Specifications for:

Roof Replacement Wentworth Hi-Rise OH5-14, AMP 2

2765 Wentworth Avenue Dayton, OH 45406



Prepared for:

Greater Dayton Premier Management 400 Wayne Avenue

Dayton, Ohio 45410 937.910.7500

Website posting at www.gdpm.org

Prepared by:



Bid Set March 1, 2024

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Roof Replacement Wentworth Hi-Rise Greater Dayton Premier Management

00 41 13 - BID FORM

Го:	GREATER DAYTON PREMIER MANAGEMENT 400 Wayne Avenue Dayton, OH 45410				
Project:	Roof Replacement – Wentworth Hi-Rise OH5-14				
Bidder:					
Date:					
OFFER					
Document related for Managem specified r	s, GDPM General Terms and Cor rms and affidavits, prepared by RD ent for the above mentioned project	all matters referred to in the Bid Documents and Contract nditions for Construction Services, HUD Documents, and A Group Architects on behalf of Greater Dayton Premier, we the undersigned, hereby proposed to furnish all labor equired for Roof Replacement at Wentworth Hi-Rise, all in			
ADDEND	A :				
Addendum No.		Date of Receipt			
		e of the site and the requirements of the Project proposes to act Documents for the Sums as indicated on this Bid Form:			
	I #1: ROOF REPLACEMENT A NT and PERMIT FEES for the sum	T WENTWORTH HI-RISE: ALL LABOR, MATERIALS of			
Base Bid Amount		\$			
Contingency Allowance –		\$ <u>25,000</u>			
Permit Allo	owance –	\$ <u>2,000</u>			
Γotal Bid <i>I</i>	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

Roof Replacement Wentworth Hi-Rise Greater Dayton Premier Management

Maximum 120 calendar days.

participation and consideration of MBE prime contractors. Section 3 preference may also be considered.

ALTER	RNATES: NONE								
UNIT F	PRICES:								
UP-1:	Replacement of 2x6 wo	ood nailers.			\$	/LF			
UP-2:	Replacement of 2x10 w	ood nailers.			\$	/LF			
UP-3:	Installation of Roof Dra	in Insert			\$	/EA			
UP-4:	Remove existing, instal	ll new roof drain			\$	/EA			
	/ SF costs provided will led. Contractor to photo o			djustmer	nts in acco	rdance w	ith the ac	tual foc	otage
SECU	RITY								
Securi	ty in the sum of: f a				(\$				the
form of	fa cations.	i:	s sub	mitted	herewith	in acc	cordance	with	the
оросии	sationio.								
ACCE	PTANCE								
of the twenty	mitting this bid, it is unde acceptance of this bid is (120) days after the opescribed form and furnish nature.	mailed, telegraphe ening thereof, the u	ed, or c ndersig	elivered ned agr	I to the und	dersigned cute and	d within o I deliver a	ne hun contra	dred act in
	r Dayton Premier Manag project as it bests fits witl			o reject	any and a	ll bids or	award on	ıly a po	rtion
PROJI	ECT CHANGES								
Contra	ctor shall indicate the an	nount of overhead a	and pro	it to be	added to c	hanges to	o the proj	ect.	
For A	DDS to the work:	Overhead	%	Profit _		%			
For DE	EDUCTS to the work:	Overhead	%	Profit _		%			
GDPM	reserves the right to neg	gotiate Contractor C	Overhea	id and P	Profit Margi	ns with th	ne selecte	d Bidde	er.
CONT	RACT TIME								
Work s	shall be completed within			cal	endar day	s from	Notice to	o Proc	eed.

Bidder acknowledges the project schedule as stated in the Bid Documents and agrees to complete the work within the contract period scheduled. Failure to complete within the final agreed upon dates as established in the contract may cause the enforcement of liquidated damages per the contract.

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: Roof Replacement at Wentworth 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.

Roof Replacement Wentworth Hi-Rise Greater Dayton Premier Management

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

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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 Roof Replacement Project at Wentworth 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: ROOF REPLACEMENT

WENTWORTH HI-RISE

B. Project Location: WENTWORTH HI-RISE OH5-14, AMP 5

2765 Wentworth Avenue

Dayton, OH 45406

C. Owner: Greater Dayton Premier Management

400 Wayne Avenue Dayton, OH 45410

D. Architect: RDA Group Architects, LLC

7662 Paragon Drive 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 replacement of the low slope roof system, including all related flashings, terminations, detailing, sheet metal, etc. at Wentworth Hi-Rise as outlined / located on the Drawings / Specifications.
 - 1. All specific scope items shall be coordinated and reviewed on the drawings and specifications as applicable.
 - 2. Maintain existing roof systems until point of removal. Maintain building in a watertight condition at the end of each work day.
 - 3. Remove existing roof systems, including underlying lightweight fill complete to the concrete plank roof deck.
 - 4. Install a vapor barrier / temporary roof membrane.
 - 5. Install tapered polyiso roof insulation and cover board.
 - 6. Install adhered EPDM roof system.
 - 7. Remove existing, install new flashing, terminations, and transitions for a complete roof system to the manufacturer requirements.
 - 8. Remove existing, install new metal copings and edge metal.
 - 9. Remove existing, install new gutter and downspouts.
 - 10. Remove existing, install new gooseneck vents.
 - 11. Core / install new overflow scuppers in parapet walls.
 - 12. Modify / raise thru wall flashing at masonry penthouse walls.
- B. Provide all materials and labor for work as noted herein for a complete project.
 - 1. IMPORTANT: 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. Provide any and all ancillary work related to the above work scope including repair of any contractor damaged finishes within the work area.
- D. Provide protection of the building entrances for safe ingress-egress of building residents.
- E. Provide protection of all staging and laydown areas.

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. The building will remain OCCUPIED throughout the duration of the work.
 - 1. Provide fire watch as required by City of Dayton Fire Department, and in particular during any "hot" work, coordinate requirements with Fire Department.

B. Work Schedules:

- 1. Work hours are 7:00 AM to 5:00 PM. Saturday and Sunday work is permitted upon approval by Owner. Contractor must notify Owner in advance if weekend work will be accomplished.
- Weekend and overtime work or increasing crew size may be required by the Owner at no additional cost if the Contractor fails to meet projected dates as prescribed in the contract and the progress schedule. Liquidated damages will be assessed if the Contractor does not meet substantial completion date.
- C. Construct temporary fencing around the project staging area. Coordinate with Owner on location and size of staging areas.
- D. Provide a clearly defined project schedule to Owner for the work of this contract.
 - 1. Owner will provide appropriate notices to the residents located below the work areas.
 - 2. Provide minimum 48 hour notice prior to entering any dwelling unit.
 - 3. Update schedule as appropriate for weather delays, progress changes, etc.
- E. Provide all required temporary protection to minimize the spread of dust, dirt, and debris to other portions of the building, in particular during dusty activities / demolition / removals.
- F. Provide temporary protection of adjacent finishes at the work areas as well as any areas traversed to the building entrances, etc.
- G. Use of the elevators is permitted. Provide protection of the elevator to prevent damages.
- H. Determine and coordinate how the various disciplines work together and are scheduled to permit the work as outlined.
- I. Daily work wrap up: Plan the work and provide sufficient manpower to ensure that at the eand of each work day that the roof system is left in a watertight condition. Provide all necessary night seals, tie-ins, supplement efforts, etc. as required to maintain the building watertight.
- J. Staff project each work day with a full crew capable of timely completion 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 ONE HUNDRED TWENTY [120] 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.
- C. 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. 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 Spring / Summer 2024.
 - 1. Expedite submittals as necessary to provide timely review and 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** [included in the contract see unit costs for associated and other work items on bid form and the drawings]
 - A. Building Systems Allowance: include **\$25,000 [twenty five thousand dollars]** in the base bid amount of the project for use as a project contingency allowance.
 - B. Building Permit Allowance: include **\$2,000 [two 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. Commence and complete work as noted in the contract.
- C. Furnish all labor, materials, equipment, and management required to complete the project.
- D. Furnish all required logistics required to accomplish the work including, but not limited to, cranes, lifts, lulls, scaffolding, barricades, temporary protection, daily night seals, trash chutes, dumpsters, hauling, safety equipment, etc.
 - 1. Coordinate and receive Owner approval for all staging and laydown areas, contractor parking, etc. prior to the start of work.
 - 2. Provide protection of all existing pavement, turf, landscaping, etc. from damage during construction. Restore site to original / like new condition upon completion of the work.
- E. 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 are to be used purely as approximate and not as a basis for exact amounts for bidding.

- Promptly advise RDA of any discrepancies, errors with the specifications and drawings before bidding the work.
- F. 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. Provide all bonds, payment schedule, insurance 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. Take special care not to allow dust and debris to fall onto any equipment, material, personnel, or any room below the deck.
- J. 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 Greater Dayton Premier Management.

1.8 WORK BY THE OWNER

A. N/A

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. Procure, at Contractor's 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 site to verify general and pertinent conditions and take measurements necessary for bidding purposes.
 - Arrangements to visit the site may be made by contacting Glen Moss or Kevin Arnold 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: 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 will be provided upon request.
- D. Provide dumpsters or trash containers needed for the work. Do not use GDPM dumpsters or trash containers at any time for removal of materials, trash, or debris related to the 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. Do not permit trash / debris on the site in unprotected areas. No trash or debris shall be left on the ground. Take all considerations Resident safety.
 - Run magnet around work areas daily to pickup stray nails, etc. when appropriate.
- E. Furnishing workers with potable drinking water and any/all sanitary requirements during the project. Use of GDPM facilities and property is prohibited.
- F. Provide portable generators and/or required equipment needed for the completion of the work. Use of GDPM / Resident power is prohibited
- G. Remain in compliance with OSHA STANDARDS 1926 REGULATIONS FOR CONSTRUCTION at all times during project. 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. Do not take advantage of any clerical errors, omissions, contradictions, or conflicts that may develop in plans, specifications, or details. Report such errors, ambiguities and discrepancies to the Architect immediately for clarification, revision, or correction prior to the submission of bids. If no notification is given, it is assumed that all specifications and conditions will be met.
- J. Contract Period
 - 1. Provide request in writing a minimum of [14] days prior to Contract Completion Date if an extension of time is necessary.
 - 2. Notify the Architect, in writing, upon determination of any delay in material delivery.
- K. Security: Contractor's Liability for Vandalism
 - 1. Secure and protect the project which is under the control of the Contractor
 - 2. Repair and replace the work, if vandalized until that portion of the work is accepted as completed by the Owner. Take all 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. Contractor is responsible for all work performed by Sub-Contractors.
 - 2. Owner has the final authority to request a particular sub-contract not be engaged in the project. If this occurs, 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 subcontractor due to them utilizing alternate manufacturers or products that were not approved substitution requests.

1.14 CONTRACTOR QUALIFICATIONS

- A. Establish and provide qualifications to Owner 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. Providw 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. Provide 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.
- 3. Contractor is responsible for all work performed by the Sub-contractors.

1.15 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.

1.16 CHANGE PROCEDURES

- A. 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. Prepare and submit estimate within 7 days.
- B. Architect or Owner will issue a change order for all changes to the Contract Sum and for all changes to Contract Time, upon Owner approval of a proposal from Contractor.
- C. Stipulated Sum/Price Change Order: Based on Proposal Request and Contractor's fixed price quotation.
- D. Unit Price Change Order: For pre-determined unit prices and quantities, Change Order will be executed on fixed unit price basis. For unit costs or quantities of units of work which are not pre-determined, execute Work under Construction Change Directive. Changes in Contract Sum/Price or Contract Time will be computed as specified for Time and Material Change Order.
- 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.
 - Promptly revise progress schedules to reflect change in Contract Time, revise subschedules to adjust times for other items of work affected by the change, and resubmit.
 - Promptly enter changes in Project Record Documents.
- H. 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.
- 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.

1.17 APPLICATIONS FOR PAYMENT

- A. Refer to Section 01 29 00.
- 1.18 UNIT PRICES [some unit price items below may not be required unless change in scope occurs]
 - A. Document unit price quantities. RDA and/or Owner will confirm quantities as required. Provide and assist in taking of measurements.
 - 1. Contractor will not be paid for unit cost work without documentation of the work accomplished.

- B. Unit Price Schedule:
 - 1. UP-1: Replacement of 2x6 wood nailers.
 - 2. UP-2: Replacement of 2x10 wood nailers.
 - 3. UP-3: Installation of Roof Drain Insert
 - 4. UP-4: Remove existing, install new primary roof drain.
- 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 RDA multiplied by unit price for Work incorporated in or made necessary by the Work.

1.19 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/bids:
 - 1. None

1.20 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. Coordinate completion and clean-up of Work of separate sections in preparation for Substantial Completion.

1.21 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. Request clarification from Architect / Owner when manufacturers' instructions conflict with Contract Documents, prior to 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.

1.22 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.

1.23 REFERENCES

- A. Conform to reference standards by date of issue current as of date of Contract Documents.
- B. Request clarification from Architect / Owner when reference standards conflict with Contract Documents, prior to proceeding.

1.24 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. Product number.
 - 2. Approval agency.
 - 3. Performance characteristics.

1.25 PRECONSTRUCTION MEETING

- A. Owner/Architect will schedule preconstruction meeting after Notice of Award for affected parties.
- B. Owner, Architect, 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. Scheduling of construction events, set-up, storage and etc.
 - 5. Project personnel with contact information.
 - 6. Sequence of construction, starting points, events and required resources.
 - 7. Subcontractors list with contact information.
 - 8. Temporary utilities.
 - 9. Inspection and acceptance of existing conditions roof drains, units, etc.
 - 10. Project Safety
 - 11. Owner's requirements.
 - 12. Designation of personnel representing parties in Contract, and Architect.
 - 13. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 - 14. Scheduling.
 - 15. Use of premises by Owner and Contractor.
 - 16. Owner requirements for procedures and inspections
 - 17. Construction facilities and controls provided by Owner.
 - 18. Security and housekeeping procedures.
 - 19. Application for payment procedures.
 - 20. Procedures for maintaining record documents.
 - 21. Requirements for start-up of equipment.
 - 22. Inspection and acceptance of equipment put into service during construction period.

1.26 PROGRESS MEETINGS

- A. RDA will be providing periodic observation of the work. RDA will issue field reports at each site visit. RDA will be observing the work for compliance with the specifications and will not be responsible for the ways, means and methods of constructing the project or managing the day to day operations.
- B. Schedule and administer meetings throughout progress of the Work as applicable to the work at maximum bi-weekly intervals.

C. 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. Administrative issues payment applications, change orders, etc.
- D. Architect shall record minutes and distribute copies via email within two days after meeting to participants and those affected by decisions made.

1.27 CONTRACT ADMINISTRATION

- A. RDA is providing contract administration services for this project to the Owner. Contractor and Owner are responsible to coordinate the proposed work, schedules, installations, permits, inspections, etc. as RDA is not on-site every day.
- B. Contact 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 is not liable for deviations, field changes, and Client / Owner changes during construction.
- C. 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, Client / Owner requirements, provide a watertight detail, meet aesthetic requirements, etc.
- D. Meet all applicable building and zoning codes requirements whether specifically noted herein or not. Building codes represent the minimum acceptable standard.
- E. 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.

1.28 CUTTING AND PATCHING

- 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/removal 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.
 - 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.
- 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.

1.29 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.

1.30 SUBMITTAL REQUIREMENTS

A. Refer to Section 01 33 00.

1.31 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 Architect and is specified in product specification sections to be removed; remove mock-up and clear area when directed to do so.

1.32 TEMPORARY UTILITIES

- A. Refer to GDPM's Terms and Conditions
- B. 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.
 - Provide and maintain a proper fire watch within the building at any time when systems are in test mode.
- C. Provide temporary power as needed to facilitate work.
- D. Provide temporary lighting for construction operations as required by conditions.
- E. Provide temporary emergency egress and exit signage as required by conditions and where existing has been temporarily removed to facilitate work.
- F. Coordinate with Owner if work requires temporary disconnect or disabling of building life safety systems.

1.33 TEMPORARY SANITARY FACILITIES

- A. Provide any and all necessary portable toilet facilities at the project site as applicable to the work. Do not use building facilities unless explicitly approved by the Owner.
 - 1. If located on the ground, provide all required protection from vandalism.

1.34 TEMPORARY BARRICADES

- A. Erect temporary barricades as applicable to the work to maintain security at project staging areas.
- Provide all applicable signage to limit non-construction personnel from entering the construction area.

1.35 STAGING AREA / MATERIAL STORAGE

- Coordinate with Owner on acceptable location of project staging and material storage area, prior to the start of work.
- B. Owner will make reasonable effort to provide suitable space on the site for the Contractor to set up operations. Moving from this space may be necessary when instructed by the Owner and shall be accomplished without charge to the Owner. Cooperate with Owner to minimize conflict from Owner's operations.
- 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.

1.36 VEHICULAR ACCESS

A. Utilize existing street parking / driveways / parking areas for construction activities. Do 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.

1.37 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.

1.38 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. Failure to provide routine and daily cleanup may result in a back charge from the Owner to accomplish this work.
- 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. Take all considerations for safety.

1.39 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.
 - Supplement as necessary per the local fire department requirements for construction operations.

1.40 PROTECTING INSTALLED CONSTRUCTION

- Protect installed Work and provide special protection where specified in individual specification sections.
- B. Provide protection of adjacent roof areas [and new roof areas already completed] which may be traversed to accomplish the scheduled work.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Protect finished pavement, concrete, stairs, walls, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.

- E. 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 and provide all required protection as determined necessary. Any damage caused shall be repaired to like new condition.
- F. Prohibit traffic from landscaped areas.

1.41 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.

1.42 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.

1.43 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of Contract Documents to be utilized for record documents.
- B. Record actual revisions to the Work. Record information concurrent with construction progress.
- C. Specifications: Legibly mark and record at each Product section description of actual Products installed.
- D. Record Documents and Shop Drawings: Legibly mark each item to record actual construction.
- E. Submit documents to Owner.

1.44 FINAL CLEANING

- A. Execute final cleaning prior to final inspection.
- B. Clean all surfaces exposed to view as impacted from the work.
- C. Remove waste and surplus materials, rubbish, and construction facilities from site.
- D. 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.

1.45 CLOSE OUT PROCEDURES

A. Refer to Section 01 77 00

1.46 PROJECT RECORD DOCUMENTS

A. Refer to Section 01 77 00

1.47 OPERATION AND MAINTENANCE DATA

A. Refer to Section 01 77 00.

1.48 WARRANTIES

- A. Refer to Section 01 77 00.
- B. Provide manufacturer warranties as outlined in the Contract Documents.
- C. Provide originals to Owner and one copy to RDA of warranty documents.
 - Execute and assemble transferable warranty documents from subcontractors, suppliers, and manufacturers.
- D. Submit prior to final Application for Payment.

PART 2 PRODUCTS

2.1 GENERAL REQUIREMENTS

- A. 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
 - 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 DELIVERY, HANDLING, STORAGE, AND PROTECTION

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

2.5 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.

2.6 SUBSTITUTIONS

A. Refer to Section 01 25 00.

2.7 EXTRA MATERIALS

A. Not Applicable

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 utility protection 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, 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. Accomplish all work in accordance with the provision of Federal, State American Standard Safety Code for Building Construction and OHSA safety requirements.
 - 1. Provide all aspects of project safety including 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. 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. Replace / Repair any damages [including interior or exterior equipment / finishes] at no expense to the Owner in the event of damages of any kind caused by improper protection.
- D. Comply with all regulations of the Local Fire Department and the Owner's requirement regarding storage and handling of flammable materials, etc. Comply with the safety provisions of the National Fire Code pertaining to such hot work. Contractor is responsible for all damage or fines resulting from failure to 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

- Each Contractor shall have a qualified foreman on the project at all times when work is being accomplished.
- B. Refrain from fraternization with building occupants.
- C. 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 24 hour/seven days a week.

3.7 ROOF/PROJECT ACCESS

A. Access to roof area shall be via the interior stairwell serving the penthouse. Provide protection of the interior areas traversed, maintain for the duration of the project. Do not to enter any facility interior spaces / dwelling units unless approved by the Owner.

3.8 SAFETY PROGRAM

A. Maintain a written safety program for all operations/ work performed on this project. Maintain all documents at the job site and make available to the Owner or Architect when requested. Assume all responsibility for project safety, ways, and means and methods of constructing the project. 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.

3.9 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.
 - Email GDPM with daily reports upon request.

3.10 REMOVALS AND CLEANUP

- A. Remove and dismantle of all items / components / construction 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, 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. Always keep all work areas and project sites neat and free of trash and clutter.
 - 1. No Debris, materials, etc. may be left unprotected on the grounds.
 - 2. All exterior staging / dumpster areas shall be fenced / protected.

3.11 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.

3.12 GENERAL PROJECT REQUIREMENTS

- A. Coordinate equipment delivery and equipment staging with Owner prior to start of project.
- B. Safety is paramount and all personnel on site must wear appropriate personal protection equipment [PPE]. Be 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 public. All work areas must be properly barricaded from the public prior to starting any work.
- D. Job sites will be always maintained in an orderly and neat fashion.
- E. Pre-determine work phases with Owner to minimize disruption of business operations.
- F. 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.
- G. 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.
- H. 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.
- I. Submission of a bid is 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. Security: Contractor's Liability for Vandalism
 - Contractor is 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 is 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.
- L. Insurance: Refer to GDPM Terms and Conditions.
 - 1. Contractor to provide copy of Certificate of Insurance to GDPM.
 - Contractor to submit evidence of Worker's Compensation insurance coverage and builder's risk insurance.

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

END OF SECTION

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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: Change 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.
 - 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. Owner 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 require 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

- Submit copy of request for Substitution for consideration to Owner no later than 10 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. Owner will notify Contractor in writing of decision to accept or reject request with 7 days of receipt of request or request additional information or documentation for evaluation.
- 4. Substitution requests shall only be submitted by registered bidder for the project.
- 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.

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.
 - 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.
 - 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
 - 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 Owner's representative/RDA.

1.2 SUBMITTAL PROCEDURES

- A. Submit product data and shop drawings for all applicable components of the project. Refer to individual sections for additional requirements.
 - 1. Provide a submittal log at the beginning of the project for review by RDA / Owner. Identify proposed submittals by Specification Section.
 - Owner's representative / 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. Accomplish submittals in a digital [PDF format]. Any hard copies received will be scanned and returned electronically. Provide those submittals required to maintain orderly progress of the work and those required for early lead time for manufacturer fabrication.
 - 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.
 - 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. Provide 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. Accomplish submittals 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. Allow 7 days for review of submittal items.
- J. Allow space on submittals for Contractor and Architect review stamps.
- K. When revised for resubmission, identify changes made since previous submission.
- L. Distribute copies of reviewed submittals as appropriate (electronically as appropriate). Instruct parties to promptly report inability to comply with requirements.
- M. All submittals shall be completed within the first 30 days of the project.

1.3 SUBMITTALS/PRODUCT DATA / SHOP DRAWINGS

General: Submitted to Owner/RDA for review for limited purpose of checking for conformance with information given information expressed in the Contract Documents.

- A. Product Data/Shop Drawings [roof related]:
 - 1. Roof Products: Data Sheets Membrane, flashing components, insulation, cover board, adhesive and other related components accessories.
 - 2. Layout: Insulation/cover board adhesion patterns and frequency, tapered saddle layout.
 - 3. Sheet Metal Items: Specialty items [fascia edges and copings, expansion joints].
 - 4. Any Additional Details to comply with manufacturer's details or changes to the details as shown on the drawings.

B. Samples for Review [metal]:

- Submitted to Owner/RDA for review and selection for aesthetic, color, or finish. Color chart for all metal items.
- 2. Submit samples of finishes from full range of manufacturer's standard colors, textures, and patterns for Owner's selection.

C. Eligible Applicator

- 1. Submit a letter from the roofing material manufacturer with the following items addressed.
- 2. The applicator is approved to use the products as specified and the manufacturer accepts the roofing system requirements and details as shown or with changes as provided.
- 3. The applicator has been manufacturer approved for over 5 years and is capable of obtaining the warranty as outlined in the specifications.

D. 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.

E. Contract Items:

- 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.
- F. 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.

G. Site Specific Safety Plan

- 1. Provide to Owner for their Review. No review / approval by RDA.
- H. Site Logistics Plan
 - 1. Provide to Owner for their Review. No review / approval by RDA.

1.4 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.

1.5 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.

1.6 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:
 - I. 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.
- 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. 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.
 - 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. 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.
 - 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. Review and provide the noted repairs and corrective work necessary at each of the Punchlist inspections to allow project close out.
 - Back-punch walk through may result in additional punchlist items which need to be addressed by the Contractor.
- D. 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 PREREQUISITIES 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:
 - Notarized affidavit of waiver of liens [contractor of record], sub-contractors and material suppliers
 - Certificates of release from authorities having jurisdiction over permitting.
 - 3. Final statement of charges [100% application for payment].

- 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 roof warranties [copy to RDA], including Contractor maintenance agreements and warranties.
- 6. Evidence that claims have been settled.
- 7. O+M Manuals including Manufacturer's roof maintenance and repair instructions.
- 8. Manufacturer's maintenance and repair instructions.
- 9. Record Drawings.
- Final cleaning of all work areas: clean roof of debris [power blowing], roof drains [remove obstructions], excess glue, staining, etc. from membrane surface, soil from building surfaces, etc
- 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.
 - 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 PROJECT WARRANTIES

- A. General: Original warranties are required to be provided to the Owner prior to final payment.
- B. Submit two sets prior to final inspection or when available, bound in 8-1/2 x 11-inch text pages, binder covers.
- C. Prepare binder cover with printed title "WARRANTIES" and title of project.
- D. Bind warranties in a heavy duty three ring loose leaf binder. Provide a typed description of the product under warranty and phone number of the installer.
- E. 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.
- F. 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.
- G. Provide notarized copies of warranty documents to the Owner.
 - Execute and assemble transferable warranty documents from subcontractors, suppliers, and manufacturers.
- H. 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: clean roof of debris [power blowing], roof drains [remove obstructions], soil and stains from building surfaces, roads, sidewalks.
- 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 04 01 00 - MAINTENANCE OF MASONRY

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and General provision of the contract and Division 1 Specification Sections apply to this section.

1.2 WORK INCLUDES BUT NOT LIMITED TO:

- A. Selective removal and relay/replacement of existing masonry veneer where indicated on drawings to allow existing thru wall flashing to be raised up on the wall to permit proper roof base flashing height.
 - Includes supplemental new masonry as required to replace damaged masonry from removals.
- B. Re-pointing mortar joints including raking, pointing-up and tooling of mortar joints in masonry where impacted by work.

1.3 RELATED SECTIONS

A. Section 07 01 50 - Preparation for Reroofing

1.4 QUALITY ASSURANCE

- A. Installer qualifications: 10 years-experience on similar projects. Work shall be performed by experienced and skilled mechanics.
- B. Source limitations: obtain each type of material for masonry restoration [face brick, CMU, cement, sand, etc.] from one source with resources to provide materials of consistent quality in appearance and physical properties.
- C. Perform Work in accordance with ACI 530 Building Code Requirements for Masonry Structures and ACI 530.1 Specification for Masonry Structures.

1.5 PRODUCT HANDLING

- A. Deliver mortar materials to project site in manufacturer's original and unopened containers, labeled with manufacturer's name and type of products.
- B. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
- C. Store hydrated lime in manufacturer's original and unopened containers. Discard lime if containers have been damaged or have been opened for more than two days.
- D. Store lime putty covered with water in sealed containers.
- E. Store sand where grading and other required characteristics can be maintained and contamination avoided.

1.6 PROJECT CONDITIONS

- A. Repoint mortar joints and repair masonry only when air temperature is between and 40°f and 90°f and is predicted to remain so for at least 7 days after completion of work.
 - 1. In accordance with ACI 530.1
- B. Hot-weather requirements: protect masonry repair and mortar-joint pointing when temperature and humidity conditions produce excessive evaporation of water from mortar and repair materials. Provide artificial shade and wind breaks and use cooled materials as required. Do not apply mortar to substrates with temperatures of 90°f and above.
 - 1. In accordance with ACI 530.1

- C. Patch masonry only when air and surface temperatures are between and 55°f and 100°f and are predicted to remain above 55°f for at least 7 days after completion of work. On days when air temperature is predicted to go above 90°f, schedule patching work to coincide with time that surface being patched will be in shade or during cooler morning hours.
- D. Provide shoring, bracing, or support to prevent movement, settlement, or collapse of structure, work under demolition, or adjacent work to remain.
- E. Prevent grout or mortar used in assembly and repair work from staining face of surrounding surfaces. Immediately remove grout and mortar in contact with exposed surfaces.
- F. Protect sills, ledges, and projections from mortar droppings.

1.7 SEQUENCING AND SCHEDULING

- A. Order re-pointing mortar immediately after approval of samples. Take delivery of and store at project site a sufficient quantity of mortar to complete project.
- B. Perform re-pointing after repair of existing masonry, including replacing existing masonry with new masonry materials and cleaning.
- C. As scaffolding is removed, patch any anchor holes used to attach scaffolding. Patch holes in mortar joints in accordance with section covering re-pointing masonry.

1.8 MOCKUP

A. Construct a mockup of the masonry repairs including thru wall flashing modifications for review by RDA, if requested.

PART 2 PRODUCTS

2.1 FACTORY-MIXED MORTAR

A. Match original mortar remnants on brick as determined from field sampling and laboratory analysis at the mortar manufacturers plant. Match for color, texture and compressive strength.

2.2 COMPONENTS

- A. Portland Cement: ASTM C150, Type I, gray color.
- Premix Mortar for below grade applications: ASTM C387/C387M, Type S using gray color cement.
- C. Premix Mortar for above grade applications: ASTM C387/C387M, Type N using colored cement.
- D. Mortar Aggregate: ASTM C144, standard masonry type.
- E. Hydrated Lime: ASTM C206, Type N.
- F. Mortar Color: color as selected by Architect from full range of available colors for above grade applications.
- G. Grout Aggregate: ASTM C404, fine.
- H. Water: Clean and potable.
- I. Bonding Agent: Latex type.
- J. Calcium chloride is not permitted.

2.3 MIXES

- A. Mortar Mixes:
 - Mortar for Structural Masonry: ASTM C270, Type S using Proportion specification.

Mortar for Non-Structural Masonry: ASTM C270, Type N using Proportion specification.

B. Mortar Mixing:

- Thoroughly mix mortar ingredients in accordance with ASTM C270 in quantities needed for immediate use.
- 2. Add mortar color.

C. Grout Mixing:

- 1. Mix grout in accordance with ASTM C94/C94M.
- Do not use anti-freeze compounds to lower freezing point of grout.

D. Mixing Procedures:

- Measure materials by volume or equivalent weight. Do not measure by shovel; use known measure.
- 2. To hydrate mortar, thoroughly mix ingredients dry. Mix again, adding only enough water to produce a damp mix which will retain its form when pressed in a ball. After keeping mortar in this dampened condition for 1-2 hours, add sufficient water to form proper consistency.
- Mix mortar using a clean mechanical batcher for 3-5 minutes or by hand until completely mixed.
- 4. Place mortar within two hours of final mixing.
- 5. Do not re-temper or use partially hardened materials

2.4 MASONRY / BRICK

- A. Provide masonry / brick units with colors, surface texture, size, and shape to match existing masonry and with physical properties not less than those determined from pre-construction testing of selected existing units.
 - 1. Brick: Modular size to match existing size and coursing. Contractor to source brick that matches existing.
 - 2. CMU: 8x8x4 size to match existing.
- B. Provide specially molded shapes for applications where shapes produced by sawing would result in sawed surfaces being exposed to view.
- C. For existing masonry that exhibits a range of colors, provide brick that matches that range rather than brick that matches an individual color within that range. Provide a sample for architect's approval where possible remove from areas to be demolished and salvage for reuse.

2.5 ACCESSORIES

- A. Adjustable Anchors / Wire Ties to Connect to Existing Structure: Anchors / Wire Ties that allow for vertical and / or horizontal adjustment but resist tension and compression forces on the wall.
 - Adjustable ties with pintle and eye connections with an adjustment of +/- 1 inch.
- B. Metal Flashing:
 - 1. 24 gauge stainless steel, formed to profiles as indicated / required by conditions.
- C. Flexible Flashing:
 - 1. Self-adhering, flexible membrane flashing; cross laminated polyethylene film; self-healing; Nominal 40 mils thick.
 - a. WR Meadows; Air-Shield Thru-Wall Flashing
 - b. Grace Products, Perm-A-Barrier Wall Flashing
 - c. York, York Seal Peel & Stick Flashing
- D. Compressible Expansion Joint Filler: Pre-molded filler strips complying with ASTM D 1056, Grade 2A1; compressible up to 35 percent; formulated from closed cell neoprene or urethane. Sized as applicable to conditions.

E. Weeps: Cellular Plastic Weep: One-piece, flexible extrusion made from UV-resistant polypropylene copolymer, full height and width of head joint and depth 1/8 inch less than other wythe of masonry.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect persons, motor vehicles, surrounding surfaces of building being restored, building site, plants, and surrounding buildings from harm resulting from masonry restoration work. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during course of restoration and cleaning work.
- B. Prevent mortar from staining face of surrounding masonry and other surfaces. Cover sills, ledges, and projections to protect from mortar droppings. Keep wall area wet below rebuilding and pointing work to discourage mortar from adhering. Immediately remove mortar in contact with exposed masonry and other surfaces. Clean mortar splatters from scaffolding at end of each day.
- C. Remove downspouts adjacent to masonry and store during masonry restoration and cleaning. Reinstall or replace as scheduled when masonry restoration and cleaning is complete. Provide temporary rain drainage during work to direct water away from building.

3.2 INSTALLATION

A. Install mortar in accordance with ACI 530.1 Specification for Masonry Structures.

3.3 FIELD QUALITY CONTROL

- A. Testing of Mortar Mix: In accordance with ASTM C780.
- B. Testing of Grout Mix: In accordance with ASTM C1019.

3.4 BRICK REPLACEMENT

- A. Remove and replace masonry where indicated on drawings to allow thru wall flashing to be raised. Reuse / reinstall existing salvaged masonry and supplement with new masonry to match where required [match existing].
- B. Remove in an undamaged condition as much masonry as possible. Remove mortar, loose particles, and soil from brick and stone by cleaning with hand chisels, brushes, and water.
- C. The documents show the masonry to be removed at each area of repair. Depending on the contractor's care, additional masonry may require replacement. The contractor shall include in the base bid allowance for additional replacement masonry at the designated areas of removal. These masonry quantities are not to be considered under the stated bid allowance for additional replacement.
- D. Clean masonry surrounding removal areas by removing mortar, dust, and loose particles in preparation for replacement.
- E. Install replacement masonry into bonding and coursing pattern of existing masonry. If cutting is required, use a motor-driven saw designed to cut masonry with clean, sharp, unchipped edges.
- F. Lay replacement masonry with completely filled bed, head, and collar joints. Butter ends with sufficient mortar to fill head joints and shove into place. Wet both replacement and surrounding bricks that have ASTM C 67 initial rates of absorption [suction] of more than 30 g/30 sq. in. per minute. Use wetting methods that ensure that units are nearly saturated but surface is dry when laid. Maintain joint width for replacement units to match existing joints.
- G. Tool exposed mortar joints in repaired areas to match surrounding existing brickwork.

H. Pointing: during the tooling of joints, enlarge any voids or holes, except weep holes and completely fill with mortar. Point up all joints at corners, openings and adjacent work to provide a neat, uniform appearance, properly prepared for application of caulking of sealant compounds.

3.5 THRU WALL FLASHING

- A. General: Install new embedded thru-wall flashing and weep vents in masonry. Flashing shall be installed longitudinally continuous and terminated with end dams. Comply with NCMA recommendation for drainage wall system masonry construction.
 - 1. Install concealed thru wall flashing in accordance with SMACNA and NCMA TEK Bulletins 19-4 and 19-5 to ensure water resistant masonry construction.
 - 2. Apply primer, if required by manufacturer according to manufacturer's written instructions.
 - 3. Install pre-formed corners and end dams, cants, etc. under flexible flashing membrane, bedded in sealant in appropriate locations along wall.
 - 4. Extend membrane up wall above thru wall flashing a minimum of 8 inches onto outer face of inner wythe of masonry. Terminate with manufacturer approved termination bar and sealant as applicable.
 - 5. Extend membrane through wall and leave ¼ inch exposed.
 - 6. Roll flashing into place. Ensure continuous and direct contact with substrate. Avoid trapping air and forming wrinkles, birds mouths, etc.
 - 7. Lap ends and overlap pre-formed corners by 4 inches minimum. Seal all laps with sealant.
 - 8. Protect installed flexible flashing from damage during construction.
 - Install weep vents in head joints in exterior masonry in the first course of masonry immediately above embedded flashing [not mortar] with weep vents spaced at 24" o.c. maximum.

3.6 RE-POINTING EXISTING MASONRY [AS IMPACTED BY MASONRY REMOVAL]

- A. Joint raking: rake out all joints to be pointed by hand, using a mason's chisel that is not more than 1/4" thick or by approved hand grinding methods. If grinding is used, wet methods are required to minimize dirt and dust. Rake or grind out mortar from joints to depths equal to 2-1/2 times their widths but not less than 1-inch nor less than required to expose sound, un-weathered mortar.
 - 1. Remove mortar to provide reveals with square backs and to expose masonry for contact with pointing mortar. Brush, vacuum or flush joints to remove dirt and loose debris. No abrasive methods of cleaning shall be used.
 - Do not spall edges of masonry units or widen joints. Replace masonry units which become damaged.
 - a. Do not use power-operated grinders without Architect's written approval based on submission by Contractor of a satisfactory quality-control program and demonstrated ability of operators to use tools without damaging masonry. Quality control program shall include provisions for supervising performance and preventing damage due to worker fatigue.
 - 3. Replace any units which become damaged.
 - 4. if the existing bricks have worn rounded edges, recess final mortar slightly from face to a point where joint face will not be wider than the original joint.

B. Joint Pointing:

- 1. Rinse masonry joint surfaces with water to remove any dust and mortar particles. Time application of rinsing so that, at time of pointing, excess water has evaporated or run off, and joint surfaces are damp but free of standing water.
- 2. Apply first layer of pointing mortar to areas where existing mortar was removed to depths greater than surrounding areas. Apply in layers not greater than 3/8-inch until uniform depth is formed. Compact each layer thoroughly and allow to become thumbprint-hard before applying next layer.
- 3. After joints are filled to uniform depth, place remaining pointing mortar in 3 layers with each of first and second layers filling approximately 2/5 of joint depth and third layer the remaining

- 1/5. Fully compact each layer and allow to become thumbprint-hard before applying next layer. Take care not to spread mortar over edges onto masonry surfaces, or to featheredge mortar.
- 4. When mortar is thumbprint-hard, tool joints to match original appearance of joints as determined by the architect. Remove excess mortar from edge of joint by brushing.
- 5. Cure mortar by maintaining in damp condition for not less than 72 hours.

3.7 FINAL CLEANING

- A. After mortar has fully hardened, thoroughly clean exposed masonry surfaces of excess mortar and foreign matter; use wood scrapers, stiff-nylon or -fiber brushes, and clean water, spray applied at low pressure. Do not use metal scrapers or brushes. Do not use acidic or alkaline cleaners.
- B. Sweep and rake adjacent pavement and grounds to remove masonry debris. Where necessary, pressure wash surfaces to remove mortar, dust, dirt, and stains.

3.8 GENERAL CLEANING

- A. As work proceeds and on completion, remove excess mortar, smears, droppings.
- B. Clean dirt and light staining from all brick surfaces.
- C. Perform cleaning working from top to bottom working in sections around the building at one elevation at a time.
- D. Use spray equipment that provides controlled application at volume and pressure indicated. Adjust pressure and volume to ensure cleaning methods do not damage masonry.

END OF SECTION

SECTION 06 10 53 - MISCELLANEOUS ROUGH CARPENTRY FOR ROOFING

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and General provisions of the contract and Division 1 Specification Sections apply to this section.

1.2 WORK INCLUDES, BUT NOT LIMITED TO:

- A. Miscellaneous sized new wood nailers/blocking, curbs, fascia/trim boards, plywood and associated fasteners, bolts, adhesives as required for installation of the roofing system and sheet metal. Some items below may not be required for this project but are outlined herein if required during course of work due to changing conditions or changes in scope.
- B. Well secured wood members that meet the requirements of Section 07 01 50 can remain in place as per conditions/guidelines and attachment as specified herein. RDA must approve all nailers that will remain in place. Any new replacement nailers must be minimum of 1 1/2-inch x 5 1/2 inch [nominal 2-inch x 6 inch] unless otherwise noted or conditions dictate otherwise. New edge nailers shall be raised / blocked up to match elevation of new insulation [and to create constant edge height where necessary], as applicable.

1.3 APPLICABLE REFERENCES

- A. The following references form a part of this specification.
 - 1. NFPA National Forest Products design specifications.
 - 2. Factory Mutual Research Corporation, Loss Prevention Data Sheet 1-49, Perimeter Flashings
 - 3. APA American Plywood Association.
 - 4. Lumber Grading Agency.
 - 5. American Wood Preservers Association
 - 6. State Building Code
 - 7. ANSI/SPRI/FM 4435 ES-1 Edge Systems.
 - 8. WWPA Western Wood Products Association
 - 9. SPIB Southern Pine Inspection Bureau
- B. Perform work in accordance with Local Building Code.

PART 2 PRODUCTS

2.1 DIMENSIONAL LUMBER

- A. Board Stock: graded in accordance with NFPA and Lumber Grading Agency, board class number 2, structural grade, kiln-dried Douglas fir or Southern yellow pine. FSC [certified] lumber may be required upon Owner's request. Moisture content for all lumber shall not exceed 19% by weight at time of installation, including any lumber that can remain in place. Lumber will be removed if moisture exceed 19%. Provide fire retardant treated blocking in non-combustible buildings according to ASTM E84. Sizes as shown are standard nominal sizes. Provide dressed lumber, S4S, unless otherwise noted.
 - 1. Any lumber intended to be left exposed shall be appearance grade, suitable for a painted finish or finish as specified.
 - 2. Where fire retardant treated lumber/materials are indicated use product with flame spread index of 25 or less in accordance with ASTM E 84.
- B. Preservative treated: AWPA, asphaltic, creosote or copper additive [CA, or ACQ] type treated lumber is not acceptable for use on this project. Use MCQ or CCA [wolmanized] water borne treated lumber complying with C2 and P5 standards for used as nailers on top of concrete or masonry wall surface and all other above grade applications. Ensure treatment that does not promote corrosion of metal fasteners, use stainless fasteners to anchor treated lumber.

