A. Maintain this minimum temperature before, during, and for minimum 3 days after installation of materials.
- B. Provide ventilation in areas to receive solvent cured materials.

PART 2 PRODUCTS

2.1 FIRESTOPPING

- A. Manufacturers:
 - 1. 3M Fire Protection Products
 - 2. United States Gypsum Co.
 - 3. Equal.
- B. Product Description: Different types of products by multiple manufacturers are acceptable as required to meet specified system description and performance requirements; provide only one type for each similar application.
 - 1. Silicone Firestopping Elastomeric Firestopping: Single component silicone elastomeric compound and compatible silicone sealant.
 - a. Interior Sealants and Sealant Primers: Maximum volatile organic compound content in accordance with SCAQMD Rule 1168.
 - 2. Foam Firestopping Compounds: Single component foam compound.
 - 3. Fiber Stuffing and Sealant Firestopping: Composite of mineral fiber stuffing insulation with silicone elastomer for smoke stopping.
 - 4. Intumescent Firestopping: Intumescent putty compound which expands on exposure to surface heat gain.

2.2 ACCESSORIES

- A. Primer: Type recommended by firestopping manufacturer for specific substrate surfaces and suitable for required fire ratings.
- B. Installation Accessories: Provide clips, collars, fasteners, temporary stops or dams, and other devices required to position and retain materials in place.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify openings are ready to receive firestopping.

3.2 PREPARATION

- A. Clean substrate surfaces of dirt, dust, grease, oil, loose material, or other matter affecting bond of firestopping material.
- B. Remove incompatible materials affecting bond.
- C. Install backing materials to arrest liquid material leakage.

3.3 APPLICATION

- A. Install material at fire rated construction perimeters and openings containing penetrating sleeves, piping, ductwork, conduit and other items, requiring firestopping.
- B. Apply primer where recommended by manufacturer for type of firestopping material and substrate involved, and as required for compliance with required fire ratings.
- C. Apply firestopping material in sufficient thickness to achieve required fire and smoke rating to uniform density and texture.
- D. Place foamed material in layers to ensure homogenous density, filling cavities and spaces. Place sealant to completely seal junctions with adjacent dissimilar materials.

3.4 FIELD QUALITY CONTROL

- A. Inspect installed firestopping for compliance with specifications and submitted schedule.

3.5 PROTECTION OF INSTALLED CONSTRUCTION

- A. Protect adjacent surfaces from damage by material installation.

END OF SECTION

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SECTION 07 90 00 - JOINT PROTECTION

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes sealants and joint backing.

1.2 SUBMITTALS

- A. Product Data: Submit data indicating sealant chemical characteristics, performance criteria, substrate preparation, limitations, and color availability.

1.3 ENVIRONMENTAL REQUIREMENTS

- A. Maintain temperature and humidity recommended by sealant manufacturer during and after installation.

1.4 QUALITY ASSURANCE

- A. Sealant shall be installed by a qualified sealant applicator for any/all joint sealant exposed to view. Owner reserves the right to request a mockup of the quality for the joint sealant installation.

PART 2 PRODUCTS

2.1 JOINT SEALERS

- A. Manufacturers:
 - 1. Tremco [basis of design]
 - 2. Sika
 - 3. GE Silicones.
 - 4. Pecora Corp.
 - 5. DAP
- B. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer, based on testing and field experience.
- C. Low-Emitting Interior Sealants: Sealants and sealant primers used inside the weatherproofing system shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
- D. Liquid-Applied Sealants: Comply with ASTM C920 and other requirements indicated for each liquid-applied chemically curing sealant specified, including those referencing ASTM C920 classifications for type, grade, class, and uses related to exposure and joint substrates.
- E. Suitability for Contact with Food: Where elastomeric sealants are indicated for joints that will come in repeated contact with food, provide products that comply with 21 CFR 177.2600.
- F. Additional Movement Capability: Where additional movement capability is specified, provide products with the capability, when tested for adhesion and cohesion under maximum cyclic movement per ASTM C719, to withstand the specified percentage change in the joint width existing at the time of installation and remain in compliance with other requirements of ASTM C920 for uses indicated.
- G. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range, unless otherwise noted.

2.2 SILICONE JOINT SEALANTS:

- A. **Type S-1:** Single component, nonsag, Silicone Joint Sealant: ASTM C920, Type S, Grade NS, Class 100/50, Use NT

1. Tremco Spectrem 1 or Spectrem 800 or Equal
- B. **Type S-2:** Single Component, nonsag, Silicone Joint Sealant: ASTM C920, Type S, Grade NS, Class 50, use NT
 1. Tremco Spectrem 2 or Spectrem 3 or Equal
- C. **Type S-3:** Multi-Component, Nonsag, Silicone Joint Sealant: ASTM C920, Type M, Grade NS, Class 50, Use NT
 1. Tremco Spectrem 4-TS or Equal
- D. **Type S-4:** Single Component, nonsag, Traffic-Grade, Silicone Joint Sealant: ASTM C920, Type S, Grade NS, Class 100/50, Use T
 1. Tremco Spectrem 800 or Equal
- E. **Type S-5:** Mildew Resistant, Single Component, Silicone Joint Sealant: ASTM C920, Type S, Grade NS, Class 25, Use NT
 1. Tremco Tremsil 200 Sanitary or Equal

