

SECTION 01 77 00 - PROJECT CLOSE-OUT PROCEDURES

PART 1 - GENERAL

1.1. RELATED DOCUMENTS

- 1.1.1. The Contractor's attention is specifically directed, but not limited, to the Uniform General Conditions for University of Texas System Building Construction Contracts (UGC) for other requirements.

1.2. SUMMARY

- 1.2.1. The following Project Close-Out procedures are addressed in this Section:

- 1.2.1.1. Requirements for Substantial Completion
- 1.2.1.2. Provisions for Release of Retainage
- 1.2.1.3. Requirements for Final Acceptance
- 1.2.1.4. Requirements for Record Submittals and Samples
- 1.2.1.5. Requirements for Operating and Maintenance Manuals
- 1.2.1.6. Requirements for Commissioning and Close-out Manual
- 1.2.1.7. Requirements for Close-Out Document Submission
- 1.2.1.8. Project Cleaning

1.3. DEFINITIONS

- 1.3.1. The term "Project Close-Out" is hereby defined to include requirements near the end of the Contract Time, in preparation for Substantial Completion acceptance, occupancy by Owner, release of retainage, final acceptance, Final Payment, and similar actions evidencing completion of the Work. Specific additional requirements for individual units of work are specified in the Technical Specifications.
- 1.3.2. The term "Time" of Close-Out is directly related to completion and acceptance, and therefore may be either a single time period for the entire Project, or a series of time periods for individual portions or phases of the Project that have been certified as substantially complete at different dates.
- 1.3.3. Refer to the UGC for Definitions used throughout the Contract Documents.

1.4. REQUIREMENTS FOR SUBSTANTIAL COMPLETION

- 1.4.1. In addition to items identified in the UGC, prior to requesting a Substantial Completion inspection (for either the entire Work or portions thereof as agreed to by the Owner and Contractor), Contractor shall complete and/or submit the following to the Owner and list known exceptions in the request.
 - 1.4.1.1. Contractor's Application for Payment that is coincident with the period of time anticipated for Substantial Completion shall reflect a minimum of 95% completion for all applicable Work.

- 1.4.1.2. Owner's acceptance of all building system installations. If Owner's Construction Inspectors are assigned to the Project, acceptance may be in the form of building system final inspection reports.
 - 1.4.1.3. Record Documents: Up-to-date, marked-up drawings and specifications that record all changes made during construction.
 - 1.4.1.4. Record Submittals and Samples.
 - 1.4.1.5. Operating and Maintenance Manual(s). Provide with warranty letters that coincident with the anticipated date for Substantial Completion.
 - 1.4.1.6. Commissioning and Close-out Manual.
 - 1.4.1.7. Completed Punchlists.
 - 1.4.1.8. Certification statement that no asbestos containing materials have been used or incorporated into the Project per Texas Asbestos Health Protection Rules (TAHPR—Tex. Admin. Code Title 25, Part 1, Ch. 295C, Asbestos Health Protection.
 - 1.4.1.9. Releases enabling Owner's full and unrestricted use of the Project and access to services and utilities, including (where applicable) operating certificates, and similar releases.
 - 1.4.1.10. Deliver tools, spare parts, extra stock of materials, Samples, and similar physical items to Owner.
- 1.4.2. If Owner intends to occupy Project upon Substantial Completion acceptance, Contractor shall make provisions for final changeover of locks with the Owner's personnel. Upon written directive from Owner and for the convenience of the Contractor in completing Punchlist activity, Owner may waive the final changeover of locks until final acceptance.
- 1.4.3. Contractor shall complete instructing and training Owner's personnel for all systems and equipment serving the areas claimed as substantially complete, for which Owner training was not completed in association with system demonstrations and inspections. Refer also to Section 01 79 00 – Demonstration and Training.
- 1.4.4. Contractor shall complete the initial clean-up requirements as described in Part 3 of this Section for the entire portion of the Project claimed as substantially complete. Contractor shall touch-up and otherwise repair and restore marred exposed finishes.
- 1.4.5. SUBSTANTIAL COMPLETION INSPECTION PROCEDURE
- 1.4.5.1. Refer to the UGC and Section 01 45 00 – Project Quality Control.
 - 1.4.5.2. The Contractor shall ensure the Work is ready for inspection and/or reinspection. If the Work is found not to be as stated in the Contractor's Punchlist or the items have not been substantially corrected and/or completed, the inspection will be terminated. All costs incurred by the Owner and Architect/Engineer for scheduling and attending the terminated inspection(s) shall be the responsibility of the Contractor and excluded from the Cost of Work.