C. Plywood: 48/24 APA rated sheathing, 3/4-inch thickness, fire retardant treated.

2.2 FASTENERS

- A. General: Contractor to determine the required length for each application in accordance with manufacturer data and Factory Mutual recommendations,
 - 1. Minimum embedment:
 - a. Steel-3/4 inch unless otherwise noted.
 - b. Wood-1 1/4 inch unless otherwise noted.
 - c. Concrete/concrete block [masonry] -1 1/4 inch unless otherwise noted.
 - 2. Comply with the fastening requirements of the International Building Code, Local Building Code and State requirements, whichever is more stringent.
 - 3. All fasteners to anchor wood members shall be corrosion-resistant steel unless exposed to weather, pressure preservatives or in high humidity areas, provide fasteners of Type 304 Stainless steel, compatible for the conditions or other requirements stated herein [as noted].
 - See roofing section for additional fasteners data.
 - 5. Contractor shall notify the Owner if deteriorated substrate conditions exist.
- B. Lag Bolts: ANSI/ASME B18.2.1
- C. Steel Bolts: ASTM A 307, Grade A
- D. Nails: ASTM F 1667 [2015], 8d, 11-12-gauge, .113-inch diameter, ring-shank, corrosion resistant coating or galvanized.
- E. Wood Screws: ANSI/ASME B 18.6.1 [2016], corrosion resistant coating, galvanized or stainless steel.
- F. Expansion Anchors: Steel, corrosion resistant, 3/8-inch diameter.

2.3 ADHESIVES

- A. Standard wood adhesive, caulk grade.
- B. ITW Red Head, A7 acrylic adhesive.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Inspect fastening of existing wood members left in place for conformance to requirements specified herein, <u>upgrade</u> as necessary to meet performance criteria outlined.
- B. Examine surfaces for satisfactory conditions and do not use materials that are warped, bowed, twisted or unsound.

3.2 INSTALLATION

General: Installation shall be in accordance with the current Factory Mutual Loss Prevention Data Sheet 1-49 perimeter flashing recommendations and details, Local Building Code, ANSI/SPRI/FM 4435 ES-1, other standard industry framing methods and as shown. Attachment withdraw resistance criteria for nailers/wood blocking is 200 P/F for perimeter, 300 P/F for corners onto substrate with margins of safety applied from printed values, as follows: Steel, Wood, Structural Steel 2:1, Concrete, 4:1, Gypsum 3:1. No power actuated fasteners or pin drive fasteners allowed. Fastener spacing as outlined below is the maximin allowable, unless otherwise shown on the plans.

- A. Install members true, plumb and level, secure in place. Provide all required shoring and temporary bracing required.
 - 1. Use members of continuous possible lengths. Do not use materials with defects or pieces that are too small [optimum joint arrangement].

- 2. #8 Screws or 10d Nails used to secure fascia and top nailers [stacked] to other wood members shall penetrate 1-1/2 inch, apply in two rows at 12 inches on center at perimeters and 6 inches in corners, staggered if feasible.
- 3. Wood nailers/blocking shall have a ¼ inch space between boards.
- B. Metal/ Metal Deck: Wood nailers at perimeter/corners shall be fastened to the deck with two rows of # 14 steel, wood to metal deck tek fasteners [wafer head] or #14 HD steel roofing fastener at 24 inches on center staggered in perimeters and 12 inches staggered in corners. Start fasteners 3 inches from each end of the board, staggered fasteners 2 inches from edge if nailer is wider than 5 1/2 inches [if existing or stacked wood nailers exceed 6 inches in thickness height consult RDA for fastener selection]. An alternate method, when nailers/blocking are parallel to deck ribs, the nailers can be attached to the structural members [joists] with 3/8-inch steel bolts/nuts or tek/5 fasteners, 7 feet on center max. spacing. All fasteners must penetrate the top flange of the deck and be driven flush or countersunk, if necessary.
- C. <u>Steel Members</u>: Wood nailers at perimeter/corners shall be fastened to a steel member with one row of #14 or 1/4-inch steel, wood to metal deck tek/5 fasteners at 18 inches on center, centered, staggered fasteners 2 inches from edge if nailer is wider than 6 inches, pre-drill holes and countersink, if necessary. Fasteners shall start 3 inches from each end of the boards and shall be spaced 16 inches on center each way from the corner.
- D. Concrete Block/Concrete, Stone and Concrete Decking: Wood nailers at perimeter/ corners or on top of parapet wall shall be fastened with one row [two rows if nailer is over 5 1/2 inches wide] of 1/4-inch self-tapping fasteners at 24 inches on center [offset or staggered] in perimeters and 16 inches [offset or staggered] in corners-each way. Fasteners shall be spaced 2 inches from edge if nailer is wider than 5 1/2 inches, pre-drill holes and countersink, if necessary. Fasteners shall start 3 inches from each end of the boards [if existing or stacked wood nailers exceed 6 inches in thickness height consult RDA for fastener selection] or use a 3/8-inch diameter treaded rod placed into a pre-drilled hole with adhesive injected for a solid substrate, bolt boards to rod. Rods placed at 4 feet on center in the perimeter and 2 feet on center in corners-each way. Cores of hollow block must be filled with grout where rods are located. Embed rods 5 inches minimum into filled block cores or solid block/concrete.
- E. <u>Gypsum/Tectum Deck</u>: Wood nailers at roof perimeters/corners on decking shall be fastened to the deck with 3/8-inch corrosion resistant thru bolts with nut and bolts attached at 18 inches on center in perimeters and 18 inches on center in corners, bolts shall have a 5/8-inch diameter outside diameter washer and be countersunk flush with top of nailer. Provide a lock washer/nut to secure bolts. An alternate method, the nailers can be attached to the structural members [joists/structural members] with 3/8-inch steel bolts/nuts or tek/5 fasteners, 7 feet on center max. spacing.

3.3 SURFACE TREATMENT

A. All exposed to view newly installed wood members shall be primed and painted to match surrounding surfaces colors unless otherwise noted.

END OF SECTION

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SECTION 07 01 50 - PREPARATION FOR REROOFING

PART 1 GENERAL

1.1 RELATED DOCUMENTS

 Drawings and General provisions of the contract and Division 1 Specification Sections apply to this section.

1.2 WORKS INCLUDES, BUT IS NOT LIMITED TO:

- A. Roof Membrane Removals and Other Removal Summary:
 - 1. **Roof Areas A-1, A-2, A-3, A-4, A-5 as shown**: Remove the entire roof system down to the existing concrete plank deck [including lightweight fill]. See existing roof matrix on the drawings for system existing components and alternates.
- B. Clean roof / deck surface of all debris detrimental to installation of new roof system, including cleaning / sealing of joints between concrete planks as is applicable, etc.
- C. Removal of existing perimeter base flashing material [metal, BUR, composite and single ply as applicable] and from associated equipment supports and related items.
 - 1. Locations where wall flashing heights are below the manufacturers requirements shall be raised or use liquid flashing system if approved by the manufacturer.
- D. Removal of wood nailers and blocking. Wood members that are securely bolted or adequately fastened or can be adequately fastened to the structure per specs and are in a dry good condition can remain in place. Remove deteriorated and damaged wood members. [See section 06 10 53 for anchoring requirements].
- E. Removal and reinstall existing electrical conduits, cable lines and associated wall attachments.
- F. Removal of sheet metal items such as copings, edges, bib flashings, gutters/downspouts and counter-flashings as noted.
- G. Removal of existing unused curbs, abandon equipment as noted on the drawings, cover opening as shown.
- H. Remove and reinstall existing RTU's from associated curbs as required to install new flashings as noted on the drawings.
- I. Other removals necessary to accomplish the new work.

1.3 QUALITY ASSURANCE

- A. Work shall be performed in strict accordance with the terms and conditions of all municipal and state regulation and local codes.
- B. Demolition shall comply with the requirements of ANSI American National Standard Safety Requirements for Demolition.
- C. Conduct demolition work in a manner that will minimize disruption of owner's normal operations. Coordinate work activities daily with Owner.
- D. Properly protect all facility surfaces and associated landscaping from damages due to normal demolition operation. Return all areas to their original condition at no charge to the Owner.
- E. Drainage Testing: Test each roof drain and/or downspouts/scuppers for proper water flow and notify the Owner of any clogged drainage and drains that cannot have the roof membrane secured with the existing clamping ring [broken, bolts, etc] before commencement of work.

 Commencement of work shall constitute acceptance of drainage device and any costs to unclog or repair these items shall be borne by the Contractor.

- **F.** Do not remove existing roofing membrane or components when weather conditions threaten integrity of building contents.
- **G.** A deck adhesion test is required to be performed by the Contractor prior to the commencement of the roof project, in accordance with manufacturer requirements. If conditions are different then manufacturer's assembly test criteria for their approval to meet the design pressures, manufacturer's requirements, or requirements by the state building codes, the information shall be provided to RDA before any roofing can take place.

1.4 COORDINATION

- A. All utilities and mechanical rooftop equipment will remain active during normal work hours, unless approved otherwise by the Owner.
- B. All removals shall be legally disposed, except those indicated to be reinstalled, salvaged or to remain Owner's property. Comply with hauling and disposal regulations of authorities having jurisdiction and EPA notification regulations.

1.5 FIELD CONDITIONS

- A. Do not overload structure with storage of materials, verify roof deck weight capacity and location of structural supports, only items needed that day shall be stored on the roof. Limit loads on roof to 25 pounds per square foot for uniformly distributed loads for metal/gypsum decks, 75 pounds per square for concrete decks. Provide temporary securement of existing membrane to prevent membrane blow off while installing new roof system, if applicable.
- B. Do not apply roofing system during inclement weather or when the chance is 40% or greater, percentage as listed on www.weather.com for the local area, percentage as listed when read at time of commencement. Proceed with roofing and associated work when weather conditions will permit unrestricted use of materials and quality control of the work being installed.
- C. Building space underneath roof work is utilized by on-going operations. Coordinate all work with owner including, material storage and contractor parking. Owner's approval required before proceeding with the work. Contractor must provide overhead protection for Owner's workers, public, visitors, etc from falling materials/debris at building entry points.

1.6 ALLOWANCES

General: Refer to General Requirements, Unit Prices, Drawings and bid form for associated allowances/other costs.

PART 2 PRODUCTS

2.1 EXISTING ROOF CONDITIONS

- A. Deck Conditions
 - 1. Check deck for damage as work progresses. Workers may have inadvertently damaged the deck using axes or power cutting tools during roof removal or repair.
 - When roofing is removed, loosely attached decking may be observed. All loose decking
 must be properly attached using techniques appropriate to construction.
 - 3. The installation of roof mounted equipment or items that project through the roof often requires cutting the deck. These areas, and any area in which the deck has been cut, should be thoroughly examined and properly reinforced as is necessary.
 - 4. Areas of damaged deck should be properly repaired. Deteriorated deck should be removed, as necessary to eliminate the spread of deterioration. Appropriate treatments such as corrosion inhibitors should be applied.

- 5. All deck replacement should be compatible with the original construction and should include an area sufficient to assure the structural integrity of the deck. The deck replacement should be fastened using techniques appropriate to the construction.
- B. Drainage: All roofs should provide positive drainage.
 - 1. Verify heights of existing drains and how drains interface with new roof insulation, drain sumps, and overall structural slopes to ensure positive drainage to the roof drains.
 - 2. Ensure drains are properly attached or anchored to the deck.
 - Ensure that the drain components are not broken and are properly installed and tightened.
- C. Flashings: Ensure that a minimum of 8 inches in flashing height is provided above the finish roof membrane; otherwise obtain acceptance from the roof membrane manufacturer for a low flashing detail which is approved and included in the warranty.
 - Where required or indicated on Drawings. Existing curbs, utility lines, and through-wall flashings need to be raised.
 - 2. Do not extend roof flashing above through-wall counterflashing.
 - Do not block weep holes in walls.

2.2 TEMPORARY PROTECTION MATERIALS

A. Air Filters: Filter medium with activated charcoal or comparable to mitigate fumes or odors from entering the building through air intakes, etc.

PART 3 EXECUTION

3.1 ROOF REPLACEMENT PREPARATION

- A. All Roof Areas: Removal of all moisture, and other materials from existing roofing that inhibit new roofing materials from conforming to substrate, including power blowing of deck surfaces.
- B. Verify that surfaces and site conditions are ready to receive work. Verify that deck is clean and smooth, free of depressions, irregularities, or projections and properly leveled, start of work constitutes acceptance of conditions.
- C. Verify that all wood blocking, nailers, decking are securely anchored in place.

3.2 DECK PREPARATION/OTHER REPAIRS

General: Depressed areas shall be made level prior to insulation of roofing or insulation in accordance with manufacturer's recommendation or as outlined herein.

A. Concrete Deck: [Where removal of total roof system has taken]. Clean the entire deck removing all debris that will be detrimental in the adhesion of the new materials, including joints between concrete planks, etc.

3.3 DUST / FUME CONTROL

- A. Take measures to avoid dust, dirt and debris from entering the building.
- B. Throwing material off the roof is prohibited; provide an enclosed chute, crane or raised dump truck to remove roofing materials. Provide a tarp or other protection of walls where material is being removed.
- C. Take special precautions around deck penetrations, including but not limited to installation and removal of reinforced visqueen below the roof deck to protect property below.
 - 1. Interior protection shall be accomplished by the Contractor during removal of any roofing system or their components where open areas occur exposing office, rooms or interior elements and removal of items that produce large penetrations. This protection must prevent dust, dirt moisture and fasteners from entering the above-mentioned areas. Contractor to coordinate as required to accomplish this work.

D. Take special precautions to avoid fumes from entering the facilities through air intakes. Provide charcoal filters or other filtration media as necessary to cover intakes, coordinate with owner.

3.4 TRAFFIC

A. Conduct demolition operations and the removals of debris to ensure minimum interference with streets, walks and other adjacent facilities. Do not close or obstruct streets or walks, without permission from Owner and authorities having jurisdiction.

3.5 DISPOSAL OF MATERIALS

- A. Remove all debris, rubbish and other materials resulting from the demolition operations from the site which are not being reused as soon as possible. The landfill used for disposal shall be approved for type of materials being disposed. Comply with local laws, EPA regulations when transporting materials from the site.
- B. All materials that are to be reused in the new work shall be removed, cleaned and stored in a safe place until reinstallation, as applicable.

3.6 ASBESTOS REMOVAL / NOTIFICATION

- A. Existing roof materials have been tested for asbestos, refer to the reports attached to the specifications. Asbestos containing materials have been identified and must be properly removed and abated as part of this project.
- B. All removals shall be in accordance with written guidelines provided by OSHA Asbestos Construction Standard [29 CFR 1926.1101], and State, County and EPA guidelines as applicable.
- C. Contractor must be OSHA trained meeting the requirements of 29 CFR 1926.1101 for the removal, handling and monitoring of removed material.
- D. Indicate receipt and acceptance of hazardous wastes, such as asbestos containing materials, by a landfill licensed to accept such materials. Notify and provide all documentation to the Owner for disposal of asbestos. All costs for asbestos removal, permitting and handling will be included in the bid if noted herein.
- E. All asbestos removals shall be in a manner not to cause the roofing fibers to become crumbed, pulverized or airborne, these materials shall be handled as Category I and II non-friable asbestos. Should asbestos be encountered noted or not, that has become friable due to the actions of the Contractor or the condition of the material, the Contractor shall secure the services of an abatement contractor to remove the material and an independent firm to monitor removal activities and procedures [removal plan required]. Contractor shall pay for this abatement contractor if asbestos became friable due to their removal procedures. Notify Owners rep if asbestos has been encountered that was not noted, prior to removal.

3.7 UTILITIES / EQUIPMENT

- A. Where electrical lines, refrigerant line sets, equipment, controls, etc. interface with the performance of the work, they shall be temporality removed, replaced and made fully operational as soon as possible, a 48-hour notice and approval from Owner is required before any removals can take place. The Contractor has the responsibly to verify the operational status of all equipment before removals take place.
- B. The Contractor must notify the Owner of any non-operational items prior to removal, commencement of work constitutes acceptance of equipment and any costs to make operational shall be borne by the Contractor.

END OF SECTION



Asbestos Bulk Analysis Report

Environmental Hazards Services, L.L.C. 7469 Whitepine Rd Richmond, VA 23237

Telephone: 800.347.4010 Report Number: 23-11-04134

Client: RDA Group Received Date: 11/30/2023

7945 Washington Wood Dr. Analyzed Date: 12/04/2023 Dayton, OH 45459 Reported Date: 12/04/2023

Project/Test Address: GDPM Wentworth; 2765 Wentworth

Client Number: 200136 Laboratory Results Fax Number: 937-374-0699

Lab Sample Number	Client Sample Number	Layer Type	Lab Gross Description	Asbestos	Other Materials
23-11-04134-001	#1 Field		Black Pliable to Brittle; Black/White to Beige Brittle; Black Fibrous; Inhomogeneous	8% Chrysotile	12% Cellulose 7% Fibrous Glass 1% Synthetic 2% Hair 70% Non-Fibrous
			Total Asbestos:	8%	
Chrysotile preser	ıt in various black լ	oliable to brittle s	ealant-type layers throughout	t sample.	
23-11-04134-002	#2 Flashing		Black Pliable to Brittle; Black/Silver Brittle; Black Fibrous; Inhomogeneous	5% Chrysotile	18% Cellulose 8% Fibrous Glass 1% Synthetic 3% Hair 65% Non-Fibrous

Total Asbestos: 5%

Chrysotile present in various black pliable to brittle sealant-type layers throughout sample and in silver brittle aluminized surface coating-type layer.

Environmental Hazards Services, L.L.C

Client Number: 200136 Report Number: 23-11-04134

Project/Test Address: GDPM Wentworth; 2765 Wentworth

Lab Sample Client Sample Layer Type Lab Gross Description Asbestos Other Number Materials

QC Sample: 60-M12019-3

QC Blank: SRM 1866 Fiberglass

Reporting Limit: 1% Asbestos

Method: EPA Method 600/R-93/116, EPA Method 600/M4-82-020

Analyst: Mark Case

Reviewed By Authorized Signatory:

Melissa Kanode

QA/QC Clerk

n. lissa Kanode

These results are based on a comparative visual estimate. The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Each distinct component in an inhomogeneous sample was analyzed separately and reported as a composite. Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of the Environmental Hazards Service, L.L.C. California Certification #2319 NY ELAP #11714 NVLAP #101882-0 VELAP 460172. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), (for enhanced detection capabilities) for materials regulated by EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

400 Point Count Analysis, where noted, performed per EPA Method 600/R-93/116 with a Reporting Limit of 0.25%.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

LEGEND: NAD = no asbestos detected



Analyst Signature Page

11/30/2023

Environmental Hazards Services, L.L.C.

7469 Whitepine Rd Richmond, VA 23237

Telephone: 800.347.4010 Report Number: 23-11-04134

Client: RDA Group Received Date:

7945 Washington Wood Dr. Analyzed Date: 12/04/2023 Dayton, OH 45459 Reported Date: 12/04/2023

Client Number: 200136

mor

Project/Test Address: GDPM Wentworth; 2765 Wentworth

Analyst(s)

Mark Case

ENVIRONMENTAL HAZARDS SERVICES, LLC

Asbestos Chain of Custody Form Company Name RDA GROUP ARCHITECTS Account # 7662 PARAGON RD City/State/Zip Company Address DAYTON OH 45459 937.610.3440 Email Phone JRSERDA-GROUP. COM Project Name/Test Address GDPW WENTWORTH 2763 WENTWORTH Collected By J. SCHARE PO Number Turn-Around Time 5 Day (A) 3 Day 2 Day 1 Day Same Day / Weekend - Must Call Ahead PLM New York Protocol PLM New Jersey Protocol PLM South Carolina Protocol BULK AIR Homogeneous Area Positive Stop NUMBER Client Collection Date & Point Count 400 Point Count 1000 Sample NIOSH 7402 Time ID TEM Bulk COMMENTS Time Flow Volume LABI PLM In Total Rate In Total Minutes In L/Min Liters FIELD -ROOF SAMPLE * LAB NOTE: FLASHING-ROOF SAMPLE 3 4 TAKEN FROM 5 SAMPLE 6 7 8 12-04-23 9 10 11 12 13 14 Released By: Date: J. SCHAAF Signature: LAB USE ONLY - BELOW THIS LINE 23-11-04134 Signature: Due Date: 12/05/2023 (Tuesday) Portal Contact Added

3 7469 WHITEPINE RD, RICHMOND, VA 23237 (800)-347-4010 RESULTS VIA CLIENT PORTAL AVAILABLE @ www.leadlab.com ΑE

SECTIONS 07 53 00 / 07 72 00 - SELF- ADHERED [EPDM] ROOFING AND ACCESSORIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and General provisions of the contract and Division 1 Specification Sections apply to this section.

1.2 RELATED SECTIONS

- A. Section 06 10 53 Miscellaneous Rough Carpentry for Roofing
- B. Section 07 01 50 Preparation for Reroofing
- C. Section 07 62 00 Sheet Metal, Flashing, Trim and Specialties Items

1.3 WORK INCLUDES, BUT NOT LIMITED TO:

General: Intent of project is to provide a functional 20-year new watertight roof system, resisting wind uplift pressures, thermally induced movement and exposure to weather without failure. Roof system must have been tested by an approved testing agency and have field experience by the manufacturer. Provide and install all roof components and accessories for a complete watertight roof system.

- A. Clean and dry deck surface.
- B. Installation of a new vapor barrier / temporary roof system.
- C. Installation of a new EPDM roofing system, self-adhered system [see roof schedules].
- D. Installation of new flat stock, full tapered insulation system, and tapered insulation saddles as indicated on drawings.
- E. Installation of new cover board.
- F. Installation of new membrane flashings and roof accessories.
- G. Installation of walk pads.
- H. Raising existing curbs on mechanical units, vents, etc and rework, disconnect / extend ducting / electrical / gas lines to accommodate new insulation heights, flashings, penetration covers and sheet metal as required. Electrical connections/utility hookups removed and reinstalled by Electrical contractor [included in Contractor's bid / scope of work]. Purge and recharge all removed HVAC units by HVAC contractor [included in Contractor's bid / scope of work].
 - All work required for plumbing, mechanical, and electrical disconnect and reconnect, rework, etc. as necessary for the proper execution of the work shall be included within the Contractor's scope – this will NOT be accomplished by the Owner, unless specifically noted.
 - 2. Sub / Trade Contractors must be approved by Owner. In some cases, there may be maintenance contracts, preferred vendors who work on the building and understand the intricacies of the existing building systems that must be utilized.
- I. Installation of new A/C condenser unit stands, curbs and other roof top units stands, curbs etc. includes approved tie down/stands, as shown, as applicable.
- J. Installation of condensate piping and associated supports.
- K. Installation of liquid flashing system around vents, pipes and at low flashing heights [under 8 inches].
- L. Installation of equipment enclosures
- M. Installation of new roof drains, repair of existing drains.

N. Installation of new gooseneck vents.

1.4 APPLICABLE REFERENCES

- A. The following references form a part of this specification.
 - ASTM C 1289-13 Polyiso Insulation Board, Type II, Class 2, Grade 2 and HD Cover Board, Type II, Class 4, Grade 1
 - 2. ASTM E108 Fire Test of Roof Coverings.
 - [FMG] Factory Mutual Global Current Approval System [NAV assembly numbers], Loss Prevention Data Sheets for Roof Deck Securement for Above Deck Roof Components, Perimeter Flashings, Wind Design-ANSI/FM 4474, Approval Standard FM 4470 and Roof Loads for Construction
 - 4. [UL] Underwriters Laboratories Roofing Materials and Systems Directory, Fire Resistance Directory, Current Edition.
 - [NRCA] National Roofing Contractors Association Current Roofing and Waterproofing Manual.
 - 6. [AISC] Manual of Steel Construction
 - 7. [OSHA] Occupational Safety and Health Administration, Guidelines
 - 8. [ASCE] 7-10 Minimum Design Loads for Buildings
 - 9. [ANSI/SPRI/FM] 4435 ES-1 Wind Design for Edge Systems
 - 10. [NFPA] National Fire Protection Association, 58 Liquefied Petroleum Gas Code
 - 11. [ANSI/SPRI] WD-1 Wind Design Standards
 - 12. ASTM D4637 Ethylene Propylene Diene Monomer [EPDM].

1.5 SUBSTITUTIONS / EQUALS

- A. When a particular make or trade name is specified, it shall indicate the standard quality required. Bidders proposing substitutions shall submit the following ten [10] days prior to bid date. Refer to Contract Documents.
 - 1. Refer to Section 01 25 00 Substitution Requests.

1.6 QUALITY ASSURANCE

- A. Manufacturer: Company specializing in manufacturing EPDM roofing membranes specified in this section, with minimum 10 years' experience.
 - 1. All roofing materials supplied must be manufactured or manufacturer approved by the company furnishing the warranty including the metal roof edge and coping [if integrated in the roof membrane] single source responsibility. The manufacturer must manufacture the membrane material furnished as a minimum.
 - 2. The roofing material manufacturer [manufacturer of record] must submit a letter stating that the applicator is approved to use the products as furnished, is licensed to install their material in the state in which the project is located, that the applicator can obtain the warranties as outlined in the specifications in accordance with the roof system requirements and details as drawn and the products are acceptable for use on the surfaces to which they are being applied. In addition, an outline of the roofing system components product name and their securement requirements shall be included with the letter.
- B. Applicator: Company specializing in applying single ply membranes with minimum 5 years documented experience, never been terminated by a manufacturer for workmanship problems, be approved for minimum 5 years by the manufacturer for use of their materials and can provide the warranties as specified. No deviations from the roof membrane products specified herein unless approved by the Owner.
- C. Inspection: Prior to, during mid-point installation and at completion, an inspection shall be made by the manufacturer's representative to assure that the roofing system is/has been installed in accordance with their requirements and recommendations.

- 1. An inspection status report at mid-point of construction shall be prepared by the manufacturer's rep, no later than 3 days after the inspection.
- D. Training: The roof foremen or at least 1 assistant working on this project must either be a 'Journeymen Roofer' or have attended and completed the roof material membrane manufacturer's approved installation course herein within the last two years of the bid date with the membrane/s specified herein. [Certificate of proof required or letter from manufacturer as part of the submittal]. Roof foremen must have a minimum of 5 years' experience with application of EPDM roof systems and be able to interpret specifications and drawings [Contract documents must be always on-site].
- E. Drainage Testing: Test each roof drain and/or downspouts/scuppers for proper water flow and notify the Owner of any clogged drainage and drains that cannot have the roof membrane secured with the existing clamping ring [broken, bolts, etc] before commencement of work.

 Commencement of work shall constitute acceptance of drainage device and any costs to unclog or repair these items shall be borne by the Contractor.
- F. Provide large waterproof tarp[s] on site for sudden inclement weather.
- G. Provide any power necessary to accomplish the work, Owner may or not provide power.
- H. Repair existing membrane penetrations or leak sources within work area watertight before commencement of new work.

1.7 REGULATORY PERFORMANCE REQUIREMENTS

- A. Fire Hazard Classification: Underwriters Laboratories [UL], Use only Class A fire-rated materials as tested in accordance with ASTM E 108 or UL 790 for exterior fire.
- American Society of Civil Engineers [ASCE], Factory Mutual Global Corporation [FMG]/Roof Material Manufacturer/NRCA: Roof materials supplied must be FMG approved meeting FM 4470 test standards, meeting the intent of the test criteria set forth in FMG/ANSI standard 4474 and ANSI/SPRI WD-1 to resistance the uplift wind design pressures as noted on the drawings and for FMG windstorm resistance classifications, to support internal/external fire, [metal decks], to support corrosion resistance fasteners/anchors and impact resistance for severe hail [SH] rating. The roof membrane manufacturer in compliance with the building code must provide the roof assembly securement requirements to resist the wind pressures as noted along with meeting the roof warranty wind requirements and other requirements as shown and outlined in the specifications. The manufacturer's roof assembly securement must not be less stringent then the ASCE 7-22 calculations or FMG [if insured] and must be successfully tested to resist wind uplift pressure according with ANSI/SPRI WD-1 standard. A field pull [ANSI/SPRI FX-1] or adhesion test [ANSI/SPRI 1A-1] will be necessary prior to commencing work when conditions are different then manufacturer's assembly test criteria for their approval to meet the design pressures or required by the state building codes or be conducted per RDA's request. If a test has been accomplished the results will be provided herein.
- C. Occupational Safety and Health Administration [OSHA]:
 - 1. Asbestos roof materials training for the removal, handling and monitoring.
 - 2. Roofing safety requirements for torch application.
 - 3. Walking working surfaces and fall protection standards.
- 1.8 STATE/FACTORY MUTUAL [FM] APPROVALS AND STANDARDS [these approvals/standards reference the design products contained herein. Equal products must provide applicable product approvals].
 - A. AMERICAN SOCIETY OF CIVIL ENGINEERS Minimum Design Loads for Buildings and Other Structures.
 - 1. ANSI/ASCE Revision 7-22 refer to wind pressure zones on the drawings.

1.9 MEETINGS/COORDINATION

- A. A pre-installation conference one week prior to commencing work of this section will be mandatory. All parties responsible for work in this section are required to attend.
- B. Progress meetings will be held during construction. Memos resulting from these meetings will be provided to the Owner and Contractor by RDA.
- C. Daily reporting by the Contractor is required.
 - 1. Contractor to email project team daily with outline summary of work accomplished, any problems encountered such as bad deck, etc.
 - Contractor to email project team on days when weather prohibits work to indicate a 'weather day.'

1.10 DELIVERY, STORAGE, AND HANDLING

- A. Do not overload structure with storage of materials, verify roof deck weight capacity and location of structural supports, only items needed that day shall be stored on the roof. Limit loads on roof to 25 pounds per square foot for uniformly distributed loads for metal/gypsum decks, 75 pounds per square for concrete decks. Provide temporary securement of existing membrane to prevent membrane blow off while installing new roof system.
- B. Store and protect products in accordance with manufacturer's instructions.
- C. Deliver products in manufacturer's original containers, dry, undamaged, with seals and labels intact. All materials must be UL or FM labeled.
- D. Store products in weather-protected environment [manufacturer's plastic wrap is accepted for proper protection if approved by the manufacturer, unless wrap is broken, torn, removed], clear of ground 4 inches min. and moisture. Use breathable tarps for moisture protection as needed. Protect unwrapped foam insulation and liquids from direct sunlight exposure. Water damaged materials will be marked 'rejected' by the Contractor/Owner or RDA and removed from the site.
- E. Storage of flammable liquids in buildings is prohibited. All combustible debris shall be removed from the site daily.
- F. Storage shall be in areas designated by Owner.

1.11 WEATHER CONDITIONS

- A. Do not apply roofing system during inclement weather or when the chance is 40% or greater, percentage as listed on www.weather.com for the local area, percentage as listed when read at 7 AM local time or at time of work commencement. Proceed with roofing and associated work when weather conditions will permit unrestricted use of materials and quality control of the work being installed.
- B. Do not apply roofing system to damp or frozen deck surface.
- C. Adverse weather conditions e.g. extreme temperature, high winds, high humidity, and moisture could have a detrimental effect on adhesives, contact manufacturer for acceptable tolerances. See additional restrictions specified herein.

1.12 SEQUENCING AND SCHEDULIING

- A. Building space underneath roof work is utilized by on-going operations. Coordinate all work with Owner including material storage and contractor parking. Owner's approval required before proceeding with the work. Contractor must provide overhead protection for Owner's workers, public, visitors, etc from falling materials/debris at building entry points.
- B. Coordinate the work of installing all associated items in such sequence that will not necessitate movement of workers and equipment over completed roof areas.

C. Sequence daily work of new roofing to be limited only that can be covered and made 100% watertight at the end of each day, including full adhesion of the membrane, flashings and night seals. No temporary roofing shall be allowed unless approved by Owner.

1.13 MANUFACTURER'S WARRANTIES

- A. Provide a manufacturer's warranty for both repairs/replacements due to any faults in the material and workmanship [Total System Responsibility]. Any leak repairs/replacement due to normal wear and tear, membrane defects, workmanship defects, damage due to wind speeds up to 72 mph [10 meters above ground], shall be performed at no charge to the Owner through the period of the warranty. Roof warranty shall be a no dollar limit type [NDL] with no penal sum, covering all insulation, fasteners, membrane, flashings, liquid flashing, metal coping/edging, regardless of the manufacturer. Warranty must be transferable and must be signed by the Manufacturer of record and the Owner, if required. When a Contractor warranty is provided or implied, this warranty must bind the Manufacturer and Contractor, for the terms of their agreement, to perform any necessary repairs/replacements for the term of the warranty [in most cases two years].
 - .060-inch-thick EPDM Roof Membrane shall be warranted for [20] twenty years.
- B. In the event of a default by the Contractor, the Manufacturer will provide a new contractor to fulfill the warranty obligation.

1.14 PORTABLE FIRE EXTINGUISHERS

- A. Two standard listed multipurpose dry chemical fire extinguishers, NFPA 10, with 10-pound capacity and an ABC UL rating shall be provided and located 20 horizonal feet from the work area. Additional fire extinguishers shall be provided for different roof levels/work sites.
 - 1. Contractor to ensure all personnel are trained to use fire extinguishers.

PART 2 PRODUCTS

General: All products shall be state approved, and Building Code approved as applicable, meeting all manufacturers full system roof warranty requirements. Some items below may not be required for this project but are outlined herein if required during course of work due to changing conditions or changes in scope.

2.1 ROOFING SYSTEM DESCRIPTIONS

General: System Assembly Applications/Scopes, Roof Removal and Replacement.

- A. Manufacturers and Membrane Products and Membrane Designation: [Single Ply]: Ethylene Diene Monomer [EPDM] .060 inches thick, non-reinforced, self-adhered, color black.
 - 1. Elevate, Rubberguard EPDM SA
 - 2. Carlisle SynTec., Sure-Seal FR EPDM SAT.
- B. Insulation [polyisocyanurate] Manufacturers:
 - 1. Elevate
 - 2. Carlisle SynTec
- C. Cover Board [CB]:
 - 1. Elevate, ISOGARD HD
 - Carlisle, SecurShield HD FR
- D. Base Flashing Designations: same as roof system unless manufacturer requires a different product for their warranty or as noted herein. Use manufacturer approved liquid membrane system product for flashing conditions where flashing height is less than 6 inches and unusual shaped metal supports and other areas as required by the manufacturer where noted or as required by condition. Use manufacturer approved molded products where liquid flashing system will not provide a watertight condition.
 - 1. Other Flashing Designation- Manufacturer's approved details for 20-year warranty.

The Contractor's quote must match the roof system including all components and application procedures [cover board, fasteners, membrane and etc.] The roofing schedules set the parameters for the roof system assembly and its application procedures.

ROOFING SYSTEM SCHEDULES

Roof Area A-1 / A-2 / A-3 / A-4 / A-5: Roof Replacement

Preparation: See Preparation for Reroofing and the Proposed Roof Matrix. Total tearoff to

the concrete plank deck, including removal of all lightweight fill. Prep deck as

required for the application of new roof materials.

New Vapor Barrier: One ply, self adhered to the existing concrete deck [contractor to confirm and

provide required adhesion tests]

New Insulation System: Tapered insulation System: 3 inch thick base layer of flat stock insulation, 1/2-

inch start to tapered insulation over base layer, tapered at 1/8-inch per foot,

adhered in place with adhesive to the vapor barrier / temporary roof.

New Saddles: Tapered insulation saddles as shown to provide positive drainage to roof drains. New Cover Board: One-layer, flat stock, HD plyiso cover board on top of new insulation, adhered

in place with adhesive to the top of the insulation.

New Membrane: One ply EPDM membrane, self-adhered to the new cover board.

2.2 VAPOR BARRIER / TEMPORARY ROOF MEMBRANE

- A. Smooth surfaced, cross laminated high density polyethylene film fully-coated with rubberized asphalt adhesive, plastic release film, 30-40 mil thickness, approved by the EPDM membrane manufacturer, approved for exposure for a minimum of 90 days prior to the application of the insulation, cover board, and EPDM roof membrane.
 - 1. Elevate. V-Force Vapor Barrier Membrane
 - 2. Carlisle, VapAir Seal 725TR
- B. Primer: as required by Manufacturer to provide bond to existing concrete substrate.
- C. Detail Membrane / Flashing: as provided by Manufacturer to suit the conditions.

2.3 SHEET MATERIALS/COMPONENTS

General: all membrane component flashings, etc shall match the same color as the membrane.

- A. Elastomeric Sheet: ASTM D4637, type I, class A material, cured, synthetic, non-polyester reinforced, self-adhered, single ply membrane composed of Ethylene Propylene Diene Monomer [EPDM], BLACK, .060 inches thick.
- B. Membrane Flashing: ASTM D4811, Type II, .055 -.060 inches thick, black, non-reinforced, semi-cured, synthetic, single ply EPDM.
- C. Self-Adhesive Flashing: un-cured .045 inches thick, EPDM membrane laminated to 35 mil EPDM tape adhesive.
- D. Lap Splice Tape: .035 inches thick, EPDM-based, formulated for compatibility w/EPDM membrane, self-adhering, cured, width as required.
- E. Adhesive Primer: Solvent based synthetic rubber based formulated for compatibility w/EPDM membrane.
- F. Splice Adhesive: Synthetic polymer-based, if required.
- G. Bonding Adhesive: N/A.
- H. Water Block Seal: Butyl rubber sealant.

I. Splice Cleaner: Organic solvent mixture.

2.4 INSULATION / COVER BOARD ADHESIVE

- A. Insulation Adhesive: Two-part, moisture cured, polyurethane based, low odor,
 - As approved and supplied by the manufacturer of the insulation / cover board / membrane.

2.5 INSULATION AND COVER BOARD

General: All flat stock insulation or cover board shall be from the same manufacturer. Board configuration: 48-inch x 96-inch thickness [mechanically fastened] or 48-inch x 48-inch thickness for adhered [adhesive] applied. Mixing of insulation panels from different manufacturers is not acceptable. All insulation/cover board shall be supplied and approved by the membrane manufacturer and must meet FMG 4450 or UL 1256 as a tested assembly.

- A. Flat Board Stock: ASTM C1289, closed cell polyisocyanurate, square edge/rigid board, type II, class 2, grade 2, coated bonded inorganic glass fiber reinforced mat facers on both sides, square edges, minimum 20 psi compressive strength, size boards as approved for application and by the roof membrane manufacturer.
 - Includes in-fill for tapered saddles and/or insulation. Thickness as outlined.
- B. Tapered: ASTM C1289, closed cell polyisocyanurate rigid board; type II, class 2, grade 2, coated bonded inorganic glass fiber reinforced mat facers on both sides, factory tapered, minimum 20 psi compressive strength, size boards as approved for application and as supplied by the roof membrane manufacturer. Contractor and the tapered insulation manufacturer designer must assume design/application responsibility for the performance of the submitted tapered insulation layout.
 - 1. Tapered Insulation starts and slope as outlined in the roofing schedules. Coordinate starting thickness and slope as indicated to ensure proper roof system thickness, flashing height, etc. per design intent details.
 - 2. Tapered Insulation System shall be sloped at 1/8 inch per foot.
 - 3. Provide a half diamond shaped saddle behind RTU's and other curbs wider than 24 inches.
 - 4. Provide a full diamond shaped saddle between drains.
 - 5. **Saddle insulation** shall be sloped at 1/2 inch per foot. *Tapered insulation saddles starts* at 1/2 inch thick.
 - 6. Saddles: Each side of the saddle width shall be a minimum of 25% of the drain to drain, if spanning between two or more drains as applicable for conditions.
 - 7. Drains Sumps: Tapered min. 1/4 inch per foot slope drain sumps are required at all drains, if conditions allow [size, 4-foot square].
- C. Cover Board: ASTM C 1289, Type II, class 4, grade 1 [80-109 PSI], 1/2-inch-thick, polyisocyanurate, square edge/rigid board, coated bonded inorganic facer with a water-resistant high-density closed cell core.
 - 1. Top layer over new insulation.

2.6 PARAPET WALL BOARD

- A. Wallboard, Flat Stock, [parapet wall / roof-wall transition sheathing where required by conditions only]
 - 1. ASTM C1278, US Gypsum, Securock, 1/4-inch-thick with square edges, gypsum fiber core, size as noted/approved for the application and as supplied by the roof membrane.
 - 2. ASTM C1177, Georgia Pacific, Dens-Deck Prime Roof Board with EONIC Technology, glass mat faced, primed surface, 1/4-inch-thick with square edges.

2.7 CANTS / EDGE

A. Cant Strips and Tapered Edge Strips: Perlite, fire resistant, performed to 45 degree angle and 18 inch long tapered edge strip, tapered front to back as required by the Manufacturer.

2.8 ROOF FASTENERS [some items may not be required for this project]

General: Fasteners/Anchors: strength, type and configuration must meet the required pull test resistance for each attachment application. Fastener's rate and pattern must be FMG, or local code approved to meet the intent of the wind uplift rating specified. All fasteners shall be corrosion resistant steel in accordance with meeting ASTM F1667 or type 304 stainless steel.

- A. Fastener Manufacturers:
 - 1. ITW Buildex
 - 2. IWT Red Head
 - 3. OMG
 - 4. Tru-Fast
 - 5. Scots
 - 6. Equal, and as appropriate and approved by the roof membrane manufacturer
- B. Required embedment of fasteners: Field confirm fastener lengths required.
 - 1. Steel: 3/4-inch.
 - 2. Concrete/concrete block: 1 1/4-inch.
 - 3. Gypsum: 2-inch.
 - 4. Tectum: 2-inch.
 - 5. Wood: 1 1/4-inch.
- C. Summary of Fasteners:
 - 1. <u>Roofing and Other Nails</u>: square or round head, ring shanked galvanized or non-ferrous type, length and diameter as required to suit application.
 - 2. <u>Metal Counterflashing and other LG metal sheets to Wood</u>: ITW Buildex, 'TruGrip, #9, self-piercing, corrosion resistance steel shank with EPDM washer.
 - 3. <u>Metal Counterflashing and Other LG Sheet Metal [exposed] to Masonry</u>: ITW Buildex, 1/4 inch, 'Scots Tapcon', stainless steel-hex head, ATF treads, corrosion resistant steel shank, with EPDM washer.
 - 4. <u>Termination Bars [exposed] to Masonry</u>: ITW Buildex, 1/4 inch, 'Scots Tapcon', stainless steel-hex head, ATF treads, corrosion resistant steel shank, with EPDM washer.
 - 5. <u>Metal Sheets or Metal Decking to Metal Decking</u>: 1/4 inch, ITW Buildex, 'tek/ 3', hex washer head, ABOT self-tapping with corrosion resistant steel shank.
 - 6. <u>Insulation Fasteners/Plate, Metal Deck:</u> Steel, HD #14, red, phillips head, superior corrosion resistant with a 3-inch round metal cap, meeting FMG 4470 standard requirements and must be supplied or approved by the roofing manufacturer for their warranty.
 - 7. General Purpose Stainless Steel: Series 304 fasteners, with or w/out EPDM washers.
 - 8. <u>Base Sheet, Cover Board, Membrane to Insulating Concrete, Gypsum or Wood Fiber Decking</u>: Tru-Fast, Twin Loc-nail, Coated steel fastener assembled with a 2.7inch diameter coated plate with a stainless-steel locking staple.
 - Edge Securement [EPDM]: Reinforced perimeter fastening strip RTS, 6 in. wide, .045 in.
 thick, polyester scrim reinforced, with factory laminated self-adhering tape, fastened in
 place to the wall or the deck at 12 inches on center with manufacturer approved fasteners
 and plates.

