

**SECTION 01 2000
PRICE AND PAYMENT PROCEDURES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Procedures for preparation and submittal of applications for progress payments.

1.02 RELATED REQUIREMENTS

- A. Section 00 5000 - Contracting Forms and Supplements: Forms to be used.

1.03 SCHEDULE OF VALUES

- A. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit draft to Architect for approval.
- B. Forms filled out by hand will not be accepted.

1.04 APPLICATIONS FOR PROGRESS PAYMENTS

- A. Payment Period: Submit at intervals stipulated in the Agreement.
- B. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to Architect for approval.
- C. Forms filled out by hand will not be accepted.
- D. Execute certification by signature of authorized officer.
- E. Submit one electronic and three hard-copies of each Application for Payment.

1.05 MODIFICATION PROCEDURES: ARCHITECTURAL/ENGINEERING ADDITIONAL SCOPE OF SERVICE

- A. For minor changes not involving an adjustment to the Contract Sum or Contract Time, Owner will issue instructions directly to Architect.
- B. For work the Architect or Design Professional feels are a substantial change to the Scope of Services as outlined in the WAC, RFP, and other owner written directives; Architect will complete the following steps:
 - 1. Within 48 hours of change request, Architect shall issue a document requesting change of services outlining the following:
 - a. Description of change to services
 - b. Potential fee and schedule impact
 - 2. Within 5 Business Days of change request: Architect shall issue a Document detailing the Requested Change of Services outlining the following:
 - a. Change in the cost of the services (lump sum fee)
 - b. Change to the time of the schedule
 - c. Architect's additional service fees to be based on Hourly Rate Schedule submitted with Bid Proposal.
 - 3. Owner will acknowledge both documents with written direction to proceed after receipt of documents.
 - a. If owner accepts change request, Contract Change Order to be complete by Architect, signed by owner, to memorialize the change to the Contract.
 - b. Architect is to immediately proceed with Change or Service after Owner accepts.
- C. Failure to adhere to the above requirements, the following occur:
 - 1. Owner shall bear no additional services for the project.
 - 2. Request for Additional Services will not be considered after the notification time eclipses from the above requirements.
 - 3. Shall the owner deem additional services are warranted but the Architect failed to notify the Owner in the time outlined above, the following shall occur:
 - a. Additional services will be negotiated between owner and architect

- b. Owner has final determination of additional services to be awarded.

1.06 MODIFICATION PROCEDURES: CONSTRUCTION CONTRACTS

- A. For minor changes not involving an adjustment to the Contract Sum or Contract Time, Architect will issue instructions directly to Contractor.
- B. For other required changes, Architect will issue a document signed by Owner instructing Contractor to proceed with the change, for subsequent inclusion in a Change Order.
 - 1. The document will describe the required changes and will designate method of determining any change in Contract Sum or Contract Time.
 - 2. Promptly execute the change.
- C. For changes for which advance pricing is desired, Owner will request, and Architect will issue a document that includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid. Contractor shall prepare and submit a fixed price quotation within 7 days.
 - 1. Architect will notify Owner in writing within 48 hours of anticipated cost changes to Architect Fees due to requested change orders.
 - 2. Architect's additional service fees to be based on Hourly Rate Schedule submitted with Bid Proposal.
- D. Contractor may propose a change by submitting a request for change to Architect, describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation and a statement describing the effect on Work by separate or other contractors.
- E. Computation of Change in Contract Amount: As specified in the Agreement and Conditions of the Contract.
 - 1. For change requested by Contractor, the amount will be based on the Contractor's request for a Change Order as approved by Owner.
 - 2. For pre-determined unit prices and quantities, the amount will be based on the fixed unit prices.
- F. Substantiation of Costs: Provide full information required for evaluation.
 - 1. Provide the following data:
 - a. Quantities of products, labor, and equipment.
 - b. Justification for any change in Contract Time.
 - c. Credit for deletions from Contract, similarly documented.
 - 2. Support each claim for additional costs with additional information:
 - a. Origin and date of claim.
 - b. Dates and times work was performed, and by whom.
- G. Execution of Change Orders: Owner will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.
- H. After execution of Change Order, promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum.
- I. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
- J. Promptly enter changes in Project Record Documents.

1.07 APPLICATION FOR FINAL PAYMENT

- A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.

- B. Application for Final Payment will not be considered until the following have been accomplished:
 - 1. All closeout procedures specified in Section 01 7000.

