

Division 1
General Requirements



SECTION 01001 - BASIC REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Summary of Work: Contract, work by Owner, Contractor use of premises, future work.
- B. Contract Considerations: Cash allowances, contingency allowance, inspection and testing allowances, schedule of values, applications for payment, change procedures, alternates.
- C. Coordination and Meetings: Coordination, field engineering, cutting and patching, meetings, progress meetings, equipment electrical characteristics and components, examination, preparation, cutting and patching.
- D. Submittals: Submittal procedures, construction progress schedules, proposed products list, shop drawings, product data, samples, manufacturers' installation instructions, manufacturers' certificates.
- E. Quality Control: Quality assurance - Control of installation, Tolerances, References, Mock-ups, Inspection and testing laboratory services, Manufacturers' field services and reports.
- F. Construction Facilities and Temporary Controls: Temporary electricity, temporary lighting for construction purposes, temporary heat, temporary ventilation, telephone service, temporary water service, temporary sanitary facilities, barriers and fencing, water control, exterior enclosures, interior enclosures, protection of installed work, security, access roads, parking, progress cleaning and waste removal, project identification, field offices and sheds, removal of utilities, facilities, and controls.
- G. Material and Equipment: Products, transportation, handling, storage, protection, product options, and substitutions.
- H. Starting of Systems: Starting systems, demonstration and instructions, testing, adjusting and balancing.
- I. Contract Closeout: Contract closeout procedures, final cleaning, adjusting, project record documents, operation and maintenance data, spare parts, maintenance materials, and warranties.

1.2 CONTRACT

- A. Contract Description: Stipulated sum.
- B. Contract considerations.

1.3 WORK BY OWNER

- A. Site Work
- B. All furniture/exercise equipment provided and installed in separate contract by Owner.
- C. All site demolition by Owner.

1.4 CONTRACTOR USE OF PREMISES

- A. Limit use of premises to allow:
 - 1. Minimal disruption to adjacent buildings and tenants.
 - 2. Work by others and work by Owner.

1.5 FUTURE WORK

- A. Not used.

1.6 CASH ALLOWANCES

- A. Carpet allowance: \$124.00/yard (including carpet, pad & labor to install).

1.7 CONTINGENCY ALLOWANCE

- A. Owner's Contingency: \$500,000.

1.8 INSPECTION AND TESTING ALLOWANCES

- A. Inspection and Testing: Include in the Contract, refer to individual specifications sections for inspection and testing requirements.
- B. Costs Included in Allowances: Cost of engaging an inspection or testing firm, execution of inspection or tests, and reporting of results.
- C. Costs Not Included in the Allowance:
 - 1. Incidental labor and facilities required to assist inspection or testing firm.
 - 2. Costs of re-testing upon failure of previous tests as determined by Architect/Engineer.

1.9 SCHEDULE OF VALUES

- A. Submit schedule on AIA Form G703. Contractor's standard form or electronic media printout will be considered.
- B. Submit Schedule of Values in duplicate within twenty (20) days after date of Owner-Contractor Agreement.

1.10 APPLICATIONS FOR PAYMENT

- A. Submit three (3) copies of each application on AIA Form G702 and G703.
- B. Content and Format: Utilize schedule of values for listing items in application for payment.
- C. Payment Period: Monthly.

1.11 CHANGE PROCEDURES

- A. Stipulated Sum/Price Change Order: Based on proposal request and Contractor's fixed price quotation or Contractor's request for a Change Order as approved by Architect/Owner.
- B. Change Order Forms: AIA G701.

1.12 ALTERNATIVES

- A. Not Used.

1.13 COORDINATION

- A. Coordinate scheduling, submittals, and Work of the various sections of specifications to ensure efficient and orderly sequence of installation of interdependent construction elements.
- B. Verify utility requirement characteristics of operating equipment are compatible with building utilities.
- C. Coordinate space requirements and installation of mechanical and electrical work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable.
- D. In finished areas, conceal pipes, ducts, and wiring within the construction.

1.14 FIELD ENGINEERING

- A. Owner will employ a land surveyor to locate a reference datum and protect survey control and reference points.
- B. General Contractor shall employ a land surveyor to establish N.G.V.D. elevations, lines, and levels and certify that elevations and locations of the Work conform to the Contract Documents.
- C. General Contractor shall verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.

1.15 PRECONSTRUCTION PREINSTALLATION MEETINGS

- A. Architect will schedule a preconstruction meeting one week prior to commencement of construction. General Contractor, Job Superintendent and all major subcontractors shall have representative.
- B. When required in individual specification section, general contractor shall convene a preinstallation meeting at Project site prior to commencing work of the section. A minimum one week notice of meeting shall be given to Owner and Architect.

1.16 PROGRESS MEETINGS

- A. Schedule and administer on site meetings throughout progress of the Work at a maximum of monthly intervals.
- B. Preside at meetings, record minutes, and distributes copies within two (2) days to those affected by decisions made.

1.17 EQUIPMENT ELECTRICAL CHARACTERISTICS AND COMPONENTS

- A. Motors: NEMA MG1 Type; specific motor type is specified in individual specification sections.
- B. Wiring Terminations: Terminal lugs to match branch circuit conductor; size terminal lugs to NFPA 70.
- C. Cord and Plug: Minimum six (6) foot (2 m) cord and plug including grounding connector; cord of longer length is specified in individual sections.

1.18 CUTTING AND PATCHING

- A. Employ a skilled and experienced installer to perform cutting and patching new Work; restore Work with new Products.

- B. Submit written request to Architect in advance of cutting or altering structural or building enclosure elements.
- C. Execute cutting, fitting, and patching including excavation and fill, to complete Work, and to:
 - 1. Fit the several parts together, to integrate with other Work.
 - 2. Uncover Work to install or correct ill-timed Work.
 - 3. Remove and replace defective and non-conforming Work.
 - 4. Remove samples of installed Work for testing.
 - 5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.
- D. Cut masonry and concrete materials using masonry saw or core drill. Restore Work with new Products in accordance with requirements of Contract Documents.
- E. Fit Work tight to adjacent elements. Maintain integrity of wall, ceiling, or floor construction; completely seal all voids.
- F. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- G. Refinish surfaces to match adjacent finishes.

1.19 SUBMITTAL PROCEDURES

- A. Submittal form to identify Project, Contractor, Subcontractor or supplier; and pertinent Contract Document references.
- B. 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 the requirements of the Work and Contract Documents.
- C. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of the completed Work.
- D. Revise and resubmit submittals as required; identify all changes made since previous submittal.
- E. Submit all color containing submittals at one time to allow for color selections to be made at one time.

1.20 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit initial progress schedule in duplicate within fifteen (15) days after date of

Owner-Contractor Agreement for Architect review.

- B. 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.
- C. Submit a horizontal bar chart with separate line for each major section of Work or operation, identifying first workday of each week.

1.21 PROPOSED PRODUCTS LIST

- A. Within fifteen (15) days after date of Owner-Contractor Agreement, submit list of major Products proposed for use, with name of manufacturer, trade name, and model number of each product.

1.22 PRODUCT DATA

A. Product Data For Review:

- 1. Submitted to Architect/Engineer for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
- 2. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article above and for record documents.

B. Product Data For Information:

- 1. Submitted for the Architect benefit as contract administrator or for the Owner.

C. Product Data For Project Close-out:

- 1. Submitted for the Owner's benefit during and after project completion.

D. Submit the number of copies, which the Contractor requires, plus two copies, which will be retained by the Architect.

E. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information unique to this project.

1.23 SHOP DRAWINGS

A. Shop Drawings For Review:

- 1. Submitted to Architect/Engineer for review for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.

2. After review, produce copies and distribute in accordance with the SUBMITTAL PROCEDURES article and for record documents.
- B. Shop Drawings For Information:
1. Submitted for the Architect/Engineer's benefit as contract administrator and/or for the Owner.
- C. Shop Drawings For Project Close-out:
1. Submitted for the Owner's benefit during and after project completion.
- D. Submit six (6) complete copies to the Architect.

1.24 SAMPLES

- A. Samples For Review:
1. Submitted to Architect/Engineer for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
 2. After review, produce duplicates and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents.
- B. Samples For Information:
1. Submitted for the Architect/Engineer's benefit as contract administrator or for the Owner.
- C. Samples For Selection:
1. Submitted to Architect for aesthetic, color, or finish selection.
 2. Submit samples of finishes from the full range of manufacturers' standard colors, textures, and patterns for Architect selection.
 3. After review, produce duplicates and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents
- D. Submit samples to illustrate functional and aesthetic characteristics of the Product.
- E. Submit samples of finishes from the full range of manufacturers' standard colors, textures, and patterns for Architect's selection.

1.25 MANUFACTURER INSTALLATION 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.

1.26 MANUFACTURER CERTIFICATES

- A. When specified in individual specification sections, submit certifications by manufacturer to Architect/Engineer, 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.

1.27 QUALITY ASSURANCE - 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' printed instructions.
- C. Comply with specified standards as minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

1.28 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify that utility services are available, of the correct characteristics, and in the correct location.

1.29 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.

1.30 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 manufacturers' tolerances.

1.31 REFERENCES

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

1.32 MOCK-UPS

- A. Tests will be performed under provisions identified in this section and identified in the respective product specification sections.
- B. Accepted mock-ups are representative of the quality required for the Work.
- C. Where mock-up has been accepted by Architect/Engineer and is specified in product specification sections to be removed; remove mock-up and clear area when directed to do so.

1.33 INSPECTION AND TESTING LABORATORY SERVICES

- A. General Contractor will appoint, employ, and pay for specified services of an independent firm to perform inspection and testing.
- B. The independent firm will perform inspections, tests, and other services as required.
- C. Cooperate with independent firm; furnish samples as requested.
- D. Re-testing required because of non-conformance to specified requirements will be charged to the General Contractor.

1.34 MANUFACTURERS' FIELD SERVICES AND REPORTS

- A. When specified in individual specification sections, require material or Product suppliers or manufacturers to provide qualified staff personnel to observe site conditions and to initiate instructions when necessary.
- B. Report observations and site decisions or instructions that are supplemental or contrary to manufacturers' written instructions.

1.35 TEMPORARY ELECTRICITY

- A. Cost: Contractor shall provide and pay for temporary power and utility service required from source until Certificate of Occupancy is issued.

- B. Provide power outlets for construction operations, branch wiring, distribution boxes, and flexible power cords as required.

1.36 TEMPORARY LIGHTING FOR CONSTRUCTION PURPOSES

- A. Provide and maintain temporary lighting for construction operations.
- B. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, and lamps as required.
- C. Permanent building lighting may be utilized during construction. Repair, clean, and replace lamps at end of construction.

1.37 TEMPORARY HEAT

- A. General Contractor shall provide and pay for temporary heating devices as needed to maintain specified conditions for construction operations until Certificate of Occupancy is issued.

1.38 TEMPORARY VENTILATION

- A. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.

1.39 TELEPHONE SERVICE

- A. Provide, maintain and pay for telephone and telephone facsimile service to field office at time of project mobilization. Allow Architect/Engineer incidental use.