2.9 ROOF ACCESSORIES

- A. <u>Pre-Molded Manufactured Accessories</u>: Molded EDPM, color to match field, .050-.075 inch thick, pipe flashings, etc. Manufacturer warranted accessories.
- B. <u>Edge Securement</u>: Seam perimeter fasteners with 2-inch steel seam plates, anchoring an RPF strip, 6-inch-wide, .045-inch-thick, polyester scrim reinforced, with and without factory laminated self-adhering tape.
- C. <u>Walkway Pads</u>: Non-Reinforced EPDM, 0.130 inches thick, size: 30-inch-wide x 30-inch long with patterned slip resistant bearing surface, self-adhered or factory applied tape.

- D. Pourable Sealer: Polyurethane, Manufacturer's standard.
- E. <u>Termination Bars</u>: Aluminum 1.3-inch-wide, 10 feet long, 1.08 inch [min.] thick bars with flat or with [integral caulk edge], as applicable per manufacturer.

F. Pipe Supports/Hangers:

- 1. Manufactured by Portable Pipe Hangers, Adjustable, stainless metal components, polypropylene base, 'type SS8 C or R [up to 2 ½ inch pipes] or PP10' [up to 3 ½ inch pipes], as required for conditions.
- 2. Manufactured by OMG, Pipe-Guard, non-adjustable, PGM-BK, PGS-BK, PGTS-BK pipes up to 2 inches, as required for conditions.
- Manufactured by Advanced Supports Products, EcoCurb or equal. Pipe supports for Condensate Lines/Piping.
- G. <u>Rail Curbs</u>: Manufactured by Pate, type es-1, es-2 or es-5, as required for condition, size as required by unit base size including unit tie downs or as shown.
- H. Vent Pipe Extenders: Manufactured by Tubos, Clearwater, FL, PVC pipe extenders.
- I. <u>Roof Drain Accessories</u>: bolts, clamping ring, strainers, size and type as required to accommodate existing drains.
- J. <u>Roof Drain Inserts</u>: Manufactured or approved by the membrane manufacturer, extruded aluminum body, cast dome with stainless steel clamping ring and a watertight rubber seal, size as required.
- K. Roof Drains: Match existing size, cast iron bowl/clamping ring with no hub. Manufactured by Zurn, as approved by the membrane manufacturer.
- L. <u>Roof Drains</u>: Match existing size or as size shown, cast iron bowl/clamping ring with no hub, overflow drains shall have a 2-inch-high metal flow restrictor adapter. Replacement drains manufactured by Zurn. Verify existing size and piping below deck, when no replacement type/style is available, as approved by the membrane manufacturer.
- M. <u>A/C condenser and other roof top unit stands</u>: Manufactured by Precision Aluminum Products, with height/load requirements provided including engineered tie downs and deck/substrate anchoring requirements.
- N. <u>Bib Metal</u>: 24-gauge stainless steel or pre-finished [match housing color] steel, minimum 4 inch wide.
- O. <u>Equipment enclosure</u>: 24-gauge stainless steel, shop or pre-manufactured with top fabricated [angled] to allow no moisture from entering the pipe areas, access to pipes required. Install mortar in the bottom of base with polyurethane pourable sealer poured around pipes [2-inch depth minimum]. Seal pipes that exit enclosure with sealant/foam.
- P. <u>Insulation Fasteners/Plate, Metal Deck [skylight infill areas]</u>: Steel, HD #14, phillips head, superior corrosion resistance with a 3-inch round metal cap, meeting FMG 4450 standard requirements and must be supplied or approved by the membrane manufacturer.
- Q. Roof Hatch: Thermally broken Aluminum roof-hatch with lids and insulated double-walled curbs, welded or mechanically fastened and sealed corner joints, continuous lid-to-curb counterflashing and weathertight perimeter gasketing, straight sides, and integrally formed deck-mounting flange at perimeter bottom. Type and Size: Single-leaf lid, 30 by 36 inches [unless otherwise required to fit existing roof opening]; 12 inch high insulated curb with integral cap flashing, secured to roof deck. Aluminum cover and frame: 11 gauge; mill finish; Type 316 stainless steel hinges, zinc plated hardware; extruded EPDM rubber gasket adhered to the cover. Compression spring operators with automatic hold-open arm with grip handle release providing smooth, easy and controlled operation throughout operation. BILCO Company, Type S-50TB or Equal.

R. <u>Expansion Joints</u>: 60 mil PVC sheet attached to aluminum flanges with bifurcated crimp, with a closed cell polyethylene foam backer; Continuous or longest pieces possible [if available], Johns- Manville 'Expand-O-Flash', curb to curb and curb to wall type with bellow size to match existing with shop fabricated termination.

2.10 SEALANTS/TAPES

- A. General Use: ASTM C920, Type S, Grade NS, Class 25 as required for each joint condition, single component, elastomeric silicone polymer, non-staining, non-shrinking, non-sagging, and ultra-violet resistance, clear or to match surrounding existing color.
 - Tremco's 'Dymonic' [basis for sealant]. Provide where sealant is exposed to weather or movement exceeds butyl sealant capability.
- B. Butyl Sealant: ASTM C1311, single component, solvent released butyl rubber sealant, polyisobutylene plasticized.
- C. Sealing Tape: Pressure-sensitive, 100 percent solids, polyisobutylene compound sealing tape with release paper.

PART 3 EXECUTION

3.1 EXAMINATION / LEVEL SURFACE CONDITIONS

- A. Verify that surfaces and site conditions are ready to receive work. Verify that deck [total removed roofing membrane sections] is clean and smooth, free of depressions, irregularities, or projections, properly leveled, start of work constitutes acceptance of conditions.
 - 1. Verify that all wood blocking, nailers are securely anchored in place.
- B. Areas of substrate where ponding water will occur [3/4" deep or greater] one hour after rainfall] shall be built-up in accordance with the leveling fill manufacturer's recommendations prior to the installation of the final mineral surfaced cap ply sheet. Failure to perform this action could result in total roof removal, string leveling prior to final ply recommended.

3.2 PROTECTION

- A. Protect building surfaces/interior spaces against damage from roofing work. It is the Contractor's responsibility to take any necessary actions to prevent construction-related leaks, to include but not limited to repairing watertight existing surrounding roofing scheduled to be replaced or overlaid. Surround roofing areas include roof top material storage areas, workers roof top access to from roofing work site areas and any drainage system [roof drain-scuppers] leak issues located in work area. Contractor must include the cost to deal with these existing leak sources into the overall project unless the Owner/Owners rep is made aware of these leak sources prior to commencement of the project.
- B. Provide, erect barricades, guardrails as required by applicable regulatory advisory to protect occupants of building and workers.
- C. Cover all drains and other openings intended for drainage during construction to prevent clogging of system, remove at the end of each day to allow for drainage.
- D. Special precautions shall be taken to avoid fumes from entering the facilities through air intakes, coordinate with owner to deal with active A/C units.

3.3 VAPOR BARRIER / TEMPORARY ROOF APPLICATION

- A. Ensure existing concrete surface is completely dry, in accordance with manufacturer's requirements.
- B. Inspect existing concrete surface. Existing surface shall have a smooth surface and be free of voids, spalled areas, sharp protrusions, loose aggregate, laitance and form-release agents. Provide adhesion test in accordance with manufacturer's requirements.

- C. Prime existing concrete surface.
- D. Apply vapor barrier from low to high points in shingle fashion so that laps will shed water. Overlap all edges a minimum of 3 inches in side laps and 6 inches in end laps. Stagger end laps. Position membrane carefully to avoid fishmouths and wrinkles. Roll vapor barrier immediately after installation with weighted roller.
- E. Extend vapor barrier up face of parapet walls
- F. Install all required flashing, tapes, etc. to seal the vapor barrier completely.

3.4 INSULATION / COVER BOARD APPLICATION

General: Secure insulation/cover board to roof deck to the requirements of FMG loss Prevention Data Sheet 1-28 and 1-29 to include additional securement at the corners and perimeters. Install insulation including saddles [if required] as shown on the contractor/manufacturer-approved layout. This layout must be capable of draining the roof completely into drainage elements after 48 hours following a rainfall with an outside average temperature of 65For higher [partly sunny or sunny conditions]. The layout pattern must not block the flow of rainwater into any roof top unit/ventilator.

- A. Concrete Decks: Adhere the insulation / cover board in a single-layer configuration onto the deck / vapor barrier in adhesive at the rate/pattern as tested/approved by the manufacturer. Adhere the cover board onto the insulation with adhesive at the approved rate/pattern. All insulation shall be installed in accordance with the Manufacturer's /Contractors/RDA approved layout. Install insulation with long joints in a straight line with end joints staggered. Install the top cover board perpendicular to roof slope to the new insulation board with joints staggered [as applicable] no less than 24 inches in all directions from joints below in accordance with windstorm resistance classification securement pattern and insulation manufacturer's instructions. Adhered boards shall be walked-in before skin coat develops and boards shall have continuous pressure until the adhesive sets to ensure not less than 85% of any board be in contact with the substrate. Any portion of an insulation board that falls within the calculated perimeter or corner area has the increased securement applied over the entire board.
- B. Level all decks as necessary prior to starting work.
- C. Parapet Wall Board: Fasten 6 inches on center the new wall board to existing steel studs with gypsum sheathing removed or thru remaining gypsum board. Remove any wet gypsum board.
- D. Correct any ponding as necessary prior to starting work.
- E. Apply no more insulation than can be sealed watertight with roofing membrane in the same day. Cut insulation to fit neatly to perimeter blocking and around penetrations through the roof, maximum joint width 3/8 inch. No temporary roofing permitted.
- F. All ventilators, A/C unit curbs, supports etc. [square or rectangle] will have a tapered edge strip [formed as a saddle] placed around the high side of unit to slope water from unit. Ventilators, A/C unit, supports etc. curbs over 2 feet wide will require insulation saddles sloped ½ inch per foot.
- G. Provide adequate separation of insulation between hot exhaust stacks.

3.5 MEMBRANE APPLICATION AND BONDING

General: Install roofing sheets as per manufacturer's recommendations and the following summary of requirements. Only install membrane when outside temperature of 40-degree F or higher. Additional enhancements to the membrane will be required if a 30-year warranted system is specified herein, consult the manufacturer for these requirements. These requirements are in addition to what is specified herein.

A. Beginning at the low point of the roof, place the membrane without stretching over the acceptable substrate and allow membrane to relax a minimum of 30 minutes before attachment or splicing.

- B. After making sure the sheet is placed in its final position seams shed water or parallel to the water flow, adjoin sheets in a manner that all lap seams along the length of the membrane overlap 3 inches for application of seam tape. The membrane should be smooth, clean, and free of wrinkles and buckles.
- C. Starting from the center split of the exposed release liner, remove the liner on both sides at a 45-degree angle beyond the membrane edge. Remove approx. 5 feet of release liner from one end of the sheet and adhered it to the cover board. Do not fold the length of the roll in half. Keeping the membrane flat and secured and seams aligned continue removing the release liner. Removal of the liner should be accomplished by two people.
- D. Use a stiff bristled broom and apply pressure to initiate adhesion. Broom the installed membrane across the width working towards the roof edge. Do not use a weighted roller.

3.6 MEMBRANE SPLICING [Factory Applied Tape]

- A. Position the sheet at the splice area by overlapping membrane. Tack the sheet back with primer at 5' centers and at factory splices or as necessary to hold back the membrane at the splicing area. Remove excess amounts of dusting agent on the sheet and at factory splices using a stiff push broom. Apply primer to both surfaces at the same time to allow the same flash off time. Additional scrubbing is required at areas that may have become contaminated or have excess amounts of dusting agent, and at all factory splices.
- B. Position the seam splice tape on the bottom sheet, aligning the edge of the release paper with the markings. When adhering factory adhered tape, pull the backing from the tape and allow the top sheet to fall freely onto the exposed primed surface. Immediately roll the splice tape with a 3 inch-4-inch-wide silicone or silicone sleeved steel hand roller or a short nap 3-inch paint roller.
- C. When the seam splice tape has been installed for the entire splice length, trim the top sheet as necessary to assure that 1/8 inch-1/2 inch of the seam splice tape will be exposed on the finished splice. Broom the entire length of the splice as the release paper is being removed.
- D. Roll the splice using a 1-1/2 inch-2-inch-wide silicone or silicone sleeved steel hand roller, first across the splice, and then along the entire length of the splice.

3.7 FLASHING APPLICATIONS – Vertical Surfaces, etc.

General: Secure membrane when there is an angle change greater that 2 inch 12 inches with a reinforced perimeter fastening strip [RPS] fastened to the deck or wall, see manufacturer's recommendations for exceptions.

- A. Remove loose or unsecured flashings, mineral surfaced or coated flashings and excessive asphalt to provide a smooth, sound surface for new flashings.
- B. Apply primer to wall surface allow to dry. Roll the field EPDM membrane up the vertical surface evenly and carefully to minimize wrinkles.
- C. Install T-Joint covers at field and other splice intersections as required by manufacturer. Apply tape at laps if membrane is not self-adhered type throughout out the sheet [edge to edge].
- D. Provide termination directly to the vertical by a termination bar set in water block seal and other requirements as shown on the drawings.

3.8 FLASHING APPLICATION - Edge, Pipes and Drains.

General: Install flashing sheets over cants strips and other vertical surfaces, at edges and penetrations through roof as per manufacture's recommendations, requirements of FMG loss Prevention Data Sheet 1-49 including details and the following requirements.

A. EDGES

- Apply primer to the metal edging and membrane. Remove approximately 2 ft.-3 ft. of release paper from the seam flashing and apply to the metal flange and membrane. Lap adjacent rolls of seam flashing a minimum of one inch with a 2 inch-3-inch-wide silicone or silicone sleeved steel hand roller, roll the seam flashing ensure proper adhesion. Additional attention must be given to factory splice intersections and to any change in plane.
- 2. Apply 6-inch length of seam flashing, a seam Joint Cover, or 6-inch x 6-inch form flash to the inside edge of the seam flashing at all overlaps and at all intersections between the seam flashing and field fabricated splices.
- 3. Apply seam edge treatment at the intersections of the flashing sections.
- 4. If the roof edge includes a metal edge and sealant is not applied between the laps in the metal edging, an additional piece of seam flashing shall be applied over the metal lap to the top of the metal edge, after the initial application of seam flashing. Seam edge treatment shall be applied at the intersections of the two flashing sections.

B. PIPES

 Flash pipes with manufactures pre-molded flashing to max. extent possible or form flash only when per-molded flashing is not available. Prime and install an additional 12-inch seam flashing over pre-molded flange.

C. DRAINS

1. Remove all existing flashings, leads and cement. Provide a clean even finish between the drain clamping ring and the drain bowl. Position the membrane and cut a hole for the roof drain allowing a ¾ inch membrane inside the clamping ring. Make round holes in the membrane to align with the bolts. Install water block seal on the clamping ring flange below the membrane. Tighten the clamping bolts to achieve a constant compression. Replace or repair [bolts broken, cannot be removed] drain where existing clamping ring cannot be bolted securely in place.

3.9 LIQUID FLASHING

A. Liquid flashing [LF] system [PMA] shall be installed on a clean roof surface with a reinforced polyester fleece fabric in a multi-layer [resin/fleece/resin] configuration with PMA resin applied [fully saturating fabric] at 2 gallons per square feet with resin top coat, Extending vertically and 8 beyond the base of penetration. LF shall be installed where noted or as required by condition per the manufacturer. Install in accordance with manufacturer's printed detail or as shown.

3.10 INSTALLATION OF ROOF ACCESSORIES

- A. Walkway pads and other accessories shall be installed in accordance with the manufacturer's recommendations or as shown on the drawings. Space pads 3 inches apart.
- B. Expansion joint, and other accessories not noted herein shall be installed in accordance with the manufacturer's recommendations and as shown on the drawings.
- C. Rail curbs, equipment stands, and pipe supports shall be installed in accordance with the manufacturer's instructions. Anchoring to substrate and tie downs as shown. Place curbs on deck and position curbs ends to allow water to flow toward drains or gutters.
- D. Equipment enclosure shall be 24-gauge stainless steel, shop or pre-manufactured with top fabricated [angled] to allow no moisture from entering the pipe areas. Install mortar in the bottom of base with polyurethane pourable sealer poured around pipes [2-inch depth minimum]. Seal pipes that exit enclosure with sealant/foam.
- E. Penetration pans shall have mortar installed in the bottom of pitch pans with polyurethane pourable sealer [2-inch min] filled to the top of the pan, then slope.
- F. Roof drain clamp rings/bolts where distorted, corroded or to short, shall be replaced. Clamp rings shall be clean of all asphalt and other deposits. Provide new drain strainers where

- missing. Install drain inserts if clamping rings cannot be compressed on the new roof membrane due to broken bolts, etc.
- G. A/C condenser and other roof top unit stands shall be installed in accordance with engineered requirements furnished by the manufacturer to include height/load, tie downs and deck/substrate anchoring requirements.

3.11 FIRE SAFETY

A. Measures to be implemented by the contractor to minimize the possibility of fire and to provide a safe work environment. It is the responsibility of the contractor performing any work to comply with the safety provisions of the National Fire Codes pertaining to such work along with other requirements specified herein. In the event of a fire of any size, contractor shall notify the Local Fire Department.

3.12 WATER CUT-OFF

- A. At the end of the day's work or when precipitation is imminent, a water cut-off or other waterproof protection shall be provided to ensure a watertight condition is obtained, between the new and existing conditions, remove cut-off prior to resuming the installation of the roofing system. Ensure that material is compatible with both membranes [new and existing] ensuring a watertight result.
- B. No temporary roofing, loose laid membrane, etc. is permitted.

3.13 CLEANING

A. In areas where finished surfaces are soiled by any other source of soiling caused by work of this section, consult manufacturer for cleaning advice.

END OF SECTION

SECTIONS 07 62 00/07 71 00 - SHEET METAL, FLASHING, TRIM and SPECIALTY ITEMS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and General provision of the contract and Division 1 Specification Sections apply to this section.

1.2 WORK INCLUDES BUT NOT LIMITED TO:

General: Intent of project is to provide new sheet metal components for the new roof system.

- A. Removal of existing sheet metal items as noted and in the preparation of reroofing section.
- B. Installation of new sheet metal items:
 - Wind-rated edges and copings.
 - 2. Fasteners.
 - 3. Bib flashing, counter flashing and other sheet metal items.
 - 4. Equipment support flashings.

1.3 RELATED SECTIONS

- A. Section 06 10 53 Miscellaneous Rough Carpentry for Roofing
- B. Section 07 01 50 Preparation for Reroofing

1.4 APPLICABLE REFERENCES

- A. General: The following references form a part of this specification.
 - ASTM A653 Metallic Coated, Sheet Steel [Galvanized], Grade A, Hot Dipped, Zinc Coated, Coating Class G90.
 - 2. ASTM A792, Metallic Coated, Sheet Steel [Galvalume and Galvalume plus], Grade 40, Coating Class A250 [galvalume] or AZ55 [galvalume plus], 55 % Aluminum-45 % Zinc Alloy.
 - 3. ASTM A755, Pre-Finished, Sheet Steel [Galvanized/galvalume], Grade 40, Coating Class A250 or G90, Pre-painted by the coil coating process.
 - ASTM B209. Aluminum.
 - ASTM E108 Fire Test of Roof Coverings.
 - [FMG] Factory Mutual Global Current Approval System [NAV assembly numbers], Loss Prevention Data Sheets for Roof Deck Securement for Above Deck Roof Components, Perimeter Flashings, Wind Design-ANSI/FM 4474, Approval Standard FM 4470 and Roof Loads for Construction
 - [UL] Underwriters Laboratories Roofing Materials and Systems Directory, Fire Resistance Directory, Current Edition.
 - [NRCA] National Roofing Contractors Association Current Roofing and Waterproofing Manual, including shop-fabricated edge metal testing data.
 - 9. [AISC] Manual of Steel Construction
 - 10. [SMACNA] Sheet Metal and Air Conditioning Contractors Association-Current Manual
 - 11. [OSHA] Occupational Safety and Health Administration, Guidelines
 - 12. [ASCE] 7-10 Minimum Design Loads for Buildings
 - 13. [ANSI/SPRI/FM] 4435 standard ES-1-17 Wind Design for Edge Systems
 - 14. [NFPA] National Fire Protection Association, 58 Liquefied Petroleum Gas Code
 - 15. [ANSI/SPRI] WD-1 Wind Design Standards

1.5 SUBSTITUTIONS/EQUALS

- A. When a particular make or trade name is specified, it shall indicate the standard quality required. Bidders proposing substitutions shall submit the following ten [10] days prior to bid date. Refer to Contract Documents.
 - 1. Refer to Section 01 25 00 Substitution Requests.

1.6 QUALITY ASSURANCE

- A. Fabricator/Installer: Company specializing with skilled workers in sheet metal with minimum 5 years documented experience, never been terminated by a manufacturer for workmanship problems and be capable of providing the warranties as specified.
- B. Sheet Metal items and installation shall comply with SMACNA's [Architectural Sheet Metal] and NRCA [Roofing] current manuals.

1.7 COORDINATION

A. Coordinate sheet metal flashing, trim layout installation with adjoining roofing to provide a leakproof, secure, non-corrosive installation.

1.8 PERFORMANCE REQUIREMENTS

- A. Fire Hazard Classification: Underwriters Laboratories [UL], Use only Class A fire-rated materials as tested in accordance with ASTM E 108 or UL 790 for exterior fire.
- B. Install sheet metal items to withstand wind loads, structural movement, by preventing buckling, opening of joints, hole elongation, failure of joint sealant, failure of connections and other detrimental effects.
- C. All perimeter metal items [copings and edges] must have been tested to resist equal or greater wind design load.

1.9 DELIVERY, STORAGE and HANDLING

- A. Do not overload structure with storage of materials; verify roof deck weight capacity and location of structural supports, only items needed that day shall be stored on the roof. Limit loads on roof to 25 pounds per square foot for uniformly distributed loads for metal or gypsum decks, 75 pounds per square foot for uniformly distributed loads for concrete decks. Store and protect products in accordance with manufacturer's instructions.
- B. Deliver products in manufacturer's original containers, dry, undamaged, with seals and labels intact. Protect sheet metal items during transportation and handling.
- C. Store products in weather-protected environment [manufacturer's plastic wrap is accepted for proper protection, unless wrap is broken, torn, removed], clear of ground 4 inches minimum and exposure from direct sunlight. Use breathable tarps for moisture protection as needed. Damaged materials will be marked 'rejected' by the contractor/owner or Owner's rep. and removed from the site.
- D. Storage of flammable liquids in buildings is prohibited. All combustible debris shall be removed from the site daily.

1.10 WEATHER CONDITIONS

A. Do not apply materials during inclement weather, high winds or when the chance of rain is 60% or greater, percentage as listed on www.weather.com for the local area, percentage as listed when read at 7 AM local time or at time of work commencement.

1.11 SEQUENCING AND SCHEDULING

A. Building space underneath roof work is utilized by on-going operations. Coordinate all work with Owner including, material storage, scaffolding [as required] and Contractor parking. Owner's approval required before proceeding with the work. Contractor must provide overhead protection for owner's workers from falling materials/debris at building entry points.

1.12 MANUFACTURERS WARRANTIES

A. Provide a manufacturer's warranty for both repairs/replacements due to any faults in the material and workmanship. Any repairs/replacement due to normal wear and tear, material

finish defects and workmanship defects. Warranty shall cover finish fading, chalking, cracking, peeling or failure of paint to adherer to base metal.

- Sheet metal items shall be warranted watertight for [20] twenty years by the roof membrane manufacturer.
- Sheet metal manufacturer of record must provide a [20] twenty-year finish warranty for the metal fascia, coping and edge as outlined herein, covering, finish and base metal. Warranty shall be a lifetime warranty for defects of material or failure to resist wind speeds.
- 3. Sheet metal coping and roof edges that terminate into/attach to [incorporated] into the roof membrane shall be warranted for winds up to 72 MPH by the roof membrane manufacturer [part of the roof warranty]. Pre-manufactured items regardless of their location must be warranted and be tested by the metal manufacturer to resist failure [blow off] for wind speeds up to 120 mph and also be certified to meet or exceed the design pressure as stated herein. The installation of these items must be incompliance with the metal manufacturers installation requirements and field condition attachments guidelines and as shown. The roof manufacturer can incorporate this warranty requirement into their roof warranty if approved by the metal manufacturer/fabricator.
- B. In the event of a default by the Contractor, the Manufacturer will provide a new Contractor to fulfill the warranty obligation.

1.13 PORTABLE FIRE EXTINGUISHERS

- A. Two standard listed multipurpose dry chemical fire extinguisher, NFPA 10, with 10-pound capacity, 4A-60B:C UL rating shall be provided and located near the work area. Additional fire extinguishers shall be provided for different roof levels/work sites.
 - 1. Contractor to ensure all personnel are trained to use fire extinguishers.

1.14 DEFINITIONS

A. Shop fabricated includes items that will be formed at the fabricators shop predominately by press brake. Prefabricated or manufactured items will be plant manufactured ready for installation. Both items must be wind rated in compliance with ANSI/SPRI/FM ES-1-17

PART 2 PRODUCTS

General: All products shall be state approved, and Building Code approved as applicable. Some items below may not be required for this project but are outlined herein if required during course of work due to changing conditions or changes in scope.

2.1 FABRICATION

A. Fabricate sheet metal items to comply with recommendations in SMACNA [architectural Sheet metal manual] and NRCA's [the NRCA roofing manual]. Conceal fasteners and expansion provisions where possible on exposed to view items. Provide expansion provisions as recommended where lapped or bayonet type expansion cannot be used.

2.2 FASTENERS

General: Fasteners/Anchors: strength, type and configuration must meet the required pull test resistance for each attachment application. Fastener's rate and pattern must be FMG, or local code approved to meet the intent of the wind uplift rating specified. All fasteners shall be corrosion resistant steel in accordance with meeting ASTM F1667 or type 304 stainless steel.

- A. Fastener Manufacturers:
 - 1. ITW Buildex
 - 2. IWT Red Head
 - 3. OMG
 - 4. Tru-Fast

- 5. Scots
- 6. Equal, and as appropriate and approved by the roof membrane manufacturer
- B. Required embedment of fasteners: Field confirm fastener lengths required.
 - 1. Steel: 3/4-inch.
 - 2. Concrete/concrete block: 1 1/4-inch.
 - 3. Gypsum: 2-inch.
 - 4. Tectum: 2-inch.
 - 5. Wood: 1 1/4-inch.
- C. Summary of fasteners and requirements are as follows:
 - Metal Counterflashing and other LG metal sheets to Wood, ITW Buildex, 'Scots Teks' [AB point] stainless steel-hex head, ¼ inch, corrosion resistance steel shank with EPDM washer.
 - Metal Counterflashing and Other LG Sheet Metal [exposed] to Masonry, ITW Red Head, ¼ inch, 'Scots Tapcon', stainless steel-hex head, HL treads, corrosion resistant steel shank, with EPDM washer.
 - 3. <u>Termination Bars [exposed] to Masonry</u>, ITW Red Head, ¼ inch, 'Scots Tapcon', stainless steel-hex head, HL treads, corrosion resistant steel shank, with EPDM washer.
 - 4. Metal Sheets or Metal Decking to Metal Decking, #10, ITW Buildex, 'tek/ 1', hex washer head, ABOT self-tapping with corrosion resistant steel shank.
 - General Purpose Stainless Steel: Series 304 fasteners, with or w/out EPDM washers.

2.3 ROOF ACCESSORIES / SPECIALTY ITEMS

General: Sheet Metal Items: All metal components not incorporated into the roof system and not outlined herein or shown on the drawings shall be fabricated with 24 gauge pre-finished meta or 24-gauge stainless steel.

- A. <u>Penetration Pockets</u>: 24-gauge stainless steel, soldered together with 4-inch roof flange and 4-inch height or size required for condition, only use if another manufacturer approved detail, field flashing, or liquid flashing system will not work for the conditions.
- B. Continuous Cleats: Galvanized steel, 22 gauge.
- C. <u>Counter flashing</u>: Pre-finished, 24-gauge metal, fabricated in lengths maximum 12 feet, designed to be removable. CF to be notched and lapped at inside corners and joints.
- D. Wind Rated Fascia [Pre-Manufactured only]: Pre-finished, 24-gauge galvanized metal face over formed 20-gauge metal continuous rail, FMG approved, size, length and shape/profile as shown, roof membrane manufacturer approved and warranted to meet or exceed design pressures/winds [see wind warranty] and 20 or 30-year finish warranty by the metal manufacturer. ANSI/SPRI/FM 4435 standard ES-1-17 and tested and approved for winds up to 120 MPH. Pre-Manufactured by Metal Era's, One System, Snap-on type or equivalent.
- E. <u>Wind-Rated Coping</u> [pre-manufactured only]: Pre-finished 24-gauge metal coping cap, without exposed fasteners cleated on both sides, [continuous cleated or seat/chair configuration] tapered style [toward roof], butt joint. Provide factory-fabricated corners, intersections. Condition must allow for moisture to drain off edges without moisture to enter under coping cap, ANSI/SPRI/FM 4435 ES-1 tested and approved, size and shape as shown to match existing wall width, roof membrane manufacturer approved and warranted for minimum 72 mph wind resistance or higher to meet design pressures and a 20-year finish, leak proof warranty by the metal/roof materials manufacturer. Pre-Manufactured by Metal Era's 'Perma-Tite' or equal.
- F. <u>Pre-Manufactured or Shop Fabricated Edge/Gravel Stop</u>: Pre-finished 24 gauge metal face over 22 gauge metal continuous cleat, slotted or prepared for fastener locations on the cleat face/top. Size, length and shape/profile as shown, roof membrane manufacturer approved.

- Pre-Manufactured by Metal Era, One System Drip or fabricated to match Metal Era's installation requirements.
- G. <u>Bib Metal</u>: 24-gauge stainless steel or pre-finished 24-gauge galvalume metal [match unit color], minimum 4 inch wide. Use stainless steel screws.
- H. <u>Gutter</u>: Pre-finished 24 gauge galvanized, style A, with a 3–4-inch flange back if indicated, size 6 inches, with 1/16 inch thick, 2-inch-wide spacers at 48 inches alternately spaced between brackets. Minimum 20 feet in length, as applicable. Complete with ends, outlets tubes and expansion joints cover fabricated with the same metal as the gutter.
- I. <u>Downspouts</u>: Pre-finished 24 gauge galvanized, round, smooth with flat lock seams, complete with mitered elbows, size 3x4-inch, see drawings for locations.
- J. <u>Downspout Hangers</u>: Pre-finished, 2-inch wide 1/16 inch thick. Color to match downspout color [SMACNA Fig. 1-35 C or G].
- K. <u>Gutter Brackets</u>: 1 ½ inch wide,1/8-inch-thick steel, painted to match gutter color.
- L. <u>Thru Wall Primary and Overflow Scupper Lining/Plate</u>: 24-gauge, stainless steel, solder all corners, size and shape as existing with 24-gauge pre-finished steel exposed to view plate. Installation [SMACNA FIG.1-30A similar].
- M. <u>Conductor Head</u>: Pre-finished, 24 gauge steel, pop riveted and sealed, [SMACNA, style FIG 1-25F], top opening size as existing with other dimensions in accordance with SMACNA sizing recommendations or as required by condition.

2.4 SHEET METAL

General: Roof membrane manufacturer supplied and approved components [copings/fascia edges - if required/shown] must be used, these sheet metal components must be pre-manufactured and be tested and approved in accordance with ANSI/SPRI/FM ES-1 test method, FM Class Number 4435 approved standard and must be included into the roof warranty. Fabricated by Metal Panel System, Architectural Products, Metal Era, Pac-Clad Peterson, Una-Clad, Drexel Metals or Dimensional Metals, etc. Drip edge/gravel stop edge - roof penetrating flange type, may be premanufactured or shop fabricated, [the metal manufacturer may allow the contractor to use their metal/materials/installation methods and shop fabricate and install the items in accordance with their wind rated ES-1 and FM 4435 standard approved tested drip/gravel stop edge rated requirements, only will be accepted if the metal manufacturer and/or the contractor is a certified ES-1 sheet metal shop and will provide/support the wind and finish warranties as outline herein and meet RDA and FM design requirements. All other metal shall be shop fabricated in accordance with SMACNA 6th Edition or other details or pre-manufactured as shown. All pre-finished metal shall be fabricated using galvalume as noted, unless not available or wind resisting testing was used with galvanized steel. See herein the metal requirements for each type, used or not used on this project.

- A. Pre-Finished Sheet Steel [Galvalume]: ASTM A792, grade 40, class A250, 24 or 22 gauge [as noted], primed and preprinted by coil coating, finished exposed to view side with a fluoropolymer Kynar 500 coating and a wash coat .5 mil thick applied to the reverse side, 20-year warranty covering fade, chalking and film integrity. Colors as selected by owner.
- B. Sheet Steel [Galvalume Plus]: ASTM A792, grade 40, 24 or 22 gauge [as noted], coating class AZ55, coated with an organic resin .012 to .090 inches thick, thermally cured. Finished on both sides with a fine sparkle appearance. 20-year warranty covering fade, chalking and film integrity. Colors as selected by owner.
- C. Pre-Finished Sheet Steel [Galvanized]: ASTM A755/A653, G90, 24 or 22 gauge [as noted], primed and preprinted by coil coating, finished exposed to view side with a fluoropolymer Kynar 500 coating and a wash coat .5 mil thick applied to the reverse side, 20-year warranty covering fade, chalking and film integrity. Colors as selected by owner.

- 1. Laminated metal [PVC Membrane]: Roof membrane manufacture's minimum 17 mil polyvinyl chloride [PVC] coating.
- D. Pre-Finished Aluminum: ASTM B209, 3105 H15 alloy, thickness .032, .040 or .050 [as noted], primed and repainted by the coil coating, finished exposed to view side with a fluoropolymer Kynar 500 coating and a wash coat .5 mil thick applied to the reverse side, 20-year warranty covering fade, chalking and film integrity. Colors as selected by the owner.
- E. Galvanized Sheet Steel: ASTM A653, hot dipped, zinc coated, G90, gauges as shown.
- F. Stainless Steel: ASTM A240/A 240M, dead soft fully annealed, smooth 24-gauge, type/grade 304 [painted or not] and 316 [exposed to view].
- G. Steel Plates: ASTM A 36, thickness 1/4 inch or as noted.

2.5 SEALANTS/TAPES

General: Provide joint sealants, backings and other materials as required to seal joint that are compatible with each other based on test and field experience.

- A. ASTM C920, Type S, Grade NS, Class 25 as required for each joint condition, single component, elastomeric silicone polymer, non-staining, non-shrinking, non-sagging and ultraviolet resistance, clear or to match surrounding existing color.
 - Provide where sealant is exposed, or movement exceeds butyl sealant capability.
- B. Gutter: GE Silicone II or equal, Clear in color.
- C. Butyl Sealant: ASTM C1311, single component, solvent released butyl rubber sealant, polyisobutylene plasticized.
- D. Sealing Tape: Pressure-sensitive, 100 percent solids, polyisobutylene compound sealing tape with release paper.

PART 3 EXECUTION

3.1 EXAMINATION AND CONDITIONS

A. Verify that surfaces and site conditions are ready to receive work.

3.2 PROTECTION

- A. Protect building surfaces/interior spaces against damage from work.
- B. Provide, erect barricades, guardrails as required by applicable regulatory advisory to protect occupants of building and workers.

3.3 INSTALLATION OF SHEET METAL AND SPECIALTY ITEMS

General: Sheet metal items shall be installed in accordance with manufacturers and NRCA's/SMACNA recommendations and details from their current manual. Anchor sheet metal items securely in place with provisions for expansion. Use items as required to complete the sheet metal or drainage system. Where dissimilar metals contact each other, protect against galvanic action by coating material as recommended by the fabricator. Seal joints with sealant as required for a watertight condition.

- A. Continuous cleat [for non-pre-manufactured metal components]: Cleats shall not exceed 12 feet in length; allow a ¼ inch gap between pieces. Fasten cleat to wood nailer top as applicable at 4 inches on center [staggered pattern-1 inch from edge] with corrosion resistant annular threaded nails [3/16-inch head], long enough to penetrate the wood 1 ¼ inch.
- B. Penetration pans shall have mortar installed in the bottom of pitch pans with polyurethane pourable sealer [2-inch depth minimum] filled to the top of the pan, then slope.

- C. Bib Flashing shall be installed around all roof top units/supports and all items that cannot be removed and reinstalled. Position under unit curb and anchor to unit with corrosion resistance fasteners with EPDM washers at 12 inches on center unless otherwise noted.
- D. Equipment enclosure shall have mortar installed in the bottom with polyurethane pourable sealer [2-inch depth minimum] filled. Seal pipes that exit enclosure with sealant/foam.
- E. Termination bars shall be placed no more then 1 1/2 inches down from top of base flashing and be fastened at 6 inches on center with concrete self-tapping [tapcon] or wood fasteners, as applicable fitted with an EPDM washer. Provide sealant at top edge of bars.
- F. Counter-flashing [CF] shall be surfaced mounted [SM] or in existing or new riglets/receivers with lap joints 4 inches. Attach SM with concrete self-tapping [tapcon] or wood fasteners, as applicable fitted with an EPDM washer at 12 inches on center, 1-inch minimum embedment. Attach riglets installed CF with components recommended by the manufacturer, including metal wedges and edge crimping. Apply a bead of sealant on the top of 45% angle lip of the metal flashing, if SM type. CF shall overlap base flashing a minimum of three inches, fit tightly to base flashing and shall terminate no lower than 4 inch above finished roof surface, unless approved by the manufacturer.
- G. Wind Rated Pre-Manufactured, ES-1 approved roof fascia shall have a 20-gauge formed extruded anchor bar, face fastened as outlined per the metal manufacturer, 12 inches on center to the nailer with 1 1/2 inch or 2-inch-long # 9 stainless steel fasteners with the roofing membrane extending under the anchor bar. Fascia cover plate shall be cleated and snapped in place with no exposed fasteners. The formed roof flange/cover plate set in approved sealant/mastic on finished roof surfaced in accordance with the written manufacturer's guidelines. Edge face shall exceed down to overlap and cover nailers onto exterior wall minimum 2 inches or existing metal fascia as shown. Follow manufacturer installation instructions.
- H. Wind Rated pre-manufactured ES-1 approved coping sections shall be jointed together with a butt type joint with 8-inch-wide concealed splice located underneath the 10 to 12-foot-long panels, which must allow to expand and contract freely while locked in place. Provide factory-fabricated corners, intersections and ends. Coping metal anchor clips to be anchored to wood nailer or surface material at splice joints and within the coping panel [approx. every three feet on center-2 feet in corners.] or coping that is installed using continuous cleats on both sides shall have cleats anchored on top of nailer at 12 inches on center. Provide self-adhered or adhered 60 mil thick EPDM or TPO or PVC over nailers/substrate to allow moisture to drain off edges without moisture to enter wall under coping cap [provide non-curing dual sealant strips on each side of splice plates], ensure SA EPDM/TPO/PVC membrane covers all wood nailers/substrate. Both methods shall use stainless steel fasteners or other fasteners to meet the wind resistance rating pressures as shown and as recommended by coping manufacturer print approvals. Coping shall have a 4-inch vertical end flange where terminating into wall, counter-flash flanges.
- I. Pre-Manufactured /shop fabricated ES-1 approved, continuous cleated edge shall be face anchored into the nailer face at 12 inches on center. Space cleats as outlined. The exposed to view metal edge to be cleated and fastened on top of the nailer at 6 inches on center. Strip-in [watertight] top metal flange onto new field of roof. See Metal Era's one system drip for installation detail meeting ES-1 anchoring requirements.
- J. Gutters shall be minimum 20 feet in length with no joints, if applicable. Gutters shall be installed with 1 1/2-inch-wide, 1/8-inch-thick painted [match gutter color] steel brackets installed at 48 inches on center, min. [1 each per twenty-foot gutter section], if shown. Gutter brackets shall be attached to the substate at with screws. Anchor roof gutter flange to wood nailers or concrete deck with screws or nails driven flush at 4 inches on center, staggered [wood]-12 inches on center [concrete]. Gutters sections shall be lapped 4 inches sealed with

Roof Replacement Wentworth Hi-Rise Greater Dayton Premier Management

- two rows of sealant and riveted with two rows of closed end stainless steel rivets offset 1 inch on center.
- K. Downspouts shall be attached to the gutter with screws. Attach downspout sections to wall with 2-inch-wide, 1/16-inch steel straps [2 per 10-foot section] Fig 1-35 C or G SMACNA, with stainless steel screws anchored into solid support members. Down spouts terminating at ground or roof shall be provided with an elbow fitting and a concrete splash block [provide a roof membrane sheet under blocks that terminate on the roof]. If existing receivers are available downspouts shall be inserted into receives, provide size and shape adapters, as necessary.

3.4 CLEANING

A. In areas where finished surfaces are soiled by any other source of soiling caused by work of this section, consult manufacturer for cleaning advice.