2.3 URETHANE JOINT SEALANTS

- A. **Type U-1:** Single Component, nonsag, Urethane Joint Sealant: ASTM C920, Type S, Grade NS, Class 25 or 35, Use NT:
 1. Tremco Dymonic or Dymonic FC or Equal
- B. **Type U-2:** Single Component, nonsag, Traffic Grade, Urethane Joint Sealant: ASTM C920, Type S, Grade NS, Class 25, Use T.
 1. Tremco Vulkem 116 or Equal.
- C. **Type U-3:** Multi-Component, nonsag, Urethane Joint Sealant: ASTM C920, Type M, Grade NS, Class 25, Use T.
 1. Tremco Dymeric 240 or Dymeric 240 FC or Equal
- D. **Type U-4:** Multi-Component, nonsag, Urethane Joint Sealant: ASTM C920, Type M, Grade NS, Class 25, Use NT.
 1. Tremco Vulken 227 or Equal
- E. **Type U-5:** Multi-Component, nonsag, Traffic Grade, Urethane Joint Sealant: ASTM C920, Type M, Grade NS, Class 25, Use T.
 1. Tremco Vulken 227 or Equal

2.4 BUTYL JOINT SEALANTS

- A. **Type B-1:** Butyl Rubber based Joint Sealants: ASTM C 1311
 1. Tremco General Purpose Butyl Sealant or Equal

2.5 LATEX JOINT SEALANTS

- A. **Type L-1:** Latex Joint Sealant: Acrylic latex or Siliconized Acrylic Latex: ASTM C834, Type OP, Grade NF or better
 1. Tremco Tremflex 834 or Equal.
- B. **Type L-2:** Paintable Mildew-Resistant Latex Joint Sealant: Acrylic Latex or Siliconized Acrylic Latex: ASTM C834, Type OP, Grade NF or better.
 1. Tremco Tremflex 834 or Equal.

2.6 ACCESSORIES

- A. General: Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
- B. Cylindrical Sealant Backings: ASTM C1330, Type C (closed-cell material with a surface skin) as approved in writing by joint-sealant manufacturer for joint application indicated, and of size and

density to control sealant depth and otherwise contribute to producing optimum sealant performance:

1. Oversized to 30 to 50 percent larger than joint width.
- C. Elastomeric Tubing Sealant Backings: Neoprene, butyl, EPDM, or silicone tubing complying with ASTM D1056, nonabsorbent to water and gas, and capable of remaining resilient at temperatures down to minus 26 deg F. Provide products with low compression set and of size and shape to provide a secondary seal, to control sealant depth, and to otherwise contribute to optimum sealant performance.
- D. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where applicable.
- E. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated. Non-staining type, recommended by sealant manufacturer to suit application.
- F. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
- G. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify substrate surfaces and joint openings are ready to receive work.
- B. Verify joint backing and release tapes are compatible with sealant.

3.2 PREPARATION

- A. Remove loose materials and foreign matter impairing adhesion of sealant.
- B. Clean and prime joints.
- C. Perform preparation in accordance with ASTM C1193.

3.3 INSTALLATION

- A. Perform installation in accordance with ASTM C1193.
- B. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer.
- C. Install bond breaker where joint backing is not used.
- D. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.**
- E. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
- F. Tool joints concave.

3.4 SCHEDULE

- A. Joint-Sealant Application: Interior joints in vertical surfaces and horizontal non-traffic surfaces, subject to movement, unless otherwise noted.
 1. Joint locations such as, but not limited to:
 - a. Control joints on exposed interior surfaces of exterior walls.
 - b. Interior joints where interior partitions meet exterior walls of dissimilar materials and components.
 - c. Other joints as indicated on Drawings.

2. Provide one of the following acceptable sealants as approved by manufacturer for substrates and uses indicated: **Type U-1**
 3. Color: As selected by Architect from manufacturer's full range of colors. Paintable Sealant, prep for painted finish.
- B. Joint-Sealant Application: Interior joints in vertical surfaces subject to abuse and movement.
1. Joint locations such as, but not limited to:
 - a. Vertical joints, including control joints and joints between masonry and structural support members, on exposed surfaces of interior unit masonry walls and partitions.
 2. Provide one of the following acceptable sealants as approved by manufacturer for substrates and uses indicated: **Type U-2**
 3. Color: As selected by Architect from manufacturer's full range of colors.
- C. Joint-Sealant Application: Interior joints in vertical surfaces not subject to movement.
1. Joint locations such as, but not limited to:
 - a. Interior perimeter joints of exterior openings.
 - b. Perimeter joints between interior wall surfaces and frames of interior doors, windows, and elevator entrances.
 - c. Interior joints between dissimilar materials where a gap is created where materials meet, unless otherwise noted.
 2. Provide one of the following acceptable sealants as approved by manufacturer for substrates and uses indicated: **Type L-1, Type L-2**
 3. Color: As selected by Architect from manufacturer's full range of colors.
- D. Joint-Sealant Application: Exterior joints under metal thresholds and saddles, sill plates, or as bedding sealant for sheet metal flashing and frames of metal or wood.
1. Provide one of the following acceptable sealants as approved by manufacturer for substrates and uses indicated: **Type S-1, Type U-1, Type B-1**
 2. Color: As selected by Architect from manufacturer's full range of colors.