1.40 TEMPORARY WATER SERVICE

- A. Provide, maintain and pay for suitable quality water service required until Certificate of Occupancy is issued.

1.41 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required temporary sanitary facilities and enclosures until Certificate of Occupancy is issued.
- B. Maintain in clean and sanitary condition per local codes.

1.42 BARRIERS AND FENCING

- A. As required by OSHA and Owners

1.43 WATER CONTROL

- A. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- B. Provide erosion control around perimeter property lines.

1.44 EXTERIOR ENCLOSURES

- A. Provide temporary weather tight closures to exterior openings to permit acceptable working conditions and protection of the Work.

1.45 INTERIOR ENCLOSURES

- A. As required.

1.46 PROTECTION OF INSTALLED WORK

- A. Protect installed Work and provide special protection where specified in individual specification sections.
- B. Prohibit traffic or storage upon waterproofed or roofed surfaces.

1.47 SECURITY

- A. Provide security and facilities to protect Work and Owner's operations from unauthorized entry, vandalism, or theft.

1.48 ACCESS ROADS

- A. Maintain roads accessing public thoroughfares to serve construction area.

1.49 PARKING

- A. Park at designated areas as directed by Owner.

1.50 PROGRESS CLEANING AND WASTE REMOVAL

- A. Collect and maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Clean construction rubbish or materials from roadways and drives that inadvertently falls on surfaces to original conditions.

1.51 PROJECT IDENTIFICATION

- A. Provide an 8' x 4' project sign of exterior grade plywood and wood frame construction, painted to Architect's design and colors.

1.52 FIELD OFFICES AND SHEDS

- A. Office: Weather tight, with lighting, electrical outlets, heating, cooling and ventilating equipment, and equipped with sturdy furniture and drawing display table.
- B. Provide air-conditioned space for Project meetings, with table and chairs to accommodate eight (8) to ten (10) persons.

1.53 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, and materials, prior to Substantial Completion review.
- B. Remove underground installations to a minimum depth of two (2) feet (600 mm). Grade site as indicated.
- 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.

1.54 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

1.55 TRANSPORTATION, HANDLING, STORAGE AND PROTECTION

- A. Transport, handle, store, and protect Products in accordance with manufacturer's instructions.

1.56 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 a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

1.57 SUBSTITUTIONS

- A. Instructions to Bidders specify time for submitting requests for substitutions during the bidding period to requirements specified in this section.
- B. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- C. Submit three (3) copies of request for Product Substitutions for consideration. Limit each request to one proposed Substitution.

1.58 STARTING SYSTEMS

- A. Provide seven (7) days notification prior to start-up of each item.
- B. Ensure that each piece of equipment or system is ready for operation.
- C. Execute start-up under supervision of responsible persons in accordance with manufacturers' instructions.
- D. Submit a written report that equipment or system has been properly installed and is functioning correctly.

1.59 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of Products to Owner's personnel two (2) weeks prior to date of Substantial Completion.

1.60 TESTING, ADJUSTING, AND BALANCING

- A. Contractor is to employ an independent testing agency to adjust air flows from all diffusers in each space to maintain plus/minus one degree throughout building, see mechanical.

1.61 CONTRACT CLOSEOUT PROCEDURES

- A. 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 Architect/Engineer's inspection.
- B. Submit final Application for Payment identifying total adjusted Contract Sum/Price, previous payments, and amount remaining due.

1.62 FINAL CLEANING

- A. Execute final cleaning prior to final inspection.
- B. Clean interior and exterior surfaces exposed to view. Vacuum carpeted and soft surfaces.
- C. Clean debris from site, roofs, gutters, downspouts, and drainage systems.
- D. Clean all filters of operating equipment.
- E. Remove waste and surplus materials, rubbish, and construction facilities from the site.

1.63 ADJUSTING

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

1.64 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 a description of actual Products installed.
- D. Record Documents and Shop Drawings: Legibly mark each item to record actual construction.
- E. Submit documents to Architect with claim for final Application for Payment.

1.65 OPERATION AND MAINTENANCE DATA

- A. Submit two (2) sets prior to final inspection, bound in 8-1/2 x 11 inch (216 x 279 mm)

text pages, three (3) D side ring capacity expansion binders with durable plastic covers.

- B. Prepare binder cover with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS" and title of project.
- C. Internally subdivide the binder contents with permanent page dividers, logically organized, with tab titles clearly 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: Operation and maintenance instructions, arranged by system.
 - 3. Part 3: Project documents, certificates, and warranties.

1.66 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Provide Products, spare parts, maintenance and extra materials in quantities specified in individual specification sections.
- B. Deliver to Project site and place in location as directed; obtain receipt prior to final payment.

1.67 WARRANTIES

- A. Provide duplicate notarized copies.
- B. Execute and assemble transferable warranty documents from Subcontractors, suppliers, and manufacturers.
- C. Submit prior to final Application for Payment.

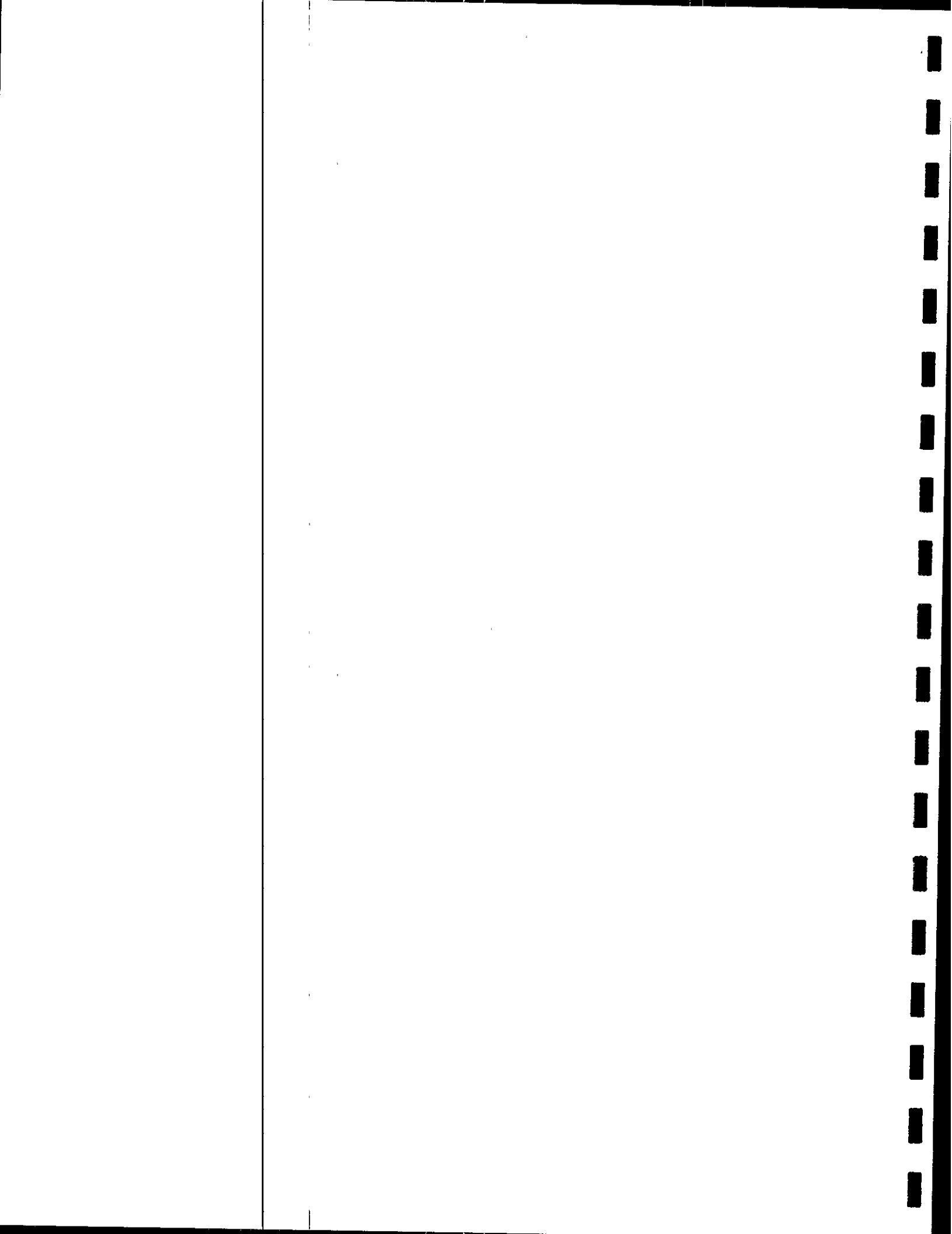
PART 2 - PRODUCT

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION



SECTION 01010 - SUMMARY OF THE WORK

PART 1 - GENERAL

1.1 WORK COVERED BY THE CONTRACT DOCUMENTS

- A. The work to be provided by Owner shall include, but is not limited to:
 - 1. Site work: By Owner (Contractor is to extend site utilities 5'-0" outside building pad).
- B. The work required by this contract shall include, but is limited to:
 - 1. Construction: Concrete Work, Masonry, Steel Metal Fabrications, Residential Equipment Work, Steel Studs, Casework, Stucco Finish Systems, Doors and Windows, Insulation, Roofing, Finishes, Plumbing, Fire Protection, Heating, Ventilating, Air Conditioning, Electrical, and All utility tie-in connections.

1.2 PROJECT LOCATION

- A. The project is located on the southside of County Road C-30A and approximately 1/4 mile east of Highway 393; Walton County, Florida.

1.3 ALLOWANCES

- A. Carpet allowance: \$24/yard (including carpet, pad and labor to install).
- B. Owner's Contingency: \$500,000.

1.4 CONTRACT

- A. Construct the work under a single fixed-price contract.

1.5 USE OF PREMISES

- A. Contractor shall limit his use of the premises for work and for storage to allow
 - 1. Work by Subcontractors.
- B. Contractor shall coordinate his use of the premises under direction of the Owners.
- C. Contractor shall assume full responsibility for the protection products under this contract that are stored on the site or elsewhere.

- D. Contractor shall assume full responsibility for safety at the work site, of existing occupants, workers, and visitors.
- E. Do not encumber the site with materials or equipment. Confine stockpiling of materials and locations of storage sheds to areas indicated.
- F. Lock automotive type vehicle and other mechanized or motorized construction equipment, when parked and unattended. Do not leave vehicles or equipment unattended with a motor running or ignition key in place.
- G. Provide barriers and signs to clearly delineate construction area and to limit public access.

END OF SECTION

SECTION 01045 - CUTTING/PATCHING/CLEAN UP

PART 1 - GENERAL

1.1 DESCRIPTION OF THE WORK

- A. Definition: "Cutting and patching" includes cutting into existing construction to provide for the installation or performance of other work and subsequent fitting and patching required to restore surfaces to their original condition.
1. Refer to other sections of these specifications for specific cutting and patching requirements and limitations applicable to individual units of work.