END OF SECTION



General Terms & Conditions for Construction Services

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1. ARTICLE I: CONTRACTOR RESPONSIBILITIES

- 1.1. The Contractor shall perform the Work in a workmanlike manner, consistent with the standards of skill and care exercised by entities licensed to perform (where required by Ohio and/or Federal Law) and regularly performing comparable work in the same or similar locality under the same or similar circumstances.
- **1.2.** The Contractor shall perform the Work in accordance with the Contract Documents.
- **1.3.** The Contractor shall furnish all labor, services, materials, tools, equipment, superintendence, and transportation necessary for performance of the Work. Contractor shall also furnish all necessary water, heat, light, and power not made available to the Contractor by GDPM.
- **1.4.** The Contractor shall perform on the site and with its own organization, work equivalent to at least twelve percent (12%) of the total amount of work to be performed under the order. This percentage may reduce by a supplemental agreement to this Construction Contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be the advantage of GDPM.
- 1.5. At all times during performance of this Construction Contract and until the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on the work site a competent superintendent whose qualifications and experience are satisfactory to GDPM and has authority to act on behalf of the Contractor. Further, Contractor must remain on-site or be immediately available if contacted.
- **1.6.** The Contractor shall be responsible for all damages, including, but not limited to, damages to persons or property that occur as a result of the Contractor's breach of this Construction Contract, fault or negligence and shall take proper safety and health precautions to protect the Work, the workers, the public, and the property of others.
- **1.7.** The Contractor shall also be responsible for all storage, protection and cleaning of materials delivered and Work performed on the Project, until Substantial Completion and acceptance of the entire Project, except for any completed unit of Work which may have not been accepted under the Construction Contract.
- **1.8.** The Contractor shall lay out the work from base lines and bench marks indicated in the drawings and be responsible for all lines, levels, and measurements of all work executed under the Contract Documents.
 - **1.8.1.** The Contractor shall verify the lines, bench marks, figures and dimensions indicated in the Contract Documents before laying out the work and will be held responsible for any error(s) resulting from its failure to do so.
- **1.9.** The Contractor shall confine all operations (including storage of materials) on GDPM's premises to areas authorized or approved by GDPM.
- **1.10.** The Contractor shall at all times keep the work area, including storage areas, free from accumulations of waste materials. At no time shall Contractor use GDPM trash receptacles.
 - **1.10.1.** After completing the Work and before final inspection, the Contractor shall:
 - Remove from the premises all scaffolding, equipment, tools, materials (including rejected materials) that are not the property of GDPM and rubbish caused by its work;
 - Leave the work area in a clean, neat, and orderly condition satisfactory to GDPM;

- Perform all specified tests; and
- Deliver the installation in complete and operating condition.
- **1.11.** The Contractor must perform the Work so as to not interfere with, disturb, hinder, or delay the services of separate consultants or the work of separate contractors.
 - **1.11.1.** The intent of this Section, 1.11, is to benefit any separate consultants and separate contractors and to demonstrate that the separate consultants or separate contractors are intended third-party beneficiaries of Contractor's obligations under the Contract.
 - **1.11.2.** The Contractor must cooperate and coordinate fully with all separate consultants and separate contractors and must freely share all of the Contractor's Project-related information with them to facilitate the timely and proper performance of the Work and of the services and work of the separate consultants and separate contractors.
 - **1.11.3.** The Contractor must afford every separate consultant and separate Contractor proper and safe access to the Site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of their services and work.
 - **1.11.4.** If the Contractor damages the property or work of any separate consultant or separate Contractor caused by Contractor or by failure to perform the Work with due diligence, delays, interferes with, hinders, or disrupts the services of any separate consultant or separate Contractor who suffers additional expense and damage as a result, the Contractor is responsible for that damage, injury, or expense.
- **1.12.** The Contractor shall remove any snow and ice as may be required for reasonably safe access to the Project, including, without limitation, building entries, driveways, parking lots, and sidewalks.
- 1.13. If the proper execution or result of any part of the Work depends upon work performed or services provided by GDPM, a separate consultant, or a separate Contractor, the Contractor must inspect that other work and appropriate instruments of service, and promptly report to GDPM in writing any defects or deficiencies in that other work or services that render it unavailable or unsuitable for the proper execution and results of the Work.
 - **1.13.1.** The Contractor's failure to inspect and promptly report any issues in writing will constitute an acceptance of the other work and services as fit and proper for integration with the Contractor's Work unless in the opinion of GDPM, the defects and deficiencies in the other work and appropriate instruments of service were not reasonably discoverable at the time of the Contractor's inspection.
- 1.14. The Contractor shall not delay the Work on account of any claim, dispute, or action between the Contractor and GDPM or the Contractor, a Separate Consultant or Separate Contractor.
- **1.15.** The Contractor shall develop and keep a Construction Progress Schedule and prepare and keep current a schedule of submittals that is coordinated with the Construction Progress Schedule for GDPM's acceptance.
- **1.16.** The Project's regular work hours shall be between 8:00 am and 5:00 pm, or as determined and approved by GDPM.
 - **1.16.1.** The Contractor may modify the regular work hours only if Contractor receives written authorization from GDPM's Project Manager and/or Construction Contract Administrator.

- **1.17.** The Contractor shall coordinate the Work with the activities and responsibilities of the Project's architect or engineer ("A/E"), GDPM and Contractor's surety to achieve the Substantial Completion date and Contract Completion.
- **1.18.** The Contractor shall keep a daily log containing a record of weather, number of workers on Site for the Contractor, identification of equipment, Work accomplished, problems encountered and other similar relevant data. Such information must be made available to GDPM immediately upon request.
- **1.19.** The Contractor hereby represents and agrees that, prior to submitting its bid or quote to perform the Work on the Project, it has had a competent person carefully and diligently review each part of the Contract Documents, including the Divisions of the Specifications and parts of the Drawings that are not directly applicable to the Work.
 - **1.19.1.** Contractor further represents and agrees that, based upon its careful and diligent review of the Contract Documents, that it is not aware of any conflicts, inconsistencies, errors, or omissions in the Contract Documents for which it has not notified GDPM or the A/E.
 - **1.19.2.** If there are any such conflicts, inconsistencies, errors, or omissions in the Contract Documents, the Contractor shall notify GDPM of such in writing and Contractor shall:
 - Provide the labor, equipment, or materials of the better quality or greater quantity; and/or
 - Comply with the more stringent requirements.
 - **1.19.3.** The Contractor will not be entitled to any additional compensation for any conflicts, inconsistencies, errors, or omissions that would have been discovered by such careful and diligent review.
- **1.20.** The Contractor hereby represents and agrees that the Project is a public project involving public funds.
 - **1.20.1.** The Contractor further understands that GDPM expects and requires that each Contractor adhere to the highest ethical and performance standards.
 - **1.20.2.** Accordingly, Contractor hereby pledges and agrees that:
 - It will act at all times with absolute integrity and truthfulness in its dealings with GDPM and the A/E;
 - It will use its best efforts to cooperate with GDPM and the A/E and all other contractors and consultants on the Project and at all times will act with professionalism and dignity in its dealings with GDPM, the A/E, and other contractors;
 - It will assign only competent supervisors and workers to the Project, each of whom is fully qualified to perform the tasks that are assigned to him/her; and
 - It has read, understands and will comply with the terms of the Contract Documents.

1.21. Emergency

1.21.1. In the event of an emergency affecting the safety of the Project, other property, or individuals, the Contractor, without special instructions or authorization, shall act to prevent the threatened damage, injury, or loss.

- **1.21.2.** If the Contractor believes that it is entitled to an adjustment of the Contract Sum or Contract Times, or both, on account of its actions in response to any emergency, the Contractor may request a Change Order by giving written notice no later than 48-hours after the emergency.
- **1.22.** The Contractor's responsibilities will terminate when all work has been completed, the final inspection made, and the Work accepted by the Contracting Officer. The Contractor will then be released from further obligation except as required by the warranties specified elsewhere in the contract.

2. ARTICLE II: HOUSING AUTHORITY RIGHTS AND RESPONSIBILITIES

- 2.1. GDPM shall designate a Project Manager and/or Construction Contract Administrator for the Project.
- **2.2.** GDPM shall have access to the Work and Site at all times, whether the Project is in preparation or progress.
- **2.3.** GDPM is not responsible for construction means, methods, manners, techniques, sequences, procedures, or for safety precautions and programs in connection with the Work, or for the Contractor's failure to carry out the Work in conformity with the Contract Documents.
- **2.4.** Upon the date indicated in the Notice to Proceed, or other document provided by GDPM that authorizes Contractor to commence Work, GDPM shall provide the Site to the Contractor in a condition to permit the Contractor to perform the Work.
- 2.5. If the Site provided by GDPM is not in a condition to permit the Contractor to perform the Work, Contractor shall notify, in writing, GDPM's Project Manager and/or Construction Contract Administrator within one working day hours of the Notice to Proceed, or other document as applicable, and identify the conditions which are preventing Contractor from performing the Work.

3. ARTICLE III: A/E'S DUTY, RESPONSIBILITY AND AUTHORITY

- **3.1.** The A/E for this Contract and any successor shall be designated in writing by GDPM.
- **3.2.** The A/E's duties and responsibilities may include, but shall not be limited to:
 - **3.2.1.** Attend and conduct the Construction Progress Meetings.
 - **3.2.2.** Making periodic visits to the work site and on the basis of his/her on-site inspections, issuing written reports to GDPM which shall include all observed deficiencies.
 - **3.2.2.1.** The A/E shall electronically send a copy of the report to GDPM and to the Contractor's designated representative at the site.
 - **3.2.2.2.** Said report shall include a summary of up-to-date project completion information and summary of any changes to the Work to date.
 - **3.2.3.** Making modifications in drawings and technical specifications and assisting the Contracting Officer in the preparation of change orders and other contract modifications for issuance to the Contracting Officer.
 - **3.2.4.** The A/E may authorize minor changes or alterations in the Work that are consistent with the intent of the Contract Documents and do not involve adjustment of the Contract Sum or Contract Time, or both.

- **3.2.4.1.** The A/E has no authority to authorize the Contractor to perform additional or extra Work for which the Contractor may seek adjustment of the Contract Sum or the Contract Time, or both.
- **3.2.5.** Reviewing and making recommendations with respect to:
 - The Contractor's Construction Progress Schedules;
 - The Contractor's shop and detailed drawings; and
 - The Contractor's price breakdown and progress payment estimates.
- **3.2.6.** Assisting in inspections, signing Certificates of Completion, and making recommendations with respect to acceptance of work completed under the contract; and
- **3.2.7.** Approve or certify applicable forms required under the Contract Documents.

3.3. Site Visits and Observation

- **3.3.1.** The A/E shall notify, advise, and consult with GDPM and protect GDPM against Defective Work throughout completion of the Project, which includes the Correction Period, and for such time period GDPM may extend A/E's services.
 - **3.3.1.1.** The A/E should designate a field representative, subject to GDPM's approval, to attend meetings, to observe and check the progress and quality of the Work, and to take action as necessary or appropriate to achieve conformity with the Contract Documents.
 - **3.3.1.2.** The A/E shall have its consultants attend to the Project at intervals required by its agreement or required by GDPM.
- **3.3.2.** The A/E is authorized to disapprove or reject Defective Work. The A/E shall immediately notify GDPM, in writing, any time the A/E disapproves or rejects an item of Work.
- **3.3.3.** The A/E is not responsible for construction means, methods, manners, techniques, sequences, procedures, or for work safety precautions and programs in connection with the Work, or for the Contractor's failure to carry out the Work in conformity with the Contract Documents.

3.4. Testing and Inspection Services

3.4.1. Unless otherwise specified in the Contract Documents, the A/E shall apply for, secure, and pay for the costs of structural testing and special inspections under the Ohio Building Code; testing including geotechnical analysis, environmental testing and analysis, concrete, masonry, structural steel, reinforcing steel, welding, bolts, steel connections, HVAC systems and controls, plumbing and piping, air, and water balancing and testing, or other testing, or approvals required by Applicable Law.

3.5. A/E Review and Approval of Work

- **3.5.1.** Any information the Contractor submits to the A/E is for the sole purpose of determining whether the Work and information is generally consistent with the Contract's intent, and will not relieve the Contractor of its sole responsibility for the performance, preparation, completeness, and accuracy of the Work and information.
- **3.5.2.** By reviewing information submitted by the Contractor, A/E is not taking on responsibility for construction means, methods, manners, techniques, sequences, procedures, or for work safety precautions and programs in connection with the Work.

3.6. Limitation of A/E's Authority

- **3.6.1.** The A/E shall serve as the technical representative for GDPM with respect to architectural, engineering, and design matters related to the Work performed under the Contract.
- **3.6.2.** Subject to the Contractor's responsibility under ARTICLE I, the A/E may provide direction on Contract performance.
- **3.6.3.** Such direction shall be within the scope of the Contract and may not be of a nature which:
 - Institutes additional work outside of the scope of the Contract;
 - Constitutes a change (except as provided for in 3.2.4);
 - Causes an increase or decrease in the cost of the Contract;
 - Alters the Construction Progress Schedule;
 - Changes any of the other express terms or conditions of the Contract;
 - Accepts any defective or non-conforming services, Work, or vendor-furnished items;
 - Makes any settlements on GDPM's behalf;
 - Assumes any responsibilities of the Contractor or Subcontractors; or
 - Binds GDPM to any authorizations under, modifications of, or amendments to the Contract Documents other than as expressly provided herein.
- **3.7.** The Contractor acknowledges and agrees that GDPM's legal counsel may from time to time provide legal services to the Project and that in doing so may communicate with the A/E, as GDPM's representative on the Project.
 - **3.7.1.** The Contractor agrees that such communications will be privileged communications and, if there is a Claim contemplated or pending, any written communications will be protected by the attorney client privilege and considered confidential work product.

4. ARTICLE IV: PRECONSTRUCTION ACTIVITIES

4.1. Pre-construction Conference

- **4.1.1.** Within ten calendar days, unless otherwise indicated by GDPM, of Contract execution, and prior to the commencement of work, the Contractor shall attend a preconstruction conference with GDPM representatives, GDPM's A/E, and other interested parties convened by GDPM.
 - **4.1.1.1.** The conference will serve to acquaint the participants with the general plan of the construction operation and all other requirements of the Contract.
 - **4.1.1.2.** The A/E will be responsible for taking minutes and distributing said minutes within seventy-two (72) hours of completion of the meeting.
 - **4.1.1.3.** GDPM will provide the A/E and Contractor with the date, time, and place of the conference. Generally, the information will be contained in the issued Notice to Proceed.

4.2. Certificate of Insurance

4.2.1. Before commencing work, the Contractor and each Subcontractor shall furnish GDPM with certificates of insurance showing the minimum insurance coverage is in force and will insure all operations under the Contract.

4.3. Building and Trade Permits, Licenses and Codes

- **4.3.1.** The Contractor shall give all notices and comply with all applicable laws, ordinances, codes, rules, and regulations.
 - **4.3.1.1.** Notwithstanding the requirement of the Contractor to comply with the drawings and specifications in the Contract, all Work installed shall comply with all applicable laws, ordinances, codes, rules, and regulations, as may be amended by any waivers.
 - **4.3.1.2.** Before installing the Work, the Contractor shall examine all drawings and the specifications for compliance with applicable laws, ordinances, codes, rules, and regulations bearing on the Work and shall immediately report, in writing, any discrepancy it may discover to GDPM's Project Manager and/or Construction Contract Administrator and the A/E. (HUD term had 'contracting officer')
 - **4.3.1.3.** If required by any governing jurisdiction, GDPM will modify the Contract by change order so that the Work on the Project will conform to the applicable laws, ordinances, codes, rules, and regulations.
 - **4.3.1.4.** If the Contractor installs any Work that does not comply with all applicable laws, ordinances, codes, rules, and regulations before providing notice hereunder to GDPM and receiving direction from GDPM, Contractor shall be responsible for all costs resulting from any removal, demolishing, and disposing of any Work that must be replaced or repaired.
- **4.3.2.** Notwithstanding the provisions below, the Contractor shall secure and pay for all permits, fees, and licenses necessary for the proper execution and completion of Work.
 - **4.3.2.1.** Where GDPM can arrange for the issuance of all or part of these permits, fees, and licenses, without cost to the Contractor, the Contract amount shall be reduced accordingly.

4.4. Plan Approval and Permits

- **4.4.1.** The A/E shall facilitate the required structural, plumbing, HVAC, and electrical plan reviews during the design phase, as required by the governing jurisdiction for securing an overall building permit to start construction.
- **4.4.2.** The Contractor shall schedule and attend all intermediate and final inspections required for any permit applicable to the Work or any governing jurisdiction.
- **4.4.3.** If applicable, the Contractor shall schedule with the State Fire Marshal or local fire authority for the life safety inspection for occupancy permits.
- **4.4.4.** The Contractor shall give the A/E and GDPM reasonable notice of the dates and times for any inspections.
 - **4.4.4.1.** The Contractor shall pay for all initial inspections and re-inspections required as a result of Contractor's failure to receive approval for its Work.

4.5. Trade Permits and Licenses

4.5.1. The Contractor shall secure and pay the fees for any permit, inspection, or license applicable to the Contractor's particular trade.

4.6. Local Permits:

- **4.6.1.** The Contractor shall secure and pay the fees for any permits, inspections, licenses, capacity charges, or tap fees required by local authorities having jurisdiction over the Work.
- **4.6.2.** The Contractor shall give the A/E and GDPM reasonable notice of the date(s) arranged for inspections.

4.7. National Pollutant Discharge Elimination System (NPDES) Storm Water General Permit:

- **4.7.1.** If applicable, the A/E shall secure the NPDES general permit by submitting a Notice of Intent (NOI) application form to the Ohio Environmental Protection Agency at least 45 days prior to the start of construction.
- **4.7.2.** The Contractor shall be a co-permitee, if required under Applicable Law.
- **4.7.3.** The A/E shall prepare and certify the storm water pollution prevention plan to provide sedimentation and erosion controls at the Work.
- **4.8.** The A/E shall prepare and process the required Notice of Termination (NOT) prior to Contract Completion.

5. ARTICLE V: CONSTRUCTION REQUIREMENTS

5.1. Commencement of Work on Site

5.1.1. Unless GDPM agrees otherwise in writing, the Construction Stage will commence with GDPM issuing the Notice to Proceed and will terminate upon Substantial Completion, Certificate of Occupancy issuance, and the Completion of all punch list items delivered to Contractor by GDPM which must occur no later than 10 days after date of Substantial Completion.

5.1.2. Notice to Proceed:

- **5.1.2.1.** The Contractor shall begin work upon the date indicated in a written Notice to Proceed from GDPM or its designee.
- **5.1.2.2.** The Contractor shall not begin work prior to receiving such notice.
- **5.1.2.3.** If GDPM Board of Commissioners" approval is required, the Notice to Proceed shall be issued within 180 days of GDPM Board of Commissioner's approval.
- **5.1.2.4.** When applicable and if the Notice to Proceed is not issued within 180 days of GDPM Board of Commissioners' approval, GDPM may, in its sole discretion, terminate the Contract without recourse from the Contractor.¹

5.2. Environmental Controls

5.2.1. The Contractor shall protect its Work and materials from damage from water, moisture, and other weather, including damage from water run-off from other property or structures, and damage from heat, cold, and humidity.

- **5.2.2.** Contractor is not authorized to use permanent HVAC system without express written authorization from GDPM
- **5.2.3.** Until the permanent HVAC system is complete and available for use:
 - **5.2.3.1.** The Contractor shall make arrangements and pay for installation and maintenance of temporary heating and ventilating systems; and
 - **5.2.3.2.** The Contractor shall pay the costs incurred in operating the temporary heating and ventilating systems.
- **5.2.4.** When the permanent HVAC system is complete and available for use:
 - **5.2.4.1.** The Contractor shall start up and maintain operation of the permanent HVAC system, including filters, and promptly remove temporary heating and ventilating systems.
 - **5.2.4.2.** If the Project consists entirely of new construction, the Contractor shall pay the costs of energy consumed in operating the permanent HVAC system until Substantial Completion.
 - **5.2.4.3.** From the date of Substantial Completion, GDPM shall pay the cost of operating the permanent HVAC system for the occupied portion of the Project.
 - **5.2.4.4.** Use of the permanent HVAC system during construction shall not change, modify or reduce the Contractor's warranty and service obligations under the Contract Documents.

5.3. Construction Procedures

- **5.3.1.** The Contractor is solely responsible for and has control over all construction means, methods, techniques, sequences, and procedures, for safety precautions and programs in connection with the Work, and for coordinating all portions of the Work.
- **5.3.2.** If the Contract Documents give instructions that affect construction means, methods, manners, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety of them and, except as expressly stated herein, be fully and solely responsible for the jobsite safety of the means, manners, methods, techniques, sequences, or procedures.
- **5.3.3.** If the Contractor determines that the means, methods, manners, techniques, sequences, or procedures specified in the Contract Documents may not be safe, the Contractor shall give timely written notice to GDPM.
- **5.3.4.** The Contractor shall not proceed with that portion of the Work without further written instructions from GDPM.

5.3.5. Additional Contractor Responsibilities

- **5.3.5.1.** The Contractor shall lay out and coordinate all lines, levels, elevations, and measurements for all of the Work, coordinate and verify existing conditions, and notify the A/E and GDPM of discrepancies and conflicts before proceeding with installation or excavation.
- **5.3.5.2.** The Contractor shall perform all cutting, fitting, or patching required for the Work and shall not endanger the Project by cutting, excavating, or otherwise altering the Work or any part of it.

- **5.3.5.3.** If the Design requires sleeves for completing the specified Work, the Contractor and all Subcontractors shall coordinate to furnish and install the sleeves.
 - The Contractors are responsible for the exact location of and size of all holes and openings required to be formed or built for the Work.
- **5.3.5.4.** The Contractor's patching shall match and blend with the existing adjacent surfaces.
- **5.3.5.5.** In addition to the items herein, The Contractor is responsible for all items in Article I, Contractor's Responsibilities.

5.4. Utilities

- **5.4.1.** Availability and Use of Utilities
 - **5.4.1.1.** If GDPM has existing access to utilities, GDPM shall make all reasonably required amounts of utilities available to the Contractor from existing outlets and service as specified herein so long as the utility use does not interfere with GDPM's operations.
 - **5.4.1.2.** Unless otherwise provided in the Contract, the amount of each utility service consumed shall be charged to or paid for by the Contractor at prevailing rates charged to GDPM or where the utility is produced by GDPM, at reasonable rates as determined by GDPM.
 - **5.4.1.3.** The Contractor shall carefully conserve any utilities furnished provided by GDPM without charge.
 - **5.4.1.4.** The Contractor, at its expense and in a manner satisfactory to GDPM, shall install and maintain all necessary temporary connections and distribution lines, and all meters required to measure the amount of each utility used for the purpose of determining charges.
 - **5.4.1.5.** Before final acceptance of the Work by GDPM, the Contractor shall remove all the temporary connections, distribution lines, meters, appurtenances and associated paraphernalia.
- **5.4.2.** The Contractor shall comply with the Ohio Revised Code and any local rules, regulations and ordinances concerning utilities.
 - **5.4.2.1.** In addition, before starting excavation or trenching, the Contractor shall determine the location of any underground utilities and notify any public authority or utility having jurisdiction over the Project and secure any required approval.
- **5.4.3.** The Contractor shall give at least 2 business days in advance of excavation to GDPM of underground utilities registered with the Ohio Underground Utility Protection Services ("OUPS").
 - **5.4.3.1.** The Contractor is required, within 48 hours' notice, to stake, mark, or otherwise designate the location for its utilities in the construction area together with its approximate depth.
 - **5.4.3.2.** In the event Contractor damages a utility line, the Contractor shall immediately notify the appropriate utility company or government official, the A/E and GDPM of the problem.

5.4.4. Water and Drainage

5.4.4.1. The Contractor shall provide water necessary for the Work until the permanent plumbing system is available for use.

- **5.4.4.2.** The Contractor shall provide temporary drainage and dewatering necessary for the Work and shall employ pumps, trenches, drains, sumps, and other necessary elements required to provide satisfactory working conditions for the protection, execution, and completion of the Project.
- **5.4.4.3.** The Contractor shall make arrangements and pay for installation and maintenance of temporary plumbing systems until the permanent plumbing system is available for use.
- **5.4.4.4.** When the permanent plumbing system is complete and available for use:
 - The Contractor shall start up and maintain operation of the permanent plumbing systems, and make arrangements and pay for removal of temporary plumbing systems.
 - If the Project consists entirely of new construction, the Contractor shall pay the costs of water consumed and sewage charges until Substantial Completion.
 - If the Project is a renovation of an existing building or structure, addition(s) to an existing building or structure, or any combination of new construction and renovation work that does not allow separate metering of utilities, GDPM shall pay the costs of water consumed and sewage charges.
 - If separate metering of utilities is available, the Contractor and GDPM will pay the costs of their respective use.
- **5.4.4.5.** After the date of Substantial Completion, GDPM shall pay the costs of water consumed and sewage charges for the occupied portion of the Project.
- **5.4.4.6.** Use of the permanent plumbing system during construction shall not change, modify, or reduce the Contractor's warranty and service obligations under the Contract Documents.

5.4.5. Electric Service

- **5.4.5.1.** The Contractor shall provide temporary light and power; pay the charges for temporary electric service, installation, and removal if required.
- **5.4.5.2.** If the Project consists entirely of new construction, the Contractor shall pay the cost of energy consumed until Substantial Completion.
- **5.4.5.3.** If the Project is a renovation of an existing building or structure, addition(s) to an existing building or structure, or any combination of new construction and renovation work that does not allow separate metering of utilities, GDPM shall pay the cost of energy consumed. GDPM will charge Contractor the cost of the energy consumed in accordance with 5.4.6.
- **5.4.5.4.** If separate metering of utilities is available, the Contractor and GDPM will pay the costs of their respective use.
- **5.4.5.5.** From the date of Substantial Completion, GDPM shall pay the cost of energy consumed for the occupied portions of the Project.
- **5.4.5.6.** Use of the permanent electrical system during construction shall not change, modify, or reduce the Contractor's warranty and services obligations under the Contract Documents.

5.4.6. Payment of Utility Services

- **5.4.6.1.** Unless otherwise expressly stated in the Contract Documents, Contractor shall reimburse GDPM the cost of utility services during the Construction Period.
- **5.4.6.2.** Unless otherwise expressly stated in the Contract Documents, payment for reimbursement of GDPM for the cost of utility services during the Contract Period shall be made directly to GDPM.
- **5.4.6.3.** If payment is not received, GDPM may deduct the cost of utility services from payments otherwise due to the Contractor.
- **5.4.6.4.** If the payments otherwise due to the Contractor are not sufficient to fully reimburse GDPM, either Contractor or its surety shall make whatever payments are necessary to fully reimburse GDPM.
- **5.4.6.5. Process for Payment**: Reimbursement from the contactor shall be performed on a quarterly basis unless a more frequent payment schedule is agreed upon between GDPM and the contractor prior to start of the project.

5.5. Hoisting Facilities

- **5.5.1.** The Contractor shall erect and maintain any hoisting equipment required for its Work.
- **5.5.2.** If the electric service requirements of hoisting facilities differ from that available at the Site, the Contractor shall provide and pay for all necessary connections.
- **5.5.3.** If a permanent elevator is identified in the Contract Documents to be used for hoisting materials or personnel during construction, the Contractor shall furnish an extended warranty and service contract in effect until the expiration of the Correction Period.

5.6. Interruption of Existing Services

- **5.6.1.** Whenever it becomes necessary to interrupt existing services in use by GDPM or its tenants, including, but not limited to, sewer, water, gas, steam lines, electric, telephone, Wi-Fi, and cable service, the Contractor shall continue the associated Work on a non-stop 24-hour per day basis until that Work is completed and the service restored, or perform the associated Work at an alternate time as required by and in coordination with GDPM.
- **5.6.2.** Before beginning that Work, the Contractor shall apply in writing to, and receive approval in writing from GDPM to establish a time when interruption of the service will cause a minimum of interference with the activities of GDPM and its tenants.

5.7. Construction Supervision

- **5.7.1.** Unless waived by GDPM in writing, the Contractor shall provide continuous supervision at the Site through a competent project manager or superintendent when any Work is being performed.
- **5.7.2.** The Contractor's project manager and superintendent shall each have responsibility and authority to act on behalf of the Contractor.
 - **5.7.2.1.** All communication to the Contractor's project manager and superintendent shall be binding as if given directly by the Contractor.
- **5.7.3.** The Contractor shall submit an outline of the qualifications and experience of the Contractor's proposed project manager and superintendent, including references, to GDPM no later than 2 days after request from GDPM.

- **5.7.3.1.** The Contractor shall submit an outline of the qualifications and experience of the Subcontractor's proposed project manager and proposed superintendent, including references, to GDPM no later than 2 days after GDPM's request.
- **5.7.3.2.** GDPM may reject the Contractor or Subcontractor's proposed project manager and/or proposed superintendent.
 - **5.7.3.2.1.** If GDPM does not notify the Contractor of the rejection within 30 days after receiving the required information, it shall then indicate that GDPM does not have an objection, but does not affect GDPM's rights under the Contract Documents or any other provision relative to the project manager or superintendent.
- **5.7.3.3.** If GDPM rejects the Contractor or Subcontractor's proposed project manager or proposed superintendent, the Contractor shall replace, or cause the Subcontractor to replace the project manager or superintendent (as appropriate) with someone acceptable to GDPM at no additional cost.
- **5.7.4.** If GDPM does not object the proposed project manager or superintendent, the Contractor and its Subcontractor shall not replace their respective project managers and superintendents without prior written approval of GDPM.

5.8. Construction Progress Schedule

- **5.8.1.** The Contractor shall, no later than seven days of the issuance of the Notice to Proceed or another period of time determined by the GDPM, prepare and electronically submit to GDPM, for approval, three copies of a practicable-viable schedule showing the order in which the Contractor proposes to perform the Work, the dates on which the Contractor contemplates starting and completing the several salient features of the Work (including acquiring labor, materials, and equipment).
- **5.8.2.** The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period.
- **5.8.3.** The Chart must be in a Critical Path Method (CPM) format.
- **5.8.4.** If the Contractor fails to submit a schedule within the time prescribed, GDPM may withhold approval of progress payments or take other remedies under the Contract until Contractor submits the required schedule.
- **5.8.5.** The Contractor shall monitor the Work for conformance with the Construction Progress Schedule and shall initiate revisions as required herein.
- **5.8.6.** The Contractor shall enter the actual progress on the chart as required by GDPM, and immediately deliver three provide electronic copies of the annotated schedule to GDPM.
 - **5.8.6.1.** If GDPM determines, upon the basis of inspection conducted, herein that the Contractor is not meeting the approved schedule, the Contractor shall take steps necessary to improve its progress, including those that may be required by GDPM, without additional cost to GDPM.
 - **5.8.6.2.** In this circumstance, GDPM may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules in chart form as GDPM deems necessary to demonstrate how the approved rate of progress will be regained.

- **5.8.7.** Failure of the Contractor to comply with the requirements of GDPM shall be grounds for a determination by GDPM that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the Contract.
 - **5.8.7.1.** Upon making this determination, GDPM may terminate the Contractor's right to proceed with the work, or any separable part of it.
- **5.8.8.** Unless otherwise agreed to in writing, The Contractor shall develop the Construction Progress Schedule using commercially available, personal computer software acceptable to GDPM and shall submit all baseline and updated schedules to GDPM in the schedule's native format.
- **5.8.9.** This submission shall be in electronic format.
- **5.8.10.** The Construction Progress Schedule shall not exceed the time limits under the Contract Documents. Further, the Progress Schedule shall provide for reasonable, efficient, and economical execution of the Project and shall relate to the entire project to the extent required by the Contract Documents.
 - **5.8.10.1.** In the event that a Construction Progress Schedule submitted by Contractor shows a completion date that extends beyond the Contract Time permitted to Contractor in the Contract Documents, such Construction Progress Schedule shall not be deemed to modify the Contract Time permitted in the Contract Documents.
 - **5.8.10.2.** The Contractor shall use the Construction Progress Schedule to plan, organize, and execute the Project, record and report actual performance and progress, and show how it plans to coordinate and complete all remaining work by contract completion within applicable milestones.
 - The Project participants shall use the Construction Progress Schedule as a tool for scheduling and reporting sequences and/or the progress of the Work.
 - The Contractor shall provide a clear graphics legend and other data including without limitation, milestone dates, constraints, and other items required by the Project and GDPM.
 - Each submission shall show GDPM's contract number and project name.
- **5.8.11.** The Contractor shall provide the following in each schedule:
 - **5.8.11.1.** Activity identification and description of each activity broken down to a maximum duration that is appropriate for the activity;
 - **5.8.11.2.** Responsibility of the Contractor;
 - **5.8.11.3.** Contractor's resources and crew size for each activity; and
 - **5.8.11.4.** Provide early start, early finish, late start, late finish dates.
 - **5.8.11.5.** The Construction Progress Schedule shall show all submittal dates, review and approval durations for coordination drawings, Shop Drawings, other action submittals and mock-up Work.
- **5.8.12.** The Contractor shall submit the initial and all updates of the Construction Progress Schedule in graphic and tabular form to GDPM.
 - **5.8.12.1.** With each monthly schedule update, the Contractor shall include a list of all changes to the previously approved baseline schedule or monthly updated schedule.

- **5.8.13.** The Construction Progress Schedule shall be managed using early start dates and early finish dates.
 - **5.8.13.1.** The Contractor must exhaust all existing float before claiming additional time for a Change Order.
- **5.8.14.** The Contractor's failure to submit and properly maintain an approved Construction Progress Schedule may result in withholding payment in accordance with the Contract Documents.
- **5.8.15.** For each Progress Meeting, the Contractor shall provide a 2-6 week look-ahead schedule, as appropriate for the Project.
- **5.8.16.** On a monthly basis, the Contractor shall prepare and submit to GDPM a written report describing:
 - **5.8.16.1.** Activities begun or finished during the preceding month;
 - **5.8.16.2.** Activities in progress and expected completion;
 - **5.8.16.3.** Activities to be started or finished in the upcoming month including, without limitation, the Contractor's workforce size and total resource hours associated with those activities;
 - **5.8.16.4.** Recommendations for adjusting the Construction Progress Schedule to meet Milestone dates and the Substantial Completion date; and
 - **5.8.16.5.** Other information requested by GDPM.
- **5.8.17.** If it is apparent that the Contractor may be unable to meet Critical Path activities, Milestone completion dates, or the Substantial Completion date(s), GDPM shall direct the Contractor to submit within 3 days a Recovery Plan to avoid or minimize a delay in the Project.
 - **5.8.17.1.** A Recovery Plan shall include, without limitation, adjustments to one or more of the following:
 - Workforce
 - Hours per shift
 - Shifts per workday
 - Workdays per week
 - Equipment
 - Activity logic
 - **5.8.17.2.** If GDPM approves the Recovery Plan, the Contractor shall prepare a revised Construction Progress Schedule within 3 business days to GDPM.
 - If GDPM does not approve the Recovery Plan, the Contractor shall submit within 3 days an alternate Recovery Plan to GDPM in writing for review and in accordance the Contract Documents.
- **5.8.18.** The Contractor shall update the Construction Progress Schedule on a monthly basis, or other interval(s) as approved by GDPM, in accordance with the Contract Documents.
 - **5.8.18.1.** The Contractor shall submit a tabular copy showing all changes to the previously approved schedule.

- **5.8.18.2.** The original or initially approved Construction Progress Schedule and all subsequent Construction Progress Schedules submitted by the Contractor, and accepted by GDPM, shall serve as an affirmation that the Contractor agrees to meet the applicable requirements and updated Construction Progress Schedule.
- **5.8.18.3.** The Contractor's failure to timely submit updated Construction Progress Schedules as deemed necessary by GDPM may result in withholding payments from Contractor.

5.9. Progress Meetings

- **5.9.1.** Unless otherwise indicated in writing, GDPM shall schedule bi-weekly Progress Meetings for the Contractor and other persons involved in the Project as deemed necessary for coordination of the Work by GDPM, including Contractor's Subcontractors on the Project.
 - **5.9.1.1.** The purpose of the Progress Meeting is to review progress on the Project during the previous week, discuss anticipated progress during the following weeks, review critical operations, and discuss critical problems.
- **5.9.2.** The Contractor shall be represented at every Progress Meeting by a person authorized with signatory authority to make decisions regarding possible modifications of the Contract Documents or Construction Progress Schedule.
 - **5.9.2.1.** GDPM shall notify the Contractor and other persons involved in the Project of the time and place of the Progress Meeting that shall thereafter be the same day and hour of the week for the duration of the Project, unless GDPM notifies the Contractor and other Persons involved in the Project of a different day and hour at least 2 days in advance.
 - **5.9.2.2.** The Contractor shall have any of its subcontractors attend the Progress Meeting as determined advisable by the Contractor, or as requested by GDPM.
 - **5.9.2.3.** Unless otherwise indicated in writing, A/E shall prepare a written report of each Progress Meeting and distribute the report to the GDPM and the Contractor.
 - **5.9.2.4.** If any person in attendance objects to anything in a report of a Progress Meeting, the person shall notify GDPM and any other affected person in writing explaining the objections within seven calendar days.
 - **5.9.2.5.** The report of each Progress Meeting shall reflect any objection made to the report of the previous Progress Meeting and any response.

5.10. Project Coordination

- **5.10.1.** If determined needed by GDPM, the Contractor or Subcontractor(s), The Contractor shall prepare Coordination Drawings for any Coordination Area.
 - **5.10.1.1.** The Contractor shall prepare the Coordination Drawings with Computer-Aided Design ("CAD") or Building Information Modeling ("BIM") software acceptable to GDPM.
 - **5.10.1.2.** The Coordination Drawings shall show all affected work, including without limitation, plan and elevation dimensions.
- **5.10.2.** After the Contractor completes the Coordination Drawing, the Contractor shall forward a copy of the Coordination Drawings to GDPM.
 - **5.10.2.1.** The A/E shall report any concerns in writing to the Coordination Participants within 14 days after receiving the drawings.

5.11. Additional Tests and Inspections

- **5.11.1.** If the A/E or GDPM determines that any portion of the Work requires special inspection, testing, or approval not otherwise required under the Contract Documents, the A/E and/or GDPM shall order such inspection, testing, or approval.
- **5.11.2.** If the special inspection, testing, or approval reveals Defective Work, the Contractor shall pay all associated costs and will not be entitled to any related adjustment of the Contract Times. Those costs may include without limitation:
 - The cost of special inspection, testing, or approval;
 - The cost of additional special inspections, testing, or approvals, to evaluate Remedial Work;
 - The cost of correcting Defective Work; and
 - All related GDPM-incurred fees and charges of contractors, engineers, architects, attorneys, and other professionals.
- **5.11.3.** GDPM may deduct the costs described under the Contract Documents from payments then or thereafter due the Contractor. If payments then or thereafter due to the Contractor are not sufficient to cover those amounts, the Contractor or its surety shall immediately pay the amount of the insufficiency to GDPM.
- **5.11.4.** If the special inspection, testing, or approval reveals that the Work complies with the Contract Documents, and the Contractor believes that it is entitled to an adjustment of the Contract Sum or Contract Time, or both, on account of the special inspection, testing, or approval, the Contractor may file a Claim by requesting a Change Order by giving written notice within 7 days after the special inspection, testing, or approval.
- **5.11.5.** If the Contractor is aware of the need of an inspection, testing, or approval, or of a need to have any inspection, testing, or approval completed by a particular time to avoid delay, then the Contractor shall timely communicate such information to GDPM.
- **5.11.6.** Except as described in Additional Tests and Inspections, GDPM shall pay for any inspection, testing, or approval that did not become a requirement until after award of Contract.
- **5.11.7.** The Contractor shall coordinate with and give GDPM reasonable notice of the anticipated dates of all inspections, testing, or approvals.

5.12. Review of Contract Documents

- **5.12.1.** Before starting each portion of the Work, the Contractor shall carefully study and compare the various Contract Documents relative to that portion of the Work, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the Site affecting it.
- **5.12.2.** If the Contractor finds any perceived ambiguity, conflict, error, omission, or discrepancy on or between any of the Contract Documents, or between any of the Contract Documents and any Applicable Law, the Contractor, before proceeding with the Work, shall promptly submit of Requests for Information ("RFI") to GDPM for an interpretation or clarification.
 - **5.12.2.1.** Before submitting any RFI, the Contractor shall carefully review the Contract Documents to ensure that the Contract Documents do not answer the RFI.

- **5.12.2.2.** If Contractor indicates that the information requested in the RFI affects the critical path of the Project's Construction Progress Schedule and attaches the portion of the Project's Construction Progress Schedule that verifies that the information requested in the RFI affects the critical path, GDPM shall make all reasonable efforts to respond to the RFI within 7 business days of receiving the RFI.
- **5.12.3.** If the Contractor believes that it is entitled to an adjustment of the Contract Sum or Contract Times, or both, on account of clarifications or instructions issued in response to a RFI, the Contractor may submit a Claim by requesting a Change Order by giving notice within 3 business days of receiving the RFI response.
- **5.12.4.** If Contractor does not notify GDPM in accordance with this Article Five or any other section of the Contract Documents that addresses adjustments to the Contract Sum and Contract Time, the Contractor will have accepted the RFI response without an adjustment to the Contract Sum or Contract Time and irrevocably waives his right to submit or request an adjustment to the Contract Sum and/or Contract Time.

5.12.5. Frivolous RFI

- **5.12.5.1.** If the Contractor submits a frivolous RFI, as determined by GDPM, Contractor shall be liable to GDPM for the costs related to the review and response of the RFI.
 - **5.12.5.1.1.** GDPM may deduct the costs described herein from payments then or thereafter due to the Contractor.
 - **5.12.5.1.2.** If payments then or thereafter due to the Contractor are not sufficient to cover GDPM's costs, the Contractor or its surety shall immediately pay the amount of the insufficiency to GDPM.
- **5.12.5.2.** Frivolous RFIs may be returned unanswered.
- **5.12.5.3.** Delays caused by improper or frivolous RFI's are the sole responsibility of the Contractor who shall waive the Contractor's right to seek adjustments to the Contract Sum and Contract Time.
- **5.13.** Site Investigation and Conditions Affecting the Work
 - **5.13.1.** The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including, but not limited to:
 - Conditions bearing upon transportation, disposal, handling, and storage of materials;
 - The availability of labor, water, electric power and roads;
 - Uncertainties of weather, river stages, tides, or similar physical conditions at the site;
 - The conformation and conditions of the ground; and
 - The character of equipment and facilities needed preliminary to and during work performance.
 - **5.13.2.** The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by GDPM, as well as from the drawings and specifications made part of this contract.

- **5.13.2.1.** Any failure of the Contractor Site Investigation and Conditions Affecting the Work will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the Work, or for proceedings to successfully perform the Work without additional expense to GDPM.
- **5.13.3.** GDPM assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by GDPM. Nor does GDPM assume responsibility for any understanding reached or representations made concerning conditions which can affect the Work by any of its officers or agents before execution of this Contract, unless that understanding or representation is expressly stated in this Contract.