END OF SECTION

SECTION 01 3000
ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Electronic document submittal service.
- B. Preconstruction meeting.
- C. Site mobilization meeting.
- D. Progress meetings.
- E. Construction progress schedule.
- F. Progress photographs.
- G. Number of copies of submittals.
- H. Submittal procedures.

1.02 RELATED REQUIREMENTS

- A. Document 00 0102 - Project Information:

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 ELECTRONIC DOCUMENT SUBMITTAL SERVICE

- A. All documents transmitted for purposes of administration of the contract are to be in electronic (PDF, MS Word, or MS Excel) format, as appropriate to the document, and transmitted via an Internet-based submittal service that receives, logs and stores documents, provides electronic stamping and signatures, and notifies addressees via email.
 - 1. Besides submittals for review, information, and closeout, this procedure applies to Requests for Interpretation (RFIs), progress documentation, contract modification documents (e.g. supplementary instructions, change proposals, change orders), applications for payment, field reports and meeting minutes, Contractor's correction punchlist, and any other document any participant wishes to make part of the project record.
 - 2. Contractor and Architect are required to use this service.
 - 3. It is Contractor's responsibility to submit documents in allowable format.
 - 4. Subcontractors, suppliers, and Architect's consultants will be permitted to use the service at no extra charge.
 - 5. Users of the service need an email address, internet access, and PDF review software that includes ability to mark up and apply electronic stamps (such as Adobe Acrobat, www.adobe.com, or Bluebeam PDF Revu, www.bluebeam.com), unless such software capability is provided by the service provider.
 - 6. Paper document transmittals will not be reviewed; emailed electronic documents will not be reviewed.
 - 7. All other specified submittal and document transmission procedures apply, except that electronic document requirements do not apply to samples or color selection charts.
- B. Training: One, one-hour, web-based training session will be arranged for all participants, with representatives of Architect and Contractor participating; further training is the responsibility of the user of the service.
- C. Project Closeout: Architect will determine when to terminate the service for the project and is responsible for obtaining archive copies of files for Owner.

3.02 PRECONSTRUCTION MEETING

- A. Attendance Required:
 - 1. Owner.

2. Architect.
 3. Contractor.
 4. Major Subcontractors.
- B. Agenda:
1. Execution of Owner-Contractor Agreement.
 2. Submission of insurance certificates.
 3. Distribution of Contract Documents.
 4. Submission of list of subcontractors, list of products, schedule of values, and progress schedule.
 5. Designation of personnel representing the parties to Contract, Owner's Project Leader, Owner's Constuction Project Manager and <1|A/E|>.
 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 7. Scheduling.
- C. Contractor to Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.03 SITE MOBILIZATION MEETING

- A. Attendance Required:
1. Contractor.
 2. Owner.
 3. Architect.
 4. Contractor's superintendent.
 5. Major subcontractors.
- B. Agenda:
1. Use of premises by Owner and Contractor.
 2. Owner's requirements.
 3. Construction facilities and controls provided by Owner.
 4. Temporary utilities provided by Owner.
 5. Survey and building layout.
 6. Security and housekeeping procedures.
 7. Schedules.
 8. Application for payment procedures.
 9. Procedures for testing.
 10. Procedures for maintaining record documents.
 11. Requirements for start-up of equipment.
 12. Inspection and acceptance of equipment put into service during construction period.
- C. Contractor to Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.04 PROGRESS MEETINGS

- A. Attendance Required:
1. Contractor.
 2. Owner.
 3. Architect.
 4. Contractor's superintendent.
 5. Major subcontractors.
- B. Agenda:
1. Review minutes of previous meetings.
 2. Project Safety

3. Review of work progress.
 4. Field observations, problems, and decisions.
 5. Identification of problems that impede, or will impede, planned progress.
 6. Review of submittals schedule, submittal log, and status of submittals.
 7. Maintenance of progress schedule.
 8. Corrective measures to regain projected schedules.
 9. Planned progress during succeeding work period.
 10. Maintenance of quality and work standards.
 11. Effect of proposed changes on progress schedule and coordination.
 12. Maintenance of Record Drawings.
 13. Other business relating to work.
- C. Contractor to Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.05 CONSTRUCTION PROGRESS SCHEDULE

- A. If preliminary schedule requires revision after review, submit revised schedule within 10 days.
- B. Within 20 days after review of preliminary schedule, submit draft of proposed complete schedule for review.
1. Include written certification that major contractors have reviewed and accepted proposed schedule.
- C. Within 10 days after joint review, submit complete schedule.