END OF SECTION

SECTION 08 71 00 - DOOR HARDWARE

PART 1 GENERAL

1.1 SUMMARY

- A. This Section includes commercial door hardware and related accessories.
- B. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.
 - 1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
 - 2. ICC/IBC - International Building Code.
 - 3. NFPA 70 - National Electrical Code.
 - 4. NFPA 80 - Fire Doors and Windows.
 - 5. NFPA 101 - Life Safety Code.
 - 6. NFPA 105 - Installation of Smoke Door Assemblies.
 - 7. UL/ULC and CSA C22.2 - Standards for Automatic Door Operators Used on Fire and Smoke Barrier Doors and Systems of Doors.
 - 8. State Building Codes, Local Amendments.
- C. Standards: All hardware specified herein shall comply with the following industry standards as applicable. Any undated reference to a standard shall be interpreted as referring to the latest edition of that standard:
 - 1. ANSI/BHMA Certified Product Standards - A156 Series.
 - 2. UL10C - Positive Pressure Fire Tests of Door Assemblies.
 - 3. ANSI/UL 294 - Access Control System Units.
 - 4. UL 305 - Panic Hardware.
 - 5. ANSI/UL 437- Key Locks.

1.2 SUBMITTALS

- A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.

1.3 QUALITY ASSURANCE

- A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.
- B. Certified Products: Where specified, products must maintain a current listing in the Builders Hardware Manufacturers Association (BHMA) Certified Products Directory (CPD).
- C. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.
 - 1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.
 - 2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.

1.5 COORDINATION

- A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop

Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.

- B. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.6 WARRANTY

- A. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:
 - 1. Structural failures including excessive deflection, cracking, or breakage.
 - 2. Faulty operation of the hardware.
 - 3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 - 4. Electrical component defects and failures within the systems operation.
- B. Standard Warranty Period: One year from date of Substantial Completion, unless otherwise indicated.

PART 2 PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

- A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.

2.2 ARCHITECTURAL TRIM

- A. Door Protective Trim
 - 1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.
 - 2. Size: Fabricate protection plates (kick, armor) not more than 2" less than door width (LDW) on stop side of single doors and 1" LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.
 - 3. Where plates are applied to fire rated doors with the top of the plate more than 16" above the bottom of the door, provide plates complying with NFPA 80. Consult manufacturer's catalog and template book for specific requirements for size and applications.
 - 4. Protection Plates: ANSI/BHMA A156.6 certified protection plates (kick, armor), fabricated from the following:
 - a. Stainless Steel: 300 grade, 050-inch thick.
 - 5. Options and fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets. Provide countersunk screw holes.
 - 6. Manufacturers:
 - a. Rockwood (RO).

2.3 ARCHITECTURAL SEALS

- A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.
- B. Thresholds: Maximum ½ inch height; requirements to ensure accessibility for persons with disabilities.

- C. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.
 - 1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.
- D. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.
 - 1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and NPFA 252, Standard Methods of Fire Tests of Door Assemblies.
- E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.
- F. Manufacturers:
 - 1. Pemko (PE).

2.4 FABRICATION

- A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

2.5 FINISHES

- A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.
- B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware
- C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.
- B. Examine roughing-in for electrical source power to verify actual locations of wiring connections before electrified and integrated access control door hardware installation.
- C. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.2 INSTALLATION

- A. Install each item of mechanical hardware to comply with manufacturer's written instructions and according to specifications.
 - 1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.

- B. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.
- C. Thresholds: Set thresholds for unit entry doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."

3.3 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

3.4 CLEANING AND PROTECTION

- A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.
- B. Clean adjacent surfaces soiled by door hardware installation.
- C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.5 DOOR HARDWARE SETS

- A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.
 - 1. Quantities listed are for each pair of doors, or for each single door.
 - 2. The supplier is responsible for handing and sizing all products.
 - 3. Where multiple options for a piece of hardware are given in a single line item, the supplier shall provide the appropriate application for the opening.
 - 4. At existing openings with new hardware the supplier shall field inspect existing conditions prior to the submittal stage to verify the specified hardware will work as required. Provide alternate solutions and proposals as needed.
- B. Manufacturer's Abbreviations:
 - 1. MK - McKinney
 - 2. PE - Pemko
 - 3. SU - Securitron
 - 4. RO - Rockwood
 - 5. SA - SARGENT
 - 6. OT - Other
 - 7. HS - HES
 - 8. NO - Norton

END OF SECTION

SECTION 09 21 16 - GYPSUM BOARD ASSEMBLIES

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes gypsum board with joint treatment.

1.2 SUBMITTALS

- A. Product Data: Submit data on each type of gypsum board, backer board, joint tape and accessories.

1.3 QUALITY ASSURANCE

- A. Perform Work in accordance with GA-201 - Gypsum Board for Walls and Ceilings. GA-214 - Recommended Specification: Levels of Gypsum Board Finish. GA-216 - Recommended Specifications for the Application and Finishing of Gypsum Board. GA-600 - Fire Resistance Design Manual.
- B. Surface Burning Characteristics:
 - 1. Textile Wall Coverings: Comply with one of the following:
 - a. Maximum 25/450 flame spread/smoke developed index when tested in accordance with ASTM E84.
- C. Mock-up:
 - 1. Provide mockup of the quality of finishes for one wall that indicates the level of finish quality. Approved mockup will become standard for comparing other work.
 - 2. Provide mockup of the quality of finishes for one ceiling area that indicates the level of finish quality for knockdown stomped ceiling finishes. Approved mockup will become standard for comparing other work.

PART 2 PRODUCTS

2.1 GYPSUM BOARD ASSEMBLIES

- A. Manufacturers:
 - 1. United States Gypsum Co.
 - 2. BPB Americas Inc.
 - 3. G-P Gypsum Corp.
 - 4. National Gypsum Co.
 - 5. Certainteed.
- B. Gypsum Board [Type GB-1]: ASTM C1396; Type X fire resistant type, high density; 5/8 inch thick, maximum available length in place; ends cut square, tapered square edges.