5.14. Protection of the Project

- **5.14.1.** The Contractor shall protect the Project from weather and maintain the Work and all materials, apparatus, and fixtures free from injury or damage until Substantial Completion of the Work.
 - **5.14.1.1.** The Contractor shall at all times cover or protect the Work and materials.
 - **5.14.1.2.** The Contractor, at its own expense, shall remove, and replace with new, any Work damaged as a result of the Contractor's failure to provide coverage or protection.
 - **5.14.1.3.** After the date of Substantial Completion of the Work, GDPM is responsible for protecting and maintaining all materials, apparatus, and fixtures for the occupied portion of the Project from injury or damage.
- **5.14.2.** The Contractor shall protect the Project and existing or adjacent property from damage at all times and shall erect and maintain necessary barriers, lateral support, furnish and keep lighted necessary danger signals at night, and take reasonable precautions to prevent injury or damage to individuals or property.

5.14.3. Temporary Heating

- **5.14.3.1.** The Contractor shall provide and pay for temporary heating, covering, and enclosures necessary to protect all Work and materials against damage by dampness and cold, to dry out the Work, and to facilitate the completion of Work.
- **5.14.3.2.** Any permanent heating equipment used shall be turned over to GDPM in the condition and at the time required by the specifications.
- **5.14.4.** The Contractor shall not load, or permit any part of the Project to be loaded, in any manner that endangers the Project, or any proportion thereof.
 - **5.14.4.1.** The Contractor shall not subject any part of the Project or existing or adjacent property to stress or pressure that endangers the Project or property.

5.14.5. Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements

- **5.14.5.1.** The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work sites, which are not to be removed under this Contract, and which do not unreasonably interfere with the Work required under this Contract.
- **5.14.5.2.** The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place.

- **5.14.5.2.1.** If any limbs or branches of trees are broken during performance of this Contract, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as specifically directed by GDPM.
- **5.14.5.3.** The Contractor shall protect from damage all existing improvements and utilities (1) at or near the work site and (2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor.
 - **5.14.5.3.1.** Prior to disturbing the ground at the construction site, the Contractor shall ensure that all underground utility lines are clearly marked.
- **5.14.5.4.** The Contractor shall shore up, brace, underpin, secure, and protect as necessary all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be affected by the excavations or other operations connected with the construction of the Project.
- **5.14.5.5.** Any equipment temporarily removed as a result of work under this Contract shall be protected, cleaned, and replaced in the same condition as at the time of award of this Contract.
- **5.14.5.6.** New work which connects to existing Work shall correspond in all respects with that to which it connects and/or be similar to existing Work unless otherwise required by the specifications.
- **5.14.5.7.** No structural members shall be altered or in any way weakened without the written authorization of GDPM, unless such work is clearly specified in the Plans or specifications.
- **5.14.5.8.** If the removal of the existing Work exposes discolored or unfinished surfaces, or work out of alignment, such surfaces shall be refinished, or the material replaced as necessary to make the continuous work uniform and harmonious.
 - This, however, shall not be construed to require the refinishing or reconstruction of dissimilar finishes previously exposed, or finished surfaces in good condition, but in different plans or on different levels when brought together by the removal of intervening work, unless such refinishing or reconstruction is specified in the plans or specifications.
- **5.14.5.9.** The Contractor shall give all required notices to any adjoining or adjacent property owner or other party before commencement of any Work.
- **5.14.5.10.** The Contractor shall indemnify and save harmless GDPM from any damages on account of settlement or the loss of lateral support of adjoining property, any damages from changes in topography affecting drainage, and from all loss or expense and all damages for which GDPM may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.
- **5.14.5.11.** The Contractor shall repair any damage to vegetation, structures, equipment, utilities, or improvements, including those that are the property of a third party, resulting from failure to comply with the requirements of this Contract or failure to exercise reasonable care in performing the work.
 - If the Contractor fails or refuses to repair the damage promptly, GDPM may have the necessary Work performed and charge the cost to the Contractor.

5.14.6. Vibration, Noise, and Dust Control

- **5.14.6.1.** The Contractor shall provide controls/barriers for vibrations, noise, and dust control in occupied buildings as required by the construction operations.
- **5.14.6.2.** The Contractor will not be permitted to exhaust or release unfiltered air, dust, construction debris, or other undesirable products into the exterior atmosphere or into occupied areas of the building.
 - **5.14.6.2.1.** GDPM may limit or stop the Work if the Contractor does not maintain proper airquality standards.
 - **5.14.6.2.2.** Such stoppage may result in a charge to the Contractor.
- **5.14.6.3.** In certain occupied buildings, tasks might be of such a nature that noise and vibration cannot be tolerated.
 - In such spaces and as approved by GDPM, Work may be scheduled for other than normal working hours.
 - The Contractor is cautioned that weekend or overtime work, if required, shall be performed at no additional cost.
 - Permission to work other than standard hours shall be received from GDPM prior to the occurrence.
 - Weekend or overtime Work shall be reflected in the Construction Progress Schedule.
- **5.14.6.4.** The Contractor is responsible for vibration control and control of transmission of noise arising from the Work.
- **5.14.6.5.** Principal considerations that shall be given to noise and vibrations control are:
 - Noise control in compliance with Occupational Safety and Health Administration (OSHA) shall be for all areas of the facility, including equipment rooms, boiler rooms, and fan rooms.
 - Vibration control to limit sound produced by construction equipment, and for protection of the equipment existing in the building and the building structure.
 - Vibration control to provide for the maximum usefulness of the facility by keeping levels of vibration within ranges conducive to peaceful enjoyment of residential living or work or other uses for which the facility was designed

5.15. General Warranty - Materials, Equipment and Workmanship

- **5.15.1.** The Contractor warrants to GDPM and A/E that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise.
 - **5.15.1.1.** The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit.
 - **5.15.1.2.** Work, materials, or equipment not conforming to these requirements may be considered defective.
 - **5.15.1.3.** If required by the A/E, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

- **5.15.2.** If the Contractor breaches any of its obligations, the Contractor will pay the Owner for its damages and expenses, including but not limited to attorneys' and consultants' fees and expenses, arising out of or related to such breach.
 - **5.15.2.1.** The Contractor's obligation shall be joint and several.

5.15.3. Additional Warranties

- **5.15.3.1.** The Contractor gives the Owner the following additional warranties:
 - **5.15.3.1.1.** If the Contractor's Work includes all or part of the exterior roofing system, provided that the Architect has designed the roofing system to be weather tight, the Contractor warrants that the roofing system will be weather tight; and
 - **5.15.3.1.2.** If the Contractor's Work includes all or part of the exterior wall system, provided that the Architect has designed the wall system to be weather tight, the Contractor warrants that the wall system will be weather tight. Weather tight shall mean the roofing and/or wall system does not permit any infiltration of water in any form that would have any adverse effect on GDPM's operations or the Project.
- **5.15.4.** The Contractor shall, at the time of final completion of the Work and as a condition precedent to final payment to Contractor, assign to GDPM all manufacturer's warranties related to the materials and labor used in the Work and further agrees to perform the Work in such manner as to preserve any and all such manufacturer's warranties and deliver to the A/E the warranties, project manual, operating procedures, and other materials related to each of the building systems and materials included in the Contractor's Work and as required by the Specifications.
- **5.15.5.** Upon notice of the breach of any of the warranties or guarantees identified herein, or any other warranties or guarantees under the Contract Documents, the Contractor, in addition to any other requirements in the Contract Documents, shall commence to correct such breach and all damage resulting therefrom within two (2) business days from written notice thereof, thereafter use its best efforts to correct such breach and damage to the satisfaction of GDPM and A/E, and, except when an extension of time is granted in writing by GDPM, correct such breach and damage to the satisfaction of GDPM within thirty (30) calendar days of such notice, or such other time as provided in the notice; provided, however, that if such notice is given after final payment the 2-day period shall be extended to seven (7) calendar days.
 - **5.15.5.1.** If the Contractor fails to commence to correct such breach and damage, or to correct such breach or damage as provided above, GDPM, without prejudice to any of its other rights or remedies at law or under the Contract Documents, may correct the breach without further notice to Contractor.
 - **5.15.5.2.** The Contractor shall pay GDPM's reasonable costs and expenses incurred in connection with the or related to such correction and/or breach, including without limitation GDPM's administrative, legal, and consulting expenses and additional service fees of the A/E.
 - **5.15.5.3.** The foregoing warranties and obligations of the Contractor shall survive final payment and/or termination of the Contract and shall not be limited by any other terms contained in the Contract Documents.

- **5.15.5.4.** If the Contractor fails to pay the GDPM any amounts due hereunder, the Contactor shall pay the GDPM, in addition to the amounts due, a late payment fee of one and one-half percent (1.5%) per month for each month or part thereof that the payments are not paid when due.
- **5.15.6.** Contractor shall bring to or store at the Site only the materials and equipment required for the Work. If possible, materials and equipment should be installed in their final positions when brought to the Site.
- **5.15.7.** All equipment, material, and articles furnished under this Contract shall be of the most suitable grade for the purpose intended, unless otherwise specifically provided in this Contract.
 - **5.15.7.1.** References in the Contract to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition.
 - **5.15.7.2.** The Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of, and as approved by GDPM in writing, is equal to that named in the specifications, unless otherwise specifically provided in this Contract so long as Contractor has submitted a substitution request to GDPM.
 - **5.15.7.3.** If the substituted material has not been approved by GDPM in writing, the substituted material may be considered Defective Work by GDPM or A/E.

5.15.8. Approval of Equipment and materials

- **5.15.8.1.** The Contractor shall obtain GDPM's approval of the machinery and mechanical and other equipment to be incorporated into the work.
 - I. When requesting approval, the Contractor shall furnish to GDPM the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the machinery and mechanical and other equipment.
 - **II.** When required by this contract or by GDPM, the Contractor shall also obtain GDPM's approval of the material or articles which the Contractor contemplates incorporating into the work.
 - III. When requesting approval, the Contractor shall provide full information concerning the material or articles.
 - **IV.** Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.
- **5.15.8.2.** When required by the specifications or GDPM, the Contractor shall submit appropriately marked samples (and certificates related to them) for approval at the Contractor's expense, with all shipping charges prepaid.
 - The Contractor shall label, or otherwise properly mark on the container, the
 material or product represented, its place of origin, the name of the producer, the
 Contractor's name, and the identification of the construction project for which
 the material or product is intended to be used.
- **5.15.8.3.** Certificates shall be submitted electronically in triplicate, describing each sample submitted for approval and certifying that the material, equipment or accessory complies with contract requirements. The certificates shall include the name and brand of the product, name of manufacturer, and the location where produced.

- **5.15.8.4.** Approval of a sample shall not constitute a waiver of GDPM's right to demand full compliance with contract requirements.
 - Materials, equipment and accessories may be rejected for cause even though samples have been approved.
- **5.15.8.5.** Wherever materials are required to comply with recognized standards or specifications, such specifications shall be accepted as establishing the technical qualities and testing methods, but shall not govern the number of tests required to be made nor modify other Contract requirements.
 - GDPM may require laboratory test reports on items submitted for approval or may approve materials on the basis of data submitted in certificates with samples.
 - Check tests will be made on materials delivered for use only as frequently as GDPM determines necessary to insure compliance of materials with the specifications.
 - The Contractor will assume all costs of retesting materials which fail to meet contract requirements and/or testing materials offered in substitution for those found deficient.
- **5.15.8.6.** After approval, samples will be kept in the Project office until completion of work. They may be built into the work after a substantial quantity of the materials they represent has been built in and accepted.
- **5.15.9. Requirements concerning lead-based paint:** The Contractor shall comply with the requirements concerning lead-based paint contained in the Lead-Based Paint Poisoning Prevention Act.

5.15.10. Substitutions

- **5.15.10.1.** If the Contractor provides approved Substitutions that require changes to the Contract Documents, the Contractor shall be solely responsible for the additional costs incurred as a result, including without limitation changes to the design by the A/E.
- **5.15.10.2.** GDPM shall consider Requests for Substitutions after the bid opening only when the Contractor can conclusively demonstrate to GDPM the following conditions:
 - The specified Basis of Design Components, Acceptable Components, or previously approved Substitutions through no fault of the Contractor are not available; or
 - II. The specified Basis of Design Components, Acceptable Components, or previously approved Substitutions will not perform as designed or intended.
- **5.15.10.3.** The Contractor's incorporation of unapproved Substitutions in the Work shall constitute Defective Work.
- **5.15.10.4.** If the Contractor provides an unacceptable Component, the Contractor shall be solely responsible for the costs of coordination and modification required.

5.16. Specifications and Drawings for Construction

5.16.1. The Contractor shall keep on the work site a stamped, permit set of the drawings and specifications and shall at all times give GDPM access thereto.

- **5.16.1.1.** Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both.
- **5.16.1.2.** In case of difference between drawings and specifications, the specifications shall govern.
- **5.16.1.3.** In case of a discrepancy in the figures, in the drawings, or in the specifications, the matter shall be promptly submitted to GDPM, who shall promptly make a determination in writing.
- **5.16.1.4.** Any adjustment by the Contractor without such determination shall be at its own risk and expenses.
- **5.16.1.5.** GDPM shall furnish from time to time such detailed drawings and other information as considered necessary, unless otherwise provided.
- **5.16.2.** Wherever in the specifications or upon the drawings the words "directed", "required", "ordered", "designated", "prescribed", or words of like import are used, it shall be understood that the "direction", "requirement", "order", "designation", or "prescription", of GDPM is intended.
- **5.16.3.** Where "shown," indicated", "detailed", or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this Contract unless otherwise stated, the word "provided" as used herein shall be understood to mean "provide complete in one place" that is "furnished and installed".
- **5.16.4.** "Shop Drawings" means drawings, submitted to GDPM by the Contractor, subcontractor or any lower tier subcontractor, showing in detail, 1) the proposed fabrication and assembly of structural elements and 2) the installations (i.e., form, fit, and attachment details) of materials of equipment.
 - **5.16.4.1.** It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the Contractor to explain in detail specific portions of the work required by the Contract.
 - **5.16.4.2.** GDPM may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.
- **5.16.5.** If this Contract requires shop drawings, the Contractor shall coordinate all such drawings, and review them for accuracy, completeness, and compliance with other Contract requirements and shall indicate its approval thereon as evidence of such coordination and review.
 - **5.16.5.1.** Shop Drawings submitted to the A/E without evidence of the Contractor's approval may be returned for resubmission.
 - **5.16.5.2.** GDPM will indicate an approval or disapproval of the shop drawings and if not approved as submitted shall indicate GDPM's reasons therefore.
 - **5.16.5.3.** Any Work done before such approval shall be at the Contractor's risk.
 - **5.16.5.4.** Approval by the A/E shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this Contract, except with respect to approved variations.
- **5.16.6.** If shop drawings show variations from the Contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission.

- **5.16.6.1.** If the A/E approves any such variation and GDPM concurs, GDPM shall issue an appropriate modification to the Contract, except that, if the variation is minor or does not involve a change in price or in time of performance, a modification need not be issued.
- **5.16.7.** It shall be the responsibility of the Contractor to make timely requests to GDPM for such large scale and full size drawings, color schemes, and other additional information, not already in possession, which shall be required in the planning and production of the work.
 - **5.16.7.1.** Such requests may be submitted as the need arises, but each such request shall be filed with ample time to permit appropriate action to be taken by all parties involved so as to avoid delay.
- **5.16.8.** The Contractor shall electronically submit to GDPM for approval (unless otherwise indicated) all shop drawings as called for under the various headings of the specifications.
 - **5.16.8.1.** As required by GDPM, the Contractor, upon completing the work under this Contract, shall furnish a complete set of drawings as finally approved.
 - **5.16.8.2.** These drawings show all changes and revisions made up to the time the work is completed and accepted.
- **5.16.9.** Specifications and Drawings for Construction shall be included in all subcontracts at any tier.
 - **5.16.9.1.** It shall be the responsibility of the Contractor to ensure that all shop drawings prepared by subcontractors are submitted to GDPM.

5.17. As Built Drawings

- **5.17.1.** "As-built drawings," means drawings submitted by the Contractor or subcontractor at any tier to show the construction of a particular structure or Work as actually completed under the Contract.
 - **5.17.1.1.** "As-built drawings" shall be synonymous with "Record Drawings".
- **5.17.2.** As required by GDPM, the Contractor shall provide GDPM accurate information to be used in the preparation of permanent as-built drawings.
 - **5.17.2.1.** For this purpose, the Contractor shall record on one set of contract drawings all changes from the installations originally indicated, and record final locations of underground lines by depth from finish grade and by accurate horizontal offset distances to permanent surface improvements such as buildings, curbs, or edges of walks.
- **5.17.3.** As Built Drawings shall be included in all subcontracts at any tier.
- **5.17.4.** It shall be the responsibility of the Contractor to ensure that all As-Built Drawings prepared by subcontractors are submitted to GDPM.

5.18. Project Document Maintenance and Submittal

- **5.18.1.** During Construction
 - **5.18.1.1.** The Contractor shall maintain in good order at a secure location on the Site:
 - I. A complete copy of all Contract Documents; Shop Drawings, Product Data, samples and similar required submittals; manufacturer operating and maintenance instructions; certificates; warranties; RFIs and responses thereto; and other Project- related documents, all marked currently and accurately to record field changes and selections made during construction and to show

- actual installation where installation varies from Work as originally shown, including the exact location and depth of underground utility lines; and
- II. A set of Drawings as approved by any applicable jurisdiction and Specifications.
- **5.18.1.2.** Before submitting each Contract Payment Request, the Contractor shall record all changes on the Contract Documents, neatly in a contrasting color, noting new information not shown on the original Contract Documents.
 - Failure to record all changes may cause payment to be withheld or delayed by GDPM.
- **5.18.1.3.** The Contractor shall keep a record of changes made to the Specifications, noting particularly any approved variation from manufacturer's installation instructions and recommendations.
- **5.18.1.4.** If the Contractor uses Shop Drawings to indicate as-built conditions, the Contractor shall cross-reference the Shop Drawing sheet numbers to the corresponding sheet numbers on the Contract Documents.
 - The Contractor shall note related numbers where applicable.

5.18.2. Before Contract Completion

- **5.18.2.1.** The Contractor, as a condition precedent to execution of the Certificate of Contract Completion and final payment, shall organize the As-Built Documents into manageable sets, bind the sets with durable paper cover sheets, and deliver the As-Built Documents to GDPM.
- **5.18.2.2.** When applicable, The Contractor's As-Built Documents submission shall include, but is not limited to:
 - I. Certificate of Occupancy;
 - II. Inspection certificates for pressure piping, elevator, boiler, electrical, plumbing or piping purification, etc.
 - **III.** Letter of Approval from the local fire authority or State Fire Marshal for the fire suppression system;
 - **IV.** Operation and Maintenance Manuals, organized into suitable sets of manageable size;
 - V. Indexed data bound in individual binders, with pocket folders for folded sheet information and appropriate identification marked on the front and the spine of each binder;
 - VI. Neatly and accurately marked sets of As-Built Documents, and other Contract Documents reflecting the actual construction of the Project;
 - **VII.** Detailed Drawings reflecting the exact location of any concealed utilities, mechanical or electrical systems, and components;
 - VIII. Assignment to GDPM of all warranties and guarantees, including the mostrecent address and telephone number of any Subcontractors or manufacturers;
 - IX. An affidavit to certify that all Subcontractors have been paid in full for all Work performed or materials furnished for the Project;
 - X. Final certified payroll reports; and

- XI. An affidavit to certify that the Contractor and each of its Subcontractors, regardless of tier, have complied with all requirements of HUD and the Ohio Revised Code.
- **5.18.2.3.** By submitting the As-Built Documents to GDPM, the Contractor certifies that its As-Built Documents are complete, correct, and accurate.

5.19. Temporary Buildings and Transportation of Materials

- **5.19.1.** Temporary buildings (e.g., storage sheds, shops, offices, sanitary facilities) and utilities may be erected by the Contractor only with the approval of GDPM and shall be built with labor and materials furnished by the Contractor without expense to GDPM.
 - **5.19.1.1.** The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the work.
 - **5.19.1.2.** With the written consent of GDPM, the buildings and utilities may be abandoned and need not be removed.
- **5.19.2.** The Contractor shall, as directed by GDPM, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by GDPM.
 - **5.19.2.1.** When materials are transported in prosecuting the Work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any federal, state, or local law or regulation.
 - **5.19.2.2.** When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage.
 - **5.19.2.3.** The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

5.20. Facilities

- **5.20.1.** The Contractor shall provide and maintain in a clean condition:
 - **5.20.1.1.** Suitable facilities, including temporary facilities, equipment, services, and enclosed storage for its use at the Site;
 - **5.20.1.2.** Adequate space, equipment, and furnishings to conduct progress meetings, and store approved documents and permits;
 - **5.20.1.3.** Adequate sanitary facilities for use by all Persons at the Site.

5.21. Progress Cleaning

- **5.21.1.** The Contractor shall remove all waste materials, rubbish, and mud attributable to the Work in accordance with the Specifications, if applicable, and to an appropriate disposal location.
- **5.21.2.** The Contractor shall perform weekly broom cleaning of hard flooring surfaces in the area of the Work.
- **5.21.3.** The Contractor shall remove, at the end of each working day or more frequently, as appropriate, for the Project, all waste materials and rubbish from the disposal location.
- **5.21.4.** The Contractor shall remove, as appropriate for the Project or as the A/E or GDPM directs, any waste materials or rubbish from areas adjacent to the Project.

- **5.21.5.** The Contractor shall dispose of waste materials, rubbish, and construction debris in a lawful manner in approved recycling facilities or landfills and record of such disposal shall be available upon written request of GDPM.
- **5.21.6.** If the Contractor fails to clean up during the progress of the Work, GDPM may clean up on behalf of the Contractor and at the Contractor's expense.
 - **5.21.6.1.** If the Contractor fails to maintain the areas adjacent to the Project clean and free of waste materials and rubbish, GDPM may also direct the local jurisdiction responsible for the area to have the area cleaned to its satisfaction at the Contractor's expense.
 - **5.21.6.2.** GDPM may deduct the cleaning costs from payments then or thereafter due the Contractor.
 - If payments then or thereafter due the Contractor are not sufficient to cover those amounts, the Contractor shall immediately pay the amount of the insufficiency to GDPM.
- **5.21.7.** The Contractor shall remove excavated material and spoil to a suitable off-site location approved by GDPM.
 - **5.21.7.1.** If GDPM designates a location on its property for disposal or storage of clean topsoil and/or subsoil in the Contract Documents, the Contractor shall remove such materials to the designated location.

5.22. Use of Premises

- **5.22.1.** The Contractor shall use corridors, stairs, and elevators as designated by GDPM and only during those times that are designated by GDPM.
- **5.22.2.** The Contractor shall exercise extreme care to not exceed the carrying capacity of elevators or damage the cab interior, including but not limited to damaging the cab padding, in any way.
- **5.22.3.** Loitering or wandering through interior of buildings or exterior grounds outside the limits of the Work will not be permitted.
- **5.22.4.** The Contractor shall confine its apparatus, materials, and the operations of its workers to the limits indicated by law, ordinances, permits and the directions of GDPM.
- **5.22.5.** Unless expressly required or approved by GDPM, no signs or advertising of any kind will be permitted on or about the Site, except those appearing on trucks and trailers.
- **5.22.6.** GDPM may deduct the costs associated with remedying Contractor's misuse of the premises from payments then or thereafter due the Contractor.
 - If payments then or thereafter due the Contractor are not sufficient to cover those amounts, the Contractor shall immediately pay the amount of the insufficiency to GDPM.

5.23. GDPM Use of Premises / Possession Prior to Completion

- **5.23.1.** GDPM shall have the right to take possession of or use any completed or partially completed part of the Work.
 - I. Before taking possession of or using any Work, GDPM shall furnish the Contractor a list of items of Work remaining to be performed or corrected on those portions of the Work that GDPM intends to take possession of or use.

- II. However, failure of GDPM to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the Contract.
- III. GDPM's possession or use shall not be deemed acceptance of Work under the Contract.
- **5.23.2.** While GDPM has such possession or use, the Contractor shall be relieved of the responsibility for:
 - I. The loss of or damage to the Work resulting from GDPM's possession or use, notwithstanding the terms herein;
 - II. All maintenance costs on the areas occupied; and
 - **III.** Furnishing heat, light, power, and water used in the areas occupied without proper remuneration therefore.
- **5.23.3.** If timely requested by the Contractor and if prior possession or use by GDPM delays the progress of the Work or causes additional expense to the Contractor, an equitable adjustment shall be made in the contract price or the time of completion, and the Contract shall be modified in writing accordingly.

5.24. Smoking and Tobacco Products

- **5.24.1.** Smoking is not permitted at any property under construction, unless GDPM has a specifically designated area for smoking, and is not permitted within 50 feet of any entrance of a GDPM owned building.
- **5.24.2.** This prohibition applies to new construction and rehabilitation.
- **5.24.3.** The Contractor shall enforce these restrictions on any individual employed by the Contractor, or a Subcontractor.
- **5.24.4.** A violation of GDPM's Non-Smoking Policy may result in a fee for damages to be made payable by Contractor to GDPM in the amount of \$250 per incident per day. Parties acknowledge and agree that this fee for damages is a reasonable amount to provide for the violation of the Non-Smoking Policy and is not necessarily putative in nature, but covers the actual reasonable cost to remedy such breach.
- **5.24.5.** GDPM may deduct the costs associated with Contractor's breach of GDPM's Non-Smoking Policy from payments then or thereafter due the Contractor.
 - If payments then or thereafter due the Contractor are not sufficient to cover those amounts, the Contractor shall immediately pay the amount of the insufficiency to GDPM.

5.25. Correction of the Work

5.25.1. Before Substantial Completion

- **5.25.1.1.** If the Contractor provides Defective Work or fails or neglects to perform the Work in accordance with the Construction Progress Schedule, GDPM or the A/E may issue a written notice to the Contractor and Contractor's Surety directing the Contractor to correct the Defective Work or recover schedule deficiencies.
 - Unless otherwise specified in that written notice, the Contractor shall begin to correct the Defective Work and recover the schedule deficiencies within no more than three days after GDPM issues the written notice.

5.25.1.2. If the Contractor fails to commence and diligently pursue correction of Defective Work or recovery of schedule deficiencies within three (3) business days of Contractor's receipt of written notice from GDPM or the A/E, GDPM may correct the Defective Work or take action to recover schedule deficiencies without giving further notice to the Contractor or Contractor's Surety.

5.25.2. During the Correction Period

- **5.25.2.1.** If GDPM issues a notice during the Correction Period, GDPM may correct the Defective Work itself without giving further notice to the Contractor or Contractor's Surety if the Contractor fails to:
 - **a.** Notify GDPM in writing of the Contractor's intent to correct the Defective Work within 3 days after GDPM issues the notice; and
 - **b.** Thereafter promptly commence and diligently pursue correction of Defective Work.

5.25.2.2. The Correction Period:

- a. Commences on the date of issuance of the written notice of Defective Work to Contractor and/or Contractor's surety and expires upon the date indicated in said written notice;
- b. Relates only to the Contractor's specific obligation and opportunity to correct the Work during the Correction Period;
- c. Does not establish a period of limitation with respect to any of the Contractor's other obligations under the Contract Documents;
- d. Has no relationship to the time within which GDPM may seek to enforce the Contract; and
- e. Does not establish a period of limitation with respect to the commencement of litigation to establish the Contractor's liability under the Contract or otherwise.

5.25.3. After the Correction Period:

- **5.25.3.1.** GDPM may correct, at the Contractor's expense, the Defective Work without giving further notice to the Contractor or Contractor's Surety if the Contractor or Contractor's surety fails to
 - a. Notify GDPM in writing of the intent to correct the Defective Work; and
 - **b.** Promptly commence and diligently pursue correction of Defective Work.

5.25.4. After Substantial Completion

- **5.25.4.1.** In addition to the Contractor's other obligations under the Contract Documents, if any of the Work is found to be Defective Work after Substantial Completion, the Contractor shall correct it promptly after receipt of written notice from GDPM to do so, unless GDPM has previously acknowledged and accepted the Defective Work in writing.
- **5.25.4.2.** GDPM may send a copy of the written notice to the Contractor's Surety, but is not obligated to do so.
- **5.25.5.** Emergency Correction of Defective Work

5.25.5.1. Notwithstanding any other provision of the Contract, if in GDPM's opinion the Defective Work presents a threat of imminent harm or danger to people, property, or the environment, GDPM may order the Contractor to immediately correct Defective Work or GDPM may correct the Defective Work, at Contractor's expense, itself without any prior notice to the Contractor or Contractor's Surety.

5.25.6. Responsibility for Costs of Correction

- **5.25.6.1.** The Contractor shall pay all of the costs and damages associated with the correction of Defective Work and the recovery of schedule deficiencies.
- **5.25.6.2.** Those costs and damages may include, but are not limited to:
 - The related fees and charges of contractors, engineers, architects, attorneys, and other professionals; and
 - The cost of correcting or replacing adjacent work.
- **5.25.6.3.** GDPM may deduct those costs and damages from payments then or thereafter due the Contractor.
 - 5.25.6.3.1. If payments then or thereafter due the Contractor are not sufficient to cover those amounts, the Contractor shall immediately pay the amount of the insufficiency to GDPM.

6. ARTICLE VI: SUBCONTRACTORS

6.1. Definitions: As used in this Contract:

- **6.1.1. "Subcontract"** means any contract, purchase order, or other purchase agreement, including modifications and change orders to the foregoing, entered into by a subcontractor to furnish supplies, materials, equipment, and services for the performance of the prime contract or a subcontract.
- **6.1.2. "Subcontractor"** means any supplier, vendor, or firm that furnished supplies, materials, equipment, or services to or for the Contractor or another subcontractor.

6.2. Evaluation and Approval

- **6.2.1.** When submitting its Bid, the Contractor shall submit a Subcontractor and Material Supplier Declaration Form through which the Contractor identifies its Subcontractor and provide a list of subcontractors and material suppliers and equipment with bid.
- **6.2.2.** Within 10 days after the Notice to Proceed, the Contractor shall submit to GDPM, an updated Subcontractor and Material Supplier Declaration form.
- **6.2.3.** In its discretion, GDPM will evaluate the use of proposed subcontractors. If GDPM rejects any proposed Subcontractor, the Contractor shall propose a replacement Subcontractor with no adjustment of the Contract Sum. The proposed replacement will also be evaluated.
- **6.2.4.** If requested by GDPM, Contractor must supply additional information on use of proposed subcontractor within five business days of such request. The Contractor's failure to timely submit the information regarding a proposed Subcontractor may result in withholding payment to Contractor.

6.3. Suspension/Debarment

6.3.1. The Contractor shall not enter into any subcontract with any subcontractor who has been denied participation by GDPM or has been temporarily or permanently denied participation in a HUD program or who has been suspended or debarred from participating in contracting programs by any agency of the United States Government or the State of Ohio.

6.4. Contractor's Responsibility

- **6.4.1.** The Contractor shall be as fully responsible for the acts or omissions of its Subcontractors and of persons either directly or indirectly employed by them as for the acts or omissions of persons directly employed by the Contractor.
- **6.4.2.** Contractor is responsible for scheduling and coordinating the Work of the Subcontractors.
- **6.4.3.** The Contractor is fully responsible for any delay, interference, disruption, or hindrance attributable to the Contractor's Subcontractors.
- **6.4.4.** The Contractors shall require that each of its Subcontractors have a competent supervisor at the Site whenever the Subcontractor is performing Work.
 - **6.4.5.** The Contractor shall use GDPM's form of Subcontract for each of its subcontractors and material suppliers. Contractor shall not agree to any provision, which seeks to bind GDPM, or with terms inconsistent with or at variance from these Contract Documents.
- **6.4.6.** The Contractor will not be relieved of its full responsibility for Subcontractors and their performance of the Work by:
 - **6.4.6.1.** The participation of GDPM, HUD, or the A/E in the processes described under this ARTICLE VI SUBCONTRACTORS or other related provisions of the Contract Documents; or
 - **6.4.6.2.** GDPM's rejection of a Subcontractor or failure to reject a Subcontractor.

6.5. Mandatory Contract Provisions/Forms

- **6.5.1.** The Contractor shall insert appropriate clauses in all subcontracts to bind Subcontractors to the terms and conditions of this Contract insofar as they are applicable in the work of Subcontractors.
- **6.5.2.** GDPM reserves the right to reassign accepted agreements
- **6.5.3.** Nothing contained in the Contract Documents shall create any contractual relationship between any subcontractor and GDPM or between the Subcontractor and HUD.
- **6.5.4.** The Contractor must include in the contract with its Subcontractors the applicable labor provisions and prevailing wages as was provided to the Contractor by GDPM.
- **6.5.5.** No less than 10 days before the Work is to be performed by a Subcontractor, or within a shorter period as mutually agreed by the Contractor and GDPM, the Contractor shall submit to GDPM a complete copy of the executed Subcontract between the Contractor and Subcontractor.

6.6. Replacement of Subcontractors

- **6.6.1.** The Contractor shall not replace any Subcontractor after execution of the Subcontract without prior written approval of GDPM.
- 6.6.2. The Contractor shall not add any subcontractors after the Contract Execution without

updating the Material Supplier and Subcontractor Form or prior to written approval of GDPM.

6.7. Contingent Assignment of Subcontract

6.7.1. The Contractor hereby assigns its Agreement with each Subcontractor to GDPM provided that the assignment is effective only after termination of the Contract by GDPM and only for those agreements that GDPM accepts by notifying Contractor and applicable Subcontractor in writing.

6.8. Prompt Payment of Subcontracts

- **6.8.1.** The Contractor shall make payments to the Subcontractor in accordance with Applicable Law, including the Ohio Revised Code that include, without limitation, the requirements under this Section, 6.8 Prompt Payment of Subcontracts.
- **6.8.2.** If a Subcontractor requests payment in time to allow the Contractor to include the request in its Contractor Payment Application Request the Contractor, within ten calendar days after receipt of payment from GDPM, shall pay to the:
 - **6.8.2.1.** Subcontractor, an amount equal to the percentage of completion of the subcontractors contract allowed by GDPM for the amount of labor or work performed;
 - **6.8.2.2.** Material Supplier, an amount that is equal to all or a portion of the invoice for materials which represents the materials furnished by the material supplier
- **6.8.3.** The Contractor may reduce the amount paid by any retainage provision contained in the Contract, invoice, or purchase order between the Contractor and Subcontractor and may withhold amounts that may be necessary to:
 - **6.8.3.1.** Resolve disputed liens or claims involving the Work or labor performed by the Subcontractor; or
 - **6.8.3.2.** Account for failure of the Subcontractor to perform its obligations under its agreement with the Contractor as required under the Ohio Revised Code.
- **6.8.4.** *Labor Payments:* Within ten days of receipt of payment from GDPM, the Contractor shall pay Subcontractor in the following manner:
 - **6.8.4.1.** Partial payments to the Subcontractor for labor performed under either a Unit Price or lump sum Subcontract shall be made at the rate of 92 percent of the amount invoiced through the Subcontractor's request for payment that shows the Work of the Subcontractor is up to 50% complete.
 - **6.8.4.2.** After the Work of the Subcontractor is 50 percent complete, as evidenced by payments of at least 50 percent of the total amount due under the Subcontract, no additional funds shall be retained from payments for labor.

6.8.5. Material Payment

- **6.8.5.1.** Required by ORC for payment to Contractor by GDPM:
 - The Contractor shall pay the Subcontractor at the rate of 95% of the invoice cost, not to exceed the scheduled value in a unit price or lump sum Subcontract, for materials delivered to the Site, or other offsite storage location approved by GDPM, provided the Subcontractor provides the information required with its request for payment.
 - The Contractor shall pay the Subcontractor at the rate of 100% of the scheduled

value for materials incorporated into the Project.

- **6.8.6.** If Contractor fails to comply with the payment provisions set forth, the Contractor shall pay to the applicable Subcontractor, in addition to any payment due, interest in the amount of 18 percent per annum of the payment due, beginning the eleventh day following the receipt of payment from GDPM and ending on the date of full payment of the payment due plus interest.
- **6.8.7.** If GDPM receives a Claim Affidavit from a Subcontractor, Subcontractor shall proceed in accordance with Applicable Law, including the Ohio Revised Code.
- **6.8.8.** Laborers, Subcontractors, and Material Suppliers may secure payment rights in accordance with Applicable Law, including the Ohio Revised Code.

6.9. Subcontracting To Meet Diversity & Contracting Goals

- **6.9.1.** The Contractor shall take the following steps to ensure that, whenever possible, Subcontracts are awarded to small business firms, minority firms, women's business enterprises, and labor surplus area firms:
 - **6.9.1.1.** Place qualified small and minority businesses and women's business enterprises on solicitations lists;
 - **6.9.1.2.** Ensure that small and minority businesses and women's business enterprises are solicited whenever they are potential resources
 - **6.9.1.3.** Divide total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses and women's business enterprises;
 - **6.9.1.4.** Establish a delivery schedule, where the requirements of the Contract permit, which encourages participation by small and minority businesses and women's business enterprises; and
 - **6.9.1.5.** Use the services and assistance of the U.S. Small Business Administration, the Minority Business Development Agency of the U.S. Department of Commerce, and State and local governmental small business agencies.

7 ARTICLE VII: SUBCONTRACTORS

7.1. GDPM Obligation

7.1.1. GDPM shall pay the Contractor the price as provided in the Contract.

7.2. Forms

7.2.1. Unless expressly authorized to the contrary, Contractor must use appropriate GDPM forms.

7.3. Step One - Pencil Application

- **7.3.1.** The purpose of a pencil application (HUD Form) is assisting the Contractor in identifying any potential error or omission in the pay application.
- **7.3.2.** If submitted timely (as set forth below) GDPM will review and help identify any potential issues. However, the GDPM Construction Administrator's approval or suggestion does not guarantee approval of the payment application by GDPM.
- 7.3.3. The Contractor shall initially submit a pencil application by no later than the 15th of each month.

- **7.3.4.** Generally, the GDPM Construction Administrator will review the pencil application, and make any suggested corrections and return to the Contractor within a reasonable amount of time.
- **7.3.5.** The Contractor shall then submit the final payment application to the GDPM Construction Administrator or project manager by the 23rd of each month.
- **7.3.6.** Failure to submit a pencil application may result in a significant delay in payment.

7.4. Progress Payments

- **7.4.1.1.** GDPM shall make progress payments approximately every 30 days as the work proceeds on estimates of Work accomplished which meets the standards of quality established under the Contract, as approved by GDPM.
- **7.4.1.2.** Subject to G D P M 's written determination and approval more frequent payments may be made to contractors which are qualified as small businesses.
- **7.4.2.** Before the first progress payment under this contract, the Contractor shall furnish, in such detail as requested by GDPM, a breakdown of the total contract price showing the amount included therein for each principal category of the work, which shall substantiate the payment amount requested in order to provide a basis for determining progress payments.
 - The breakdown shall be approved by GDPM and must be acceptable to HUD.
 - If the contract covers more than one Project, the Contractor shall furnish a separate breakdown for each.
 - The values and quantities employed in making up this breakdown are for determining the amount of progress payments and shall not be construed as a basis for additions to or deductions from the contract price.
 - The Contractor shall prorate its overhead and profit over the construction period of the contract.
- **7.4.3.** The Contractor shall submit, on forms provided by GDPM, periodic estimates showing the value of the work performed during each period based upon the approved breakdown of the contract price.
 - Such estimates shall be submitted not later than ---- days in advance of the date set for payment and are subject to correction and revision as required.
 - The estimates must be approved by GDPM prior to payment.
 - If the contract covers more than one project, the Contractor shall furnish a separate progress payment estimate for each.
- **7.4.4.** Along with each request for progress payments and the required estimates, the Contractor shall furnish the following certification, or payment shall not be made:
 - **7.4.4.1.** I hereby certify, to the best of my knowledge and belief, that:
 - The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the Contract;
 - Payments to subcontractors and suppliers have been made from previous payments received under the contract, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements; and
 - This request for progress payments does not include any amounts which the prime Contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract.

7.5. Allowances

- **7.5.1.** The Contract Sum includes the Allowances (if any) identified in the Contract.
- **7.5.2.** All allowances include the costs to the Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes.

7.6. Unit Prices

- **7.6.1.** Where the Contract provides that all or a part of the Work is to be Unit Price Work, initially that Contract Sum will include for all Unit Price Work:
 - **7.6.1.1.** An amount equal to the sum of the established Unit Prices for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Contract
 - **7.6.1.2.** The Contractor's fee on that Unit Price Work
- **7.6.2.** The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Sum.
 - **7.6.2.1.** GDPM will determine the actual quantities and classifications of Unit Price Work performed by the Contractor.
 - **7.6.2.2.** Before final payment, an appropriate Change Order will be issued to reconcile the Contract Sum so that it reflects actual amount due to the Contractor on account of Unit Price Work actually performed.

7.7. Schedule of Values

- **7.7.1.** Within seven days after issuance of Letter of Intent or other period as mutually agreed by the Contractor and GDPM, the Contractor shall submit to GDPM a Schedule of Values on a form provided for by GDPM, with separate amounts shown for labor and materials for each branch of Work.
 - **7.7.1.1.** The Contractor shall clearly indicate on the Schedule of Values, but is not necessarily limited to, the cost of payment and performance bond(s), permit costs, the amount(s) allocated, including separate items for the Contractor's Fee (Overhead and Profit), and the amount(s) of labor and materials, as appropriate.
- **7.7.2.** The grand total shown on the Schedule of Values shall equal the total Contract Sum.
- **7.7.3.** GDPM may use the approved Schedule of Values to determine cost or credit to GDPM resulting from any change in the Work.
 - **7.7.3.1.** The first items shall be a breakdown of the General Conditions Cost
 - **7.7.3.2.** The amounts for labor and materials shall accurately reflect the cost for each item.
 - 7.7.3.2.1. The Contractor shall clearly indicate on the Schedule of Values, the amount(s) allocated, including separate items for Contractor's Fee (overhead and profit), for each Section 3 certified Business used in the performance of the Work.
 - **7.7.3.2.2.** Contractor's Fee shall be included in the totals for labor and materials.
 - **7.7.3.3.** If the material allocation exceeds 55 percent of the Contract Sum, the Contractor shall provide, upon request, sufficient information to support the higher percentage.
 - **7.7.3.4.** Subcontract Work shall show amounts for labor and materials.