1.5. PROVISIONS FOR RELEASE OF RETAINAGE

- 1.5.1. Refer to the UGC.

1.5.2. Release of any retainage, or reduction in amount of retainage withheld, is strictly at the discretion of the Owner, regardless of Contractor compliance with requirements. All of the requirements noted for Substantial Completion acceptance must be completed prior to application for final release of Contract retainage. In addition, Contractor shall meet the following requirements:

- 1.5.2.1. Submit affidavits of final release of claim and lien from each subcontractor and supplier who provided materials and/or labor to the Project.
- 1.5.2.2. Submit affidavit that all bills for the Project have been paid, or will be paid within thirty (30) days of Contractor's receipt of payment.
- 1.5.2.3. Submit Consent of Surety to Release of Retainage.

1.6. REQUIREMENTS FOR FINAL ACCEPTANCE

1.6.1. In addition to items identified in the UGC, prior to requesting a Final Completion inspection (for either the entire Work or portions thereof as agreed to by the Owner and Contractor), Contractor shall complete and/or submit the following to the Owner and list known exceptions in the request:

- 1.6.1.1. Draft Application for Final Payment showing 100% completion for each line item on the Schedule of Values. Contractor must submit with this draft, the final releases and supporting documentation not previously submitted and accepted. Contractor must include Certificates of Insurance when applicable. The Final Payment, including final release of retainage, will not be released until all Work (including Punchlist items) has been completed, all requirements met, a Project Close-Out audit performed (if deemed necessary) and a Final Change Order has been processed if required to resolve final cost or close-out audit issues, including deletion of any remaining Contract allowances.
- 1.6.1.2. Copy of Architect/Engineer's Substantial Completion Punchlist including evidence that each item has been completed or otherwise resolved.
- 1.6.1.3. Final meter readings for utilities, and similar data as of time of Substantial Completion or when Owner took possession of and responsibility for corresponding elements of the Work.
- 1.6.1.4. Final Record Documents see specification 01 78 39, Completed Commissioning and Close-Out Manual, acknowledging receipt of all attic stock, training/demonstration, test reports, and any other requirements of the Contract Documents.
- 1.6.1.5. Complete final cleaning requirements including touch-up of marred surfaces.
- 1.6.1.6. Evidence of final and continuing insurance coverage complying with applicable insurance requirements.

1.6.2. FINAL ACCEPTANCE INSPECTION PROCEDURE

- 1.6.2.1. When the Contractor has completed the Work required in the Final Completion inspection Punchlist and has complied with the Close-Out requirements in this Section and elsewhere in the Contract Documents, then the Contractor shall provide a minimum of ten (10) days written notice to the Architect/Engineer and Owner that the Project is ready for a final acceptance inspection for Final Completion. Refer to the UGC for additional requirements.

- 1.6.2.2. All Owner and Architect/Engineer costs for travel and time for additional inspections at either Substantial Completion or Final Acceptance which are required either by failure of the Contractor to complete the noted Punchlist items, or by erroneous notices that the Work is ready for such inspections, shall be the responsibility of the Contractor. Owner may issue a unilateral deductive Change Order for these costs.

1.6.3. FINAL PAYMENT REQUEST

- 1.6.3.1. Contractor shall submit the following documentation with the Application for Final Payment:
 - 1.6.3.1.1. Final Release of Liens and Claims.
 - 1.6.3.1.2. Affidavit of Payment of Debts and Claims.
 - 1.6.3.1.3. Consent of Surety.
 - 1.6.3.1.4. Completed SWPPP Documents and Notice of Termination.
 - 1.6.3.1.5. Final Historically Underutilized Business Plan.
 - 1.6.3.1.6. Completed and Signed Notice of Termination.
 - 1.6.3.1.7. Signed Final Completion Certificate.