1.2 CUTTING AND PATCHING

- A. Cutting and patching is the responsibility of the Contractor including attendant excavation and backfill required to complete the work or to:
1. Make its several parts fit together properly.
 2. Uncover portions of the work to provide for installation of ill-timed work.
 3. Remove and replace defective work.
 4. Provide routine penetrations of non-structural surfaces for installation of piping and electrical conduit.

1.3 STRUCTURAL WORK

- A. Do not cut-and-patch structural work in a manner resulting in a reduction of load-carrying capacity or load/deflection ratio. Submit proposal/request and obtain Architect's/Engineer's approval before proceeding with cut-and-patch of structural work.

1.4 VISUAL/QUALITY LIMITATION

- A. Do not cut-and-patch work exposed to view (exterior and interior) in a manner resulting in noticeable reduction of aesthetic qualities and similar qualities, as judged by Architect/Engineer.

1.5 LIMITATIONS ON APPROVALS

- A. Architect's/Engineer's approval to proceed with cutting and patching does not waive right to later require removal/replacement of work found to be cut-and-patched in an unsatisfactory manner, as judged by Architect/Engineer.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Use materials for cutting and patching that are identical to existing materials. If identical materials are not available, or cannot be used, use materials that match existing adjacent surfaces to the fullest extent possible with regard to visual effect. Use materials for cutting and patching that shall result in equal-or-better performance characteristics.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Inspection: Before cutting, examine surfaces to be cut-and-patched and conditions under which the work is to be performed. If unsafe or otherwise unsatisfactory conditions are encountered, take corrective action before proceeding with the work.

3.2 TEMPORARY SUPPORTS

- A. Provide adequate temporary supports as necessary to assure the structural integrity of the affected portion of the work.

3.3 PROTECTION

- A. Protect other work during cutting and patching to prevent damage. Provide protection from adverse weather conditions for that part of the project that may be exposed during cutting and patching operations.

3.4 INTERFERENCE

- A. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

3.5 PRECAUTIONS

- A. Take precautions not to cut existing pipe, conduit or duct serving the building but scheduled to be relocated until provisions have been made to bypass them.

3.6 CUTTING:

- A. Cut the work using methods that are least likely to damage work to be retained or adjoining work. Where possible, review proposed procedures with the original installer; comply with original installer's recommendations.
- B. Where cutting is required use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut through concrete and masonry using a cutting machine such as carborundum saw or core drill. Cut holes and slots neatly to size required with minimum disturbance of adjacent work. To avoid marring existing finished surfaces, cut and drill from the exposed or finished side into concealed surfaces. Temporarily cover openings when not in use

PART 4 - PERFORMANCE

4.1 GENERAL

- A. Execute cutting and demolition by methods, which shall prevent damage to other work, and shall provide the proper surfaces to receive repairs.
- B. Execute excavating and backfilling by methods which shall prevent settlement or damage to other work or the building.
- C. Restore work, which has been cut or removed; install new products to provide completed work in accordance with requirements of Contract Documents.
- D. Refinish entire surfaces as necessary to provide an even finish to match adjacent finishes.

PART 5 - PATCHING

5.1 GENERAL

- A. Patching: Patch with seams which are durable and as invisible as possible. Comply with specified tolerances for the work.
- B. Restore exposed finishes of patched areas and where necessary extend finish restoration into retained adjoining work in a manner which shall eliminate evidence of patching refinishing.

PART 6 - CLEAN UP

6.1 GENERAL

- A. Prior to final acceptance the Contractor shall thoroughly clean the entire project of all debris, excess material, trash or any other loose or foreign matter which is on the site at the completion of the project as a result of the work on the project. This shall include, but is not limited to, floor, finishes and site. Remove all debris associated with construction. Burning shall not be allowed on site.
- B. The Contractor for the general work shall keep the site of operations free from accumulations of rubbish and waste materials at all times, and shall require Subcontractors to remove and dispose of their debris. Removal and disposition of debris shall be made by Contractor at no cost to the Owner.
- C. Should any Contractor or Subcontractor allow rubbish or waste material to accumulate on any portion of the site or in any portion of the building to such extent that the accumulation constitutes a hazard or obstructs the prosecution of the work in any way, the Architect or Owner may, if Contractor/Subcontractor at fault fails to remove such debris or waste material after written notice to clear up the accumulation, engage proper labor or services of another Contractor to make necessary removal and disposition and to charge cost against monies due to Contractor.
- D. Flammable and combustible materials shall be kept in metal cans with tight covers, and removed from building at the end of each working day.

END OF SECTION

SECTION 01090 - DEFINITIONS AND STANDARDS

PART 1-DEFINITIONS

1.1 GENERAL

- A. Except as specifically defined otherwise, the following definitions supplement definitions of the Contract, General Conditions, Supplementary Conditions and other Contract Documents. And apply generally to the Work.
- B. The provisions of Division 0 sections, General Requirements, apply to the entire work of the Contract.
- C. Indicated: Shown on drawings by notes, graphics or schedules, or written into other portions of Contract Documents. Terms such as "shown", "noted", "scheduled" and "specified" have same meaning as "indicated", and are used to assist the reader in locating particular information.
- D. Directed, Requested, Reviewed, etc.: These terms imply "by the Architect/Engineer", unless otherwise indicated.
- E. "Reviewed by Architect/Engineer" in no case releases Contractor from responsibility to fulfill requirements of Contract Documents.
- F. Layout Area: Space available to Contractor at location of project, either exclusively or to be shared with separate contractors, for performance of the work.
- G. Furnish: Supply and deliver to project site, ready for unloading, unpacking, assembly, installation, and similar subsequent requirements.
- H. Install: Operations at project site, including unloading, unpacking, assembly, erection, placing, anchoring, applying, working dimension, finishing, curing, protecting, cleaning, and similar requirements.
- I. Provide: Furnish and install, complete and ready for intended use.
- J. Installer: Entity (firm or person) engaged to install work, by Contractor, Subcontractor or Sub-subcontractor. Installers are required to be skilled in work they are engaged to install.
- K. Specification Text Format: Underscoring facilitates scan reading, no other meaning. Imperative language is directed at Contractor, unless otherwise noted.
- L. Overlapping/Conflicting Requirements: Most stringent (generally) requirement in the Contract Documents is intended and shall be enforced, unless specifically detailed language in the Contract Documents clearly indicates that a less stringent requirement is acceptable. Refer uncertainties to the Architect/Engineer for a decision before

proceeding.

1. Where optional requirements are specified, option is intended to be Contractor's unless otherwise indicated.
- M. **Minimum Requirements:** Indicated requirements are for a specific minimum acceptable level of quality/quantity, as recognized in the industry. Actual work must comply (within specified tolerances), or may exceed minimums within reasonable limits. Refer uncertainties to Architect/Engineer before proceeding.
- N. **Abbreviations, Plural Words:** Abbreviations, where not defined in Contract Documents, shall be interpreted to mean the normal construction industry terminology, determined by recognized grammatical rules, by the Architect/Engineer. Plural words shall be interpreted as singular and singular words shall be interpreted as plural where applicable for context of Contract Documents. Where abbreviations or acronyms are used in Contract Documents, they mean the well recognized name of entity in building construction industry; refer uncertainties to Architect/Engineer before proceeding, or consult "Encyclopedia of Associations" by Gale Research Company.
- O. **Testing Laboratory:** An independent entity engaged for the project to provide inspections, tests, interpretations, reports and similar services.
- P. **Shop Drawings:** Drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or any Subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.
- Q. **Product Data:** Illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate a material, product or system for some portion of the Work.
- R. **Samples:** Physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work shall be judged.

PART 2 - STANDARDS AND REGULATIONS

2.1 GENERAL

- A. **Industry Standards:** Applicable standards of construction industry have same force and effect on performance of the work as if copied directly into the Contract Documents or bound and published therewith. Standards referenced in Contract Documents or in governing regulations have precedence over non-referenced standards, as different standards may contain overlapping or conflicting requirements. Comply with standard in effect as of date of Contract Documents, unless otherwise indicated.

END OF SECTION

SECTION 01150 - SCHEDULE OF VALUES AND REQUEST FOR PAYMENT

PART 1 - GENERAL

1.1 SCHEDULE OF VALUES

- A. As required by the General Conditions, Article 24, the Contractor shall submit a schedule of values allocated to the various portions of the building.
- B. Schedule shall be submitted within fifteen days of signing contract or before first draw, whichever is sooner.
- C. Upon request of the Architect/Engineer, support the values with data, which shall substantiate their correctness.
- D. The schedule of values, unless objected to by the Architect/Engineer, shall be used only as the basis for the Contractor's Applications for Payment.
- E. Related requirements specified in other sections apply.

PART 2 - FORM AND CONTENT OF SCHEDULE OF VALUES

2.1 GENERAL

- A. Type schedule on 8 ½ x 11" white paper: Contractor's standard forms and automated printout shall be considered for approval by Architect/Engineer upon Contractor's request. Identify schedule with:
 - 1. Title of project and location.
 - 2. Architect/Engineer and project number.
 - 3. Name and address of Contractor.
 - 4. Contract designation.
 - 5. Date of submission.
- B. Schedule shall list the installed value of the component parts of the work in sufficient detail to serve as a basis for computing values for progress payments during construction.
- C. Follow the Table of Contents of the Project manual as the format for listing component items.
 - 1. Identify each line item with the number and title of the respective major section of the specifications.

PART 3 - REQUEST FOR PAYMENT

3.1 GENERAL

- A. Submit itemized applications typed on AIA Document G702, Application and Certification for Payment, continuation sheet(s) G703.

PART 4 - SUBMITTAL PROCEDURE

4.1 GENERAL

- A. Submit Applications for Payment to Architect at the times stipulated in the Agreement.
- B. Number: Three copies of each Application.
- C. When Architect/Engineer finds the application properly completed and correct, he shall transmit a certificate for payment to Owner, with a copy to Contractor.
- D. Prior to the initial payment request, submit:
 - 1. List of principal subcontractors and suppliers.
 - 2. Schedule of values.
 - 3. Progress schedule and first progress report.
 - 4. Copies of building permits and similar start-up authorization or certifications.
 - 5. Performance/payment bonds (if required)
 - 6. Evidence of insurance coverage
- E. Following issuance by Architect/Engineer of Certificate of Substantial Completion, Contractor may submit special payment request, provided the following have been completed:
 - 1. Obtain permits, certificates of inspection and other approval and releases by governing authorities, required for Owner's occupancy and use of project.
 - 2. Submit warranties and similar documentation.
 - 3. Submit maintenance manuals and provide instruction to Owner's operation/maintenance personnel.
 - 4. Complete final cleaning of the work.
 - 5. Submit record documents.
 - 6. Submit listing of work to be completed before final acceptance.
- F. Following completion of the following requirements, final payment request may be submitted:
 - 1. Complete work listed as incomplete at time of substantial completion.
 - 2. Settle liens and other claims, or assure Owner of subsequent settlement.
 - 3. Submit proof of payment of fees, taxes and similar obligations.