3.06 PROGRESS PHOTOGRAPHS

- A. Photography Type: Digital; electronic files.
- B. In addition to periodic, recurring views, take photographs of each of the following events:
1. Completion of site clearing.
 2. Excavations in progress.
 3. Foundations in progress and upon completion.
 4. Structural framing in progress and upon completion.
 5. Enclosure of building, upon completion.
 6. Final completion, minimum of ten (10) photos.
- C. Digital Photographs: 24 bit color, minimum resolution of 1024 by 768, in JPG format; provide files unaltered by photo editing software.
1. Delivery Medium: Via email.
 2. File Naming: Include project identification, date and time of view, and view identification.
 3. PDF File: Assemble all photos into printable pages in PDF format, with 2 to 3 photos per page, each photo labeled with file name; one PDF file per submittal.

3.07 NUMBER OF COPIES OF SUBMITTALS

- A. Electronic Documents: Submit one electronic copy in PDF format; an electronically-marked up file will be returned. Create PDFs at native size and right-side up; illegible files will be rejected.

3.08 SUBMITTAL PROCEDURES

- A. General Requirements:

END OF SECTION

**SECTION 01 3523
OWNER SAFETY REQUIREMENTS**

PART 1 INTRODUCTION

1.01 INTRODUCTION

- A. The personal safety and health of each contractor, patient, family member, staff, and general public of our Organization is of primary importance. We believe that those individuals are our most important assets and that their safety in and around our facilities is our greatest responsibility. The prevention of occupationally induced injuries and illnesses is of such consequence that it will be given precedence over operating productivity whenever necessary. Leadership and Management will provide all mechanical and physical facilities required for the personal safety and health of each of its employees.
- B. To be successful, such a program must embody the proper attitude toward injury and illness prevention on the part of corporate management, supervisors, and employees. It also requires cooperation in all safety and health matters, not only between corporate management, supervisor and employees, but also between each employee and their fellow workers.
- C. Our concern for safety and health of all human beings is daily, even hourly. We expect every person who conducts the affairs of our organization, no matter what capacity they function in, to accept this concern and its responsibility. Contractors as well as employees are expected to use the safety equipment provided. Rules of conduct and rules of safety and health must be observed. Safety equipment cannot be abused, destroyed or ignored.
- D. Cooperation between Construction Manager's and Subcontractor's employees and management in the observance of these guidelines will ensure safe-working conditions, will help result in accident-free performance and will work to our mutual advantage. It will also assist in reducing workers' compensation costs (direct costs) and reduce jobsite down time, material loss and regulatory agency fines (indirect costs).
- E. Contractors are expected to take the authority to procure the necessary resources to execute the expectations of our organizations safety and health objectives. We will hold our contractor's managers, supervisors and employees accountable for meeting their responsibilities so that essential tasks will be performed.

1.02 COREWELL FACILITIES SAFETY GOAL

- A. Safety is an essential component of construction work at Corewell. It is a key contractual responsibility for those managing and performing such work and an important determinant of overall project success. Corewell believes that effective contractor safety programs enhance projects by assisting contractors to systematically identify and evaluate anticipated hazards and establish controls in advance of actual work. While the obvious purpose of a contractor safety program is to reduce on-the-job injuries and illnesses to the greatest extent possible and to insure compliance with all workplace safety standards, the interactions developed through these programs can also bring collateral benefits in the form of improved quality, communication, documentation, and cost savings.

1.03 SCOPE OF DOCUMENT

- A. To establish guidelines and specific instructions for all contractors and staff working at spectrum health, that they will abide by for the protection of patients, employees, the general public and contractors' personnel. These instructions apply to all construction and renovation projects, including data and telecom cabling installation. The contractor remains solely responsible for the safety of all persons and property, and must take whatever steps necessary or appropriate to assure that safety. This document provides contractors with spectrum health specific requirements to incorporate into their safety programs and implement pursuant to their contracts for work to be performed at Corewell. This document is not designed to address every possible safety or health issue. No specific requirement given herein are intended to limit, replace or supersede application provisions of federal, state, and municipal safety laws.

PART 2 SAFETY MANAGEMENT SYSTEMS

2.01 CONTRACTOR PREQUALIFICATION

- A. Corewell has established requirements to contractor safety. Corewell Health requires an EMR of 1.0 or less and also evaluates other safety performance criteria.
 - 1. Information and prequalification forms can be obtained by submitting a request to SHFacilitiesRFQ@corewellhealth.org <mailto:SHFacilitiesRFQ@corewellhealth.org>. The contractor is responsible to prequalify all subcontractors/trade contractors engaged on a project per their own written prequalification process.