2.2 ACCESSORIES

- A. Gypsum Board Accessories: ASTM C1047; metal, metal and paper combination; corner beads, edge trim, and expansion joints.
 - 1. Metal Accessories: Galvanized steel.
 - 2. Edge Trim: Type LC or U bead.
- B. Joint Materials: ASTM C475/C475M, reinforcing tape, joint compound, and water.
- C. Fasteners: ASTM C1002; Type S12 hardened screws, length to suit application.
- D. Gypsum Board Screws: ASTM C1002; Type W or S hardened screws, length to suit application.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify site conditions are ready to receive work.

3.2 INSTALLATION

- A. Gypsum Board:
 - 1. Install gypsum board in accordance with GA-216 and GA-600.
 - 2. Fasten gypsum board to furring or framing with screws.
 - 3. Place corner beads at external corners. Use longest practical length. Place edge trim where gypsum board abuts dissimilar materials.
 - 4. Seal cut edges and holes in moisture resistant gypsum board with sealant.
- B. Joint Treatment:
 - 1. Finish in accordance with GA-214 Level 4.
 - 2. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.
 - 3. Feather coats onto adjoining surfaces so camber is maximum 1/32 inch.

3.3 SCHEDULE

- A. Match existing / adjacent finishes as applicable to the conditions. General intent is repair existing gypsum board finishes to a Level 4 standard finish. Prep, repair, and skim as required to achieve desired finish.
- B. Interior walls [except where noted otherwise]: GB-1. Level 4 finish.
- C. Interior Walls / Ceilings at Demising Wall Locations: GB-1, Level 4 finish.

END OF SECTION

SECTION 09 26 13 - GYPSUM VENEER PLASTERING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes: Veneer plaster / Skim coat over existing plaster or gypsum board surfaces.

1.2 SUBMITTALS

- A. Product Data: Veneer plaster products.

1.3 QUALITY ASSURANCE

- A. Apply gypsum base according to ASTM C844 and GA 216.
- B. Apply gypsum veneer plaster according to ASTM C843.
- C. Veneer plaster Work according to GA 216.
- D. Fire-Rated Wall and Floor Construction: in conjunction with Section 09 21 16 and the drawings.
- E. Manufacturer: Company specializing in manufacturing products specified in this Section with three years' experience.
- F. Installer: Company specializing in performing Work of this Section with three years' experience.

1.4 ENVIRONMENTAL REQUIREMENTS

- A. Do not apply veneer plaster when substrate or ambient air temperature is less than 50 degrees F nor more than 80 degrees F; for 24 hours prior to, during operations and after, until building heating system can maintain spaces above minimum temperature.

PART 2 PRODUCTS

2.1 GYPSUM VENEER PLASTER

- A. Manufacturers:
 - 1. USG
 - 2. Georgia Pacific
 - 3. National Gypsum

2.2 COMPONENTS

- A. Gypsum Veneer Plaster: ASTM C587.
- B. Gypsum Base: Refer to Section 09 21 16 for gypsum board base materials.
- C. Gypsum Veneer Base Accessories: ASTM C1047; metal; corner beads, edge trim, and expansion joints.
- D. Reinforcing Tape, Joint Compound, Adhesive, Water, Fasteners: GA 216.
- E. Bond Coat: ASTM C631, vinyl polymer type.

2.3 ACCESSORIES

- A. Gypsum Board Screws: ASTM C954; length to suit application.
 - 1. Screws for Wood Framing: Type W.

2.4 MIXES

- A. Mix plaster according to ASTM C587.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify gypsum base is flat, joints are taped and sanded, and surface is ready to receive Work of this Section. Verify joint and surface perimeter accessories are in place.
- B. Verify gypsum plaster base has been installed according to ASTM C844, is flat, smooth and surface is ready to receive Work. Verify joint and surface perimeter accessories are in place.

3.2 PREPARATION

- A. Clean surfaces of dust or loose matter.

3.3 INSTALLATION

- A. Install gypsum base according to GA 216. Refer to Section 09 21 16.
- B. Use drywall screws to fasten gypsum board to framing substrate.
- C. Install accessories.
- D. Tape, fill, and sand filled joints, edges, corners, openings, and fixings to produce surface ready to receive veneer finish.
- E. Feather coats onto adjoining surfaces so joint camber is maximum 1/32 inch.
- F. Apply gypsum veneer plaster according to ASTM C843.
- G. Apply single coat of veneer plaster immediately after dampening substrate to thickness of 1/16 to 3/16 inch in thickness or as required to suit existing conditions.
- H. Finish surface of veneer plaster to **smooth skim coat finish to match new adjacent gypsum board finishes.**

3.4 ERECTION TOLERANCES

- A. Maximum Variation from Specified Thickness: Plus or minus 1/32 inch.

3.5 SCHEDULES

- A. Existing plaster/ gypsum board finishes to remain, except where existing gypsum board is damaged and will be replaced in like kind. Repair walls from prior damage and as a result of cut-patch operations for proposed work. Apply new full skim coat gypsum veneer skim coat over the entire surface of the existing finishes scheduled to remain where impacted by the work. New finish shall be smooth and consistent with the finish of new gypsum board, Level 4 finish.

END OF SECTION

SECTION 09 64 00 - RESILIENT WOOD FLOORING

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes resilient plank flooring – direct glue down.

1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data.
- B. Samples:
 - 1. Submit manufacturer's complete set of color samples for initial selection.

1.3 QUALITY ASSURANCE

- A. Surface Burning Characteristics:
 - 1. Floor Finishes: Class I, minimum 0.45 watts/sq cm when tested in accordance with NFPA 253.