4. Transfer operational, access, security and similar provisions to Owner; and remove temporary facilities, tools and similar items
5. Completion of requirements specified in "Project Close-out"-Section 01700.
6. Obtain Consent of Surety for final payment.

END OF SECTION



SECTION 01150 - SCHEDULE OF VALUES AND REQUEST FOR PAYMENT

PART 1 - GENERAL

1.1 SCHEDULE OF VALUES

- A. As required by the General Conditions, Article 24, the Contractor shall submit a schedule of values allocated to the various portions of the building.
- B. Schedule shall be submitted within fifteen days of signing contract or before first draw, whichever is sooner.
- C. Upon request of the Architect/Engineer, support the values with data, which shall substantiate their correctness.
- D. The schedule of values, unless objected to by the Architect/Engineer, shall be used only as the basis for the Contractor's Applications for Payment.
- E. Related requirements specified in other sections apply.

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2.1 GENERAL

- A. Type schedule on 8 ½ x 11" white paper: Contractor's standard forms and automated printout shall be considered for approval by Architect/Engineer upon Contractor's request. Identify schedule with:
 - 1. Title of project and location.
 - 2. Architect/Engineer and project number.
 - 3. Name and address of Contractor.
 - 4. Contract designation.
 - 5. Date of submission.
- B. Schedule shall list the installed value of the component parts of the work in sufficient detail to serve as a basis for computing values for progress payments during construction.
- C. Follow the Table of Contents of the Project manual as the format for listing component items.
 - 1. Identify each line item with the number and title of the respective major section of the specifications.

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- D. Prior to the initial payment request, submit:
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 - 2. Schedule of values.
 - 3. Progress schedule and first progress report.
 - 4. Copies of building permits and similar start-up authorization or certifications.
 - 5. Performance/payment bonds (if required)
 - 6. Evidence of insurance coverage
- E. Following issuance by Architect/Engineer of Certificate of Substantial Completion, Contractor may submit special payment request, provided the following have been completed:
 - 1. Obtain permits, certificates of inspection and other approval and releases by governing authorities, required for Owner's occupancy and use of project.
 - 2. Submit warranties and similar documentation.
 - 3. Submit maintenance manuals and provide instruction to Owner's operation/maintenance personnel.
 - 4. Complete final cleaning of the work.
 - 5. Submit record documents.
 - 6. Submit listing of work to be completed before final acceptance.
- F. Following completion of the following requirements, final payment request may be submitted:
 - 1. Complete work listed as incomplete at time of substantial completion.
 - 2. Settle liens and other claims, or assure Owner of subsequent settlement.
 - 3. Submit proof of payment of fees, taxes and similar obligations.

4. Transfer operational, access, security and similar provisions to Owner; and remove temporary facilities, tools and similar items
5. Completion of requirements specified in "Project Close-out"-Section 01700.
6. Obtain Consent of Surety for final payment.

END OF SECTION



SECTION 01160 - PROGRESS SCHEDULE

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The Contractor shall develop a Progress Schedule demonstrating fulfillment of the contract requirements, shall keep the schedule up to date in accordance with the requirements of this section. The schedule form shall be approved by the Architect.
- B. The Contractor's Progress Schedule shall clearly delineate the work to be performed, and identify dates critical to Substantial Completion, as well as all other work to be executed by the Contractor.
- C. The Contractor's Progress Schedule shall be revised each month as required to accurately reflect the progress of the work, and the anticipated progress. Copies of the updated revised progress schedule shall be submitted with each Monthly Pay Request.

1.2 CONTRACTOR'S REPRESENTATIVE

- A. The Contractor shall designate an authorized representative in the firm who shall be responsible for the preparation of the schedule, review and report progress of the project with and to the Architect. The Contractor's representative shall have direct project control and complete authority to act on behalf of the Contractor in fulfilling the requirements of this specification section and such authority shall not be interrupted throughout the duration of the project.

PART 2 - PROGRESS AND PROGRESS REPORTING

2.1 MEETINGS AND REPORTS

- A. Job site progress meetings shall be held on dates mutually agreed to by the Owner (or Representative), the Architect and the Contractor. Contractor shall be required to attend all monthly progress meetings. Presence of Subcontractors during progress meetings is optional unless required by the Architect. The Contractor shall complete their copy of the "look-ahead report" and all other data required by this section shall be accurately filled in and completed prior to the monthly progress meeting. The Contractor shall provide this information to the Architect at the time of the progress meeting.
- B. "Look-Ahead" Reports: The Contractor shall be responsible for providing "look-ahead" reports, clearly identifying which aspects of the work are to be executed in the time period between the most recent Progress Meeting and the next three month period of work. The specific subcontractors responsible for the work to be executed during

this time period shall be identified, as well as anticipated dates that their work is to be completed.

PART 3 - RESPONSIBILITY FOR COMPLETION

3.1 MEETING COMPLETION DATES

- A. Whenever it becomes apparent from the current monthly progress review meeting that the contract completion dates shall not be met, the Contractor shall execute some or all of the following remedial action:
 - 1. Increase construction manpower in such quantities and crafts as necessary to eliminate the backlog of work.
 - 2. Increase the number of working hours per shift, shifts per working day, working days per week, the amount of construction equipment, or any combination of the foregoing to eliminate the backlog of work.
 - 3. Reschedule the work in conformance with the specification requirements.
- B. Prior to proceeding with any of the above actions, the Contractor shall notify and obtain approval from the Architect for the proposed schedule changes.

PART 4 - ADJUSTMENT OF CONTRACT COMPLETION

4.1 REQUESTS FOR EXTENSIONS

- A. The contract completion time shall be adjusted only for causes specified in this contract. Request for an extension of the contract completion date by the Contractor shall be supported with a justification and supporting evidence as the Owner may deem necessary for determination as to whether or not the Contractor is entitled to an extension of time under the provisions of the contract. The Owner shall, within a reasonable time after receipt of such justification and supporting evidence, review the facts and advise the Contractor in writing of Owner's decision.
- B. The Contractor shall submit each request for a change in the contract completion date to the Owner. The Contractor shall include, as a part of each change order proposal, a sketch showing revisions, for the work in question and its relationship to other activities on the approved schedule.
- C. The original schedules shall be in reproducible form, with two copies each. The original reproducible form, after approval, must be used each month with the updated information added to the reproducible schedules and three copies of the schedules submitted with the request for payment.

END OF SECTION

SECTION 01160 - PROGRESS SCHEDULE

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The Contractor shall develop a Progress Schedule demonstrating fulfillment of the contract requirements, shall keep the schedule up to date in accordance with the requirements of this section. The schedule form shall be approved by the Architect.
- B. The Contractor's Progress Schedule shall clearly delineate the work to be performed, and identify dates critical to Substantial Completion, as well as all other work to be executed by the Contractor.
- C. The Contractor's Progress Schedule shall be revised each month as required to accurately reflect the progress of the work, and the anticipated progress. Copies of the updated revised progress schedule shall be submitted with each Monthly Pay Request.

1.2 CONTRACTOR'S REPRESENTATIVE

- A. The Contractor shall designate an authorized representative in the firm who shall be responsible for the preparation of the schedule, review and report progress of the project with and to the Architect. The Contractor's representative shall have direct project control and complete authority to act on behalf of the Contractor in fulfilling the requirements of this specification section and such authority shall not be interrupted throughout the duration of the project.

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- B. The Contractor shall submit each request for a change in the contract completion date to the Owner. The Contractor shall include, as a part of each change order proposal, a sketch showing revisions, for the work in question and its relationship to other activities on the approved schedule.
- C. The original schedules shall be in reproducible form, with two copies each. The original reproducible form, after approval, must be used each month with the updated information added to the reproducible schedules and three copies of the schedules submitted with the request for payment.

END OF SECTION

SECTION 01205 - PROCEDURES AND CONTROLS

PART 1 - ADMINISTRATION AND SUPERVISION

1.1 COORDINATION

- A. Coordinate various elements of the work and entities engaged to perform work; and coordinate the work with existing facilities/conditions, and with work by separate Contractors and by Owner.

PART 2 - SURVEYING/RECORDING

2.1 GENERAL

- A. Working from established lines and levels at or near project site, establish and maintain dependable markers for lines and levels of the work. Calculate dimensions and measure for layout of work; do not scale the drawings. Maintain surveyor's log of layout work. Record deviations from drawing information on existing conditions and review with Architect/Engineer at time of discovery.

PART 3 - INSPECTIONS AND TESTING

3.1 GENERAL

- A. Provide required inspection and testing services specified to be by independent agencies, where not indicated specifically as Owner's responsibility (this provision supplements General Conditions). Neither inspection and test results nor failure thereof to disclose deficiencies relieves Contractor of responsibility to comply with requirements of Contract Documents. Provide services to inspection and testing agencies (Owner's and Contractor's), including taking and delivery of samples, patching work and similar assistance. Require engaged agencies to perform indicated testing and submit reports promptly; and to report significant observations having an important bearing on the work, to the Architect/Engineer by the most expeditious means possible.
- B. Installer Inspections: Require Installer of each major unit of work to inspect substrate and conditions for installation, and to report (in writing) unsatisfactory conditions. Correct unsatisfactory conditions before proceeding. Inspect each product immediately before installation, and do not install damaged or defective products, materials or equipment.

PART 4 - PREPARATION FOR INSTALLATION

4.1 PRE-INSTALLATION CONFERENCE

- A. Prior to starting installation of each major component of the work, hold a pre-installation conference, attended by each entity involved or affected by planned installation. Include technical representatives of product by manufacturers and others recognized as expert or otherwise capable of influencing success of installation. Review significant aspects of requirements for the work. Record discussion and distribute as plan of action.

PART 5 - INSTALLATION, GENERAL

5.1 GENERAL

- A. Comply with manufacturer's instructions and recommendations to extent printed information are more detailed or stringent that requirements contained directly in Contract Documents.
- B. Timing: Install work during time and under conditions, which shall ensure best possible results, coordinated with required inspection and testing.
- C. Anchor work securely in place; properly located by measured line and level, organized for best possible uniformity, visual effect, operational efficiency, durability, and benefit to Owner's use. Insulate non-compatible materials from contact sufficiently to prevent deterioration.
- D. Mount individual units of work at industry-recognized mounting heights, if not otherwise indicated; refer uncertainties to Architect/Engineer before proceeding.

PART 6 - CLEANING AND PROTECTION

6.1 GENERAL

- A. Clean each element of work at time of installation. Provide sufficient maintenance and protection during construction to ensure freedom from damage and deterioration at time of Substantial Completion

END OF SECTION

SECTION 01300 - SUBMITTAL/SHOP DRAWINGS/PRODUCT DATA/SAMPLES

PART 1 - GENERAL

1.1 SHOP DRAWINGS

- A. Submit shop drawings, Product Data and Samples required by the Contract Documents.
- B. Related requirements specified in other sections:
 - 1. Warranties: Section 01350
 - 2. Heating, Ventilation & Air Condition: Division 15
 - 3. Plumbing: Division 15
 - 4. Electrical: Division 16
- C. "EQUIVALENT SUBSTITUTIONS"-See Section 01631-Products and Substitutes. Whenever a material, article or piece of equipment is identified on the plans or in the specifications by reference to manufacturer's or vendor's names, catalog numbers, etc., it is intended merely to establish a standard; and, any material, by the general design shall be considered equally acceptable provided the material, article or equipment so proposed, is in the opinion of the Architect/Engineer, of equal substance and function. It shall not be purchased or installed by the Contractor without the Architect's/Engineer's written review.
- D. Definitions of Shop Drawings, Product Data and Samples are as follows:
 - 1. Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or any Subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.
 - 2. Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate a material, product or system for some portion of the Work.
 - 3. Samples are physical examples, which illustrate materials, equipment or workmanship and establish standards by which the Work shall be judged.