- **7.7.3.2.3.** Fringe benefits shall be shown as a part of labor costs.
- **7.7.3.5.** When more than one major structure is included in the Work, the Contractor shall subdivide the Schedule of Values accordingly, with cost details for each structure shown separately.
- **7.7.3.6.** The line items shall be coordinated with line items in the Project Schedule, which may require division of items of Work by area of the Project by floor, phase, or other appropriate area.
- **7.7.3.7.** Mechanical and electrical Work shall be included in separate line items for all major pieces of equipment, and group smaller equipment items by type.
- **7.7.3.8.** Line items shall be included for each Allowance, Punch List Work, Project Record Document Submittals, delivery of attic stock, and specified demonstrations and training.
- **7.7.4.** GDPM may return the Schedule of Values to the Contractor for re-submittal if it does not meet the requirements or contains insufficient items or details of the Work, or approve the Schedule of Values if GDPM determines that it conforms to section 7.7
- **7.7.5.** No payment shall be made until the GDPM has approved the Contractor's Schedule of Values.

7.8. Labor Payments/Retainage

- **7.8.1.** The unit or lump sum price stated in the contract shall be used in determining the amount to be paid and shall constitute full and final compensation for all the work.
- **7.8.2.** Partial payment to the contractor for work performed under the lump sum price shall be based on a schedule prepared by the contractor and approved by GDPM and/or A/E who shall apportion the lump sum price to the major components entering into or forming a part of the work under the lump sum price.
- **7.8.3.** GDPM shall make partial payments to the contractor for labor performed under either a unit or lump sum price contract at the rate of ninety per cent of the estimates prepared by Contractor and approved by the A/E.
- **7.8.4.** All labor performed after the job is fifty per cent completed shall be paid for at the rate of one hundred per cent of the estimates submitted by the contractor and approved by GDPM and/or the A/E.

7.9. Material Payments/Retainage

- **7.9.1.** Provided such materials have been inspected and found to meet the specifications, GDPM shall pay the Contractor at the rate of ninety percent of the invoice cost, not to exceed the scheduled value in a Unit Price or lump sum contract, for materials delivered to the Site, or other off-Site storage location approved by GDPM, provided the Contractor provides the following information with the Contractor Payment Request:
 - A list of the fabricated materials consigned to the Project, giving the place of storage, together with copies of invoices, in order to verify quantity and cost; and
 - A certification of materials stored off-site, prepared by the Contractor and signed-off on by GDPM and/or the A/E, to evidence that the materials are in conformity with the Specifications and have been tagged with the Project name and number for delivery to the Project.

- **7.9.2.** The Contractor shall directly reimburse GDPM and/or the A/E for all costs incurred to visit a storage site, other than the areas adjacent to the Site.
- **7.9.3.** Provided such materials have been inspected and found to meet the specifications, GDPM shall pay the balance of the scheduled value when the materials are incorporated into and becomes a part of the Work.
- **7.9.4.** hen payment is allowed for materials delivered to the Site or other off-site storage location, approved by GDPM, but not yet incorporated into the Project, such material shall become the property of the GDPM, but if such material is stolen, destroyed, or damaged by casualty before being used, the contractor shall be required to replace it at the contractor's own expense.
- **7.9.5.** GDPM may, at its sole discretion, retain any material not ultimately incorporated into the Project or return it to the Contractor for credit of an amount proportionate to the value of the extra materials.
- **7.9.6.** Payment on approved estimates filed with GDPM or its representative shall be made within thirty days.

7.9.7. Release of Retainage

7.9.7.1. When the Contractor has achieved Substantial Completion of all Work, and there is no other reason to retain funds; upon request of the Contractor, the funds retained in connection with the Work shall be released and paid to the Contractor, withholding only that amount necessary to assure faithful completion in the sole discretion of GDPM.

7.10. Payments Withheld

- **7.10.1.** GDPM may withhold funds from or may assess Liquidated Damages against a Contractor Payment Request.
- **7.10.2.** GDPM may decline to approve any Contractor Payment Request or part thereof, or nullify any previous Contractor Payment Request, in whole or in part, to the extent necessary in GDPM's sole opinion to protect GDPM from loss because of:
 - Defective Work not remedied;
 - Overpayment of any schedule of values line item without prior approval of related change order by Contracting Officer
 - Overpayment due to calculation error;
 - Damage caused by the Contractor;
 - Reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
 - Reasonable evidence that the Work will not be completed within the Contract Times, and that the unpaid balance would not be adequate to cover damages under the Contract Documents for the anticipated delay;
 - Failure to comply with Applicable Law including, but not limited to, the requirements of the Ohio Revised Code.

7.11. Payment Request

- **7.11.1.** The Contractor and each of its subcontractors, regardless of tier, shall execute a Payment Release Affidavit to certify that the Contractor and each of its subcontractors, regardless of tier, have complied with all applicable requirements of the ORC, and to certify that all of its subcontractors have been paid in full for all Work performed or materials furnished under the Contract.
- **7.11.2.** GDPM shall pay Contractor in approximately 30 days from the date of acceptance of the Payment Request.
- **7.11.3.** The Contractor, as a condition precedent to final payment, shall complete all requirements of the
- **7.11.4.** Acceptance of final payment by the Contractor or a Subcontractor constitutes the payee's waiver of all claims against GDPM except those previously made in writing and identified by that payee as unsettled at the time of the final Contractor Payment Request.

8 Article VIII: Contract Modifications

8.1. Changes in Work

- **8.1.1.** GDPM may order changes in the Work without invalidating the Contract, subject to the limitations set forth in this Article and elsewhere within the Contract Documents, a change in the Work may be accomplished by a Change Order, Change Directive, or order for a minor change in the Work.
- **8.1.2.** Except as provided, no order, statement or conduct of GDPM shall be treated as a change or entitle the Contractor to an equitable adjustment.
- **8.1.3.** Only GDPM's Contracting Officer has authority to modify any term or condition of this Contract. Any Contract modification shall be authorized in writing.
- **8.1.4.** The Contracting Officer may modify the contract unilaterally:
 - Pursuant to a specific authorization stated in a Contract clause; or
 - For administrative matters which do not change the rights or responsibilities of the parties.
- **8.1.5.** All other contract modifications shall be in the form of supplemental agreements signed by the Contractor and GDPM.
- **8.1.6.** Except as expressly stated herein, the Contractor's failure to obtain prior written authorization from GDPM for a change in the Work constitutes a waiver by the Contractor of an adjustment to the Contract Sum or Contract Time or both.
- **8.1.7.** The Contractor shall perform all changes in the Work under applicable provisions of the Contract Documents, and the Contractor shall proceed promptly with the change unless otherwise provided in the Change Order, Change Directive or order for a minor change in the Work.
- **8.1.8. HUD Approval:** When a proposed modification requires the approval of HUD prior to its issuance; such modification shall not be effective until the required approval is received by GDPM.

8.2. Change Order

8.2.1. GDPM may, at any time, without notice to the sureties, by written order designated or indicated to be a change order, make changes in the Work within the general scope of the

Contract including changes:

- In the specifications (including drawings and designs);
- In the method or manner of performance of the Work;
- GDPM-furnished facilities, equipment, materials, services, or site; or
- Directing the acceleration of the Work.

8.3. Increase or decrease of cost

- **8.3.1.** If any change causes an increase or decrease in the Contractor's cost of, or the time required for the performance of any part of the Work under this contract, whether or not changed by any such order, GDPM shall make an equitable adjustment as set forth in Section 8.8 Change Order Cost or Credit Determination below and modify the Contract in writing.
- **8.3.2.** The Contractor shall proportionally increase the amount of the Bond whenever the Contract Sum is increased.
- **8.3.3.** If any notice of any change affecting the Contract is required by the provision of the Bond, notice is the Contractor's responsibility.
- **8.3.4.** Except for an adjustment based on defective specifications, no proposal for any change shall be allowed for any costs incurred more than 20 days before the Contractor gives written notice as required.
 - **8.3.4.1.** In the case of defective specifications for which GDPM is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specification.
- **8.3.5.** The Contractor must assert its right to an adjustment within 30 days after:
 - **8.3.5.1.** Receipt of a written change order, or
 - **8.3.5.2.** The furnishing of a written notice by submitting a written statement describing the general nature and the amount of the proposal.
- **8.3.6.** If the facts justify it, GDPM may extend the period for submission.

8.4. Change Directive

- **8.4.1.** Notwithstanding Form HUD-5370 Article 29(b), Parties agree that Change Order Directives may be utilized during the course of the Work.
- **8.4.2.** A Change Directive is a written order prepared by GDPM directing a change in the Work and may, if necessary, state a proposed basis for adjustment, if any, of Contract Sum or Contract Time, or both.
- **8.4.3.** A Change Directive shall be used to direct a change in the Work in the absence of a total agreement on the terms of a Change Order and shall only be used in the absence of total agreement on the terms of a Change Order concerning the associated change of the Work.
- **8.4.4.** Upon receipt of a Change Directive, the Contractor shall promptly proceed with the change in the Work involved.
- 8.4.5. Within 14 days after receiving the Change Directive, the Contractor shall respond with a

Change Order Proposal for adjustment of the Contract Sum or Contract Time or both.

- **8.4.6.** If the Contractor does not respond to the Change Directive as required above, GDPM shall determine the adjustments, if any, of the Contract Sum and Contract Times.
 - If the Contractor does not agree with GDPM's determination, the Contractor shall initiate a claim within 10 days of the date on which GDPM issues the determination, and the Contractor's failure to do so shall constitute an irrevocable waiver the Claim.
- **8.4.7.** If GDPM and the Contractor agree on the adjustment of the Contract Sum and Contract Time associated with the Change Order Directive, GDPM shall prepare an appropriate Change Order.

8.5. Change Order Procedure

- **8.5.1.** Any Change Order Request must be in writing and submitted by the Contractor to GDPM in accordance with the Notice Provision.
- **8.5.2.** The Contractor's cost of preparing and providing Proposals is included in the Contract Sum.
- **8.5.3.** If GDPM Agrees with Change Order Proposal:
 - GDPM shall prepare each Change Order, attach the supporting documentation, and issue the Change Order to the Contractor for signature.
 - Within 3 days after issuance of Change Order to Contractor, Contractor must sign the Change Order and resubmit to GDPM.
 - Change Order is not approved until GDPM's Contracting Officer signs the Change Order.
- **8.5.4.** If GDPM disagrees with Change Order Proposal or Contracting Officer doesn't approve Change Order:
 - GDPM will notify Contractor in writing with reasons; and
 - Contractor has 14 days to modify the Change Order Request or invoke Article Dispute Resolution/Claim Procedure.
 - Failure to reach an agreement on any proposal shall be a dispute under Article Dispute Resolution/Claim Procedure.
- **8.5.5.** Nothing in the change order procedure, however, shall excuse the Contractor from proceeding with the contract change pursuant to an issued Change Directive.

8.6. Change Order Proposal

8.6.1. The Contractor's written proposal for equitable adjustment shall be submitted in the form of a lump sum proposal supported with an itemized breakdown of all increases and decreases in the contract with at least the following details:

8.6.1.1. Direct Costs:

- Materials (list individual items, the quantity and unit cost of each, and the aggregate cost)
- Transportation and delivery costs associated with materials
- Labor breakdowns by hours or unit costs (identified with specific Work to be performed)
- Construction equipment exclusively necessary for the change
- Costs of preparation and/ or revision to shop drawings resulting from the change
- Worker's Compensation and Public Liability Insurance

- Employment taxes under FICA and FUTA
- Bond Costs
- **8.6.1.2.** <u>Indirect Costs</u>: Indirect costs may include overhead, general and administrative expenses, and fringe benefits not normally treated as direct costs.

8.6.1.3. Profit:

- **8.6.1.3.1.** The amount of profit shall be negotiated and paid in accordance with Section 8.9 *Change Order Cost or Credit Determination* below and may vary according to the nature, extent, and complexity of the work required by the change.
 - The allow-ability of the direct and indirect costs shall be determined in accordance with the Contract Cost Principles and Procedures for Commercial Firms in Part 31 of the Federal Acquisition Regulation (48 CFR 1-31), in effect on the date of this Contract.
 - The Contractor shall not be allowed a profit on the profit received by any subcontractor.
 - Equitable adjustments for deleted work shall include a credit for profit and may include a credit for indirect costs.
 - On proposals covering both increases and decreases in the amount of the contract, the application of indirect costs and profit shall be on the netchange in direct costs for the Contractor or subcontractor performing the Work.
- **8.6.2.** The Contractor shall include in the proposal its request for time extension (if any), and shall include sufficient information and dates to demonstrate whether and to what extent the change will delay the completion of the Contract in its entirety.
- **8.6.3.** GDPM shall act on proposals within 30 days after their receipt, or notify the Contractor of the date such action will be taken. Equitable adjustments shall be made in accordance with Section
 - 8.9 Change Order Cost or Credit Determination below
- **8.6.4.** Failure to reach an agreement on any change order proposal shall be a dispute under the Disputes Article herein. Nothing in this Section, however, shall excuse the Contractor from proceeding with the contract as changed.
- **8.6.5.** By signing a Change Order, the Contractor irrevocably certifies that the elements of a Change Order described herein are completely satisfied, and waives all rights, if any, to seek further adjustment of the Contract Sum or Contract Times, or both, at a later date with respect to the associated change in the Work, including without limitation on account of the "cumulative impact" of the associated change in the Work in combination with one or more of the other changes in the Work.
- **8.6.6.** No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this Contract.
- **8.6.7.** Except in an emergency endangering life or property, as determined by GDPM, no change shall be made by the Contractor without a prior written authorization from GDPM's Contracting Officer. When the Change Order is signed by the Contractor and GDPM's Contracting Officer, the fully executed Change Order modifies the Contract Documents and authorizes and directs the Contractor to proceed, and the Contractor shall promptly proceed

8.7. Differing Site Conditions

- **8.7.1.** The Contractor shall promptly, and before the conditions are disturbed, give a written notice to GDPM of:
 - Subsurface or latent physical conditions at the site which differ materially from those indicated in this contract; or
 - Unknown physical conditions at the site(s), of an unusual nature, which differ
 materially from those ordinarily encountered and generally recognized as inhering
 in work of the character provided for in the Contract. Written notice of the
 condition shall be given immediately to GDPM.
 - The Contractor's failure to give notice of the Differing Site Condition as required shall constitute an irrevocable waiver of any associated claim.
- **8.7.2.** GDPM shall investigate the site conditions promptly after receiving the notice.
 - Work shall not proceed at the affected site, except at the Contractor's risk, until GDPM has provided written instructions to the Contractor.
 - If the conditions do materially so differ and cause an increase or decrease in Contractor's
 cost of, or the time required for, performing any part of the Work under this Contract,
 whether or not changed as a result of the conditions, the Contractor shall file a claim in
 writing to GDPM within ten days after receipt of such instructions and, in any event,
 before proceeding with the Work.
 - An equitable adjustment in the Contract price, the delivery schedule, or both shall be
 made under this Section and in accordance with Section 8.9 Change Order Cost or
 Credit Determination below, and the Contract modified in writing accordingly.
- **8.7.3.** No request by Contractor for an equitable adjustment to the Contract under this Section shall be allowed, unless the Contractor has given the written notice required; provided that the time prescribed for giving such written notice may be extended by GDPM.
- **8.7.4.** No request by Contractor for an equitable adjustment to the Contract under this Section shall be allowed if made after final payment under this contract.
- **8.7.5.** If GDPM determines that the Contractor has not encountered a Differing Site Condition and the Contractor does not agree with that determination, the Contractor must initiate a Claim within 10 days of the date that GDPM issues its determination.

8.8. Minor Changes in the Work

- **8.8.1.** Notwithstanding Form HUD-5370 Article 29(b), GDPM may order minor changes in the Work not involving adjustment of the Contract Sum or extension of the Contract Times and not inconsistent with the intent of the Contract Documents.
 - Such changes shall be effected by written order ("no cost change order") issued to the Contractor.
- **8.8.2.** The Contractor shall promptly carry out each order for a minor change in the Work if the Contractor agrees that the order does not involve adjustment of the Contract Sum and Contract Times.
- **8.8.3.** If the Contractor reasonably believes that it would be entitled to an adjustment of the Contract Sum or Contract Times, or both, on account of an order for a minor change in the Work, the Contractor, within 3 business days after receiving the order, shall give GDPM written notice of the Contractor's position, and not proceed with the subject Work without

first receiving a Change Order related to it.

- **8.8.4.** The Contractor waives its right to an adjustment of the Contract Sum or Contract Times on account of an order for a minor change in the Work by:
 - a. Starting the Work that is the subject of the order for a minor change in the Work; or
 - **b.** Failing to give the notice described herein within 3 business days after receiving the order for a minor change in the Work.

8.9. Change Order Cost or Credit Determination

- **8.9.1.** Notwithstanding any provisions set forth in this Section 8.8 *Change Order Cost of Credit Determinations*, the allowability of any direct and indirect costs shall be determined in accordance with the Contract Cost Principles and Procedures for Commercial Firms in Part 31 of the Federal Acquisition Regulation (48 CFR1-31), as implemented by HUD Handbook 2210.18, in effect on the date of this Contract.
- **8.9.2.** The maximum cost or credit resulting from a change in the Work shall be determined as described below.
 - a. Proposals shall include the information required.
 - **b.** A Unit Price Proposal shall only be valid when incorporated into the Contract by Change Order.
 - **c.** The maximum cost or credit includes all compensation for impact costs. However, additional costs for impacts shall not be allowed.
- **8.9.3.** The Contractor shall not assign any portion of the Work to another Person whereby the Contractor would benefit directly or indirectly from the double application of charges for overhead or profit.
- **8.9.4.** GDPM may require notarized invoices for material costs and may audit the records of the Contractor and Subcontractors.
- **8.9.5.** For each change in the Work, the Contractor shall furnish a detailed Proposal itemized on the Proposal Worksheet Summary Form published by GDPM through which the Contractor shall document the related changes in the Contract Sum.
 - a. Any Subcontractor pricing shall also be itemized on the Proposal Worksheet Summary Form.

8.9.6. Pricing Criteria

- **8.9.6.1.** This Section *Pricing* Criteria establishes the exclusive and maximum amount that GDPM shall pay for any Change Order, including, but not limited to, all amounts for interference with, delay, hindrance, disruption, or impact of the Work
 - a. These Pricing Criteria also govern the value of deduct Change Orders and the Contractor's entitlement to additional compensation or damages through the claims and dispute resolution processes on account of changes in the Work.
- **8.9.6.2.** In order to expedite the review and approval process, Proposals shall be prepared in the categories and order as listed below.

8.9.6.3. Contractor Personnel Costs

- a. The Contractor's on-Site management (including supervision and administrative personnel) are not subject to State or Federal Prevailing Wage Rates.
- b. These costs will be calculated on an hourly basis according to the rates acceptable to GDPM.
- c. In no event will the Contractor be entitled to an increase in the Contract Sum on account of Contractor Personnel Costs unless the Contractor actually incurs

additional Contractor Personnel Costs solely on account of the associated change in the Work.

8.9.6.4. Labor

- a. Field labor directly involved in the Work shall be based upon the actual rate of pay to the worker.
- b. If the Project is subject to payment of prevailing wage rates, field labor shall be paid according to the relevant classification of labor as established in the applicable prevailing wage determination.
- c. In no event will the Contractor be entitled to an increase in the Contract Sum on account of labor costs unless the Contractor actually incurs additional labor costs solely on account of the associated change in the Work.
- d. Under no conditions will the increase exceed those additional labor costs the Contractor actually incurs.
- e. The cost for supervision above the level of working forepersons (such as general forepersons, superintendent, project manager, etc.) is included in the adjustment to Contractor Personnel Costs.

8.9.6.5. <u>Fringes</u>

- a. Fringe benefit credit for labor is only allowable for prevailing wage fringe benefits including, but not limited to, Health and Welfare, vacation, apprenticeship training, and certain types of pension plans.
- b. Each fringe benefit for which credit is requested shall be calculated on an hourly basis and listed as a separate line item.
- c. The Contractor shall submit documentation supporting the calculation of the amounts for each fringe benefit for each worker classification, including labor provided by Subcontractors.
- **8.9.6.6.** <u>Allowable Payroll Expenses:</u> Allowable payroll expenses for labor including payroll taxes as well as other benefits that are required by Applicable Law, shall each be a separate line item.

8.9.6.7. **Equipment Rentals**

- a. All charges for certain non-owned heavy or specialized equipment at up to 100 percent of the documented rental cost
- b. No rental charges shall be allowed for hand tools, minor equipment, simple scaffolds, etc.
- c. Downtime due to repairs, maintenance and weather delays shall not be allowed.
- d. Contractor shall submit copies of actual paid invoices to substantiate rental costs.

8.9.6.8. Owned Equipment

- a. All charges for certain heavy or specialized equipment owned by the Contractor or Subcontractor performing the Work shall be paid at up to 100 percent of the cost listed by the current edition of the Associated Equipment Distributors' *AED Green Book* heavy equipment rental rates.
- b. No recovery shall be allowed for hand tools, minor equipment, simple scaffolds, etc.
- c. The longest period of time that the equipment is to be required for the Work shall be the basis for the pricing.
- d. Downtime due to repairs, maintenance, and weather delays shall not be allowed.

8.9.6.9. <u>Trucking</u>

a. A reasonable delivery charge or per-mile trucking charge for delivery of required

- materials or equipment.
- b. Charges for use of a pick-up truck shall not be allowed.

8.9.6.10. Materials

- a. The actual cost (including all discounts, rebates or related credits) of all materials incorporated into the changed Work.
- b. Documentation shall show costs, quantities, or Unit Prices of all items, as appropriate.
- c. The cost or credit for reusable materials shall be limited to 33 percent of the material cost for each use.

8.9.6.11. Contractor's General Conditions Costs

- a. The Contractor's General Conditions Costs to the extent attributable to an associated change in the Contract Time for achievement of Final Acceptance resulting from the change in Work.
- b. In no event shall the Contract Sum adjustment per day of Contract Time adjustment exceed an amount equal to (1) the sum of the General Conditions Costs line items in the Contractor's Schedule of Values approved by GDPM, (2) divided by the total number of days of the original Contract Time for achievement of Final Acceptance.
- c. The Contractor shall:
 - Exclude the bond premium from the Schedule of Values for the purposes of the calculation; and
 - o Include the actual adjustment of the Bond Premium attributable to an associated change in the Contract Sum.
- d. If the Contractor purchases Builder's Risk insurance for the Project, the Contract shall:
 - Exclude the Builder's Risk insurance premium from the Schedule of Values for the purposes of the calculation; and
 - Include the actual adjustment of the Builder's Risk insurance premium attributable to an associated change in the Contract Sum.

8.9.6.12. Subcontractor Overhead and Profit

- a. Adjustment of the Contract Sum on account of a change in Subcontractor-performed Work shall include the Subcontractor's aggregate overhead and profit allowance equal to 15 percent of the sum of the Subcontractor's costs that are associated with that changed Work.
- b. The allowance applies to each Subcontractor tier.
- c. The allowance covers:
- 1. The costs required to schedule and coordinate the Work
- 2. Telephone
- 3. Telephone charges
- 4. Facsimile
- 5. Telegrams
- 6. Postage
- 7. Photos
- 8. Photocopying
- 9. Hand tools
- 10. Simple scaffolds (one level high)
- 11. Tool breakage

- 12. Tool repairs
- 13. Tool replacement
- 14. Tool blades
- 15. Tool bits
- 16. Home office estimating and expediting
- 17. Home office clerical and accounting support
- 18. Home office labor (management, supervision, engineering)
- 19. All other home office expense, legal services, travel, and parking expenses
- d. An exception is allowed for shop or engineering labor, which shall not be subject to Prevailing Wage rates for steel fabricators, sheet metal fabricators, and sprinkler system fabricators performing work off-site.
 - o Recovery for these matters shall be allowed on an hourly basis.
- e. An exception is allowed for field supervision labor, for those portions of the Change Order Work that will be performed, or was performed, at times when the superintendent is not required to be on site, including but not limited to overtime hours due to acceleration and\ extensions of the Contract Times.
 - Recovery for this matter will be allowed on an hourly basis.
- **8.9.6.13.** Contractor's Fee: Adjustment of the Contract Sum on account of a change in the Work shall include an allowance for the Contractor's Fee equal to 10 percent of the sum of the costs that are associated with that changed Work.

8.9.6.14. Miscellaneous

- a. Adjustment of the Contract Sum on account of a change in Work may include the following costs with no allowance for Contractor's Fee or Subcontractor overhead and profit.
 - The premium portion only for approved overtime (labor and fringes).
 - The straight time portion is included.

8.9.6.15. Costs that shall not be reimbursed for Change Order Work include the following

- b. Voluntary employee deductions including, but not limited to, deductions for charitable donations or U.S. savings bonds
- c. Employee profit sharing

8.10. Time Extension

- **8.10.1.** Contractor's **Change** Order Proposal shall include sufficient information and dates to demonstrate whether and to what extent the change will delay the completion of the Contract in its entirety. Every adjustment of the Contract Times associated with any Change Order Proposal shall be determined as provided herein, which establishes the Contractor's maximum entitlement for any change in the Work, including without limitation all adjustments for interference, delay, hindrance, or disruption of the Work.
- **8.10.2.** This **also** governs time adjustments for deduct Change orders and Contractor's entitlement to additional time through the claims and dispute resolution process on account of changes in the Work.
- **8.10.3.** The Contractor shall substantiate all changes in the Contract Times with:
 - a. A written description of the nature of the interference, disruption, hindrance or

- delay ("disruption or delay");
- b. Identification of Persons and events responsible for the disruption or delay;
- c. Date, or anticipated date, of commencement of the disruption or delay;
- d. Identification of activities by schedule activity number and name on the Construction Progress Schedule, which may be affected by the disruption or delay, or new activities created by the disruption or delay and the relationship with existing activities;
- e. Anticipated duration of the disruption or delay and of any remobilization period;
- f. Specific number of days of extension requested and specific number of days for remobilization requested;
- g. Recommended action to avoid or minimize any future disruption or delay; and
- h. A detailed written proposal for an increase in the Contract Sum which would fully compensate the Contractor for all costs of acceleration of the Work needed to completely overcome the associated delay, if any.
- **8.10.4.** A Change Order may authorize extension of the Contract Time for specific elements, while maintaining milestone dates for unaffected elements. Such a Change Order may also authorize an appropriate adjustment to Liquidated Damages.

8.11. Critical Path

8.11.1. Time extensions shall depend upon the extent to which the Work on the critical path of the Construction Progress Schedule is affected.

8.12. Granting Time Extension

8.12.1. A Change Order granting a time extension may provide that the Contract Times shall be extended for only elements so interfered with, disrupted, hindered, or delayed and related remobilization and that shall not be altered and may further provide for adjustment of Liquidated Damages.

9 ARTICLE IX: DISPUTE RESOLUTION & CLAIM PROCEDURE

9.1. General

- **9.1.1.** "Claim," as used in this Article, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to the contract.
- **9.1.2.** A claim arising under the Contract, unlike a claim relating to the contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant.
- **9.1.3.** A voucher, invoice, application for payment, or other routine request for payment that is not in dispute when submitted is not a Claim. However, the submission may be converted to a Claim by complying with the requirements of this Article, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.
- **9.1.4.** Except for disputes arising under the article entitled Labor Standards Davis Bacon and Related Acts, herein, all disputes arising under or relating to this Contract, including any claims for damages for the alleged breach thereof which are not disposed of by agreement, shall be resolved under this Article.
- **9.1.5.** All Claims by the Contractor shall be made in writing and submitted to GDPM for a written decision.

9.1.6. A claim by GDPM against the Contractor shall be subject to a written decision by the Contracting Officer.

9.2. Initiation of a Claim by Contractor

- **9.2.1.** Every Claim shall accrue upon the date of occurrence of the event giving rise to the Claim.
- **9.2.2.** Except as provided, the Contractor shall initiate every Claim by giving written notice of the Claim to GDPM within fourteen (14) days after occurrence of the event giving rise to the Claim, with the following exceptions:
 - **9.2.2.1.** The 14-day time limit on initiating a Claim arising from the response of an RFI by GDPM begins to run on the date of the response.
 - **9.2.2.2.** The 14-day time limit on initiating a Claim arising from GDPM's determination concerning a Differing Site Condition begins to run on the date of the determination.
 - **9.2.2.3.** Contractor's written notice of claim must be delivered to the Contracting Officer prior to GDPM's issuance of final contract payment.
- **9.2.3.** The Contractor's written notice of a Claim shall provide the following information:
 - **9.2.3.1.** Nature and anticipated amount of the impact, including all costs for any interference, disruption, hindrance, or delay, which shall be calculated and be a fair and reasonably accurate assessment of the damages suffered or anticipated by the Contractor;
 - **9.2.3.2.** Identification of the circumstances responsible for causing the impact, including, but not limited to, the date or anticipated date, of the commencement of any interference, disruption, hindrance, or delay;
 - **9.2.3.3.** Identification of activities on the Construction Progress Schedule that will be affected by the impact or new activities that may be created and the relationship with existing activities;
 - **9.2.3.4.** Anticipated impacts and anticipated duration of any interference, disruption, hindrance, delay, or impact, and any remobilization period; and
 - **9.2.3.5.** Recommended action to avoid or minimize any interference, disruption, hindrance, delay, or impact.
- **9.2.4.** The Contractor's failure to initiate a Claim as and when required shall constitute the Contractor's irrevocable waiver of the Claim.

9.3. Substantiation of Claims General

- **9.3.1.** Within 30 days after the initiation of a Claim, the Contractor shall submit to the project manager or other GDPM designee, an electronic copy of all information and statements required to substantiate a Claim and all other information that the Contractor believes substantiates the Claim.
- **9.3.2.** The Contractor shall file the one electronic copy with GDPM.
- **9.3.3.** The Contractor shall substantiate all of its Claims by providing the following minimum information:
 - A narrative of the circumstances, which gave rise to the Claim, including without limitation the start date of the event or events and the actual or anticipated finish date;
 - Detailed identification of the Work affected by the event giving rise to the Claim;

- Copies of the Contractor's daily log for each day of impact;
- Copies of relevant correspondence and other information regarding or supporting Contractor's entitlement;
- Copies of any and all information related to the Contractor's costs, including all job cost reports, bid take offs, and other financial information related to the Contractor's Claim;
- A notarized certification

9.4. Substantiation of Claims for increase of the Contract Sum

- **9.4.1.** In addition to the minimum information required by Contractor, the Contractor shall substantiate each Claim for an increase of the Contract Sum with:
 - Written documentation of the actual additional direct and indirect costs to the Contractor due to the event giving rise to the Claim;
 - A written statement from the Contractor that the increase requested is the entire increase in the Contract Sum associated with the Claim; and
 - The general substantiation documentation.

9.5. Substantiation of Claims for Extension of the Contract Time

- **9.5.1.** In addition to the minimum information required by Contractor, the Contractor shall substantiate each Claim for an extension of the Contract Times with:
 - Written documentation of the actual delay to the critical path of the Construction Progress Schedule due to the event giving rise to the Claim;
 - A detailed written Proposal for an increase in the Contract Sum that would fully compensate the Contractor for all costs of acceleration of the Work needed to completely overcome the associated delay, A written statement from the Contractor that the extension requested is the entire extension of the Contract Times associated with the Claim; and
 - The general substantiating documentation.
 - In addition, if adverse weather conditions are the basis for a Claim for additional time, the Contractor shall document the Claim with data substantiating that weather conditions were abnormal for the period, could not have been reasonably anticipated, and had an adverse effect on a critical element of the scheduled construction.

9.6. Certification of a Claim

9.6.1. The Contractor shall certify each Claim within 30 days after initiating the Claim or before Contract Completion, whichever is earlier, by providing the notarized certification specified below, signed and dated by the Contractor:

"The undersigned Contractor certifies that the Claim is made in good faith; that the supporting data is accurate and complete to the best of the Contractor's knowledge and belief; that the amount requested is a fair, reasonable, and necessary adjustment for which the Contractor believes that GDPM is liable; and that the undersigned is duly authorized to certify the Claim on behalf of the Contractor."

9.7. Delay and Delay Damage Limitations

- 9.7.1. Subject to other provisions of the Contract, the Contractor will be entitled to an extension of the Contract Times if Contractor demonstrates that delay is "excusable". To be excusable, the delay must be a delay in the commencement or progress of Work on the critical path of the Construction Progress Schedule and shall be caused by acts of unforeseeable nature or the public enemy, acts of the government not arising from the Contractor's failure to comply with Applicable Law, fires, floods, epidemics, weather, and labor disputes beyond the Contractor's control. The delay shall be beyond the control of the Contractor and without fault or negligence of Contractor and shall be unforeseeable prior to submitting a response to the initial solicitation for construction Work.
- **9.7.2.** Notwithstanding any other provision of the Contract Documents to the contrary, the Contractor shall not be entitled to an increase in the Contract Sum, or an extension of the Contract Times, or both:
 - On account of the impact of any normal adverse weather on any of the Work or on account of the impact of any abnormal adverse weather on Work not on the critical path;
 - Unless contractor demonstrates that the event giving rise to the claim caused a delay to the overall completion of the Contract;
 - To the extent that a delay occurs concurrently with a delay attributable to the Contractor; or
 - On account of the delay of any Work not on the critical path.
- **9.7.3.** When the Contractor is prevented from completing any part of the Work on the critical path within the Contract Time due to weather conditions, provided the Contractor properly initiates a Claim, the Contract Time will be extended by one (1) day for each work day lost due to weather that delays Work on the critical path in excess of those in the following table:

Month(s)	Number of Workdays Lost Due To Weather
January & February	8
March	7
April	6
May	5
June - August	4
September	5
October & December	6

- **9.7.4.** Contractor shall not be entitled to an increase in Contract Time and/or Contract Sum for non- delays. Non-excusable delays include, but are not limited to, delays which are foreseeable or preventable by the Contractor (e.g. financial difficulties, supplier delays where supplies are obtainable from other source, defective specifications where defect is apparent prior to start of the Contract Work.).
- **9.7.5.** Notwithstanding any other provision of the Contract Documents to the contrary, the Contractor shall not be entitled to an increase in the Contract Sum or any type of damages on account of a delay in the commencement or progress of Work on the critical path. Such claims may be compensable in limited circumstances and in accordance with the following:
 - **9.7.5.1.** GDPM Ordered Suspension of Work. Increased sum may be permitted for increased costs of performance, excluding profit, for "unreasonable delays", ordered by GDPM.

- **9.7.5.2.** Constructive Suspension of Work: work is prevented by GDPM without express order of Contracting Officer (e.g. delay in issuance of notice to proceed, delay in availability of site, delay due to interference with Contractor's Work, delay of approvals, delay in inspections).
- **9.7.5.3.** If GDPM does not order a Suspension of Work, the delay will generally not be compensable unless Contractor demonstrates that GDPM is solely at fault for the delay (e.g. GDPM implied duty to cooperate).
- **9.7.5.4.** For such delay claims, Contractor must notify GDPM in writing within 14 days of event giving rise to the claim.
- **9.7.5.5.** For such delay claims, potential recovery is limited to:
 - 9.7.5.5.1. Indirect cost increase that occurred during the extended performance period;
 - 9.7.5.5.2. Unabsorbed office overhead that occurred during the extended performance; period
 - 9.7.5.5.3. Material cost increases that occur during the delay;
 - 9.7.5.5.4. Lost productivity caused by the delay;
 - 9.7.5.5.5. Damages directly related to or attributable to the delay.
- **9.7.6.** Notwithstanding any other provision of the Contract Documents to the contrary, the Contractor shall not be entitled to an increase in the Contract Sum or any type of damages arising from a delay in the commencement or progress of Work caused by the occurrence or non-occurrence of an event beyond GDPM's control such as acts of Nature or the public enemy, acts of the government, fires, floods, epidemics, labor disputes, unusual delivery delays, weather, or damages caused by the Contractor.

9.8. Derivative Claims

9.8.1. Notwithstanding any other provision of the Contract Documents to the contrary, if GDPM prosecutes a claim, suit, or appeal against a Separate Consultant or Separate Contractor to recover damages the Contractor suffers on account of the acts or negligent acts of a Separate Consultant or Separate Contractor or person or entity for whom either is legally responsible, GDPM's liability to the Contractor shall not exceed the amount GDPM actually recovers from the Separate Consultant or Separate Contractor on account of those damages less the costs GDPM incurs recovering them. GDPM is not obligated to prosecute any such claim, suit, or appeal.

9.9. Claim Decision

- **9.9.1.** GDPM shall, within 60 (unless otherwise indicated) days after receipt of the request, decide the claim or notify the Contractor of the date by which the decision will be made.
- **9.9.2.** The Contracting Officer's decision shall be final unless the Contractor:
 - Appeals in writing to a higher level at GDPM in accordance with GDPM's policy and procedures;
 - Refers the appeal to an independent mediator or arbitrator; or
 - Files suit in a court of competent jurisdiction. Such appeal(s) must be made within 15 days after receipt of GDPM's decision.

9.9.3. The Contractor shall proceed diligently with performance of the contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of GDPM.

9.10. Audit of a Claim

- **9.10.1.** All Claims shall be subject to audit at any time following filing of the Claim, whether or not the Claim is part of a lawsuit.
- **9.10.2.** The audit may be performed by GDPM staff or by a consultant engaged by GDPM.
- **9.10.3.** The audit may begin upon 10-days' notice to the affected Contractor or affected Subcontractor.
- **9.10.4.** The Contractor shall cooperate with the request.
- **9.10.5.** Failure of the Contractor or Subcontractor to produce sufficient records to allow GDPM to audit and verify a Claim shall constitute an irrevocable waiver of the Claim or portion of the Claim that could not be completely audited.
- **9.10.6.** The Contractor shall make available to GDPM all Contractor and Subcontractor documents related to the Claim including, without limitation, the following documents:
 - 1. Daily time sheets and superintendent's daily reports;
 - 2. Union agreements, if any, and employer agreements;
 - 3. Insurance, welfare, fringes, and benefits records;
 - **4.** Payroll tax returns;
 - **5.** Material invoices, purchase orders, Subcontracts, and all material and supply acquisition contracts;
 - 6. Material cost distribution worksheets;
 - 7. Equipment records (list of Contractor equipment, rates, etc.);
 - 8. Vendor rental agreements and Subcontractor invoices;
 - 9. Subcontractor payment certificates;
 - 10. Canceled checks (payroll and vendors);
 - 11. Job cost report;
 - 12. Job payroll ledger;
 - **13.** General ledger, general journal, (if used) and all subsidiary ledgers and journals together with all supporting documentation pertinent to entries made in these ledgers and journals;
 - 14. Cash disbursements journal;
 - **15.** Financial statements for all years reflecting operations on the Project;
 - **16.** Income tax returns for all years reflecting operations on the Project;
 - **17.** Depreciation records on all equipment utilized whether the records are maintained by the Contractor, its accountant, or others;
 - **18.** If a source other than depreciation records is used to develop costs for the Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all other source documents;
 - 19. All documents that reflect the Contractor's actual profit and overhead

- during the years the Project was being performed;
- **20.** All documents related to the preparation of the Contractor's Bid, including the final calculations on which the Bid was based, unless the documents are placed in escrow under provisions of the Instructions to Bidders;
- **21.** All documents that relate to the Claim together with all documents that support the amount of damages as to the Claim;
- 22. Worksheets used to prepare the Claim establishing the cost components for items of the Claim including, but not limited to, labor, fringes, benefits and insurance, materials, equipment, Subcontractors, and all documents that establish the periods of time, individuals involved, the hours and rate of pay for the individuals; and
- 23. All other documents requested by GDPM to review the Claim.

9.11. False Certification of a Claim

- **9.11.1.** If the Contractor falsely certifies all or any part of a Claim, the portion of the Claim falsely certified shall be denied, and may be sufficient cause for GDPM to exclude Contractor from future contracting opportunities.
- **9.11.2.** The Contractor shall not knowingly present or cause to be presented to GDPM a false or fraudulent Claim. "Knowingly" shall have the same meaning as in the Federal False Claims Act.
- **9.12.** If the Contractor knowingly presents or causes to be presented a false or fraudulent Claim, then the Contractor shall be liable to the GDPM for the same civil penalty and damages as the United States Government would be entitled to recover and shall also indemnify and hold GDPM harmless from all costs and expenses, including GDPM's attorneys' and consultants' fees and expenses incurred in investigating and defending against such Claim and in pursuing the collection of such penalty, damages and fees and expenses.
- **9.13. Claims based upon Defective Specifications**: Contractor may be entitled to compensation for increased costs of performance when increased cost is due to Contractor following GDPM-provided defective design specifications.
 - **9.14.** Claims based on GDPM ordered Change: If the Contracting Officer makes a direct change within the scope of the contract, Contractor may be entitled to an increase in Contract Sum or Time if the change increases or decreases the cost or time of performance. Recovery under this provision is limited to changes by the Contracting Officer or a formally designated representative. Contractor shall not be entitled to compensation for any change ordered by un-designated person even if such person is a GDPM agent or employee. Claims for changes must be asserted within 14 calendar days after written change order.
- **9.15. Claims based upon Differing Site Conditions**: To be compensable, Claims based upon Differing Site Conditions is limited to the following:
 - **9.15.1.** Differing Site Condition must be an actual physical condition of the job site.
 - 9.15.2. Differing Site Condition must have existed at the time of contract commencement
 - **9.15.3.** Differing Site Condition must not have been discoverable during site inspection.
 - **9.15.4.** Differing Site Condition must be of a nature that materially differs from conditions indicated in the information provided by GDPM in the solicitation documents.

- **9.15.5.** Differing Site Condition must be an unknown and unusual condition that differs materially from what is ordinarily encountered on the particular type of Work in the particular locality (it must be unusual for that particular area).
- 9.16. Subcontractor Claims: A subcontractor shall not submit a claim directly to GDPM. Any claim related to a Subcontractor must be brought directly by and certified by the Contractor as if the Claim were brought by the Contractor itself. The Contractor may "sponsor" the Subcontractor Claim only by affirmatively and clearly agreeing to do so in writing and must be expressly permitted in the initial agreement between Contractor and Subcontractor. Any claim falsely certified will subject the Contractor to debarment from future GDPM contracting opportunities.
- **9.17. Initiation of Claim by GDPM:** All GDPM initiated Claims must be presented within eight (8) years of notice of event giving rise to the Claim unless such claim is based upon breach of warranty in which case the term of the warranty shall apply.

10. ARTICLE X: SUSPENSION AND TERMINATION

10.1. Suspension of the Work

- **10.1.1.** The Contracting Officer may order the Contractor in writing to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of GDPM.
- 10.1.2. If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted by an act of GDPM in the administration of this Contract, or by GDPM's failure to act within the time specified (or within a reasonable time if not specified) in this Contract, an adjustment shall be made for any increase in the cost of performance of the Contract (excluding profit) necessarily caused by such unreasonable suspension, delay, or interruption and the Contract modified in writing accordingly.
- **10.1.3.** However, no adjustment shall be made for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor or for which any equitable adjustment is provided for or excluded under any other provision of this Contract.