PART 2- PRODUCTS

2.1. REQUIREMENTS FOR RECORD SAMPLES

2.1.1. RECORD SAMPLES

- 2.1.1.1. Prior to date(s) of Substantial Completion, Contractor shall arrange for Architect/Engineer and Owner's representative to meet with Contractor at the Site to determine which (if any) of the submitted Samples or mock-ups maintained by Contractor during progress of the Work are to be transmitted to Owner for record purposes.
- 2.1.1.2. Contractor shall comply with Architect/Engineer's and/or Owner's instructions for packaging, identification marking, and delivery to Owner's designated location at the Site or other location as directed by Owner.
 - 2.1.1.2.1. Furnish two (2) binders of all record finishes Samples, bound in heavy-duty, 3-ring vinyl-covered binders including pocket folders for any folded sheet information. Binder content shall be divided with plastic-covered tabs for each section of each binder. Provide labels to identify binder content on both the front and spine of each binder.
 - 2.1.1.2.2. Samples shall be mounted to paper or heavy stock depending on type of sample, organized by finish type, with the following information: Type, Manufacturer, Product Number, Finish/Color, Description, Installed Location.
 - 2.1.1.2.3. Finishes Samples include, but are not limited to, the following as applicable to the Work: tile, VCT, terrazzo, stone, sheet vinyl, carpet, base, wall coverings, laminates, solid surface materials, decorative glass, paint, and wood.

2.1.1.3. Contractor shall dispose of other Samples in the manner specified for disposal of surplus and waste materials, unless otherwise indicated or directed by Architect/Engineer and/or Owner.

2.2. REQUIREMENTS FOR OPERATING AND MAINTENANCE MANUALS

2.2.1. Within thirty (30) days of the Notice to Proceed with Construction, Contractor shall submit to Owner the proposed format, content and organizational structure for Operating and Maintenance Manuals for Owner’s review and approval. The organizational structure shall follow Owner’s format for maintenance management; confirm structure with Owner.

2.2.2. Contractor shall make revisions and corrections to format and content as reasonably requested by Owner. After the Owner approves the proposed format, content, and organizational structure, Contractor shall create the file structure and update Operating and Maintenance Manual content as the Work progresses.

2.2.3. Product submittals, owner’s manuals, manufacturer’s printed instructions, parts lists, and other submittals required by other Sections of the Specifications shall be included in the Operating and Maintenance Manuals provided that they are approved and are formatted in a manner consistent with the requirements of this Section.

2.2.4. Test data and commissioning data included in the Operating and Maintenance Manuals need not be duplicated in the Commissioning and Close-Out Manual and vice versa. Test data not pertaining to a particular device or piece of equipment (such as domestic water pipe pressure test reports) must be inserted in the Commissioning and Close-Out Manual.

2.2.4.1. Equipment is defined as any mechanism, mechanical, electrical or electronic device, or any combination thereof, which is made up of two (2) or more working parts to perform a particular function.

2.2.4.2. When an item of equipment is a packaged unit furnished by one manufacturer and the package as furnished contains proprietary items of equipment obtained from other sources, Contractor shall include copies of equipment data for each item of such equipment as if each item of equipment had been separately furnished.

2.2.5. Manufacturers’ standard printed data shall include only sheets pertinent to the product or component installed. Mark each sheet to identify each product or component incorporated into the Work. Prepare supplementary text if manufacturers’ standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.

2.2.6. Refer to individual Technical Specification Sections for additional operating and maintenance requirements.

2.2.7. Examples of equipment, material, and systems for which operating and maintenance data is required includes, but is not limited to, the following:

Architectural / Miscellaneous	HVAC / Plumbing	Electrical / Life Safety
Doors and Windows	Piping, Valves, and Fittings	Cable, Wire, and Connectors, 600 Volt
Overhead Coiling Doors and Grilles	Motors	Wiring Devices
Automatic Door Openers	Fire Protection Systems	Motor Control Centers
Door Hardware	Plumbing Equipment	Distribution Panelboards
Wall Coverings	Plumbing Specialties	Panelboards
Paint	Liquid Nitrogen System	Emergency Generator

Architectural / Miscellaneous	HVAC / Plumbing	Electrical / Life Safety
		Paralleling Switchgear
Floor Coverings and Base	Gas Systems	Packaged Engine Generator Systems
Stone and Terrazzo	Fuel Oil Systems	Automatic Transfer Switches
Tile	Reverse Osmosis System	Standby Power Generator Switchgear
Acoustical Ceiling Tile	Hydronic Specialties	Fuses
Decorative Glass	Steam and Steam Condensate Specialties	Switchgear
Access Flooring	HVAC Pumps	Power Factor Correction Equipment
Demountable Partitions	Chemical Treatment Systems	Transformers
Folding Operable Partitions	Chillers	Busway – 600 Volt and Below
Loading Dock Equipment	Boilers	Surge Protective Devices
Laboratory Casework	DX Air-Conditioning Systems	Motor Starters
Fume Hoods	Heat Exchangers	Power Status and Monitoring System
Biological Safety Cabinets	Humidifiers	Lighting Fixtures
Environmental Rooms	Terminal Heat Transfer Units	Lighting Control Systems
Sterilizers, Washers and Dryers	Modular Air Handling Units	UPS Equipment
Audio-Visual Equipment	Custom Air Handling Units	Fire Alarm System
Window Treatment	Fans	Communication Systems
Radiation Protection	Filters	Security System
Conveying Systems	Ductwork	
Irrigation Systems	Air Terminal Units	
Window Washing Systems	Air Outlets and Inlets	
Pneumatic Tube Systems	Variable Speed Drives	
	Building Automation System	