PART 2 - PROCEDURES

2.1 GENERAL

- A. General Contractor only shall submit all Shop Drawings, Product Data and Samples. The Contractor shall review, approve and submit, with reasonable promptness and in such sequence as to cause no delay in the Work or in the work of the Owner or any separate Contractor, all Shop Drawings, Product Data and Samples required by Contract Documents.

- B. General Contractor, by approving and submitting Shop Drawings, Product Data and Samples, represents that he has determined and verified all materials, field measurements, and field construction criteria related thereto, or shall do so, and that he has checked and coordinated that information contained within such submittals with the requirements of the Work and of the Contract Documents.
- C. General Contractor shall not be relieved of responsibility for any deviation from the requirements of the Contract Documents by the Architect's review of Shop Drawings, Product Data or Samples unless the Contractor has specifically informed the Architect in writing of such deviation at the time of submission and the Architect has given written acknowledgment of the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the Shop Drawings, Product Data or Samples by the Architect's review thereof.
- D. The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data or Samples, to revisions of those requested by the Architect on previous submittals.
- E. No portion of the Work requiring submission of a Shop Drawing, Product Data or Sample shall be commenced until the submittal has been reviewed as provided by the Architect. All such portions of the Work shall be in accordance with reviewed submittals.
- F. The Architect shall review or take other appropriate action upon Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for conformance with design concept of the Work and with the information given in the Contract Documents. Such action shall be taken with reasonable promptness so as to cause no delay. The Architect's review of a specific item shall not indicate approval of an assembly of which the item is a component.
- G. Coordination: Coordination the preparation and processing of work-related submittals with the performance of the work. Coordinate each separate submittal with other submittals and related activities that require sequential activity. Coordinate the submittal of different units of interrelated work so that one submittal shall not be delayed by the necessity of reviewing a related submittal.
- H. Submit all Structural, Mechanical, Plumbing and Electrical items at one time.
- I. Submit color and material selections where applicable with respective Shop Drawings.

PART 3 - DISCONTINUED ITEMS

3.1 GENERAL

- A. Every effort is made to select and use products and colors that are currently in production. Statements that a color or product is out of production shall not be accepted unless accompanied by written proof from the manufacturer of the product.

PART 4 - COLOR SUBMITTALS

4.1 GENERAL

- A. The Architect's Color Schedule requires that all submittals be in as early as possible after Contract is awarded for him to properly coordinate and make color selections. A color schedule shall not be produced until all items requiring color samples are on hand in the Architect's office, refer to paragraph 01300.6.1 for reviewing time.

PART 5 - SUBMITTAL CONTENTS

5.1 GENERAL

- A. The date of submission and the dates of any previous submissions.
- B. The project title and number. Submittals not clearly marked to identify the material, equipment and accessories on which approval is requested shall be returned without action, for identification and resubmittal.
- C. Contract identification.
- D. The names of: Contractor, Supplier, and Manufacturer.
- E. Identification of the product, with the specification section number.
- F. Field dimensions, clearly identified as such.
- G. Relation to adjacent or critical features of the work or materials.
- H. Applicable standards, such as ASTM or Federal Specification numbers.
- I. Identification of deviations from Contract Documents.
- J. Identification of revisions on resubmittal.
- K. Package each submittal appropriately for transmittal and handling.

PART 6 - SPECIFIC REQUIREMENTS

6.1 GENERAL

- A. Shop Drawings shall be submitted in adequate time as not to delay progress of the

work. Allow a minimum of three weeks for processing of each submittal. No extension of time shall be allowed because of failure to transmit submittals to the Architect/Engineer sufficiently in advance of the Work.

PART 7 - SPECIFIC REQUIREMENTS

7.1 SHOP DRAWINGS

- A. All submittals 11" x 17" or smaller submit on each copy of each item for review.
1. All submittals larger than 11" x 17" shall be submitted as follows:
 - a. Initial submittal: Six sets of Xerox copies.
 - b. After approval, Contractor shall print and process all copies necessary for job use and distribution.
 - c. Where it is necessary to provide intermediate submittals between the initial and final submittals, provide and process intermediate submittals in the same manner as for initial submittals. See Mechanical and Electrical Sections for their specific Shop Drawing Requirements.
 2. Architect's Review of Submittals:
 - a. Submittals reviewed by the Architect shall be returned to the Contractor stamped or marked by the Architect as follows:

"REVIEWED"-Means that fabrication, manufacture and/or construction may proceed providing the work is in compliance with the Contract Documents.

"REJECTED"-Means no work shall be fabricated, manufactured, and/or constructed and that the Contractor shall make a new submittal to the Architect. Any submissions marked "Rejected" shall not be permitted on the site.

"REVISED AND RESUBMIT"-Means that the submittal shall be revised and resubmitted due to inadequacies beyond minor corrective action on the submittal.

"FURNISH AS CORRECTED"-Means that fabrication, manufacture, and/or construction may proceed providing the work is in compliance with the Architect's corrections and the Contract Documents

7.2 SAMPLES

- A. Submit three samples when required. Submit with Shop Drawings if Shop Drawings are required. Submit three color samples at same time.

1. Tag or mark each sample for identification.
2. Products and materials requiring submittals are noted in the individual sections of the specifications.
3. Submit two sets of samples; one set shall be returned. Provide three or more samples in each set where variations in color, pattern, or texture are observable; show average condition and extreme range of variations. Submit full documentation with each set. Sample submittals are for Architect/Engineer's observations of color, texture, pattern and "kind". Maintain one returned set at project site for purposes of quality control comparisons.

7.3 PRODUCT DATA

- A. Mark each copy to indicate the actual product to be provided; show selections from among options in the manufacturer's printed Product Data. Submit copies to Architect/Engineer following the format in section 01300.7.1 SHOP DRAWINGS; submittal is for information and record purposes only. Where the Product Data is required for maintenance manuals, submit two additional copies that shall not be returned. Maintain one additional copy at the project site for reference purposes.
- B. Preparation: Clearly mark each copy to identify pertinent products or models.
 1. Show performance characteristics and capacities.
 2. Show dimensions and clearances required.
 3. Show wiring or piping diagrams and controls.
- C. Manufacturer's standard schematic drawings and diagrams:
 1. Modify drawings and diagrams to delete information, which is not applicable to the work.
 2. Supplement standard information to provide information specifically applicable to the work.

PART 8 - DISTRIBUTION

8.1 GENERAL

- A. Distribute reproductions of Shop Drawings and copies of Product Data which carry the Architect's/Engineer's stamp of approval to:
 1. Job Site file
 2. Other affected Contractors
 3. Subcontractors
 4. Suppliers or Fabricator
 5. Owner

- B. Documents and Samples at the Site: The Contractor shall maintain at the site for the Owner one record copy of all Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to record all changes made during construction and approved Shop Drawings, Product Data, and Samples. These shall be available to the Architect and shall be delivered to him for the Owner upon completion of the Work.

PART 9 - MISCELLANEOUS SUBMITTALS

9.1 GENERAL

- A. Provide copies of miscellaneous submittals as follows:
 1. Warranties: Submit two copies, plus additional copies as required for maintenance manuals.
 2. Inspection and Test Reports: Where not processed as Shop Drawings or Product Data, provide two copies plus additional copies as required for maintenance manuals.
 3. Field Records: Four copies, including one copy of which shall be returned for inclusion in the submittal of record documents.
 4. Maintenance Manuals: Submit two bound copies.
 5. Record Drawing: See Section 01700-Project Close-out, As-Built Drawings.
 6. Miscellaneous Record Documentation: Provide the original maintained marked-up copy.

PART 10 - ARCHITECT'S/ENGINEER'S ACTION

10.1 GENERAL

- A. Stamp: The Architect/Engineer's stamp or copy of the stamp shall be on each submittal to be returned. The stamp shall be uniform, self explanatory, and appropriately marked and executed to indicate the status of the submittal, see 01300.7.1.

END OF SECTION

SECTION 01350 - WARRANTIES

PART 1 - GENERAL

1.1 WARRANTIES

- A. Per the general conditions, the Contractor shall warrant all materials and work for one (1) year from date of Substantial Completion.

DIVISION 2 - SITEWORK

Section 02281 – Termite Control:

Five (5) years with no yearly costs or additional costs if retreatment required within five (5) year period including repair damage.

DIVISIONS 3, 4, & 5 - NONE

DIVISION 6 – WOOD & PLASTIC

Section 06200 – Finish Carpentry:

The manufacturer or woodworking company shall warrant the products from delaminating, loose edges, defective or broken hardware, loose trim, and horizontal or vertical members coming apart from each other for five years after Date of Substantial Completion.

If problems occur, each affected item shall be repaired in field or replace the product at no cost to the Owner.

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

Section 07120 – Fluid Applied Membrane Waterproofing:

Contractor shall warrant material and workmanship after final Certificate of Occupancy of the Project by the Owner for a warranty period of not less than five (5) years. In the event of membrane failure Contractor shall remove and replace all damaged items at his own cost and expense.

Section 07240 - Stucco System:

Provide manufacturer's ten (10) year warranty.

Section 07300 – Ice and Water Shield:

Roofing contractor shall furnish to Owner, the manufacturer's standard ten (10) year material warranty. Warranty shall be signed by Manufacturer, Installer (Roofer), and General Contractor.

Section 07412 – Preformed Metal Roofing:

1. The contractor shall furnish to the owner a written guarantee covering the roofing and flashing work including the installation of products furnished by

others and installed under this section of the work, against defects in materials and workmanship for a period of five (5) years from the date of Substantial Completion. Guarantees are not intended to serve as protection against poor workmanship or inferior or improper materials at the time the roof is installed, but are for the purpose of protecting the owner the owner against future failures during the intended life of the roof covering.

2. The manufacturer for the preformed metal roofing shall also furnish to the owner a written guarantee covering the finish of exposed coated metal surfaces against blistering, peeling, cracking, flaking, checking, chipping, rusting, and excessive chalking and color change for a period of twenty (20) years from the date of substantial completion.
 - a. Also provide a manufacturer's twenty (20) year weathertightness warranty equal to industry standard weathertightness warranty. Standard Weathertightness warranty.

Section 07570 – Pedestrian Traffic Deck System

The product shall be free of defects in workmanship and materials at the time of shipment to site. Defective materials shall be replaced by manufacturer at no cost to Owner.