10.1.4. A claim shall not be allowed:

- For any costs incurred more than 14 calendar days before the Contractor shall have notified GDPM in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order); and
- Unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the suspension, delay, or interruption, but no later than the date of final payment under the Contract.
- **10.1.5.** If GDPM suspends the Work under this Article and the Contractor submits a proper Payment Request, subject to all other provisions of the Contract Documents, the Contractor shall be entitled to payment of compensation due under the Contract Documents for the Work performed before the suspension based upon the Schedule of Values.
- **10.1.6.** GDPM, without prejudice to any other right or remedy it may have, may order the Contractor in writing to suspend, delay, or interrupt the performance of the Work in whole or in part for such period as GDPM may determine for any of the following reasons:
 - Defective Work;

- The Contractor is causing undue risk of damage to any part of the Project or adjacent area;
- The Contractor fails to furnish or perform the Work in such a way that the complete
 Work will conform to the requirements of the Contract Documents; or
- Any other cause GDPM reasonably believes justifies suspension.
- **10.1.7.** GDPM's exercise of its right to suspend the Work shall not entitle Contractor to any adjustment of the Contract Sum, Contract Time or both.
- **10.1.8.** Upon receipt of the notice of suspension, the Contractor shall cease Work on the suspended activities and take all necessary or appropriate steps to limit disbursements and minimize respective costs.
- **10.1.9.** The Contractor shall furnish a report to GDPM within 5 days of receiving the notice of suspension, describing the status of the Work, including, but not limited to, results accomplished, resulting conclusions, and other information as GDPM may require.
- **10.1.10.** GDPM's right to stop the Work shall not give rise to any duty to exercise the right for the benefit of the Contractor or any other party, and GDPM's exercise or failure to exercise the right shall not prejudice any of GDPM's other rights including the right to suspend the Work in the future under the same or similar circumstances.

10.2. Termination for Convenience

- **10.2.1.** GDPM, through the Contracting Officer, may terminate this contract in whole, or in part, whenever the Contracting Officer determines that such termination is in the best interest of GDPM.
- **10.2.2.** Any such termination shall be effected by delivery to the Contractor of a Notice of Termination specifying the extent to which the performance of the work under the contract is terminated, and the date upon which termination becomes effective.
- **10.2.3.** Upon delivery of the Notice of Termination, the Contractor shall immediately proceed with performance of the following duties in accordance with instructions from GDPM:
 - 1. Cease operations as specified in the Notice;
 - 2. Place no further orders and enter into no further subcontracts for materials, labor, services, or facilities, except as necessary to complete continued portions of the Project;
 - 3. Terminate all subcontracts and orders to the extent they are related to the Work terminated;
 - 4. Proceed with Work not terminated; and
 - **5.** Take actions that may be necessary, or that GDPM may direct, for the protection and preservation of the terminated Work.

Failure to do any actions set forth in this Provision (10.2.3), may lead to Contractor's liability for actual damages as a result of Contractor's failure to protect the Work.

- **10.2.4.** If the performance of the work is terminated, either in whole or in part, GDPM shall be liable to the Contractor for reasonable and proper costs resulting from such termination upon the receipt by GDPM of a properly presented claim setting out in detail:
 - 1. The total cost of the work performed to date of termination less the total amount of contract payments made to the Contractor;
 - 2. The cost of settling and paying claims under subcontracts and material orders for

- work performed and materials and supplies delivered to the site, payment for which has not been made by GDPM to the Contractor or by the Contractor to the subcontractor or supplier;
- **3.** The cost of preserving and protecting the work already performed until GDPM or assignee takes possession thereof or assumes responsibility therefore; and
- **4.** An amount constituting a reasonable profit on the value of the work performed by the Contractor.
- **10.2.5.** Unless GDPM deems in writing that additional time is needed for review, GDPM will act on the Contractor's claim within 60 days of receipt of the Contractor's claim.
- **10.2.6.** Any disputes are expressly made subject to the Article titled **Dispute Resolution and Claim Procedure** of this Contract.
- **10.2.7.** If GDPM terminates the Work the termination shall not affect the rights or remedies of GDPM against the Contractor then existing or which may thereafter accrue.
- **10.2.8.** Notwithstanding this Provision **10.2** *Termination for Convenience*, if GDPM terminates the Work but there exists an event of Contractor's default, the Contractor shall be entitled to receive only such amounts as it would be entitled to receive following the occurrence of an event of default as provided for below.

10.3. Termination for Cause/Default

- 10.3.1. If the Contractor materially breaches this Contract, including without limitation, the Contractor refuses or fails to prosecute the work, or any separable part thereof, with the diligence that will insure its completion within the time specified in this Contract, or any extension thereof, or fails to complete said work within this time, GDPM may, by written notice to the Contractor, terminate the right to proceed with the work (or separable part of the work) that has been delayed. Other examples of material breaches of the Contract include but are not limited to:
 - Refusal to remedy defective work;
 - Failure to supply enough properly skilled workers or proper materials;
 - Failure to provide revised Construction Progress Schedule or Recovery Plan;
 - Failure to properly make payment to Subcontractors or Consultants; or
 - Disregarding laws, ordinances, or rules, regulations, or orders of a public authority with jurisdiction over the Project.
- **10.3.2.** In the event of a Termination under this Provision, GDPM may take over the work and complete it, by contract or otherwise, and may take possession of and use any materials, equipment, and plant on the work site necessary for completing the work.
- **10.3.3.** The Contractor and its sureties shall be liable for any damage to GDPM resulting from the Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by GDPM in completing the Work.
- 10.3.4. In accordance with the Ohio Revised Code, if GDPM intends to exercise its termination right, GDPM shall issue not less than 5 days written notice ("5-Day Notice") to the Contractor and the Contractor's Surety. However, notwithstanding any provision of the Contract to the contrary, the issuance of the 5-Day Notice is not a condition precedent to GDPM's exercise of its rights and GDPM's decision to not issue a 5-Day Notice will not

- prejudice GDPM's rights under this Contract.
- **10.3.5.** If the Contractor fails to satisfy the requirements set forth in the 5-Day Notice within 15 days of receipt of the 5-Day Notice or as otherwise specified in the Notice, GDPM may declare the Contractor in default, terminate the Contract, and employ upon the Work the additional force or supply materials or either as appropriate, and remove Defective Work.
- **10.3.6.** If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the Parties will be the same as if the termination had been for convenience of GDPM.
- **10.3.7.** If the Contract is terminated, the Contractor's Surety may perform the Contract. Contractor and its Surety are subject to the following provisions and Contractor shall ensure the following provisions are contained within the Agreement between the Surety and Contractor regarding the Work that is the subject of this Contract.
 - **10.3.7.1.** If the Contractor's Surety does not commence performance of the Contract within 10 days of the date of Contract termination, GDPM may complete the Work by means that GDPM deems appropriate.
 - **10.3.7.2.** GDPM may take possession of and use all materials, facilities, and equipment at the Site or stored off-site, for which GDPM has paid.
 - **10.3.7.3.** If GDPM notifies the Contractor's Surety that the Contractor is in default or terminates the Contract, the Surety shall promptly and in not less_more than 21 days complete an investigation of the claimed material default or termination.
 - **10.3.7.4.** As part of such investigation, the Surety shall visit the offices of the Contractor, A/E and GDPM to review the available project records.
 - **10.3.7.5.** If the Surety proposes to take over the Work, the Surety shall do so no later than the expiration of such 21 day period or 10 days after the date GDPM terminates the Contract, whichever is later.
 - **10.3.7.6.** If GDPM terminates the Work, and the Surety proposes to provide a replacement contractor, the replacement contractor shall be fully capable of performing the Work in accordance with the Contract Documents, including meeting all the requirements of the Contract Documents. If the Contractor is terminated, the replacement contractor shall not be the Contractor.
 - **10.3.7.7.** The surety shall provide GDPM with the results of its investigation, including any written report or documents.
 - **10.3.7.8.** Termination for Cause/Default is in addition to GDPM's other rights under the Contract Documents and is not intended to create any rights of the Surety, including but not limited to the right to take over the Contractor's obligations.
 - 10.3.7.9. If the Contract is terminated for cause, the Contractor shall not be entitled to further payment. If the unpaid balance of the Contract Sum exceeds the costs of finishing the Work, including without limitation the fees and charges of engineers, architects, attorneys, and other professionals and court costs, and other damages incurred by GDPM and not expressly waived, the Contractor or Surety shall immediately pay the amount of insufficiency to GDPM.
 - **10.3.7.9.1.** This obligation for payment shall survive termination of the Contract.
 - **10.3.7.10.** If the Contractor's Surety performs the Work, the provisions of the Contract Documents govern the Surety's performance, with the Surety in place of Contractor

in all provisions including, but not limited to, provisions for payment for the Work, and provisions of the right of GDPM to complete the Work.

- **10.4.** If GDPM terminates the Contract, the termination shall not affect any rights or remedies of GDPM against the Contractor then existing or which may thereafter accrue.
- **10.5.** GDPM's retention or payment of funds due to the Contractor shall not release the Contractor or the Contractor's Surety from liability for performance of the Work in accordance with the Contract Documents.

10.6. Contractor Insolvency

- 10.6.1. Bankruptcy o/ Contractor: If the Contractor files a voluntary petition in bankruptcy or has an involuntary petition in bankruptcy filed against it, the Contractor, the Contractor as the debtor-in- possession, or the trustee of the Contractor's bankruptcy estate shall notify GDPM in writing within 5 days of such filing and file a motion to assume or reject the Contract within 20 days after the filing of the petition and shall diligently prosecute that motion to conclusion so as to obtain an order granting or denying that motion within 45 days after the filing of the petition.
 - The failure to file and prosecute that motion Contractor shall constitute a material breach of the Contract as time is of the essence with respect to Contractor's performance of all terms of this Contract.
 - The Contractor agrees to the granting of relief from the automatic stay of the Bankruptcy Code, to permit GDPM to terminate the Contract for cause in such instance and issue and serve all notices necessary to terminate the Contract or arising out of termination of the Contract and to take any other action necessary to terminate the Contract.
- 10.6.2. Receivership or Assignment /or the Bene/it o/ Creditors: If the Contractor makes a general assignment for the benefit of creditors or if a receiver is appointed for all or a substantial part of Contractor's business or property, GDPM shall serve written notice to the Contractor and Contractor's Surety stating that any failure of the Contractor to provide adequate assurance of continued performance shall be considered a rejection of the Contract, which shall result in termination of the Contract for cause.
 - Such termination of the Contract need not be evidenced by an order of any court
- **10.7.** A Contractor's right to Proceed shall not be terminated for Cause or the Contractor charged with damages under this the Provisions for Termination for Cause/ Default as set forth above if:
 - **10.7.1.** The delay in completing the Work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include
 - 1. Acts of God, or of the public enemy;
 - 2. Acts of GDPM or other governmental entity in either its sovereign or contractual capacity,
 - 3. Acts of another contractor in the performance of contract with GDPM;
 - 4. Fire;
 - 5. Floods;
 - 6. Epidemics;
 - 7. Quarantine restrictions;

- 8. Strikes;
- 9. Freight embargos;
- 10. Unusually severe weather; or
- 11. As determined by GDPM, delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of either the Contractor or Subcontractors and suppliers.
- **10.7.2.** The Contractor, within 10 days from the beginning of such delay as set forth in this Provision, unless otherwise extended by GDPM, shall notify GDPM in writing of the causes of delay.
- **10.7.3.** GDPM's Contracting Officer shall ascertain the facts and extent of the delay.
- **10.7.4.** If in the judgment of GDPM's Contracting Officer, the findings of fact warrant such action, time for completing the Work shall be extended by written modification to the Contract. The findings of fact of the Contracting Officer shall be reduced to a written decision which shall be subject to the provisions of the Article titled Dispute Resolution and Claim Procedure.

11 ARTICLE XI: CONSTRUCTION CLOSEOUT

11.1. Final Cleaning

- **11.1.1.** Before requesting the Substantial Completion inspection of the Work, the Contractor shall clean the Site, remove waste materials and rubbish attributable to the Project, and restore the property to an acceptable condition so that upon Substantial Completion, the premises site is ready for occupancy by GDPM.
- **11.1.2.** If the Contractor performs any Work after final cleaning, the Contractor shall clean the affected area as provided above so that upon Substantial Completion, the premises site is ready for occupancy by GDPM.
- **11.1.3.** Final cleaning shall be done to the reasonable satisfaction of GDPM.

11.1. Inspection and Construction of the Work

- **11.1.1.** The Contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the Work performed under the Contract conforms to all Contract requirements.
- **11.1.2.** All Work is subject to GDPM inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the Contract.
- 11.1.3. GDPM inspections and tests are for the sole benefit of GDPM and shall not:
 - Relieve the Contractor of responsibility for providing adequate quality control measures;
 - Relieve the Contractor of responsibility for loss or damage of the material before acceptance;
 - Constitute or imply acceptance; or
 - Affect the continuing rights of GDPM after acceptance of the completed work.
- **11.1.4.** The presence or absence of the GDPM inspector does not relieve the Contractor from any Contract requirement. And, the inspector is not authorized to change any term or condition of the specifications without the Contracting Officer's written authorization.
- 11.1.5. All instructions and approvals with respect to the work shall be given to the Contractor by

- GDPM and shall be in writing.
- **11.1.6.** The Contractor shall promptly furnish, without additional charge, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by GDPM.
- **11.1.7.** GDPM may charge to the Contractor any additional cost of inspection or test when work is not ready at the time specified by the Contractor for inspection or test, or when prior rejection makes re-inspection or retest necessary.
- **11.1.8.** GDPM shall perform all inspections and tests in a manner that will not unnecessarily delay the work. Special, full size and performance tests shall be performed as described in the Contract Documents.

11.2. Routine Inspections

- **11.2.1.** At its discretion, GDPM may conduct routine inspections of the construction Site on a daily basis.
- **11.2.2.** The Contractor shall, without charge, replace or correct Work found by GDPM not to conform to contract requirements, unless GDPM decides that it is in its interest to accept the Work with an appropriate adjustment in Contract Sum.
- **11.2.3.** The Contractor shall promptly segregate and remove rejected material from the premises.
- 11.2.4. If the Contractor does not promptly replace or correct rejected Work, GDPM may:
 - **11.3.4.1.** By Contract or otherwise, replace or correct the Work and charge the cost to the Contractor; or
 - **11.3.4.2.** Terminate for default the Contractor's right to proceed.
- **11.2.5.** If any work requiring inspection is covered up without approval of GDPM, it must, if requested by GDPM, be uncovered at the expense of the Contractor.
- **11.2.6.** If at any time before final acceptance of the all Work, GDPM considers it necessary or advisable, to examine Work already completed by removing or tearing it out, the Contractor, shall on request, promptly furnish all necessary facilities, labor, and material.
 - If such Work is found to be defective or nonconforming in any material respect due to the fault of the Contractor or its subcontractors, the Contractor shall defray all the expenses of the examination and of satisfactory reconstruction.
 - If, however, such Work is found to meet the requirements of the Contract, GDPM shall make an equitable adjustment to cover the cost of the examination and reconstruction, including, if completion of the Work was thereby delayed, an extension of time.

11.3. Substantial Completion

11.3.1. Contractor's Punch List

- When the Contractor considers the Work, or a designated portion thereof, Substantially Complete, the Contractor shall inspect the Work and prepare a list of Defective Work and incomplete or unacceptable Work ("Contractor's Punch List").
- **2.** The Contractor shall list all items of Work not in compliance with the Contract Documents, including items the Contractor is requesting to be deferred.
- 3. The Contractor shall proceed to correct all items listed on the Contractor's Punch List

- and certify that the incomplete items listed on the Contractor's Punch List are to its knowledge an accurate and complete list by signing the Contractor's Punch List.
- **4.** The Contractor's failure to include an item on the Contractor's Punch List shall not alter the Contractor's responsibility to complete the Work in accordance with the Contract Documents.
- **5.** The Contractor shall submit the signed Contractor's Punch List to GDPM together with a request for a Substantial Completion inspection of the Work.

11.3.2. Substantial Completion Inspection

- The Contractor shall notify GDPM, in writing, as to the date when, in its opinion, all
 or a designated portion of the Work will be substantially completed and ready for
 inspection.
- 2. If GDPM and/or the A/E determine that the state of preparedness is as represented, GDPM will promptly arrange for the inspection.
- 3. Unless otherwise specified in the Contract, GDPM shall accept, as soon as practicable after completion and inspection, all work required by the Contract or that portion of the Work that GDPM determines and designates can be accepted separately.
- **4.** Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or GDPM's right under any warranty or guarantee.
- 5. Within 3 business days after receipt of the request for the Substantial Completion inspection of the Work, GDPM shall notify the Contractor of acceptance or rejection of the request, stating reasons for any rejection.
- 6. Within 7 days after its acceptance of the Contractor's request, GDPM and/or the A/E shall conduct the Substantial Completion inspection to determine whether the Work, or designated portion, is in conformity with the Contract Documents and Substantially Complete.
- 7. If GDPM and/or the A/E determines that the Work is Substantially Complete, within 3 business days after the Substantial Completion inspection, GDPM and/or the A/E shall prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion and include a list of Defective, incomplete, or unacceptable Work ("GDPM's Punch List").
- 8. GDPM's Punch List shall include:
 - The items on the Contractor's Punch List that are not yet completed or corrected as of the date of the Substantial Completion inspection; and
 - Comments from GDPM.
- **11.3.3.** GDPM shall submit the Certificate of Substantial Completion to the Contractor for their written acceptance.
- **11.3.4.** Upon their acceptance and consent of the Contractor's Surety, and subject to GDPM's right to withhold payment, GDPM shall release retainage.
- **11.3.5.** GDPM and/or the A/E's failure to include an item on GDPM's Punch List shall not alter the Contractor's responsibility to complete the Work in accordance with the Contract Documents.
- 11.3.6. If GDPM subsequently determines that the Work is not Substantially Complete, GDPM

may request compensation for related expenses.

- GDPM may deduct the additional expenses from payments then or thereafter due the Contractor.
- If payments then or thereafter due the Contractor are not sufficient to cover those amounts, the Contractor shall immediately pay the amount of the insufficiency to GDPM.

11.3.7. Completion o/ Punch List Items

- **1.** The Contractor shall complete all items on GDPM's Punch List prior to date of Final Contract Completion.
- **2.** After completing all items on GDPM's Punch List, the Contractor shall provide a written request for Final Inspection of the Work.
- **3.** If Work on the Punch List cannot be timely completed, the Contractor shall submit a change order in accordance with the provisions of this Contract.
- **4.** Within 3 business days after receipt of the request for the Final Inspection of the Work, GDPM and/or the A/E shall complete a Final Inspection of the Work for compliance with the Contract Documents.
- 5. If multiple inspections of items on GDPM's Punch List are required due to the Contractor's failure to properly and timely complete them, the Contractor shall pay any additional costs incurred by the A/E and GDPM resulting from any attendant delay.
- **6.** GDPM may deduct those additional costs from payments then or thereafter due the Contractor. If payments then or thereafter due the Contractor are not sufficient to cover those amounts, the Contractor shall immediately pay the amount of the insufficiency to GDPM.

11.4. Demonstration and Training, Operating Appurtenances

- **11.4.1.** The Contractor, as a condition precedent to execution of the Certificate of Contract Completion and final payment, shall perform demonstration and training of GDPM's maintenance staff and other staff as requested by GDPM.
- **11.4.2.** The Contractor, as a condition precedent to execution of the Certificate of Contract Completion and final payment, shall organize and submit operating appurtenances and loose items related to operation and maintenance of the completed Project to GDPM, including, but not limited to:
 - Keys to door and window hardware, panels, and other devices not directly provided to GDPM from the manufacturer;
 - Operating handles, levers, cranks, specialized wrenches or drivers, remote controls, and similar items; and
 - Extra materials (e.g., attic stock).

11.5. Acceptance of Defective Work

- **11.5.1.** Defective Work may only be knowingly accepted by GDPM in writing instead of GDPM requiring its removal or correction, in which case the Contract Sum must be equitably reduced to account for the reduction in benefit of the Work received by GDPM on account of the Defective Work.
- 11.5.2. GDPM may only accept Defective Work though a deduct Change Order that makes

- **11.5.3.** None of the following will constitute acceptance of Defective Work, a release of the Contractor's obligation to perform the Work in accordance with the Contract, or a waiver of any rights set forth in the Contract or otherwise provided by Applicable Law:
 - 1. Observations or inspections by GDPM or the A/E;
 - 2. The making of any payment;
 - 3. Substantial Completion or the issuance of a Certificate of Substantial Completion;
 - 4. Partial Occupancy and GDPM's use or occupancy of the Work or any part of it;
 - 5. Contract Completion or the issuance of a partial or final Certificate of Contract Completion;
 - **6.** Any review or approval of a submittal;
 - 7. Any inspection, test, or approval by other Persons; or
 - 8. Any correction of Defective Work by GDPM.

11.6. Building Commissioning

- **11.6.1.** If the Project scope includes building commissioning, the Contractor shall participate in the Commissioning Process, as prescribed in the Contract Documents.
- **11.6.2.** The Contractor shall permit the A/E, GDPM, or a third-party Commissioning Agent ("CxA") if applicable, access to commission performance based equipment, fixtures, and/or systems (e.g., HVAC, fire protection, smoke evacuation, fume hoods, emergency power, etc.), prior to Substantial Completion.
- **11.6.3.** The A/E, GDPM, or CxA, if applicable, shall promptly notify, in writing, the Contractor of any deficiency identified during the Commissioning Process.
- **11.6.4.** To facilitate the Commissioning Process, the Contractor shall submit 4 sets of Operation and Maintenance manuals for dynamic and engineered systems to GDPM and CxA, if applicable, for approval. This submission shall occur within 30 days of obtaining approval of all related Contractor submittals required by the Contract Documents.

11.7. Partial Contract Completion

- **11.7.1.** When items of Work cannot be completed until a subsequent date, GDPM shall prepare a partial Certificate of Contract Completion that shall include a detailed list of the deferred Work and the date(s) by which the Contractor will complete that Work.
- **11.7.2.** GDPM shall submit the partial Certificate of Contract Completion to Contractor for their written acceptance. Upon their acceptance of the partial Certificate of Contract Completion and consent of the Contractor's Surety, GDPM may release payment to the Contractor, as determined in the sole discretion of GDPM.

11.8. Final Contract Completion

- **11.8.1.** When all items on GDPM's Punch List have been completed to the satisfaction of GDPM, all requirements of the Contract Documents have been completed, and the provisions have been fulfilled, GDPM shall prepare and recommend execution of final Contract payment.
- **11.8.2.** The date that GDPM executes the final Contract payment is the date of Contract Completion.

- **11.8.3.** Nothing in Contract Completion shall constitute a waiver of GDPM's ability to pursue damages as the result of any breach of the Contract by the Contractor or Liquidated Damages.
- **11.9. Partial Occupancy**: if the building authority with jurisdiction over the project issues a partial certificate of occupancy, GDPM may occupy or use a portion of the Project prior to Contract Completion. The Contractor shall be relieved of the obligation to maintain the area accepted for partial Occupancy, but shall remain obligated to complete and correct the Work and to carry insurance as required by the Contract Documents during performance of any such Work.

12. Article XII: Warranty

12.1. Warranty of Title: Contractor warrants good title to all materials, supplies, and equipment incorporated in the Work and agrees to deliver the premises together with all improvements thereon free from any claims, liens or charges, and agrees further that neither it nor any other person, firm or corporation shall have any right to a lien upon the premises or anything appurtenant thereto.

12.2. Warranty of Construction

- **12.2.1.** Contractor warrants to GDPM that all materials and equipment furnished under this Contract shall be new and of good quality unless otherwise required or permitted by the Contract Documents. In addition, Contractor warrants that work performed under this Contract conforms to the contract requirements and is free of any defect in equipment, material, or workmanship performed by Contractor or any subcontractor or supplier at any tier.
 - **a.** This warranty shall continue for a period of one-year from the date of final acceptance of the Work.
 - **b.** If GDPM takes possession of any part of the Work prior to final acceptance, this warranty shall continue for a period of one year from the date GDPM takes possession.
 - c. Work not conforming to the requirements, including Substitutions not properly approved and authorized, may be considered Defective Work.
 - d. If Contractor or a Subcontractor recommends a particular product, material, system, or item of equipment for incorporation into the Project and GDPM accepts that recommendation, the above warranty includes a warranty from Contractor to GDPM that the recommended product, material, system, or item of equipment is fit and appropriate for the associated purpose.
 - **e.** If required by GDPM, Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.
- **12.2.2.** Contactor shall remedy, at Contractor's expense, any failure to conform, or any defect. Further, Contractor shall remedy, at Contractor's expense, any damage to GDPM-owned or controlled real or personal property when the damage is the result of: (1) Contractor's failure to conform to contract requirements; or (2) any defects of equipment, material, workmanship or design furnished by Contractor.
- **12.2.3.** Contractor shall restore any work damaged in fulfilling the terms and conditions of Warranty of Construction. Contractor's warranty with respect to work repaired or replaced will run for not less than one year of repair or replacement.
- 12.2.4. GDPM shall notify Contractor, in writing, within a reasonable time after the discovery of

- any failure, defect or damage. If Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, GDPM shall have the right to replace, repair or otherwise remedy the failure, defect, or damage at Contractor's expense.
- **12.2.5.** With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, Contractor shall:
 - a. Obtain all warranties that would be given in normal commercial practice;
 - b. Require all warranties to be executed in writing, for the benefit of GDPM; and
 - c. Enforce all warranties for the benefit of GDPM.
- **12.2.6.** In the event Contractor's warranty under this provision has expired, GDPM may bring suit to enforce a subcontractor's or manufacturer's or supplier's warranty.
- **12.2.7.** Unless a defect is caused by the negligence of the Contractor or its subcontractor or supplier at any tier, Contractor shall not be liable for the repair or defect of material or design furnished by GDPM or for the repair of any damage that results from any defect in GDPM furnished material or design.
- **12.2.8.** Notwithstanding any provisions herein to the contrary, the establishment of time periods in this Article relate only to the specific obligation of the Contractor to correct the work and have no relationship to the time within which its obligation to comply with the contract may be sought to be enforced, or to the time within which proceedings may be commenced to establish Contractor's liability with respect to its obligations other than specifically to correct the work.
- **12.2.9.** This Warranty shall not limit GDPM's rights under the Inspection and Acceptance of Construction related provisions within this Contract with respect to latent defects, gross negligence or fraud.
- **12.3. Warranty Walk-through Contractor:** At GDPM's request, Contractor shall perform a walkthrough of the property no earlier than three months prior to the expiration of any Warranty. If Contractor is unavailable for the warranty walk-thru, the warranty shall be extended until the time Contractor is available.
- **12.4.** All warranties, including but not limited to, material, equipment and special warranties and warranties otherwise required by the Contract Documents shall be issued in the name of GDPM, or shall be transferrable to GDPM and shall commence, unless otherwise indicated in the Contract Documents, upon issuance of certification of substantial completion.

13 Article XII: Bonds and Insurance

13.1. Bid Bond/Guaranty

- **13.1.1.** The Contractor shall provide to GDPM a bid guaranty in the form of either: (1) a bond for 10% of the bid; or (2) a certified check, cashier's check or letter of credit revocable only at the option of GDPM and shall be in the amount of 10% of the bid.
- **13.1.2.** The bid guaranty shall be conditioned to provide that Contractor will, after award, enter into a contract with GDPM in accordance with the bid, plans, details, and specifications.

- **13.1.3.** If the bidder fails to enter into the Contract and GDPM awards Contract to next lowest bidder, the bidder and the surety on the bidder's bid are liable to GDPM for the lessor of either:
 - The difference between the bid and that of the next lowest bidder; or
 - For a penal sum in the amount of 10% of the bid.
- **13.1.4.** If GDPM does not award the Contract to the next lowest bidder but resubmits the Project for bidding, the bidder failing to enter into the Contract and the surety on the bidder's bond are liable to GDPM for a penal sum not to exceed 10% of the amount of the bid.
- **13.1.5.** Where GDPM accepts a bid but the bidder fails or refuses to enter into a proper contract in accordance with the bid, plans, details, and specifications within ten days after Notice of Intent, the bidder and surety on any bond are liable for the amount of the difference between the bidder's bid and the next lowest bidder.
- **13.1.6.** All bid guaranties shall be payable to GDPM, be for the benefit of GDPM and be deposited with GDPM.

13.2. Payment and Performance Bond

- 13.2.1. Contract Commencement does not occur until GDPM receives a Payment and Performance Bond
- **13.2.2.** Contractor must, within 10 days of GDPM's delivery of signed Contract to Contractor, unless otherwise specified by GDPM in writing, deliver to GDPM a payment and performance bond with a penal sum in the amount of 100% of the Contract Sum (which includes all acceptable alternates).
- **13.2.3.** The payment and performance bond must contain a condition that indemnifies GDPM against all damages suffered by Contractor's failure to perform the Contract according to the provisions and in accordance with the plans, details, and specifications and to pay all lawful claims of subcontractors, material suppliers, and laborers for labor performed or material furnished in carrying forward, performing or completing the Contract.
- **13.2.4.** The bond shall be obtained from companies holding certificates of authority as acceptable sureties and shall be listed on the U.S. Treasury Circular 570 (T-List).
 - **13.2.4.1.** Each company shall be licensed to do business in Ohio and satisfactory to GDPM.
 - **13.2.5.** The Contractor shall submit with the executed Bond:
 - **13.2.5.1.** A certified copy of the authority to act (power of attorney) of the agent signing the Bond on behalf of the Surety, and
 - **13.2.5.2.** A current signed Certificate of Compliance issued by the Ohio Department of Insurance demonstrating that Surety is licensed to do business in Ohio.
 - **13.2.6.** If the Contract Sum increases at any time such that it exceeds the sum of the Bond, the Contractor shall cause the penal sum of the Bond to be increased such that the sum equals one-hundred percent (100%) of the increased Contract Sum.
 - **13.2.7.** Any time Contractor increases the sum of the Bond, the Contractor shall deliver to GDPM written consent of the affected Surety confirming the increased sum. GDPM's receipt of that written consent is a condition precedent to GDPM's obligation to pay the Contractor for any portion of the Work associated with the increase.
 - **13.2.8.** If notice of any change affecting the Contract is required by any Surety or by the provision of any Bond, the Contractor shall provide that notice.

13.3. Form of Bond: All bonds and guarantees must be provided for on a form deemed acceptable by GDPM and must be drafted and executed in accordance with all HUD and State of Ohio requirements. Unless otherwise so indicated, Contractor shall use GDPM's Bond Forms.

13.4. General Insurance Requirements

- **13.4.1.** Prior to commencing Work, Contractor and each subcontractor shall furnish GDPM with certificates of insurance demonstrating coverage that meets the Minimum Contractor Coverage Requirements as outlined below is in full force and will insure all operations sunder the Contract.
- **13.4.2.** Throughout the performance of the Work or longer as may be described below, Contractor and each Subcontractor shall obtain, pay for and keep in force, the minimum insurance coverage.
- **13.4.3.** On a case-by-case basis, GDPM and Contractor may agree to adjust the below requirements for any particular subcontractor.
- **13.4.4.** All insurance shall be carried with companies which are financially responsible and admitted to do business in the State of Ohio.
- **13.4.5.** If any such insurance is due to expire during the construction period, Contractor (including subcontractors, as applicable) shall not permit the coverage to lapse and shall furnish evidence of coverage to GDPM.
- **13.4.6.** All certificates of insurance, as evidence of coverage, shall provide that no coverage may be canceled or non-renewed by the insurance company until at least 30 days prior written notice has been given to GDPM.

13.5. Minimum Contractor Coverage Requirements

- **13.5.1.** *Workers' Compensation:* The amount of Workers' Compensation coverage shall be in accordance with the State of Ohio Workers' Compensation laws.
- **13.5.2.** *Commercial General Liability:* With a combined single limit for bodily injury and property damage of not less than \$1,000,000 per occurrence unless otherwise specified by GDPM in writing, to protect Contractor and each subcontractor against claims for bodily injury or death and damage to the property of others. This shall cover the use of all equipment, hoists, and vehicles on the site(s) not covered by Automobile Liability.
 - **13.5.2.1.** If Contractor has a "claims made" policy, then the following additional requirements apply: (1) the policy must provide a "retroactive date" which must be on or before the execution date of the Contract; and (2) the extended reporting period may not be less than five years following the completion date of the Contract.
- **13.5.3.** *Employers Liability Coverage:* Unless otherwise specified by GDPM in writing, Contractor shall maintain employer's liability coverage with:
 - **13.5.3.1.** An each accident limit of not less than \$1,000,000;
 - **13.5.3.2.** A disease each-employee limit of not less than \$1,000,000; and
 - **13.5.3.3.** A disease policy limit of not less than \$1,000,000.
- **13.5.4. Automobile Liability:** On owned and non -owned motor vehicles used on the site(s) or in connection therewith for a combined single limit for bodily injury and property damage of not less than \$ 1,000,000 per occurrence.

- **13.5.5.** *Builder's Risk Insurance:* Before commencing Work, Contractor shall furnish GDPM with a certificate of insurance evidencing that Builder's Risk (fire and extended coverage) Insurance on all work in place and/or materials stored at the building site(s), including foundations and building equipment, is in force.
 - **13.5.5.1.** The Builder's Risk Insurance shall be for the benefit of the Contractor and GDPM as their interests may appear and each shall be named in the policy or policies as an insured.
 - **13.5.5.2.** If installing equipment supplied by GDPM, Contractor shall carry insurance on such equipment from the time Contractor takes possession thereof until the Contract work is accepted by GDPM.
 - **13.5.5.3.** The Builder's Risk Insurance need not be carried on excavations, piers, footings, or foundations until such time as work on the superstructure is started. Builder's Risk coverage need not be carried on landscape work.
 - **13.5.5.4.** Policies shall furnish coverage at all times for the full cash value of all completed construction, as well as materials in place and/or stored at the site(s), whether or not partial payment has been made by GDPM.
 - **13.5.5.5.** Contractor may terminate this insurance on buildings as of the date taken over for occupancy by GDPM.
 - **13.5.5.6.** The amount of Builder's Risk coverage shall not be less than the total completed value of the Project, including the value of permanent fixtures and decorations, with a deductible of not more than \$25,000 per occurrence. Any deductible over the amount specified in this provision shall be authorized in writing by GDPM.
 - **13.5.5.7.** Coverage shall include a provision to pay the reasonable extra costs of acceleration and expediting temporary and permanent repairs to, or permanent replacement of, damaged property.
 - **13.5.5.8.** This shall include overtime wages and the extra costs of "express" or other means of expedited transportation and/or delivery of supplies necessary to the repair of replacement.
 - **13.5.5.9.** Coverage shall include "soft costs endorsement" including, but not limited to, the reasonable extra costs of the A/E and reasonable Contractor extension or acceleration costs.
 - **13.5.5.10.** Coverage shall include material in transit or stored in off-site and identified for the Project.
 - **13.5.5.11.** Coverage shall waive all rights between GDPM, Contractor, and Subcontractors at any tier, for damages caused by fire or any other perils to the extent of actual recovery of any insurance proceeds under the policy.
 - **13.5.5.12.** Coverage shall include appropriate sub-limits for installation coverage.
 - **13.5.5.13.** Coverage shall include provisions for mechanical or electrical breakdown, or boiler system testing.
 - **13.5.5.14.** Coverage shall include temporary structures and scaffolding, along with collapse coverage.
 - **13.5.5.15.** Coverage shall be primary to all other applicable insurance.

- **13.5.5.16.** The builder's risk policy shall specifically permit partial occupancy by GDPM prior to Contract Completion and coverage shall remain in effect until all punch items are completed.
- **13.5.5.17.** The Contractor's tools and equipment shall not be covered under the builder's risk policy. It is the Contractor's sole responsibility to maintain such coverage, which shall be included in its Overhead (a component of Contractor's Fee) and not included as a separate item in Contractor's Schedule of Values.
- **13.5.5.18.** If Contractor is involved solely in the installation of material and equipment and not in new building construction, Contractor shall purchase and maintain a builder's risk, builder's risk-renovations, or installation floater insurance policy that complies with this Provision.
- **13.5.6.** *Umbrella/Excess Liability:* Contractor may employ an umbrella/excess liability policy to achieve the above required minimum coverage. Unless otherwise specified by GDPM in writing, for Construction Contracts in excess \$1,000,000, the Contractor shall maintain umbrella/excess liability coverage with a limit of not less than \$2,000,000 (in addition to the above-required limits) if the Work (or Work to be performed by the Subcontractor) includes any of the following:
 - a. Brick/block masonry;
 - b. Exterior caulking/sealant;
 - c. Cast-in-place or precast concrete;
 - d. Damp proofing/waterproofing;
 - e. Electrical;
 - f. Elevator;
 - g. Exterior glass and/or glazing;
 - h. Exterior marble, granite, and/or other stonework;
 - i. Miscellaneous metals;
 - j. Plaster/stucco;
 - k. Plumbing;
 - I. HVAC;
 - m. Roofing and/or sheet metal;
 - n. Scaffolding;
 - o. Spray-on fireproofing;
 - p. Sprinkler and/or fire protection; or
 - q. Structural steel and/or metal deck.
- **13.5.7.** Unless otherwise specified by GDPM in writing, Contractor shall maintain umbrella/excess liability coverage with a limit of not less than \$5,000,000 (in addition to the above-required limits) if the Work (or the Work to be performed by the Subcontractor) includes any of the following:
 - a. Caissons and/or piles;
 - b. Major Demolition;

- c. Excavation and/or utility work;
- d. Sheeting, shoring, and/or underpinning;
- e. Window washing equipment; or
- f. Wrecking.
- **13.5.8.** *Professional Liability*: Unless otherwise specified by GDPM in writing, Contractor shall maintain professional liability insurance (including without limitation for sprinkler and/or fire protection and other design-build work included in the Work) without design-build exclusions with a limit not-less than \$1,000,000 each claim and an annual-aggregate limit of not less than \$2,000,000.
 - **13.5.8.1.** The professional liability policy shall have an effective date on or before the date that Contractor first started to provide any Project-related services.
 - **13.5.8.2.** Upon submission of the associated certificate of insurance and at each policy renewal, the Contractor shall advise GDPM in writing of any actual or alleged claims that may erode the professional liability limits.
 - **13.5.8.3.** Contractor shall maintain the professional liability insurance in effect for no less than 5 years after the earlier of the termination of the Contract or Substantial Completion of all Work.
- **13.5.9.** Additional Property Insurance: For any demolition, blasting, excavating, tunneling, shoring, or similar operations, the Contractor shall provide and maintain Property Damage Liability insurance with a limit of liability equal to the limit as specified in the applicable provisions of this Article.

13.5.10. Equipment Coverage:

- **13.5.10.1.** GDPM will not insure or be liable for damage to any Contractor or Subcontractor owned, leased, rented, or borrowed tools, equipment, or vehicles.
- **13.5.10.2.** Contractor and Subcontractors are solely responsible for maintaining all insurance necessary to cover their tools, equipment, and vehicles.
- **13.5.11.** *Pollution Coverage:* Contractor shall maintain Pollution Liability Insurance, including Asbestos Liability Insurance, covering liability for bodily injury, property damage, and environmental damage resulting from "sudden accidental" or "gradual" pollution and related cleanup costs incurred by the Contractor, all arising out of the Work to be performed under this contract. Combined single limit per occurrence shall not be less than \$500,000, or the equivalent. Annual aggregate limit shall not be less than \$1,000,000.

13.6. Waivers of Subrogation

- **13.6.1.** To the fullest extent permitted by Applicable Law, Contractor waives all rights against GDPM and its agents and employees for damages to the extent covered by any insurance, except rights to the proceeds of that insurance.
- **13.6.2.** All policies shall accomplish the waiver of subrogation by endorsement or otherwise.
- **13.6.3.** GDPM and Contractor waive all rights against each other for damages caused by fire or other perils to the extent actual recovery of any insurance proceeds under any property insurance or builder's risk insurance applicable to the Work.

14. Article XIV: Indemnification

- **14.1.** To the fullest extent permitted by federal and State Law, Contractor shall indemnify, defend, and hold harmless the Indemnified Parties from and against all claims, costs, damages, losses, fines, penalties, and expenses (including but not limited to all fees and charges of attorneys and other professionals, and all court, arbitration, or other dispute-resolution costs) arising out of or in connection with the Project.
- 14.2. The Contractor shall be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence, and shall take proper safety and health precautions to protect the Work, the workers, the public, and the property of others. Contractor shall hold and save GDPM, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance.
- **14.3.** Contractor's indemnification obligations under this Article exists regardless of whether or not and the extent to which the claim, damage, loss, fine, penalty, or expense is caused by a party indemnified pursuant to this Article.
- **14.4.** Nothing in this Article obligates Contractor to indemnify any individual or entity from and against the consequences of that individual or entity's own negligence.
- **14.5.** Contractor's obligations under this Article shall not extend to the liability of the A/E, A/E's consultants, agents, representatives, or employees for negligent preparation or approval of Drawings, Specifications, Change Orders, opinions, and other responsibility of the A/E, except to the extent covered by Contractor's insurance.
- 14.6. In claims against an Indemnified Party by any direct or indirect employee (or the survivor or personal representative of that employee) of the Contractor or a person or entity for whom the Contractor may be liable, the indemnification obligations under this Article will not be limited by a limitation on the amount or type of damages, compensation, or benefits payable under workers' compensation acts, disability benefit acts, or other employee benefits acts.
- **14.7.** Contractor's indemnification obligation under this Article will survive termination of the Contract and Contract Completion.
- **14.8.** GDPM may deduct, from the Contract Sum, the claims, losses, fines, penalties, and expenses for which Contractor is liable under this Article.
- **14.9.** If those claims, damages, losses, fines, penalties and expenses exceed the unpaid balance of the Contract Sum, Contractor shall immediately pay the difference to GDPM.

15. Article XV: Damages

15.1. Liquidated Damages

- **15.1.1.** If Contractor fails to complete the work within the time specified in the contract, or any extension, the Contractor shall pay to GDPM as liquidated damages in accordance with the table below.
 - **15.1.1.1.** If different completion dates are specified in the contract for separate parts or stages of the work, the amount of liquidated damages shall be assessed on those parts or stages which are delayed.
 - **15.1.1.2.** To the extent that Contractor's delay or nonperformance is excused under another clause in this contract, liquidated damages shall not be due GDPM.
 - **15.1.1.3.** Contractor remains liable for damages caused other than by delay.