1.4 ENVIRONMENTAL REQUIREMENTS

- A. Maintain temperature in storage area between 55 degrees F and 85 degrees F.
- B. Store materials for not less than 48 hours prior to installation in area of installation at temperature of 65 degrees F to achieve temperature stability. Thereafter, maintain conditions above 55 degrees F. Maintain relative humidity between 40% and 60% during installation.

1.5 PERFORMANCE REQUIREMENTS

- A. Fire-Test-Response Characteristics: For resilient tile flooring, as determined by testing identical products according to ASTM E 648 or NFPA 253 by a qualified testing agency.
 - 1. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm.

1.6 EXTRA MATERIALS

- A. Furnish an additional 5% of each type of floor, base and accessories.
- B. Document attic stock, properly label, and turn over to Owner.

1.7 WARRANTY

- A. Furnish twenty [20] year warranty on Vinyl Plank Flooring.

PART 2 PRODUCTS

2.1 TILE FLOORING

- A. Manufacturers:
 - 1. Tarkett Luxury Vinyl Planks, Event+Wood
 - 2. Armstrong, Vinyl Plank Flooring, LUXE Best Collection.
 - 3. Congoleum Corp.
- B. Vinyl Plank Flooring: ASTM F1066:
 - 1. Tile Standard: ASTM F 1700, Class III, Type B, printed film vinyl tile, embossed surface
 - 2. Size: 6 x 36 inch.
 - 3. Wear Layer Thickness: 30 mil [embossed]
 - 4. Total Thickness: 0.120 inch
 - 5. Surface Treatment: Polyurethane – Reinforced
 - 6. Installation Method: Glue Down
 - 7. Pattern: Surface woodgrain pattern, as selected from full range of manufacturers colors.

2.2 ACCESSORIES

- A. Subfloor Filler: Premix latex; type recommended by floor material manufacturer.
- B. Primers and Adhesives: Waterproof, types recommended by floor material manufacturer.
- C. Moldings and Edge Strips: Same material as flooring as applicable, molded rubber other locations.
- D. Sealer and Wax: Types recommended by floor material manufacturer.

PART 3 EXECUTION

3.1 EXAMINATION

- A. All subfloors must be permanently dry, clean, smooth, and structurally sound. The surface must be free of all dust, loose particles, solvents, paint, grease, oil, wax, alkali, sealing/curing compounds, old adhesive, and any other foreign material, which could affect the installation and adhesive bond to the substrate. Permanent and non-permanent markers, pens, crayons, paint, or similar marking tools used to mark the substrate or the back of the resilient flooring material will cause migratory staining. All substrate contaminants must be mechanically removed prior to the installation of the flooring material. NOTE: Do not use liquid solvents or adhesive removers.
- B. Verify concrete floors are dry to maximum moisture content as recommended by manufacturer, and exhibit negative alkalinity, carbonization, and dusting.
- C. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of resilient products.

3.2 PREPARATION

- A. Clean substrate.
- B. Fill all depressions, cracks, and other surface irregularities with a good quality Portland cement based underlayment patching compound appropriate for this purpose.
- C. Fill minor low spots and other defects with sub-floor filler.
- D. Repair concrete surfaces in accordance with ASTM F 710.
- E. Wood subfloors shall have a 1/4 or 1/2 inch APA approved underlayment plywood and approved by LVP manufacturer.
- F. Fill cracks, holes, depressions and irregularities in the substrate with good quality Portland cement based underlayment leveling and patching compound and remove bumps and ridges to produce a uniform and smooth substrate.
- G. Apply primer as required to prevent "bleed-thru" or interference with adhesion by substances that cannot be removed. Apply primer to substrate surfaces per manufacturer.

3.3 INSTALLATION

- A. Layout flooring planks in accordance with manufacturer's recommendations. Set flooring in place. Bond planks together, adhered to underlayment per manufacturer's recommendations.
- B. Install tile flooring with joints and seams parallel to building lines.
- C. Scribe flooring to produce tight joints at items penetrating flooring.
- D. Where floor finishes are different on opposite sides of door, terminate flooring under centerline of door.

- E. Apply adhesive to the underlayment in preparation for LVP, install per manufacturer's requirements.
- F. LVP shall be lightly butted together when placing the LVP into the adhesive.
- G. Roll floor in both direction with weighted roller in accordance with manufacturer's recommendations.
- H. Install edge strips at unprotected or exposed edges, where flooring terminates, and where indicated. Secure resilient strips by adhesive.
- I. Adhere base tight to wall and floor surfaces.
- J. Fit joints tightly and make vertical. Miter internal corners. At external corners, V cut back of base strip to 2/3 of its thickness and fold.

3.4 CLEANING

- A. Remove excess adhesive from surfaces without damage.

3.5 SCHEDULE

- A. Vinyl Plank Flooring: at areas identified on the drawings.

END OF SECTION

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SECTION 09 65 00 – RESILIENT RUBBER FLOORING

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes resilient base and accessories.

1.2 REFERENCES

- A. ASTM International:
 - 1. ASTM F1861 - Standard Specification for Resilient Wall Base.
- B. National Fire Protection Association:
 - 1. NFPA 253 - Standard Method of Test for Critical Radiant Flux for Floor Covering Systems Using a Radiant Heat Energy Source.
- C. South Coast Air Quality Management District:
 - 1. SCAQMD Rule 1113 - Architectural Coatings.
 - 2. SCAQMD Rule 1168 - Adhesive and Sealant Applications.