Section 07600 - Flashing and Sheet Metal

Twenty (20) years on finish of sheet metal, five (5) years on installation.

Section 7900 - Joint Sealers

Material Warranty: Waterproofing Contractor shall warranty material and workmanship after a final acceptance of the Project by the Owner for a warranty period of not less than five (5) years.
In the event of a sealant failure, Contractor shall remove and replace all damaged items at his own cost and expense.

DIVISION 8 - DOORS AND WINDOWS

Section 08520 – Aluminum Windows:

1. The contractor shall assume full responsibility and warrant for one year the satisfactory performance of the total window installation which includes that of the windows, hardware, glass (including insulated units), glazing, anchorage and setting system, sealing, flashing, etc., as it relates to air, water and structural adequacy as called for in the specifications and approved shop drawings.
2. Any deficiencies due to such elements not meeting the specifications shall be corrected by the responsible contractor at his expense during the warranty period.
3. Insulated glass is to be warranted for ten (10) years against materially obstructed vision due to dust, film, or moisture on the interior surfaces of the glass.

Section 08640 – Glazed Patio Doors:

1. The contractor shall assume full responsibility and warrant for one year the satisfactory performance of the total door installation which includes that of the

doors, hardware, glass (including insulated units), glazing, anchorage and setting system, sealing, flashing, etc., as it relates to air, water and structural adequacy as called for in the specifications and approved shop drawings.

2. Any deficiencies due to such elements not meeting the specifications shall be corrected by the responsible contractor at his expense during the warranty period.
3. Insulated glass is to be warranted for ten (10) years against materially obstructed vision due to dust, film, or moisture on the interior surfaces of the glass.

Section 08800 - Glass & Glazing:

Written guarantee: material and workmanship on all glazing.

Warranty on Hermetic Seals: Ten (10) years after seal date permanently imprinted on unit, but not less than nine (9) years after date of Substantial Completion.

Warranty on Maintained Hermetic Seal: Manufacturer's standard ten (10) year warranty.

DIVISION 9 - FINISHES - NONE

DIVISION 10

Warranty on defective materials and workmanship for one (1) year from the date of completion.

DIVISION 11 - EQUIPMENT

Section 11175 - Trash Chute

Manufacturer's warranty: Furnish one year warranty from date of Certificate of Occupancy. Warranty shall apply to defects in product material and workmanship.

DIVISION 12 & 13 - NONE

DIVISION 14 - CONVEYING EQUIPMENT

Section 14240 - Hydraulic Elevators

The guarantee period shall not extend longer than one (1) year from the date of completion or acceptance thereof by beneficial use, whichever is earlier, of each elevator. The guarantee excludes ordinary wear and tear or improper use, vandalism, abuse, misuse, or neglect or any other causes beyond the control of the elevator contractor and this express warranty is in lieu of all other warranties, express or implied, including any warranty of merchantability or fitness for a particular purpose.

DIVISIONS 15 & 16:

As called for in respective sections.

PART 2 - OPERATION MANUALS

2.1 GENERAL

- A. Contractor shall file in one place all operation, maintenance or other manuals received with equipment and upon completion of project, present these to the Owner with notification, in writing, to the Architect that this has been accomplished.

END OF SECTION

SECTION 01500 - TEMPORARY FACILITIES

PART 1 - GENERAL

1.1 TEMPORARY STORAGE AND OFFICE

- A. The Contractor shall provide for his own use at the project site, such storage and office space as deemed necessary.
- B. Provide a temporary fence around the area. Location shall be approved before installation by Authorities on the site.
- C. Trailers, sheds and fenced areas; as necessary, shall be located only with the Owners approval.

1.2 USE CHARGES

- A. Usage charges for temporary services of facilities are not chargeable to the Owner or Architect/Engineer.

1.3 REGULATIONS

- A. Comply with requirements of local laws and regulations governing construction and local industry standards, in the installation and maintenance of temporary services and facilities.

1.4 STANDARDS

- A. Comply with the requirements of NFPA Code 241, "Building Construction and Demolition Operations", the ANSI-A10 Series standards for "Safety Requirements for Construction and Demolition", and the NECA National Joint Guideline NJG-6 "Temporary Job Utilities and Services".

1.5 INSPECTIONS

- A. Inspect and test each service before placing temporary utilities in use. Arrange for inspections and tests by governing authorities, and obtain certifications and permits for use.

1.6 SUBMITTALS

- A. Submit copies of reports and permits required or necessary for installation and

operation including reports of tests, inspections, and meter readings performed on temporary utilities, and permits and easements necessary for installation, use and operation.

1.7 MATERIALS AND EQUIPMENT

- A. Provide new materials and equipment for temporary services and facilities; if acceptable to the Architect/Engineer, used materials and equipment that are undamaged may be used. Provide materials and equipment that are suitable for the intended use.

1.8 INSTALLATION

- A. Use qualified tradesmen for installation. Locate temporary services and facilities where they shall serve the project adequately and result in minimum interference with the work.

PART 2 - TOILET FACILITIES

2.1 GENERAL

- A. The Contractor shall provide his own toilet facilities. Units shall be of the chemical type, sanitary, ventilated and clean. Location shall be within the construction office/storage area.
- B. Contractor shall comply with governing regulations including Safety and Health Codes for type, number, location, operation and maintenance of fixtures and facilities.

PART 3 - UTILITIES, GENERAL

3.1 GENERAL

- A. Temporary Utility Installation: Contractor shall provide all temporary utilities as required to perform the work under this contract and pay all expenses attributed to this requirement. Engage local utility company to install temporary service or to make connections to existing service. Arrange with the companies and existing users on an acceptable time when service can be interrupted to make connections.
 - 1. Establish a service implementation and termination schedule. As early as possible change to use of permanent service, to enable removal of the temporary utility and eliminate possible interference with completion of the Work.
 - 2. Provide adequate capacity at each stage of construction. Prior to availability at the site, provide, trucked-in services for start up construction operations.
 - 3. Obtain and pay for easements required to bring temporary utilities.

- B. **Water:** As required for use, shall be obtained by attaching a hose or hoses to the lines established by the plumbing contractor. The General Contractor shall bear all cost.
- C. **Power:** Contractor shall provide all extension lines as required for his use. Power shall be obtained from the temporary source established for the project. Contractor shall bear all cost.
 - 1. **Electrical Power Supply:** Provide weathertight, grounded temporary electrical distribution system, with ground fault circuit interrupters and ground-fault interrupter features of proper types, sizes electrical ratings and characteristics to fulfill project requirements. Comply with applicable requirements of NEMA, NECA and UL standards and governing regulations. Install temporary lighting of adequate illumination levels to perform the work specified.
 - a. **Service:** Comply with NECA pertaining to installation of temporary wiring service and grounding. Provide transformers and overcurrent protective devices at main distribution panel for power and light circuitry. Provide disconnects for equipment circuits.
 - (1) Exercise control over power usage to conserve energy.
- D. **Power Distribution System:** Provide circuits of proper sizes, characteristics, and ratings for each use indicated. Install wiring overhead, and risers vertically where least exposed to damage. Provide rigid steel conduit to protect wiring on grade, floors, decks or other areas exposed to possible damage.
 - 1. Provide 20 amp, 4-gang receptacle outlets, equipped with ground-fault circuit interrupters, reset button and pilot light, spaced that a 100 foot extension cord can reach each area of work. Use only grounded extension cord; use "hard-service" cords where exposed to abrasion and traffic.
 - 2. Provide warning signs at power outlets that are other than 110/120 volt. Provide outlets of proper NEMA configuration to prevent insertion of 110/120 volt plugs into higher voltage outlets.
- E. **Temporary Lighting:** Provide general service incandescent lamps of wattage required for adequate illumination. Protect lamps with guard cages or tempered glass enclosures where exposed to breakage. Provide exterior type fixtures where exposed to weather or moisture. Provide local switching to allow lights to be turned off in patterns to conserve energy.
 - 1. Install temporary lighting to fulfill security and protection requirements, without having to operate the entire temporary lighting system.
- F. **Telephone:** Telephone in field office shall be provided by General Contractor and shall be installed as soon as field office is on site, notify Architect's office of number as soon as installed. Contractor shall pay all costs except for toll calls. Party making toll call shall pay for it.

PART 4 - PROTECTION OF OCCUPANTS

4.1 GENERAL

- A. Provide temporary fencing, barricades, supports, partitions, etc. as required to provide protection to occupants, and to exclude unauthorized persons from work areas.
- B. Protection of Facilities: Provide protection from damage, dust, etc. to all items in vicinity of contract work including, but not limited to, adjacent building surfaces, finishes, items or equipment, utilities, etc. Repair any damage to Owner's satisfaction at no additional cost to Owner.

PART 5 - LIFTING DEVICES AND HOISTING FACILITIES

5.1 GENERAL

- A. Provide cranes, hoists, towers and other lifting devices necessary for the proper and efficient movement of materials; provide operating personnel for equipment as required. Equipment shall be provided with proper guys, bracing and other safety devices as required by Local or State codes.
- B. Remove towers and hoisting equipment when they are no longer needed, or as directed by the Architect.

PART 6 - TEMPORARY HEAT

6.1 GENERAL

- A. Provide temporary heat where needed for performance of work, for curing or drying of recently installed work or for protection of work in place from adverse effects of low temperatures or high humidity. Provide UL or FM tested and labeled heating units known to be safe and without adverse effects upon work in place or being installed. Coordinated with ventilation requirements to produce the ambient condition and minimize fuel or energy consumption.
- B. Maintain a minimum temperature of 45 degrees F. (7 degrees C) in permanently enclosed portions of the building and areas where finished work has been installed.
- C. Except where use of the permanent heating system is available and authorized, provide properly vented self-contained LP gas or fuel oil heaters with individual space thermostatic control for temporary heat. Do not use open burning or salamander type heating units.

PART 7 - FIRST AID SUPPLIES

7.1 GENERAL

- A. Comply with governing regulations and recognized recommendations within the construction industry.

PART 8 - DEWATERING FACILITIES AND DRAINS

8.1 GENERAL

- A. For temporary drainage and dewatering facilities and operations not directly associated with performance of work included under other sections, comply with dewatering requirements of applicable Division 2 - Sitework sections. Where feasible, utilize the same facilities. Maintain the site, excavations and construction free of water.
- B. Dispose of rainwater in a lawful manner, which shall not result in flooding of project or adjoining property, nor endanger either permanent work or temporary facilities.

PART 9 - TEMPORARY ENCLOSURE

9.1 GENERAL

- A. Provide temporary enclosure of materials, equipment, work in progress and completed portions of the Work to provide protection from exposure, foul weather, other construction operations, and similar activities. Provide enclosures where temporary heat is needed and the permanent building enclosure is not complete and there is no other provision for containment of heat. Coordinate with ventilating and material drying or curing requirements to avoid dangerous conditions.
- B. Provide temporary enclosures by installing waterproof, fire resistant, UL labeled tarpaulins with flame-spread rating of 15 or less, using a minimum of wood framing. Use translucent nylon reinforced laminated polyethylene tarpaulins to admit the maximum amount of daylight in. Individual openings of 25 square feet or less may be closed with plywood or similar materials.
- C. Close openings through the floor or roof decks and other horizontal surfaces with substantial load-bearing wood-framed or similar construction.