2.2.8. OPERATING AND MAINTENANCE DATA

2.2.8.1. Contractor shall furnish the following equipment data content to be Included in Operating and Maintenance Manuals:

- 2.2.8.1.1. Description of Equipment. Completed Equipment Matrix; refer to the Equipment Matrix requirements of Section 01 91 00 – General Commissioning Requirements.
- 2.2.8.1.2. Record Product Submittals. Clearly identify all options and accessories of actual installed product and variations in the actual Work in comparison with submitted information.
- 2.2.8.1.3. Parts List. Clearly identify every part in the item of equipment with the proper manufacturer's name, part nomenclature and number, local source, and list price.

- 2.2.8.1.4. Recommended Spare Parts List. For each equipment item that Owner will likely need within a 12-month period to support and operate that item of equipment. The quantities of spare parts recommended must be based upon the quantity of like equipment items installed under the Contract Documents.
- 2.2.8.1.5. Normal Operating Instructions. Detailed information to permit a journeyman mechanic to adjust, start-up, operate, and shut down the equipment. Special start-up precautions shall be noted as well as other action items required before the equipment is put into service.
- 2.2.8.1.6. Emergency Operating Procedures. Detailed description of the sequence of action to be taken in the event of a malfunction of the unit, either to permit a short period of continued operation or emergency shutdown to prevent further damage to the unit and to the system in which it is installed.
- 2.2.8.1.7. Preventive Maintenance. Detailed information to cover routine and special inspection requirements, including but not limited to, field adjustments, inspections for wear, adjustment changes, packing wear, lubrication points, frequency and specific lubrication type required, cleaning of the unit and type solvent to use, and such other measures as are applicable to preventive maintenance program.
- 2.2.8.1.8. Calibration. Detailed data on what to calibrate, how to calibrate, when to calibrate and procedures to enable checking the equipment for reliability or indications as well as data for test equipment, special tools and the location of test points.
- 2.2.8.1.9. Scale and Corrosion Control. Detailed information covering the prevention of and removal of scale and corrosion.
- 2.2.8.1.10. Trouble Shooting Procedures. Detailed information and procedures for detecting and isolating malfunctions and detailed information concerning probable causes and applicable remedies.
- 2.2.8.1.11. Removal and Installation Instructions. Detailed information concerning the logical sequence of steps required to remove and install the item including instructions for the use of special tools and equipment.
- 2.2.8.1.12. Disassembly and Assembly Instructions. Detailed illustrations and text to show the logical procedure and provide the instructions necessary to disassemble and assemble the unit properly. The text shall include all checks and special precautions as well as the use of special tools and equipment required to perform the assembly or disassembly.
- 2.2.8.1.13. Repair Instructions. Detailed repair procedures to bring the equipment up to the required operating standard including instruction for examining equipment and parts for needed repairs and adjustments, and tests or inspections required to determine whether old parts may be reused or must be replaced.
- 2.2.8.1.14. Special Tools and Test Equipment. Detailed list of the special tools and test equipment needed to perform repair and maintenance for each equipment item. The list shall contain the special tool and test equipment part number, size, quantity, price, manufacturer's name and address, and local supplier's name and address.

2.2.8.1.15. System Drawings. Contractor shall furnish detailed drawings, where applicable, that clearly show wiring diagrams, utility service diagrams, control diagrams, system schematics, pneumatic and fluid flow diagrams, etc., which pertain to the unit function. System drawings must show major pieces of equipment, such as chillers, boilers, heat exchangers, pumps, air handlers, tanks, switchgear, etc., as meaningful to the Project. Fluid flow and direction and valves with their valve tag identification numbers must be clearly noted on drawings. Drawings must show modifications to another manufacturer's standard unit when it is incorporated into the assembly or package unit.

2.2.9. WARRANTIES AND GUARANTEES

2.2.9.1. Contractor shall include, within the Operating and Maintenance Manual organizational structure for each system, equipment item, or material, an executed copy of the specified warranty/guarantee with warranty effective dates covering that particular system, equipment item, or material. Contractor shall include the manufacturer's warranty as specified and the installing subcontractor's and supplier's guarantee for workmanship and system operation.