1.3 SUBMITTALS

- A. Product Data: Submit data describing physical and performance characteristics; including sizes, patterns and colors available; and installation instructions.
- B. Samples:
 - 1. Submit manufacturer's complete set of color samples for initial selection.
 - 2. Submit **two** samples, illustrating color and pattern for each resilient product specified.

1.4 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: Submit maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning

1.5 QUALITY ASSURANCE

- A. Surface Burning Characteristics:
 - 1. Base Material: Class I, minimum 0.45 watts/sq cm when tested in accordance with NFPA 253.
- B. Accessibility: Base shall comply with accessibility requirements ICC/ANSI A117.1.
 - 1. Exceed Federal Standards and ADA requirements for slip-resistance.

1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum ten years documented experience.
 - 1. Manufacturers Qualifications: Product manufacturer will have a technical installation representative available at the job site at the start of the installation to insure there are no conditions which will compromise the installation of the material and that the material is being installed according to industry standards, practices and manufacturers guidelines. The manufacturer's technical representative will document and confirm that the substrate, material, and installation are in compliance with manufacturer's guidelines and accepted industry standards and practices.
 - a. Any noticed defect with the product or installation system will require the response of the manufacturer's technical field service personnel on site to determine cause, correction or replacement.
- B. Installer: Company specializing in performing Work of this section with minimum ten years documented experience.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store resilient products and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by Tarkett, but not less than 55 deg F or more than 85 deg F.

1.8 PROJECT CONDITIONS / ENVIRONMENTAL REQUIREMENTS

- A. Maintain ambient temperatures within range recommended by the manufacturer, but not less than 65 deg F or more than 85 deg F in spaces to receive resilient products during the following time periods:
 - 1. 48 hours before installation.
 - 2. During installation.
 - 3. 48 hours after installation.
- B. Maintain the ambient relative humidity between 40% and 60% during installation.

1.9 EXTRA MATERIALS

- A. Furnish an additional 5% of each type of floor, base and accessories.
- B. Document attic stock, properly label, and turn over to Owner.

1.10 WARRANTY

- A. Provide five [5] year manufacturer warranty for all resilient flooring, base, and accessories.

PART 2 PRODUCTS

2.1 RESILIENT BASE

- A. Manufacturers:
 - 1. Tarkett North America [Basis of Design]
 - 2. Roppe
 - 3. Johnsonite
 - 4. Approved Equal.
- B. Base: ASTM F1861 Type TP – Thermoplastic, Rubber; coved style:
 - 1. Height: 6 inch.
 - 2. Thickness: 0.125 inch thick.
 - 3. Finish: Satin or Matte.
 - 4. Length: 4 foot sections.
 - 5. Outside Corners: Premolded or precut. Corners shall be a minimum of 4 inches in length each direction.
 - 6. Inside Corners: Job formed

2.2 ACCESSORIES

- A. Transition Moldings and Edge Strips, same material as flooring or metal as applicable. Refer to drawings.

2.3 INSTALLATION MATERIALS

- A. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement based or blended hydraulic-cement-based formulation provided or approved by manufacturer for applications indicated and coordinate with substrate.
- B. Primer: A primer may be required and must be verified by the manufacturer.
- C. Adhesives: Water-resistant type recommended by manufacturer to suit floor tile and substrate conditions indicated.

1. Adhesives shall be approved by manufacturer for use over concrete substrates with maximum RH of 85 percent (ASTM F2170) and maximum pH of 9.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the work.
- B. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of resilient products.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.
- D. Verify floor and wall surfaces are free of substances capable of impairing adhesion of new adhesive and finish materials.

3.2 PREPARATION

- A. Contractor shall provide all required field verification of conditions, quantity take-offs, layout confirmations, etc. as applicable to the work.
- B. Prohibit traffic until filler is cured.
- C. Clean substrate.
- D. Apply primer as required to prevent "bleed-thru" or interference with adhesion by substances cannot be removed.
- E. Do not install resilient products until they are same temperature as the space where they are to be installed.
 1. Move resilient products and installation materials into spaces where they will be installed at least 48 hours in advance of installation.
- F. Sweep and vacuum clean substrates to be covered by resilient products immediately before installation.

3.3 CLEANING AND PROTECTION

- A. Comply with manufacturer's written instructions for cleaning and protection of resilient products.
- B. Perform the following operations immediately after completing resilient product installation:
 1. Remove adhesive and other blemishes from exposed surfaces.
 2. Sweep and vacuum surfaces thoroughly.
 3. Damp-mop surfaces to remove marks and soil.
- C. Protect resilient products from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period.
 1. Prohibit traffic on resilient flooring for 48 hours after installation.
 2. No heavy traffic, rolling loads, or furniture placement for 72 hours after installation.
- D. Wait 72 hours after installation before performing initial cleaning.
- E. A regular maintenance program must be started after the initial cleaning.

3.4 SCHEDULE

- A. Refer to Drawings.

END OF SECTION

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SECTION 09 90 00 - PAINTING AND COATING

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes surface preparation and field application of paints and other coatings.
- B. Paint/Stain all exposed surfaces, new and existing, unless otherwise indicated.
 - 1. Interior Work
 - a. Walls and ceilings.
 - b. Interior trim and casing
 - c. Doors and frames.
- C. Do not paint prefinished items, finished metal surfaces, operating parts, labels, and materials obviously intended to be left exposed such as brick and tile.
- D. Unless otherwise indicated do not paint concealed surfaces.
- E. Obtain primers and undercoat materials for each coating system from the same manufacturer as the finish coats. Primer and finish coat shall be factory applied, finish coat shall be field applied.
- F. **Extra Materials:** Deliver to Owner **any extra materials**, properly labeled, factory sealed, of each color and type of finish coat paint used on project for each building in contract. Materials shall be signed for by GDPM Construction Inspector.
- G. Minimum surface temperature of 50 degrees required for all coating systems.
- H. Store all materials in tightly closed containers when not in use, away from heat, electrical equipment, sparks and open flames. Use approved bonding and grounding procedures. Keep out of the reach of children and residents.
- I. Transfer materials to approved containers with complete and appropriate labeling.