PART 10 - COLLECTION AND DISPOSAL OF WASTES

10.1 GENERAL

- A. Establish a system for collection and disposal of waste materials. Enforce requirements strictly. Do not hold collected materials longer than seven (7) days during normal weather or three (3) days when the daily temperature is expected to rise above 80 degrees F. (27 degrees C). Handle waste materials that are hazardous, dangerous, or unsanitary separately from other waste by containerizing. Dispose of waste material in a lawful manner.

PART 11 - RODENT AND PEST CONTROL

11.1 GENERAL

- A. Retain a local exterminator or insect-and-pest control company to perform extermination and control procedures at regular intervals so that the project shall be relatively free of pests and their residues at Substantial Completion. Perform control operations in a lawful manner using environmentally safe materials.

PART 12 - MISCELLANEOUS SERVICES AND FACILITIES

12.1 GENERAL

- A. Design, construct, and maintain miscellaneous services and facilities as needed to accommodate performance of the Work, including temporary ramps, ladders, staging, shoring, scaffolding, temporary partitions, and similar items.

PART 13 - SECURITY AND PROTECTION FACILITIES INSTALLATION

13.1 GENERAL

- A. Provide a neat and uniform appearance in security and protection facilities acceptable to the Architect/Engineer and the Owner. Maintain site in a safe, lawful and publicly acceptable manner. Take necessary measures to prevent erosion.

PART 14 - TEMPORARY FIRE PROTECTION

14.1 GENERAL

- A. Until fire protection needs may be fulfilled by permanent facilities, install and maintain temporary fire protection of the types needed to protect against losses. Comply with

- recommendations of NFPA Standard 10.
- B. Locate fire extinguishers where most effective. Provide type "A" fire extinguisher for temporary offices and spaces where there is minimal danger of electrical or flammable liquid fires, and type "ABC" dry chemical extinguishers elsewhere. Store combustible materials in containers in fire-safe locations.
 - C. Review fire prevention and protection needs with local fire Department officials and establish procedures to be followed in the event of fire. Instruct personnel in procedures and post warnings and information. Maintain unobstructed access to fire extinguishers, temporary fire protection facilities, and other access routes. Prohibit smoking in hazardous areas. Provide supervision of welding operations, combustion type temporary heating units, and similar sources of ignition.
 - D. At temporary water outlets provide hose of sufficient length to reach construction areas. Hang hoses with a warning sign, indicating that hoses are for fire protection purposes and are not to be removed.

PART 15 - BARRICADES, WARNING SIGNS AND LIGHTS

15.1 GENERAL

- A. Comply with recognized standards and code requirements for erection of substantial barricades where needed to prevent accidents. Paint with appropriate colors and warning signs to inform personnel at the site and the public of the hazard being protected against. Provide lighting where needed, including flashing red lights where appropriate.
- B. As required by local jurisdiction, OSHA, and Owners.

PART 16 - SECURITY ENCLOSURES AND LOCKUP

16.1 GENERAL

- A. Install substantial temporary enclosures of partially completed areas of construction. Provide locking entrances adequate to prevent unauthorized entrance, vandalism, theft and similar violations of project security.
- B. Where materials and equipment must be temporarily stored, and are of substantial value or attractive for possible theft, provide a secure lockup. Enforce strict discipline in connection with the timing of installation and release of materials, to minimize the opportunity for theft and vandalism.

PART 17 - ENVIRONMENTAL PROTECTION

17.1 GENERAL

- A. Conduct construction activities by methods that comply with environmental regulations, minimize the possibility that air, waterways and subsoil might be contaminated or polluted, or that other undesirable effects might result from the performance of work at the site. Avoid the use of tools and equipment that produce harmful noise. Restrict the use of noise making tools and equipment to hours of use that shall minimize complaints.
- B. Post Florida Department of Environmental (DEP) protection "Notice to Proceed" on the site in a conspicuous watertight location. Hold a preconstruction meeting with local DEP officer on site prior to commencement of construction. All construction activities shall conform to DEP standards.

PART 18 - OPERATION, TERMINATION AND REMOVAL

18.1 GENERAL

- A. **Supervision:** Limit availability of temporary services and facilities to essential and intended uses to minimize waste and abuse. Do not permit temporary installation to be abused or endangered.
- B. **Maintenance:** Operate and maintain temporary services and facilities in good operating condition and in a safe and efficient manner until removal is authorized. Do not overload services of facilities. Protect from damage by freezing temperatures and similar elements. Do not allow unsanitary conditions, public nuisances or hazardous conditions to develop or persist on the site.
- C. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation and similar facilities on a twenty-four (24) hour basis where required to achieve indicated results and avoid the possibility of damage to the Work or to temporary facilities.

PART 19 - PROTECTION

19.1 GENERAL

- A. Prevent water filled piping from freezing. Maintain markers for underground lines. Protect from damage during excavation.

PART 20 - TERMINATION AND REMOVAL

20.1 GENERAL

- A. Remove each temporary service and facility promptly when need has ended, or when replaced by use of a permanent facility, but no later than Substantial Completion. Complete, or, if necessary, restore permanent work delayed because of interference with the temporary service or facility. Repair damaged work, clean exposed surfaces and replace work, which cannot be repaired.
- B. Substantial Completion, clean and renovate permanent services and facilities that have been used to provide temporary services and facilities during the construction period.

END OF SECTION



SECTION 01631 - PRODUCTS AND SUBSTITUTIONS

PART 1 - PROCEDURAL REQUIREMENTS

1.1 SOURCE LIMITATIONS

- A. To the fullest extent possible, provide products of the same generic kind, from a single source, for each unit of work. Where it is possible to do so, match separate procurements as closely as possible. To the extent that the product selection process is under the Contractor's control, provide products that are compatible with previously selected products. Where standard products are available that comply with specified requirements, provide those standard products that have been used successfully before in similar applications, and that are recommended by the manufacturers for the applications indicated.

PART 2 - PRODUCT SELECTION LIMITATIONS

2.1 PRODUCT SELECTIONS

- A. Comply with the following requirements in the selection of products, materials and equipment:
1. **Single Product Name:** Where only a single product or manufacturer is named, provide the product, unless it is not available, is incompatible with existing work, or does not comply with specified requirements or governing regulations.
 2. **Two or More Products Named:** Where two or more products or manufacturers are named, the selection is at the Contractor's option, provided the product selected complies with specified requirements.
 - a. **"Equivalent" Provisions:** Where products or manufacturers are specified by name accompanied by the term "equivalent", provide either the product named, or comply with the requirements for gaining approval of "substitutions" for the use of an unnamed product.
 3. **Compliance with Standards:** Where specifications require only compliance with an imposed standard, code or regulation, the Contractor has the option of selecting any product that complies with specified requirements provided no product names are indicated.
 4. **Performance Requirements:** Where the specifications require compliance with indicated performance requirements, the Contractor has option of selecting any product that complies with the specific performance requirements provided no product names are indicated.
 5. **Visual Requirements:** Where specifications indicate that a product is to be selected from the manufacturer's standard options, without naming the manufacturer, the Architect/Engineer has the option of making the selection,

after the Contractor has determined or selected the manufacturer.

2.2 NAMEPLATES

- A. Except as otherwise indicated for required labels and operating data, do not permanently attach or imprint manufacturer's or producer's name-plates or trademarks on exposed surfaces or products which shall be exposed to view either in occupied spaces or on the exterior of the completed project.

PART 3 - SUBSTITUTIONS

3.1 CONDITIONS

- A. The Contractor's requests for substitutions shall be considered when they are reasonable, timely, fully documented, and when they qualify under one or more of the following circumstances:
 1. The proposed substitution is related to an "equivalent" or similar provision in the Contract Documents.
 2. The required product cannot be supplied in time for compliance with Contract Time requirements.
 3. The required product is not acceptable to the governing authorities.
 4. The required product cannot be properly coordinated with other materials in the Work, or cannot be warranted or insured as specified.
 5. The proposed substitution shall offer a substantial advantage to the Owner after deduction offsetting disadvantages including delays, additional compensation to the Architect/Engineer for redesign, evaluation and other necessary services, and similar considerations.

3.2 SUBMITTALS

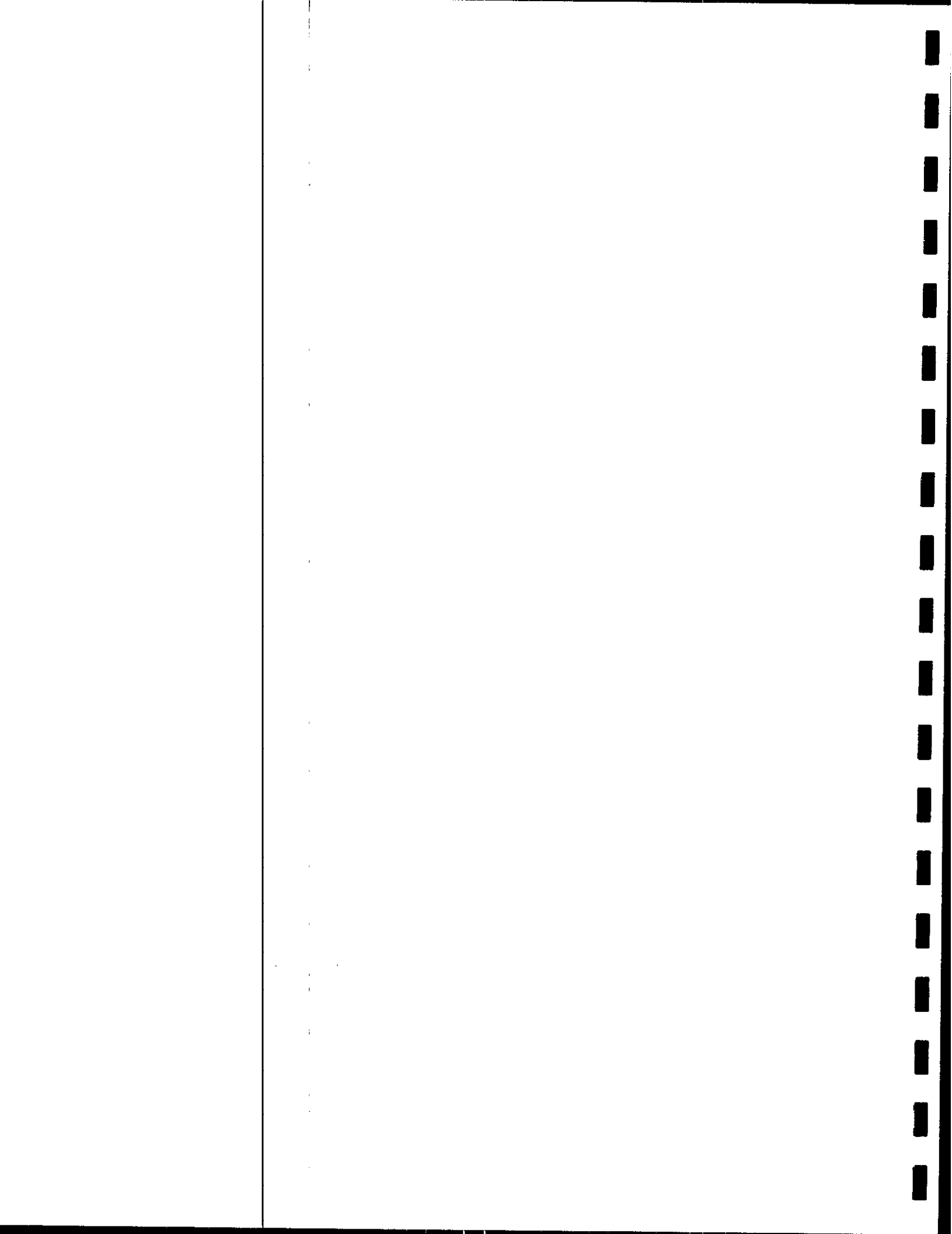
- A. Include the following information, as appropriate, in each request for substitution:
 1. Provide complete product documentation, including Product Data and Samples, where appropriate.
 2. Provide detailed performance comparisons and evaluation, including testing laboratory reports where applicable.
 3. Provide coordination information indicating the effect of the substitution on other work and the time schedule.
 4. Provide cost information for the proposed Change Order.
 5. Provide the Contractor's general certification of the recommended substitution.