2.3. REQUIREMENTS FOR COMMISSIONING AND CLOSE-OUT MANUAL

2.3.1. The Contractor shall incorporate all Commissioning and Close-Out documentation and/or verification documents not included in the Operating and Maintenance Manuals, into a separate Commissioning and Close-Out Manual for transmittal to the Owner at the conclusion of the Project. The Commissioning and Close-Out Manual is intended to be a consolidation of documentation/verification for the Project commissioning and close-out process. Update the Commissioning and Close-Out Manual throughout the Project, so that the documentation process can be expedited and monitored.

2.3.2. The Owner may provide a preliminary handbook with sample forms for use by the Contractor in development of the Commissioning and Close-Out Manual. Each Project may require the Contractor to revise and/or create forms for Project specific equipment. The Contractor shall review each form for approval with the Owner before using the Contractor's form.

2.3.3. The Commissioning and Close-Out Manual is not intended to impose duplication of Close-Out Documents. Those items and/or data that are incorporated into the Operating and Maintenance Manuals need not be included in the Commissioning and Close-Out Manual.

2.3.4. The Commissioning and Close-Out Manual shall include, but is not limited to, the following.

2.3.4.1. Commissioning documentation as described in Section 01 91 00 - General Commissioning Requirements.

2.3.4.2. Final air balance reports produced by the Test, Adjust, and Balance Firm.

2.3.4.3. Completed Valve Schedule and Fire, Fire/Smoke and Smoke Damper Schedule per Specification Section 20 05 53.

2.3.4.4. Owner Demonstration / Training Reports: Contractor shall furnish Training Plan and documentation of Owner's personnel training regarding operation of systems per Section 01 79 00 – Demonstration and Training and Technical Specification Sections. Contractor shall include identification of parties receiving training and date(s) of such training.

2.3.4.5. Paint/Finish Schedule: All paints, flooring, finishes, door hardware, used on the Project. Provide manufacturer, model number, color formula, location on Project,

purchase source, and any other information helpful to the Owner's maintenance personnel.

- 2.3.4.6. Extra Materials and Keys Checklists: Extra Materials shall be referenced to the Owner's Mainsaver Asset Number.
- 2.3.4.7. Elevator Checklist.
- 2.3.4.8. Electrical Test Reports (including factory tests and settings).
- 2.3.4.9. Miscellaneous Equipment Test Reports (including factory tests and settings).
- 2.3.4.10. HVAC Calibration Reports (including duct testing reports).
- 2.3.4.11. Fire Alarm Test Reports.
- 2.3.4.12. Piping Test Reports.
- 2.3.4.13. Sewer Video Log.
- 2.3.4.14. Code-required Certifications as described within Technical Specifications.
- 2.3.4.15. Material Safety Data Sheets (MSDS) for any and all products incorporated into the Project.
- 2.3.4.16. Miscellaneous Close-out Documents. Contractor shall provide categories of requirements resulting in miscellaneous work records including, but not be limited to, the following:
 - 2.3.4.16.1. Required field records on excavations, foundations, underground construction, wells and similar work.
 - 2.3.4.16.2. Accurate survey showing locations and elevations of underground lines, including invert elevations of drainage piping.
 - 2.3.4.16.3. Surveys establishing lines and levels of building.
 - 2.3.4.16.4. Planting material treatment records (wood, soil, etc).
 - 2.3.4.16.5. Certifications received in lieu of labels on products and similar record documentation.
 - 2.3.4.16.6. Concrete batch mixing and bulk delivery records.
 - 2.3.4.16.7. Testing and qualification of tradesmen.
 - 2.3.4.16.8. Documented qualification of installation firms.
 - 2.3.4.16.9. Materials testing reports.
 - 2.3.4.16.10. Final inspection Punchlist and deficiency corrections.
- 2.3.4.17. All original, signed Project warranties and guarantees.

PART 3- EXECUTION

3.1. REQUIREMENTS FOR CLOSE-OUT DOCUMENT SUBMISSION

- 3.1.1.1. Verify that all pages on every document have been scanned. All documents shall be scanned with optical character recognition (OCR) technology. Review each page to ensure that the scan captures original detail. If images appear too dark or too light, or smudged, rescan the page to ensure proper image quality and legibility. Color charts or other documents where color is required to convey full information shall be scanned in color.