1.2 APPLICATORS QUALIFICATIONS

- A. Engage an experienced applicator with a minimum of five years experience and who has completed painting systems application similar in materials and extend to those indicated for the Project and that have resulted in a construction record of successful in-service performance.

1.3 SUBMITTALS

- A. Product Data and Color Samples: Provide product data on each coating system component indicating VOC and environmental requirements. Coordinate coating systems for each material/substrate.

1.4 MOCKUP

- A. Full-coat finish sample (benchmark sample) of each type of coating, substrate, color, and finish required in area of not less than 100 sq. ft. Comply with PDCA P5. Contractor shall not begin work until final approval is given on color and finish.

1.5 REFERENCES AND REGULATIONS:

- A. Standards: Comply with applicable provisions and recommendations of the following, except when otherwise shown or specified:
 - 1. OSHA Safety Standards for the Construction Industry, Title 29 - Labor, Subtitle B – Regulations Relating to Labor, Occupational Safety and Health Administration (OSHA) 1926, 07/01/93 editions.
 - 2. OSHA Worker Safety and Health Act Regulation 29 CFR No. Parts 1900 through 1910.1400, 07/01/93 and later editions.

3. SSPC Volume 1, Good Painting Practice, 1989 edition.
 4. SSPC Volume 2, Systems and Specifications, 1991 edition, Surface Preparation Guide and Paint Application Specifications of the Steel Structures Painting Council.
 5. NACE Standards, Volume I and II, 1992 editions of the National Association of Corrosion Engineers.
 6. SSPC and NACE Painter Safety Guidelines, latest editions.
- B. Requirements of Regulatory Agencies, conform with the following:
1. Clean Air Act (CAA) – hazardous Air Emissions by U.S. EPA or State Agency under Regulation 40 CFR 61 or state equivalent.
 2. Clean Water Act (CWA) – hazardous Water Releases by U.S. EPA or State Agency under Regulation 40 CFR 116 through 117 or state equivalent.
 3. Toxic Substances Control Act (TSCA) – Toxic substance by U.S. EPA under Regulation 40 CFR 761.
 4. Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or “SuperFund”) – Uncontrolled Hazardous Waste Sites and Hazardous Substance Release by U.S. EPA under Regulation 40 CFR 302.
 5. Resource Conservation and Recovery Act (RCRA) – Generation, Transportation, Treatment, Storage and Disposal of hazardous waste by U.S. EPA or State Agency under Regulation 40 CFR 260 through 267 or state equivalent.
 6. Hazardous and Solid Waste Amendments (HSWA) – Further regulation of hazardous waste by U.S. EPA or State Agency under Regulation 40 CFR through 267 or state equivalent.
 7. Hazardous Material Transportation Act (HMTA) – Transportation of Hazardous Material by DOT or State Agency under Regulation 49 CFR 171 through 179 or state equivalent.

1.6 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: Submit maintenance and cleaning instructions.

1.7 QUALITY ASSURANCE

- A. Surface Burning Characteristics:
1. Fire Retardant Finishes: Maximum 25/450 flame spread/smoke developed index when tested in accordance with ASTM E84.

1.8 ENVIRONMENTAL REQUIREMENTS

- A. Store and apply materials in environmental conditions required by manufacturer's instructions.

PART 2 PRODUCTS

2.1 COLORS AND FINISHES

- A. Color Pigments: Pure, non-fading, applicable types to suit substrates and service indicated.
1. Lead: Measurable lead content in either the pigment or binder will not be permitted.
 2. The finish coats shall match colors selected.
- B. Finish Quality:
1. Finishes shall exhibit a high quality, commercial grade appearance of uniform thickness.
 2. Finishes shall be free of runs, sags, drips, waves, orange peel, festoons, dry spray, cloudiness, spotting, ropiness, brush marks, roller marks, fish eyes or other surface imperfections, voids, discontinuities, pinholes, holidays and overspray.
 3. Final coat shall be uniform in texture, color and gloss, and shall provide an acceptable match with the approved drawdown sample sheet.

2.2 COATINGS

- A. Manufacturer
1. Sherwin-Williams (SW)
 2. PPG Porter

3. Benjamin Moore
- B. Colors: As selected from a full range of manufacturer's offerings, including premium colors.
- C. Contractor shall provide for a minimum of the following:
 1. Interior Finishes: 3 colors – ceiling, walls, and doors / frames / trim