- **15.1.2.** If GDPM terminates Contractor's right to proceed, the resulting damage will consist of liquidated damages until such reasonable time as may be required for final completion of the work together with any increased costs occasioned GDPM in completing the work.
- **15.1.3.** If GDPM does not terminate Contractor's right to proceed, the resulting damage will consist of liquidated damages until the work is completed or accepted.
- **15.1.4.** If Contractor fails to achieve a Milestone within the associated Contract Time, it would be difficult, if not impossible, to determine GDPM's resulting damages.
- **15.1.5.** Therefore, if the Contractor fails to achieve a Milestone within the associated Contract Time, the Contractor shall (at GDPM's option) pay to or credit GDPM the Liquidated Damages per day sum determined according to the following schedule for each day that the Contractor fails to achieve a Milestone within the associated Contract Time.

Total Contract Sum	Daily Liquidated Damages
Less than \$150,000	\$200
\$150,000-\$500,000	\$400
\$500,000.01 - \$1,000,000	\$500
\$1,000,000.01 - \$2,000,000	\$1,000
More than \$2,000,000	\$2,000

- **15.1.6.** If Contractor simultaneously fails to achieve two or more Milestones, GDPM shall be entitled to recover the sum of the associated Liquidated Damages per day rates.
- **15.1.7.** The Liquidated Damages described are only intended to compensate GDPM for the direct damages it incurs as a result of Contractor's failure to achieve the Milestones within their associated Contract Times.
- **15.1.8.** The Liquidated Damages described are not intended to compensate GDPM for any damages GDPM incurs on account of:
 - **15.1.8.1.** Any claims attributable to Contractor that are brought by others including Separate Consultants and Separate Contractors; or
 - **15.1.8.2.** Any failure of Contractor to timely, properly, and completely perform the Contract other than the failure to achieve the Milestones within their associated Contract Times.
 - **15.1.9.** The parties acknowledge that the above-listed Liquidated Damages per day sums are not penalties, and they each irrevocably waive the right (if any) to challenge the validity and enforceability of those Liquidated Damages per day sums.
 - **15.1.9.1.** Notwithstanding any other provision of the Contract Documents to the contrary, if a court determines that the Liquidated Damages per day sums or their application are void and unenforceable, GDPM shall be entitled to recover the actual damages that it incurs on account of the Contractor's failure to achieve one or more of the Milestones within the Contract Times.
 - **15.1.10.** In addition to other rights that GDPM may have relative to the Liquidated Damages, GDPM may deduct the Liquidated Damages from the Contract Sum as the damages accrue. If payments then or thereafter due to the Contractor are not sufficient to cover such amounts, Contractor shall immediately pay the amount of the insufficiency to

15.2. Mutual Waiver of Consequential Damages

- **15.2.1.** Except for the Liquidated Damages provided for above, GDPM and Contractor each waive against the other all Claims for consequential damages that may arise out of or relate to this Contract.
 - **15.2.1.1.** GDPM's waiver includes Claims for loss of use, income, profit, revenue, financing, cost of capital, business and reputation, management and employee productivity, and consequential damages arising from termination of the Contract or related to insolvency.
 - **15.2.1.2.** The Contractor's waiver includes:
 - **15.2.1.2.1.** Claims for unabsorbed home-office overhead;
 - **15.2.1.2.2.** Any other form of overhead in excess of that specifically
 - provided for; **15.2.1.2.3.** Delay damages except as otherwise specifically
 - provided for; **15.2.1.2.4.** Increased cost of funds for the Project;
 - **15.2.1.2.5.** Lost opportunity to work on other projects;
 - **15.2.1.2.6.** Losses of financing, business, and reputation;
 - **15.2.1.2.7.** Loss of profit except anticipated profit, arising directly from properly performed Work;
 - **15.2.1.2.8.** Loss of bonding capacity; and
 - **15.2.1.2.9.** Consequential damages arising from termination of the Contract or related to insolvency.
- **15.2.2.** Notwithstanding Section 15.2.1, this Section 15.2:
 - **15.2.2.1.** Does not apply to any damages that would be covered by insurance provided in connection with the Project if the Contract did not include Section 15.2.1;
 - **15.2.2.2.** Does not apply to Contractor's indemnity obligations for third-party claims against the Indemnified Parties even if those claims are for damages that Section 15.2.1 would otherwise preclude;
 - **15.2.2.3.** Does not preclude GDPM's recovery of Liquidated Damages; and
 - **15.2.2.4.** Does not apply to Claims for damages arising from GDPM's or Contractor's gross negligence or willful misconduct.
- **15.3.** This Article 15 shall survive termination of the Contract.

16 Article XVI: Labor Standards Davis-Bacon and Related Acts

- **16.1.1.** All rulings and interpretations of the Davis Bacon and Related Acts contained in 29 CFR Part 3 are herein incorporated by reference in this Contract.
- **16.2.** Minimum Wages
 - **16.2.1.** All laborers and mechanics employed under this Contract in the development or construction of the project(s) involved will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the

- Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which shall be attached to the Contract Documents and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.
- **16.2.2.** Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the regular weekly period, are deemed to be constructively made or incurred during such weekly period.
- **16.2.3.** Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4).
- **16.2.4.** Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.
- **16.2.5.** The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5 and the Davis-Bacon poster (WH-1321)) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.
- **16.2.6.** Any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination.
- **16.2.7.** HUD shall approve any additional classification and wage rate and fringe benefits therefor only when all the following criteria have been met:
 - **16.2.7.1.** The work to be performed by the classification requested is not performed by a classification in the wage determination;
 - **16.2.7.2.** The classification is utilized in the area by the construction industry; and
 - **16.2.7.3.** The proposed wage rate, including bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
 - **16.2.8.** If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employee Standards Administration, U.S. Department of Labor, Washington, DC 20210.
- **16.2.9.** The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary.
- **16.2.10.** In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where

- appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator of the Wage and Hour Division for determination.
- **16.2.11.** The Administrator or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30 day period that additional time was necessary.
- 16.2.12. The wage rate (including fringe benefits where appropriate) shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in classification.
- **16.2.13.** Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- 16.2.14. If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; provided that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met.
- **16.2.15.** The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

16.3. Withholding of Funds

- **16.3.1.** HUD or its designee shall, upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime Contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract.
- **16.3.2.** In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working in the construction or development of the Project, all or part of the wages required by the contract, HUD or its designee may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.
- **16.3.3.** HUD or its designee may, after written notice to the Contractor, disburse such amounts withheld for and on account of the Contractor or subcontractor to the respective employees to whom they are due.

16.4. Payrolls and Basic Records

- **16.4.1.** Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working in the construction or development of the Project. Such records shall contain:
 - **16.4.1.1.** The name, address, and social security number of each such worker;
 - **16.4.1.2.** His or her correct classification

- **16.4.1.3.** Hourly rates of wages paid, including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in the Davis-Bacon Act;
- **16.4.1.4.** Daily and weekly number of hours worked;
- **16.4.1.5.** Deductions made; and
- **16.4.1.6.** Actual wages paid.
- **16.4.2.** Whenever the Secretary of Labor has found, under 29 CFR 5.5, that the wages of any laborer or mechanic include the amount of costs reasonably anticipated in providing benefits under a plan or program described in the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.
- **16.4.3.** Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- **16.4.4.** The Contractor shall submit for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer for transmission to HUD or its designee.
- **16.4.5.** The payrolls submitted shall set out accurately and completely all of the information required to be maintained.
- **16.4.6.** This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.
- **16.4.7.** The Contractor is responsible for the submission of copies of payrolls by all subcontractors (Approved by the Office of Management and Budget under OMB Control Number 1214-0149).
- **16.4.8.** Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - **16.4.8.1.** That the payroll for the payroll period contains the information required to be maintained and that such information is correct and complete;
 - **16.4.8.2.** That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3; and
 - **16.4.8.3.** That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the Contract.
- **16.4.9.** The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirements for submission of the "Statement of Compliance".
- **16.4.10.** The falsification of any of the above certifications may subject the Contractor or

subcontractor to civil or criminal prosecution under Title 18 and Title 31 of the United States Code.

16.5. Records

- **16.5.1.** The Contractor or subcontractor shall make the records available for inspection, copying, or transcription by authorized representatives of HUD or its designee, the Contracting Officer, or the Department of Labor and shall permit such representatives to interview employees during working hours on the job.
- **16.5.2.** If the Contractor or Subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds.
- **16.5.3.** Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

16.6. Apprentices & Trainees

- **16.6.1.** Apprentices will be permitted to work at less than predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship and Training, Employer and Labor Services (OATELS), or with a State Apprenticeship Agency recognized by OATELS, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by OATELS or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.
- **16.6.2.** The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program.
- **16.6.3.** Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.
- **16.6.4.** In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.
- **16.6.5.** Where a Contractor is performing construction on a project in a locality other than that in which registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed.
- **16.6.6.** Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination.
- **16.6.7.** Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program.
- **16.6.8.** If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification.

- **16.6.9.** If the Administrator of the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.
- **16.6.10.** In the event OATELS, or a State Apprenticeship Agency recognized by OATELS, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

16.7. Trainees

- **16.7.1.** Except as provided for in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the
 - U.S. Department of Labor, Employment and Training Administration.
- **16.7.2.** The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.
- **16.7.3.** Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination.
- **16.7.4.** Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program.
- **16.7.5.** If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate in the wage determination which provides for less than full fringe benefits for apprentices.
- **16.7.6.** Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate in the wage determination for the classification of work actually performed.
- **16.7.7.** In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate in the wage determination for the work actually performed.
- **16.7.8.** In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work until an acceptable program is approved.
- **16.8. Equal Employment Opportunity**: The utilization of apprentices, trainees, and journeymen shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended and 29 CFR Part 30.
- **16.9. Compliance with Copeland Act requirements:** Contractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this Contract
- **16.10. Contract Termination; Debarment:** A breach of this Article may be grounds for termination of the contract and for debarment as a Contractor and a subcontractor.
- 16.11. Disputes Concerning Labor Standards: Disputes arising out of the labor standards provisions of Disputes Concerning Labor Standards shall not be subject to ARTICLE 9 DISPUTE RESOLUTION/CLAIM PROCEDURE of this contract. Such disputes shall be resolved in accordance

with the procedures of the Department of Labor. Disputes within the meaning of Disputes Concerning Labor Standards include disputes between the Contractor (or any of its subcontractors) and GDPM, HUD, the U.S. Department of Labor, or the employees or their representatives.

- **16.12. Certification of Eligibility:** By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded contracts by virtue of the Davis-Bacon Act or 29 CFR 5.12.
 - **16.12.1.** No part of this contract shall be subcontracted to any person or firm ineligible for award of a United States Government contract by virtue of the Davis-Bacon Act or 29 CFR 5.12.
 - **16.12.2.** The penalty for making false statements is prescribed in the U. S. Criminal Code 18 U.S.C. 1001.
- **16.13. Contract Work Hours and Safety Standards Act:** As used in this provision Contract Work Hours and Safety Standards Act, the terms "laborers" and "mechanics" include watchmen and guards.
 - **16.13.1.** *Overtime Requirements*
- 16.14. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics, including watchmen and guards, shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one half pay for all hours worked in excess of 40 hours in such workweek.
- **16.15.** Violation; liability for unpaid wages; Liquidated Damages
 - **16.15.1.** In the event of any violation, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages.
 - **16.15.2.** In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages.
 - **16.15.3.** Such liquidated damages shall be computed with respect to each individual laborer or mechanic (including watchmen and guards) employed in violation, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages.
- **16.16.** Withholding for unpaid wages and liquidated damages
 - **16.16.1.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any Federal contract with the same prime Contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages.

16.17. Subcontracts

16.17.1. The Contractor or subcontractor shall insert in any subcontracts all the provisions contained in subcontracts, and such other clauses as HUD or its designee may by

appropriate instructions require, and also a clause requiring the subcontractors to include these provisions in any lower tier subcontracts.

16.17.2. The prime Contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all these provisions.

16.18. Non-Federal Prevailing Wage Rates

- **16.18.1.** Any prevailing wage rate (including basic hourly rate and any fringe benefits), determined under State or tribal law to be prevailing, with respect to any employee in any trade or position employed under the contract, is inapplicable to the contract and shall not be enforced against the Contractor or any subcontractor, with respect to employees engaged under the contract whenever such non-Federal prevailing wage rate exceeds:
 - **16.18.1.1.** The applicable wage rate determined by the Secretary of Labor pursuant to the Davis- Bacon Act (40 U.S.C. 276(a)) to be prevailing in the locality with respect to such trade;
 - **16.18.1.2.** An applicable apprentice wage rate based thereon specified in an apprenticeship program registered with the U.S. Department of Labor (DOL) or a DOL- recognized State Apprenticeship Agency; or
- **16.19.** An applicable trainee wage rate based thereon specified in a DOL-certified trainee program.

17 ARTICLE XVIII: SECTION 3

- 17.1. In order to promote Employment, Training, and Contracting Opportunities for Low-Income Persons, the Contractor shall participate in GDPM's Section 3 Program.
- **17.1.** The work to be performed under this Contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended.
- 17.2. The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- **17.3.** The parties to this contract agree to comply with HUD's regulations in 24 CFR Part 135, which implement Section 3.
- **17.4.** As evidence by the execution of the Contract, the parties to this Contract certify that they are under no contractual or other impediments that would prevent them from complying with the Part 135 regulations.
- 17.5. The Contractor agrees to send to each labor organization or representative of workers with which the Contractor has a collective bargaining agreement or other understanding, if any, a narrative advising the labor organization or workers' representative of the Contractor's commitments, and will post copies of this notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice.
- 17.6. The notice shall describe the preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work will begin.
- 17.7. The Contractor agrees to include this Article SECTION 3 in every subcontract subject to

compliance with regulations in 24 CFR Part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Article upon a finding that the subcontractor is in violation of the regulations in 24 CFR Part 135

- 17.8. The Contractor will not subcontract with any subcontractor where the Contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR Part 135.
- 17.9. The Contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the Contractor is selected but before the Contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR Part 135 require employment opportunities to be directed, were not filled to circumvent the Contractor's obligations under 24 CFR Part 135.
- **17.10.** Noncompliance with HUD's regulations in 24 CFR Part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.
- **17.11.** Section 3 Reporting Requirements:
 - Contractor must acknowledge and abide by any request for Section 3 documentation made by GDPM. In addition, contractor must follow any specific Section 3 reporting requirements required by GDPMs procurement department.

18 ARTICLE XVIII: Equal Opportunity Prohibition against Discrimination

- **18.1.** During the performance of this contract, the Contractor agrees as follows:
 - **18.1.1.** Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, sexual orientation, or handicap.
 - **18.1.2.** The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, national origin, or handicap. Such action shall include, but not be limited to:
 - **18.1.2.1.** Employment;
 - **18.1.2.2.** Upgrading;
 - **18.1.2.3.** Demotion;
 - **18.1.2.4.** Transfer;
 - **18.1.2.5.** Recruitment or recruitment advertising;
 - **18.1.2.6.** Layoff or termination;
 - 18.1.2.7. Rates of pay or other forms of compensation; and
 - **18.1.2.8.** Selection for training, including apprenticeship.
 - **18.1.3.** The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by GDPM that explain this Article.
 - **18.1.4.** The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor; state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, or handicap.
 - **18.1.5.** The Contractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be

- provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this Article, and post copies of the notice in conspicuous places available to employees and applicants for employment.
- **18.1.6.** The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.
- **18.1.7.** The Contractor shall furnish all information and reports required by Executive Order 11246, as amended, the Rehabilitation Act of 1973, as amended, and by rules, regulations, and orders of the Secretary of Labor, pursuant thereto.
- **18.1.8.** The Contractor shall permit access to its books, records, and accounts by the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- **18.1.9.** In the event of a determination that the Contractor is not in compliance with this Article or any rules, regulations, or order of the Secretary of Labor, this contract may be canceled, terminated or suspended in whole or in part, and the Contractor may be declared ineligible for further Government Contracts, or Federally assisted construction contracts under the procedures authorized, in Executive Order 11246, as amended.
- **18.1.10.** In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in Executive Order 11246, as amended, the rules, regulations, and orders of the Secretary of Labor, or as otherwise provided by law, including the following as provided by ORC:
 - **18.1.10.1.** In the event Contractor fails to comply with these nondiscrimination provisions, GDPM shall deduct from the amount payable to the Contractor a forfeiture of the statutory penalty pursuant to ORC for each person who is discriminated against or intimidated.
 - **18.1.10.2.** The Contract may be terminated or suspended in whole or in part by GDPM and all money due hereunder may be forfeited in the event of a subsequent violation of the foregoing nondiscrimination provisions.
- **18.1.11.** The Contractor shall include the terms and conditions of this Article in every subcontract or purchase order unless exempted by the rules, regulations, or orders of the Secretary of Labor under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor.
- **18.1.12.** The Contractor shall take such action with respect to any subcontract or purchase order as the Secretary of Housing and Urban Development or the Secretary of Labor may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the Contractor may request the United States to enter into the litigations to protect the interests of the United States.
- **18.1.13.** Compliance with the requirements of this Article shall be to the maximum extent consistent with, but not in derogation of compliance with the Indian Self-Determination and Education Assistance Act and the Indians Preference clause of this Contract.
- **18.2.** The Contractor shall cooperate fully with the States Equal Opportunity Coordinator (EOC), with any other official or agency of the state of federal government that seeks to eliminate unlawful employment discrimination, and with all other state and federal efforts to assure equal employment practices under the Contract.

19 ARTICLE XIX: HEALTH, SAFETY, AND ACCIDENT PREVENTION

- **19.1. Contractor Obligations.** In performing this contract, the Contractor shall:
 - **19.1.1.** Take reasonable precautions to ensure safety of individuals on the Project;
 - **19.1.2.** Ensure that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his/her health and/or safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation;
 - 19.1.3. Protect the lives, health, and safety of other persons;
 - 19.1.4. Prevent damage to property, materials, supplies, and equipment;
 - 19.1.5. Avoid work interruptions;
- **19.2.** For these purposes, the Contractor shall:
 - **19.2.1.** Comply with regulations and standards issued by the Secretary of Labor (failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act);
 - **19.2.2.** Include the terms of this Article in every subcontract that such terms will be binding on each subcontractor. The Contractor shall be responsible for its subcontractors' compliance with the provisions of this Article;
 - **19.2.2.1.** The Contractor shall take such action with respect to any subcontract as GDPM, the Secretary of Housing or Secretary of Labor shall direct as a means of enforcing such provisions.
 - **19.2.3.** Maintain an accurate record of exposure data on all accidents incident to work performed under this contract resulting in death, traumatic injury, occupational diseases or damages to property, materials, supplies, or equipment, and shall report this data in the manner prescribed by 26 CFR 1904 applicable law;
 - **19.2.4.** Pay any fine or cost incurred because of Contractor's violation, or alleged violation, of any Applicable Law.

19.3. Notification of Non-Compliance Procedure

- **19.3.1.** GDPM shall notify the Contractor of any noncompliance with these requirements and of the corrective action required. This notice, when delivered to the Contractor or the Contractor's representative at the site of the work, shall be deemed sufficient notice of the noncompliance and corrective action required.
- 19.3.2. After receiving the notice, the Contractor shall immediately take corrective action.
- **19.3.3.** If the Contractor fails or refuses to take corrective action promptly, GDPM may issue an order stopping all or part of the work until satisfactory corrective action has been taken.
- **19.3.4.** The Contractor shall not base any claim or request for equitable adjustment for additional time or money on any stop order issued under these circumstances.

19.4. Safety Plan

19.4.1. The Contractor is responsible for designing and implementing its own site-specific safety

- plan, including compliance with OSHA regulations and such plan shall meet or exceed GDPM's site-specific safety plan (if any).
- **19.4.2.** Before starting any Work, the Contractor shall submit to GDPM a copy of the Contractor's site- specific safety plan and safety manuals.

19.5. Safety Data Sheets

- **19.5.1.** The Contractor shall identify any material it uses at the Site with a Safety Data Sheet ("SDS") meeting the requirements of OSHA's Hazardous Communication Standard.
- 19.5.2. The Contractor shall maintain a notebook containing all of its applicable SDSs.
- **19.5.3.** This notebook shall be kept at the Site for the duration of the Project.

19.6. Hazardous Materials

- **19.6.1.** <u>Prohibition Against Hazardous Materials:</u> The Contractor shall not introduce Hazardous Materials to the Project.
- **19.6.2.** Work Stoppage Due to Hazardous Materials:
 - a. If the Contractor encounters material the Contractor reasonably believes to be, or contain, a Hazardous Material that has not been rendered harmless, the Contractor shall immediately stop Work in the affected area and verbally report the condition to GDPM, and within 1 business day deliver written notice of the condition to GDPM.
 - b. GDPM will promptly determine the necessity of GDPM retaining a qualified environmental consultant to evaluate the suspected Hazardous Material and to issue a related written report.
 - c. Where appropriate, GDPM will engage a licensed abatement contractor to remove the material or render it harmless as directed.
 - d. The Contractor shall resume Work in the affected area upon written notice from GDPM that: (1) The suspect material was evaluated and found not to be or contain a Hazardous Material; or (2)The suspect material has been removed or rendered harmless.
 - e. If the Contractor knowingly or negligently proceeds with the Work in an area where a Hazardous Material exists and has not been rendered harmless, the Contractor shall be solely responsible for all related claims, damages, losses, and expenses, including, but not limited to, attorneys' fees, arising out of or resulting from performing the Work in the affected area.
 - f. The term "rendered harmless" means that the level of exposure is less than any applicable exposure standards set forth in Applicable Law.

19.7. Fires or Hot-Work

- **19.7.1.** Contractor shall not burn any fires on the Site(s).
 - **19.7.1.1.** The Contractor shall notify the Project Manager 24 hours before the start of non-routine or non-recurring hot-work.
 - a. Use of sources of fire, flame or sparks and flammable materials shall be kept to an absolute minimum.
 - b. At the beginning of the Project, the Contractor shall inform the Project Manager of its intent to use blowtorches, welding apparatus or similar exposed flame

- and sparking devices.
- c. Similar notice shall be given in regard to the use of flammable liquids, adhesives, and cleaners.
- **19.7.2.** The Contractor shall furnish an appropriate number of fire extinguishers (minimum of 1), which shall be within the immediate areas where work is being done at all times. The extinguisher shall be adequate and suitable for the class of fire likely to be caused by the Contractor's operations.

19.8. Explosives and Blasting

- **19.8.1.** The Contractor shall not conduct blasting on, or bring explosives to the Work Site without written approval of GDPM and other authorities with jurisdiction.
- **19.8.2.** The Contractor shall perform all blasting, storing, and handling of explosives as required under Applicable Law.
- **19.8.3.** The Contractor shall carry appropriate liability insurance coverage, as required by the Contract Documents, for its blasting and explosives storage and handling operations.
 - **19.8.3.1.** Immediately upon request, the Contractor shall deliver evidence of that insurance to GDPM.

20 ARTICLE XX: CONTRACT DOCUMENTS AND CONTRACT RECORDS

20.1. Examination and Retention of Contractor's Records

- **20.1.1.** GDPM, HUD, or the Comptroller of the United States, or any of their duly authorized representatives shall, until 6 years after final payment under this contract, have access to and the right to examine any of the Contractor's directly pertinent books, documents, papers, or other records involving transactions related to this Contract for the purpose of making audit, examination, excerpts, and transcriptions.
- **20.1.2.** The Contractor agrees to include in first-tier subcontracts under this contract a clause substantially the same as 20.1.1. "Subcontract," as used in Examination and Retention of Contractor's Records, excludes purchase orders not exceeding \$10,000.
- **20.1.3.** The periods of access and examination for records relating to (1) appeals under the DISPUTE RESOLUTION/CLAIM PROCEDURE Article of this contract, (2) litigation or settlement of claims arising from the performance of this contract, or (3) costs and expenses of this contract to which GDPM, HUD, or Comptroller General or any of their duly authorized representatives has taken exception, shall continue until disposition of such appeals, litigation, claims, or exceptions.
- **20.1.4.** If a dispute arises with any other Person about whether that Person should be given access to the documents, the Contractor or Subcontractor as applicable, shall indemnify GDPM against all costs, expenses, and damages, including but not limited to attorneys' fees, incurred or paid by reason of that dispute.
- **20.1.5.** The right of inspection, audit, and reproduction extends to all documents necessary to permit adequate evaluation of the cost of pricing data submitted along with the computations and projections used therein.
- **20.1.6.** If the Contract has been terminated, in whole or in part, the records relating to the Work terminated shall be made available to GDPM for a period of 6 years from the date of any applicable final settlement or payment, as applicable.

20.2. Examination and Audit o/ Contractor's Records

- **20.1.7.** GDPM may examine all books, records, documents and other data of the Contractor and its Subcontractors related to the bidding, pricing, or performance of the Work for the purpose of evaluating any Contractor Payment Request, Proposal, Modification, or Claim.
- **20.1.8.** The above referenced materials shall be made available at the office of the Contractor or Subcontractor, as applicable, at all reasonable times for inspection, audit, and reproduction until the expiration of 6 years after the date of Substantial Completion of all Work.
 - **20.1.8.1.** The Contractor shall maintain, and require its Subcontractors to maintain complete and accurate business records at its principal place of business.
 - **20.1.8.1.1.** If the principal place of business is greater than 50 miles from the Site, the Contractor shall timely make records available, and shall require its Subcontractors to timely make records available, at the office of GDPM upon request for the records.
 - **20.1.8.2.** To the extent that the Contractor or Subcontractor, as applicable, informs GDPM in writing that any documents provided to GDPM are trade secrets, GDPM shall treat these documents, to the extent permitted by law, as trade secrets of the Contractor or Subcontractor, as applicable.
 - **20.1.8.2.1.** If a dispute arises with any other Person about whether that Person should be given access to the documents, the Contractor or Subcontractor as applicable, shall indemnify GDPM against all costs, expenses, and damages, including but not limited to attorneys' fees, incurred or paid by reason of that dispute.
- **20.1.9.** The right of inspection, audit, and reproduction extends to all documents necessary to permit adequate evaluation of the cost of pricing data submitted along with the computations and projections used therein.
- **20.1.10.** If the Contract has been terminated, in whole or in part, the records relating to the Work terminated shall be made available to GDPM for a period of 6 years from the date of any applicable final settlement or payment, as applicable.
- **20.1.11.** Records that relate to disputes, litigation, or settlement of Claims arising out of the performance of the Work shall be made available until the dispute, litigation or Claims have been finally decided or settled.

20.3. Ownership of Contract Documents

- **20.1.12.** GDPM shall have exclusive ownership of, all proprietary interest in, and the right to full and exclusive possession of all information, materials and documents discovered or produced by Contractor pursuant to the terms of this Contract, including but not limited to reports, memoranda, drawings or letters concerning the research and reporting tasks of this Contract.
- **20.1.13.** For data other than computer software, the Contractor grants to GDPM and others acting on its behalf, a paid-up, nonexclusive, irrevocable, world-wide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly by or on behalf of GDPM.
- 20.1.14. GDPM alone owns the Contractor's Documents and the Contract Documents and

- every right, title, and interest therein.
- **20.1.15.** The Contractor must execute and deliver and cause its agents and subcontractors to execute and deliver, to GDPM any transfers, assignments, documents or other instruments necessary to vest in GDPM the complete right, title, interest in and ownership of the Contractor's Documents.
- **20.1.16.** The Contractor may retain copies of the Contractor's Documents and the Contract Documents for information, reference, and performance of the Work.
- **20.1.17.** The submission or distribution of the Contractor's Documents or the Contract Documents to meet official regulatory requirements or for similar purposes in connection with the Project is not a waiver of GDPM's reserved rights in the Contractor's Documents.
- **20.1.18.** Any unauthorized use of the Contractor's Documents or the Contract Documents shall be at the sole risk of the entity making the unauthorized use.

20.4. Intent of Contract Documents

- **20.1.19.** The intent of the Contract Documents is to include all items necessary for the proper execution and completion of Work by the Contractor.
- **20.1.20.** The Contract Documents are complementary, and what is required by one is binding as if required by all.
- **20.1.21.** The Contractor shall provide all labor materials necessary for the entire completion of the Work described in the Contract Documents and reasonably inferable to produce the intended results.
- **20.1.22.** The Drawings govern dimensions, details, and location of the Work.
- **20.1.23.** The Specifications govern the quality of materials and workmanship.
- **20.1.24.** The organization of the Specifications in divisions, sections, and articles, and the arrangement of Drawings shall not restrict the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.
- **20.1.25.** Unless otherwise defined in the Contract Documents, words that have well known technical or construction industry meanings are used within those recognized meanings.

20.5. Use of Electronic Files

- **20.1.26.** GDPM and Contractor reasonably expect that they will provide electronic files to each other to facilitate the design and construction of the Project consistent with current practices and customs in the construction industry.
- **20.1.27.** GDPM and Contractor acknowledge that the use of electronic files involves risks not generally associated with the use of paper documents. Those risks may include, but not be limited to, alteration (inadvertent or intentional) and deterioration, both of which may not be apparent through casual observation.
- **20.1.28.** In the event of a discrepancy between information contained in a paper version of a document and the electronic file of that document, the paper will govern.
- **20.1.29.** Use of electronic files does not relieve the Contractor of its responsibility for the preparation, completeness, or accuracy of the Contractor's Documents.

20.6. Order of Precedence

- **20.1.30.** In the event of any inconsistency or conflict within any of the Contract Documents, the Contractor shall provide the better quality of Work and comply with the stricter requirement.
- **20.1.31.** In the event of a conflict between the contract and any applicable state or local law or regulation, the state or local law or regulation shall prevail; provided that such state or local law or regulation applies to GDPM and does not conflict with, or is less restrictive than applicable federal law, regulation, or Executive Order.
 - **20.1.31.1.** In the event of such a conflict, applicable federal law, regulation, and Executive Order shall prevail.

21 ARTICLE XXI: MISCELLANEOUS

- **21.1. Assignment:** The Contractor shall not assign or transfer any interest in this contract; except that claims for monies due or to become due from GDPM under the contract may be assigned to a bank, trust company, or other financial institution.
 - **21.1.1.** Such assignments of claims shall only be made with the written concurrence of GDPM.
 - **21.1.2.** If the Contractor is a partnership, this contract shall inure to the benefit of the surviving or remaining member(s) of such partnership as approved by GDPM.
 - **21.1.3.** Assignment of Antitrust Claims: By signing the Agreement, the Contractor assigns, conveys and transfers to GDPM any right, title, and interest to any claims or causes of action it may have or acquire under state or federal antitrust laws relating to any goods, products, or services purchased, procured, or rendered to GDPM pursuant to the Contract.
 - **21.1.4.** GDPM and Contractor each bind themselves, their successors, assigns and legal representatives, to the other party to this Contract and to the successors, assigns, and legal representatives of the other party with respect to the Contract.
- **21.2. Contractor Performance Evaluation:** GDPM may evaluate the Contractor's Performance at any time including without limitation during the progress of the Work, at the completion of a phase of the Project, and/or completion of the Project.
 - 21.2.1. GDPM shall retain the evaluation.
 - **21.2.2.** The Contractor may request a copy of the completed evaluation(s).
 - **21.2.3.** If the Contractor wishes to comment or take exception to any rating or remark, the Contractor must send a response in writing to GDPM within 30 days of Contract Completion and/or Termination.
 - **21.2.4.** GDPM may use the evaluation(s) in determining the responsibility of the Contractor for award of future contracts.
 - **21.2.5.** Poor evaluations may lead to a determination that Contractor is not responsible and therefore ineligible for award of future contracts for a period of not less than one year.
 - **21.2.6.** GDPM may request information from the Contractor for use in evaluating the A/E's performance. If information is requested, the Contractor shall comply in a timely and responsive manner.
 - **21.2.7.** If a breach of the Contract is committed by the Contractor or is attributable to a Subcontractor, that breach will be used in the responsibility analysis of the Contractor and Subcontractor (where applicable) for future contracts or subcontracts for a period of 5 years

after the date of the breach unless said breach results in Contractor being placed on debarment list, then for the period provided therein.

21.3. Prohibition Against Liens: The Contractor is prohibited from placing a lien on GDPM's property. This prohibition shall apply to all subcontractors at any tier and all material suppliers.

21.4. Conflict of Interest

- **21.4.1.** <u>Interest of Members of Congress:</u> No member of or delegate to the Congress of the United States of America shall be admitted to any share or part of this contract or to any benefit that may arise therefrom.
- 21.4.2. Interest of Members, Officers, or Employees and Former Members, Officers, or Employees:

 No member, officer, or employee of GDPM, no member of the governing body of the locality in which the Project is situated, no member of the governing body of the locality in which GDPM was activated, and no other public official of such locality or localities who exercises any functions or responsibilities with respect to the Project, shall, during his or her tenure, or for one year thereafter, have any interest, direct or indirect, in this Contract or the proceeds thereof.

21.5. Limitation on Payments Made to Influence Certain Federal Financial Transactions

- **21.5.1.** The Contractor agrees to comply with Title 31, United States Code which prohibits the use of Federal appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions:
 - **21.5.1.1.** The awarding of any Federal contract;
 - **21.5.1.2.** The making of any Federal grant;
 - **21.5.1.3.** The making of any Federal loan;
 - **21.5.1.4.** The entering into of any cooperative agreement; or
 - **21.5.1.5.** The modification of any Federal Contract, grant, loan, or cooperative agreement.
- **21.5.2.** The Contractor further agrees to comply with the requirement of the Act to furnish a disclosure (OMB Standard Form LLL, Disclosure of Lobbying Activities) if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement.
- 21.6. **Procurement o/ Recovered Materials:** In accordance with the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, the Contractor shall procure items designated in guidelines of the Environmental Protection Agency (EPA) 40 CFR that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition.
 - **21.6.1.** The Contractor shall procure items designated in the EPA guidelines that contain the highest percentage of recovered materials practicable unless the Contractor determines that such items (1) are not reasonably available in a reasonable period of time; (2) fail to meet reasonable performance standards, which shall be determined on the basis of the

- guidelines of the National Institute of Standards and Technology, if applicable to the item; or (3) are only available at an unreasonable price.
- **21.6.2.** This provision *Procurement of Recovered Materials* shall apply to items purchased under this contract where:
 - **21.6.2.1.** The Contractor purchases in excess of \$10,000 of the item under this contract; or
 - **21.6.2.2.** During the preceding: (1) purchased any amount of the items for use under a contract that was funded with Federal appropriations and was with a Federal agency or a State agency or agency of a political subdivision of a State; and (2) purchased a total of in excess of \$10,000 of the item both under and outside that contract.
- **21.7. Royalties and Patents:** The Contractor shall pay all royalties and license fees and assume all costs incident to the use, in the performance of the Work or the incorporation in the Work, of any design, inventions, process, product, or device that is the subject of patent rights or copyrights held by others.
 - **21.7.1.** Contractor shall defend all suits or claims for infringement of any patent rights or copyrights and shall save GDPM harmless from loss on account thereof; except that GDPM shall be responsible for any such loss when a particular design, process, or the product of a particular manufacturer or manufacturers is specified and the Contractor has no reason to believe that the specified design, process, or product is an infringement.
 - **21.7.2.** If, however, the Contractor has reason to believe that any design, process or product specified is an infringement of a patent or copyright, the Contractor shall promptly notify the Contracting Officer.
 - **21.7.2.1.** Failure to give such notice shall make the Contractor responsible for resultant loss.
- **21.8. Contract Period:** The Contractor shall complete all Work required within the required number of days of the effective date of the contract as set forth in the solicitation, supplemental terms, or within the time schedule established in the notice to proceed issued by GDPM.
- **21.9. Other Contracts:** GDPM may undertake or award other contracts for additional work at or near the site of the work under this contract.
 - **21.9.1.** The Contractor shall fully cooperate with the other contractors and with GDPM employees and shall carefully adapt scheduling and performing the work under this contract to accommodate the additional work, heeding any direction that may be provided by GDPM.
 - **21.9.2.** The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor or by GDPM employees.
- 21.10. Drug-Free Workplace: Each contractor shall be enrolled in and in good standing and shall require all subcontractors with whom the Contractor is in contract for the public improvement to be enrolled in and be in good standing in the Bureau of Workers' Compensation's Drug-Free Workplace Program or a comparable program approved by the Bureau that meets the requirements specified in the Revised Code prior to a subcontractor providing labor at the project site of the public improvement.
- **21.11.** Energy Efficiency and Sustainability Requirements: The Contractor shall comply with mandatory standards and policies relating to energy efficiency which are contained in the energy conservation plan issued in compliance with the Energy Policy and Conservation Act for the State in which the work under the contract is performed.
 - **21.11.1.** If the Project is designed and constructed under the Leadership in Energy and Environmental Design ("LEED") Rating System developed by the U.S. Green Building

Council or another rigorous rating system used to facilitate achievement of sustainability goals for the Project, the Contractor shall provide submittals certifying achievement of sustainable designed rating system criteria for verification by the Green Building Certification Institute or other third party in accordance with the Contract Documents.

- **21.12. Clean Air and Water:** The contactor shall comply with the Clean Air Act, as amended 42 USC, the Federal Water Pollution Control Water Act, as amended 33 U.S.C., and standards issued pursuant thereto in the facilities in which this contract is to be performed.
- **21.13.** *Public Relations:* Public relations or publicity about the Project shall be solely within the control of and consent of GDPM.
 - **21.13.1.** Contractor shall submit to GDPM all advertising and publicity related material relating to this Contract, including without limitation, information provided in social media, wherein GDPM's name is mentioned or language used from which the connection of GDPM's name may, in GDPM's judgment, be inferred or implied.
 - **21.13.2.** Contractor shall not publish or use such advertising and publicity matters without prior express written consent of GDPM.
- **21.14. Governing Law:** This Contract shall be governed and construed exclusively by its terms and by the laws of the State of Ohio and any suit filed to enforce any term of this Contract shall be filed only in a court of competent jurisdiction in Montgomery County, Ohio. The parties to this Contract shall comply with Applicable Law.
- **21.15.** *Written Notice:* Notice under the Contract Documents shall be validly given if delivered personally to a member of the organization for whom the notice is intended.
- **21.16.** *Taxes:* Parties acknowledge that GDPM is a tax exempt entity and Contractor must use tax exemption status for all purchases made for the Project in which tax exemption is permitted under law.
- **21.17. Computing Time:** When the Contract Documents refer to a period of time by a number of days, the period shall be computed to exclude the first and include the last day of the period. If the last day of the period falls on a Saturday or Sunday, or a legal holiday, that day shall be omitted from the computation and the period shall end on the next business day.
 - **21.17.1.** Except as excluded, the Contract Times and all other periods referred to in the Contract Documents includes Saturdays, Sundays, and all days defined as legal holidays below.
 - **21.17.2.** The standard workdays for the Work are Monday through Friday, excluding legal holidays.
 - **21.17.3.** The Legal Holidays are as follows:
 - New Year's Day
 - Martin Luther King Jr. Day
 - President's Day
 - Memorial Day
 - Independence Day
 - Labor Day
 - Columbus Day
 - Veterans Day
 - Thanksgiving Day

Christmas Day

- **21.18.** *Time is o/ the Essence:* All time limits set forth in the Contract Documents are of the essence.
 - **21.18.1.** By signing this Contract, Contractor acknowledges that the Contract Times are reasonable, taking into consideration the usual weather and other conditions prevailing in the locality of the Project.
 - **21.18.2.** By Signing the Construction Schedule, the Contractor acknowledges that the specified milestone dates are reasonable, taking into consideration the usual weather and other conditions prevailing in the locality of the Project.
 - **21.18.3.** The Notice to Proceed Establishes the date for commencement of the Work.
 - **21.18.4.** The Contractor acknowledges that it may be subject to interference, disruption, hindrance, or delay in the progress of the Work from any cause. The sole remedy for such interference, disruption, hindrance, or delay shall be an extension of the Contract Time, unless otherwise required by law.
- 21.19. Extent o/ Contract: The Contract Documents represent the entire and integrated agreement between GDPM and the Contractor and supersede all prior negotiations, representations, or agreement, either written or oral. This Contract may be executed in any number of counterparts, each of which shall be regarded as original and all of which constitute but one and the same instrument. The captions and headings in this Contract are for convenience only and in no way define, limit, or describe the scope or intent of any of the provisions or sections hereof.
- **21.20. Severability:** If any provision of this Contract is determined by a court having jurisdiction to be unenforceable to any extent, the rest of the provisions of this Contract will remain enforceable to the fullest extent permitted by law.
- **21.21. Electronic Signature:** Any party hereto may deliver a copy of its counterpart signature page of any Contract Documents via email, fax, or web-based project management software. Each party shall be entitled to rely upon a scanned or facsimile signature of the other party in such a manner as if such a signature were an original.
- 21.22. No Third Party Interest: Except as expressly provided herein, no person or entity, other than GDPM and Contractor, will have any right or interest under the Contract, and the Contract does not create a contractual relationship of any kind between any persons or entities other than GDPM and the Contractor.
- **21.23. No Waiver:** The failure of GDPM or Contractor to insist on any one or more instances upon strict performance of any one or more of the provisions of the Contract or to exercise any rights under the Contract or provided by law will not be construed as a waiver or relinquishment of that provision or of the right to subsequently demand strict performance or exercise the right and the rights will continue unchanged and remain in full force and effect.
- **21.24. Survival o/ Obligations:** All representations, indemnity obligations, warranties, guarantees, and other expressed continuing obligations under the Contract, will survive final payment, completion and acceptance of the Work, and termination or completion of the Contract.
- **21.25.** *Force Majeure:* Neither party shall be liable for failure to perform if such failure is caused by conditions beyond its control including, but not limited to, Acts of God, Government restrictions (including the denial or cancellation of any export or other necessary license), wars, and/or insurrections.
- 21.26. Privacy: The Contractor agrees to Comply with the Privacy Act of 1974 (the Act) and the

agency rules and regulations issued under the Act and any Personal information collected, used, or acquired in connection with this Contract shall be protected against unauthorized use, disclosure, modification or loss. Contractor shall ensure that its directors, officers, employees, subcontractors or agents use personal information solely for the purposes of accomplishing the services set forth herein.

- **21.26.1.** Contractor agrees not to release, divulge, publish, transfer, sell or otherwise make known to unauthorized persons personal information without express written consent of GDPM or otherwise required by law.
- **21.26.2.** Contractor agrees to indemnify and hold harmless GDPM for any damages related to Contractor's unauthorized use of personal information.
- **21.27. Contractor Status:** It is understood that the Contractor is an independent contractor and is not to be considered an employee of GDPM, or assume any right, privilege or duties of an employee.