3.2. PROJECT CLEANING AT SUBSTANTIAL COMPLETION

- 3.2.1. The Contractor shall maintain the Project and the Site in a clean and orderly condition throughout the course of construction. In addition to continuous Project cleaning, the following requirements are related to Project Close-Out. Special cleaning for specific units of Work may also be specified in other Sections of Project Specifications.
- 3.2.2. Contractor shall perform an initial cleaning of the Work consisting of cleaning each surface or unit of Work to normal "clean" condition expected for a first-class building cleaning and maintenance program.
- 3.2.3. Contractor shall comply with manufacturer's instructions for cleaning of all system components, equipment, and materials incorporated into the Project.
- 3.2.4. Contractor shall perform the following "initial" final cleaning immediately prior to the time the Contractor requests Substantial Completion inspection.
 - 3.2.4.1. Remove labels that are not required as permanent labels.
 - 3.2.4.2. Clean, according to manufacturer's recommendations, exposed hard-surfaced finishes, including glass, metals, stone, concrete, painted surfaces, plastics, tile, wood, special coatings, and similar surfaces, to a dirt-free condition, free of dust, stains, films and similar noticeable distracting substances. Restore reflective surfaces to original condition.
 - 3.2.4.3. Remove debris and surface dust from limited-access spaces including plenums, shafts, and similar spaces.
 - 3.2.4.4. Clean concrete floors in non-occupied spaces, wet-mop and broom clean.
 - 3.2.4.5. Clean fixtures of all dust and debris. Replace lamps in accordance with Technical Specifications after final Project cleaning.
 - 3.2.4.6. Remove crates, cartons and other flammable waste materials or trash from the Site. Provide Owner with a finished Project that is free of concealed garbage, trash and rodent infestation. If concealed garbage, trash and rodent infestation are revealed, or odors from them occur, Contractor shall remove and correct at the Contractor's expense. Restore property to its original condition where no improvements are shown.
 - 3.2.4.7. Clean spaces such as elevator shafts, equipment rooms, pipe and duct chases, furred spaces, and other similar unfurnished space to leave free from rubbish, loose plaster, mortar drippings, extraneous construction materials, dirt, and dust.
 - 3.2.4.8. Remove rubbish by way of chutes, taken down on hoists, or lowered in receptacles. Contractor shall not remove rubbish or waste by dropping or throwing from one level to another within or outside the building(s).

3.2.5. Contractor shall not mark, soil or otherwise deface finished surfaces. If Contractor marks, soils, or otherwise defaces finished surfaces, Contractor shall bear all costs for cleaning and restoring such surfaces to their originally intended condition.

3.3. PROJECT CLEANING AT FINAL ACCEPTANCE

3.3.1. Contractor shall complete the following "final" cleaning immediately prior requesting a Final Completion inspection:

3.3.1.1. Clean transparent materials, including mirrors and window/door glass, to a polished condition, removing substances that are noticeable as vision-obscuring materials.

3.3.1.2. Turn the work over in immaculate condition inside and outside the premises.

3.3.1.3. Clean all work on the premises including walks, drives, curbs, paving, fences, grounds and walls. Provide a clean shine on slick surfaces. Remove smudges, marks, stains, fingerprints, soil, dirt, paint, dust, lint, labels, discolorations and other foreign materials.

3.3.1.4. Clean all finished surfaces on interior and exterior of Project including floors, walls, ceilings, windows, glass, doors, fixtures, hardware and equipment. Final wax and polish all natural finish metal on interior or exterior surfaces. Clean and apply finish (including wax) to all floors as recommended by the manufacturer and accepted by Owner.

3.3.2. In addition to the cleaning specified above and more specific cleaning required in the various technical Specifications, Contractor shall prepare the building(s) for occupancy by a thorough cleaning throughout, including washing (or cleaning by approved methods) surfaces on which dirt or dust has collected, and by washing glass on both sides leaving a smear-free shine. Contractor shall wash exterior glass using a window-cleaning contractor specializing in such work.

3.3.3. Contractor shall remove temporary buildings and structures, fences, scaffolding, surplus materials and rubbish of every kind from the Site. Contractor shall repair these areas to be compatible with the surrounding construction finished condition.

END OF SECTION 01 77 00

FOR MDACC USE ONLY. DELETE THIS PAGE BEFORE ISSUING DOCUMENTS.

DOCUMENT REVISION HISTORY

Issue	Date	Revision Description	Author
	Original 20110526		
Rev. 1	20200716	ODG Revision Request ID 214, Typo Correction 1.6.1.4	B. Ogle
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