2.3 INTERIOR COATINGS

- A. Interior Latex Primer: SW ProMar 200 Zero VOC Wall Primer B28W02600, or equal.
 1. Interior Latex Primer
 2. VOC: maximum 0g/L; 0.0 lb/gal
 3. Volume Solids: 26 +/- 2%
- B. Interior Latex: SW ProMar 200 Zero VOC Interior Latex Flat B30-2600 Series, or equal.
 1. Interior Latex Flat Acrylic
 2. VOC: maximum 0g/L; 0.0 lb/gal
 3. Volume Solids: 41 +/- 2%
- C. Interior Latex: SW ProMar 200 Zero VOC Eg-Shel B20-2600 Series, or equal.
 1. Interior Latex Eggshell Acrylic
 2. VOC: maximum 0g/L; 0.0 lb/gal
 3. Volume Solids: 42 +/- 2%
- D. Interior Latex: SW ProMar 200 Zero VOC Semi-Gloss B31-2600 Series, or equal.
 1. Interior Latex Semi-Gloss Acrylic
 2. VOC: maximum 0g/L; 0.0 lb/gal
 3. Volume Solids: 39 +/- 2%
- E. Interior Acrylic Primer: SW Pro Industrial DTM Acrylic Primer B66W1
 1. Interior Acrylic Primer
 2. VOC: <150 g/L, 1.25 lb/gal
 3. Volume Solids: 46% +/- 2%
- F. Interior Acrylic Finish: SW DTM Acrylic Finish B66W01151 Series
 1. Interior Acrylic Coating
 2. VOC: <50 g/L, 0.42 lb/gal

2.4 PRE-CLEANING AND SURFACE PREPARATION PRODUCTS

- A. Pre-cleaning Agents
 1. SW No Rinse Prepaint Cleaner
 2. Great Lakes Laboratories, Product 899, No Rinse Cleaner
 3. Krud Kutter
 4. Or approved equal
 5. Potable water
- B. Pre-cleaning (Power Wash) Equipment
 1. Capacity to continuously deliver 3-5 gpm at 2,500 psig of 180-200 degree F hot water.
 2. Cleaning system shall affect the 32-ounce per gallon dilution.
 3. Manufacturer: Alkota, Model 565T with model 520 water heater or approved equal.
 4. Power wash with 15 degree tip capable of delivering hot water at 2500 psig.
- C. Power Tool Surface Preparation Media:
 1. Scotch Brite No. 07451 by 3 M Corporation, Surface Conditioning disc.
 - a. Properties
 - b. Texture: A Medium
 - c. Maximum Speed: 18,000 RPM
 2. Clean "N" Strip Disco No CSD2 by 3 M Corporation

- a. Texture: Course
- b. Maximum Speed: 8,000 RPM
- c. Or approved equal.

PART 3 EXECUTION

3.1 SURFACE PREPARATION

- A. Comply with paint manufacturer's written instructions for surface preparation, environmental and substrate conditions, product mixing, and application.
- B. Perform all surface preparation in accordance with SSPC specifications, guidelines and good painting practices.
- C. Patch all holes and imperfections with spackle joint compound and sand smooth.
- D. Seal all stains from water, smoke, ink, pencil, grease, etc. with SW Prep-Rite Interior Latex Primer or equal.
- E. Fill all cracks, voids and crevices with caulk after priming the surface.
- F. Do not paint until surface is thoroughly dry and in sound condition.

3.2 APPLICATION

- A. Examination and Verification of Condition: Contractor shall verify the areas and conditions under which the work is to be performed and notify the Owner in writing of conditions detrimental to the proper and timely completion of the Work. Do not proceed with the Work until satisfactory conditions have been corrected. Do not coat over chalk, dirt, scale, moisture, oil, surface contaminants, coatings that have exceeded the manufacturer's re-coat guidelines, or conditions otherwise detrimental to the formation of a durable high quality coating system.
- B. Comply with manufacturer's instructions and SSPC Good Paint Practices Volumes 1 and 2.
- C. Comply with OSHA regulations, City of Dayton, State of Ohio and Federal laws, ordinances, and guidelines.
- D. Coating systems require a minimum surface temperature of 77 degrees F at 50% RH for proper drying and curing with a minimum temperature of 50 degrees and a maximum relative humidity of 85%. Follow label directions for each type of coating. Substrate temperatures to be coated shall be a minimum of 5 degree F above dew point and rising. Ambient surface to be painted and coating materials shall be a minimum maintained temperature of 50 degree F for 24 hours.
- E. Refer to SDS sheets before using any product.
- F. All surfaces must be thoroughly dry before coating applications.
- G. Apply coatings using brush or roller only.

3.3 INTERIOR PAINT APPLICATION SCHEDULE

- A. Gypsum Board:
 - 1. Gypsum board ceilings:
 - a. Interior Latex Primer: SW ProMar 200 Zero VOC Primer at 1.3 MILS DFT per coat, one coat.
 - b. Interior Latex: SW ProMar 200 FLAT Interior Latex at 1.7 MILS DFT per coat, two coats.
 - 2. Gypsum board walls:
 - a. Interior Latex Primer: SW ProMar 200 Zero VOC Primer at 1.3 MILS DFT per coat, one coat.
 - b. Interior Latex: SW ProMar 200 Zero VOC Eggshell Interior Latex at 1.6 MILS DFT, two coats.

- B. Steel Substrates [hollow metal doors, frames, miscellaneous metal surfaces, access panels]:
 - 1. Interior Primer: SW DTM Acrylic Primer at 2.5-5.0 MILS DFT, one coat, where required for spot priming / bare metal conditions.
 - 2. Interior Acrylic: SW Pro Industrial DTM Acrylic Semi-Gloss Interior Coating at 2.5-4.0 MILS DFT, two coats.

3.4 CLEAN UP

- A. Clean site and remove debris and empty cans daily. Remove all paint from adjacent surfaces. Clean spills and splatters immediately.
- B. Clean hands and tools immediately after use with soap and water for water based products and with mineral spirits for oil based products.
- C. Follow manufacturer's safety recommendations when using mineral spirits.

3.5 ENVIRONMENTAL REQUIREMENTS

- A. Store and apply materials in environmental conditions required by manufacturer's instructions.

END OF SECTION

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