PART 4 - DELIVERY, STORAGE AND HANDLING

4.1 GENERAL

- A. Receive, store and handle products, materials and equipment in a manner that shall prevent loss, deterioration and damage. Schedule deliveries so as to minimize long-term storage at the project site.

END OF SECTION



SECTION 01700 - PROJECT CLOSE-OUT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and General Provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification sections, apply to work of this section.

1.2 DESCRIPTION OF REQUIREMENTS

- A. Definitions: Close-out is hereby defined to include general requirements near end of Contract Time, in preparation for final acceptance, final payment, normal termination of contract, occupancy by Owner and similar actions evidencing completion of the Work. Specific requirements for individual units of work are specified in sections of Division 2 through 16. Time of closeout is directly related to "Substantial Completion", and therefore may be either a single time period for entire work or a series of time periods for individual parts of the work, which have been certified as substantially complete at different dates. That time variation (if any) shall be applicable to other provisions of this section.

1.3 PREREQUISITES TO SUBSTANTIAL COMPLETION:

- A. General: Prior to requesting Architect's/Engineer's inspection for certification of Substantial Completion (for either entire work or portions thereof), complete the following and list known exceptions in request:
 - 1. In progress payment request coincident with or first following date claimed, show either 100% completion for portion of work claimed as "Substantially Complete", or list incomplete items, value of incompleteness, and reasons for being incomplete.
 - 2. Include supporting documentation for completion as indicated in these Contract Documents.
 - 3. Submit statement showing accounting of changes to the Contract Sum.
 - 4. Contract shall notify and advise Owner of pending insurance changeover requirements.
 - 5. Submit specific warranties, workmanship/maintenance bonds, maintenance agreements, final certifications and similar documents.
 - 6. Obtain and submit releases enabling Owner's full and unrestricted use of the work and access to services and utilities, including (where required) Occupancy Permits, operating certificates, and similar releases.
 - 7. Deliver tools, spare parts, extra stocks of materials, and similar physical items to Owner.
 - 8. Make final changeover of locks and transmit keys to Owner, and advise Owner's personnel of changeover in security provisions, obtain written receipt of delivery

- and forward copy to Architect.
9. Complete start-up testing of systems, and instructions of Owner's operating/maintenance personnel. Discontinue (or change over) and remove from project site temporary facilities and services, along with construction tools and facilities, mock-ups, and similar elements.
 10. Complete final cleaning up requirements, including touch-up of marred surfaces.
 11. Touch-up and otherwise repair and restore marred exposed finishes.

1.4 INSPECTION PROCEDURES

- A. Upon receipt of Contractor's request, Architect/Engineer shall either proceed with inspection or advise Contractor of prerequisites not fulfilled. Following initial inspection, Architect/Engineer shall either prepare Certificate of Substantial Completion, or advise Contractor of work which must be performed prior to issuance of certificate; and repeat inspection when requested and assured that work has been substantially completed. Contractor shall prepare a type written "punch-list" of items to be completed and attached to the Substantial Completion Form. Results of completed inspection shall form initial "punch-list" for final acceptance.

1.5 PREREQUISITES TO FINAL ACCEPTANCE

- A. General: Prior to requesting Architect's/Engineer's final construction review for certification of final acceptance and final payment, as required by General Conditions, complete the following and list known exceptions (if any) in request:
 1. Submit final payment request with final releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
 2. Submit updated final statement, accounting for additional (final) changes to Contract Sum.
 3. Submit certified copy of Architect's/Engineer's "final punchlist" of itemized work to be completed or corrected, stating each item has been completed or otherwise resolved for acceptance, endorsed and dated by Architect/Engineer.
 4. Submit final meter readings for utilities, measured record of stored fuel, and similar data as of time of Substantial Completion when Owner took possession of and responsibility for corresponding elements of the work.
 5. Submit Consent of Surety.
 6. Submit final liquidated damages settlement statement, acceptable to Owner.
 7. Revise and submit evidence of final, continuing insurance coverage complying with insurance requirements.
- B. Review Procedure: Upon receipt of Contractor's notice that work has been completed, including punch-list items resulting from earlier construction reviews, and excepting incomplete items delayed because of acceptable circumstances, Architect/Engineer shall reinspect work. Upon completion of review, Architect/Engineer shall either prepare Certificate of Final Acceptance or advise Contractor of work not completed or obligations not fulfilled as required for final acceptance. If necessary, procedure shall

be repeated.

1.6 AS-BUILT DRAWINGS (ARE REQUIRED)

- A. During the progress of the work, the Contractor shall require the job superintendent for the Plumbing, Air Conditioning, Heating, Ventilating, and Electrical Subcontractors to record on their field sets of drawings the exact locations, as installed, of all underground and otherwise concealed conduit, pipe and duct lines which were not installed exactly as shown on the Contract Drawings.
- B. With reference to Electrical work, the exact conduit runs shall be shown on these drawings.
- C. Upon completion of the work, this data shall be recorded to scale, by a competent draftsman on sepia line prints or transparent paper of the contract drawings. Sepias shall be furnished to the Architect. All costs are to be borne by the Contractor for As-Built drawings.
- D. The sepia line prints reflecting changed and unchanged sheets shall be submitted to the Architect when completed, together with two (2) sets of Xerox or black-line prints for certification and forwarding to the Owner, at the time of project close-out.

1.7 RECORD SPECIFICATIONS

- A. Maintain one (1) copy of Specifications, including Addenda, Change Orders, Supplemental Instructions and similar modifications issued in printed form during construction, and mark-up variations (of substance) in actual work in comparison with text of specifications and modifications as issued. Give particular attention to substitutions, selection of options, and similar information on work where it is concealed or cannot otherwise be readily discerned at a later date by direct observation. Note related record drawing information and product data, where applicable. Upon completion of mark-up submit to Architect along with sepia line as-built plans referenced in Paragraph 1.6 of this specification section.

1.8 MAINTENANCE MANUALS

- A. Organize maintenance-and-operating manual information into suitable sets of manageable size, and bind into individual binders properly identified and indexed (thumb-tabbed). Include emergency instructions, spare parts listing, warranties, wiring diagrams, recommended "turn-around" cycles, inspection procedures, shop drawings, product data, and similar applicable information. Bind each manual of each set in a heavy-duty 2", 3-ring vinyl-covered binder, and include pocket folders for folded sheet information. Mark identification on both front and spine of each binder.
- B. Maintenance manuals shall include cleaning procedures for doors, windows, floors, walls, etc.

PART 2 - PRODUCTS

NOT APPLICABLE

PART 3 - EXECUTION

3.1 CLOSE-OUT PROCEDURES

- A. General Operating/Maintenance Instructions: Arrange for each installer of work requiring continuing maintenance or operation, to meet with Owner's personnel, at project site, to provide basic instructions needed for proper operation and maintenance of entire work. Include instructions by manufacturer's representatives where installers are not expert in the required procedures. Review maintenance manuals, record documentation, tools, spare parts and materials, lubricants, fuels, identification system, control sequences, hazards, cleaning and similar procedures and facilities. For operational equipment, demonstrate start-up, shutdown, emergency operations, noise and vibration adjustments, safety, economy/efficiency adjustments, and similar operations. Review maintenance and operations in relation with applicable warranties, agreements to maintain bonds, and similar continuing commitments.

3.2 FINAL CLEANING

- A. General: Special cleaning for specific units of work is specified in sections of Division 2 through 16. General cleaning during progress of work is specified in General Conditions and as temporary services in "Temporary Facilities" section of this division. Provide final cleaning of the work, at time indicated, consisting of cleaning each surface or unit of work to normal "clean" condition expected for a first-class building cleaning and maintenance program. Comply with manufacturer's instructions for cleaning operations. The following are examples, but not by way of limitation, of cleaning levels required:
1. Remove labels that are not required as permanent labels.
 2. Clean transparent materials, including mirrors and window/door glass, to a polished condition, removing substances, which are not noticeable as vision-obscuring materials. Replace broken glass and damaged transparent materials.
 3. Clean exposed exterior and interior hard-surfaced finishes, to a dirt-free condition, free of dust, stains, films and similar noticeable distracting substances. Except as otherwise indicated, avoid disturbance of natural weathering of exterior surfaces. Restore reflective surfaces to original reflective condition.
 4. Wipe surfaces of mechanical and electrical equipment clean. Remove excess lubrication and other substances.
 5. Remove debris and surface dust from limited-access spaces including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics and similar spaces.
 6. Clean concrete floors in non-occupied spaces broom clean.

7. Vacuum clean carpeted surfaces and similar soft surfaces.
 8. Clean plumbing fixtures to a sanitary condition, free of stains including those resulting from water exposure.
 9. Clean light fixtures and lamps so as to function with full efficiency.
 10. Clean project site (yard and grounds), including landscape development areas, of litter and foreign substances. Sweep paved areas to a broom-clean condition; remove stains, petro-chemical spills and other foreign deposits. Rake grounds that are neither planted nor paved, to a smooth, even-textured surface.
- B. Removal of Protection: Except as otherwise indicated or requested by Architect/Engineer, remove temporary protection devices and facilities, which were installed during course of the work to protect previously, completed work during remainder of construction period.
- C. Compliance: Comply with safety standards and governing regulations for cleaning operations. Do not burn waste materials at site, or bury debris or excess materials on Owner's property, or discharge volatile or other harmful or dangerous materials into drainage systems; remove waste materials from site and dispose of in a lawful manner.
1. Where extra materials of value remaining after completion of associated work have become Owner's property, dispose of these to Owner's best advantage as directed.

END OF SECTION