2.02 COMMUNICATION

- A. Contractor Orientation
 - 1. On Corewell projects, all workers are required to complete the Corewell Contractor Orientation.
 - a. Contractor Orientation maybe contacted at:
contractororientation@corewellhealth.org
 - 2. The general contractor/construction manager is required to develop a project-specific safety orientation for all workers, including subcontractors/trade contractors and other individuals performing work at the site. Orientation training shall address all components identified in the project-specific plan. The orientation must be completed prior to allowing workers to start on-site.

2.03 PROJECT SPECIFIC SAFETY PLAN OVERVIEW

- A. General contractors/construction managers must develop, communicate, and implement a written project-specific safety plan ("Plan"). The goal of the Plan is to assist general contractors/construction managers in meeting their responsibilities to provide a safe work environment and to aid in developing a program to eliminate accidents, injuries, and property damage.
- B. Although the specific elements of each Plan will vary by the work or services to be provided, project size, complexity, and location, at a minimum, the Plan must adequately address all requirements (if applicable to the general contractor's/construction manager's work). The Plan must also identify foreseeable project-specific hazards and list the general contractor's/construction manager's mitigation and control of such hazards. Such the Plan is meant to be a living document, general contractors/construction managers are to amend the Plan to address any new hazards that were not addressed in the initial Plan but later identified during the course of performing work at Corewell. This Plan is required to be followed by all subcontractor/trade contractors as well.
- C. Each plan should be signed by a site safety representative designated by Corewell to certify that it fully complies with all Corewell Construction Safety Requirements as referenced in this document. The Safety Plan Certification form should be used and included in the site specific project manual.
- D. The following list of elements of a project-specific safety plan is provided to assist the general contractor/construction manager. The Plan may include only elements that are necessary for the given project and do not need to comply with this particular format.
 - 1. Accountability Plan
 - 2. Blood Borne Pathogens/Exposures
 - 3. Cell Phone Usage
 - 4. Confined Space Entry
 - 5. Food and Drink
 - 6. ID Badging
 - 7. Illness/Disease
 - 8. Infection Prevention
 - 9. Parking
 - 10. Personal Protective Equipment (PPE)

11. Recordkeeping and Incident Reporting
12. Reportable Events
13. Safety Rules
14. Substance Abuse
15. Tobacco/Smoking
16. Visitors

PART 3 SPECTRUM HEALTH ADDITIONS FOR PROJECT-SPECIFIC SAFETY PLAN

3.01 ACCOUNTABILITY PLAN

- A. The purpose of the accountability plan is to provide all contractors and its employee's guidelines for enforcement of safety rules, policies, procedures and directives from Corewell.
- B. Contractors and its employees will be subject to disciplinary action for violations of safety rules. Such action may include any one or more of the following depending on the severity of the violation:
 1. Employees shall be afforded instructive counseling and/or training to assure a clear understanding of the infraction and the proper conduct under Corewell guidelines. However, nothing in Corewell's policy or this safety manual will preclude the termination of a contractor and/or their employees for a safety violation. **This is not a progressive disciplinary system and any safety violation may lead to a contractor and/or their employee's termination without prior instruction or warning.**
 2. Verbal warning with documentation.
 3. Written warning outlining the nature of offense and necessary corrective action with documentation.
 4. Disciplinary suspension with documentation.
 5. Termination or Banishment from all Corewell project sites into the future.
- C. Contractors, including management and supervisory personnel, shall be subject to disciplinary action for the following reasons:
 1. Repeated safety rule violations by their on-site employees.
 2. Failure to provide adequate training prior to job assignment.
 3. Failure to report accidents and provide medical attention to their employees injured at work.
 4. Failure to control unsafe conditions or work practices reported by on-site employees or by site observations.
 5. Failure to adhere to Tobacco/Smoking and Substance Abuse policies.
 6. Failure to adhere to other policies and clauses reference in this section.

3.02 BLOOD BORNE PATHOGENS/EXPOSURES

- A. Biological hazards or containers that store biohazard items such as needles or sharps must be removed by Corewell personnel (or designated contracted service) only. If construction personnel find a biohazard container or biohazard material in a construction site, they must contact Corewell's Project Manager for proper handling and removal. It is expected that contractors will have a low risk of exposure to blood or body fluids during work at Corewell, but evaluation may be necessary for contractors selected to work in high risk/special care areas. In the unlikely event that a contractor is stuck with a needle or contaminated sharps, immediately contact Infection Control at (616) 391-1407.

3.03 CELL PHONE USAGE

- A. The general contractor/construction manager shall have a cell phone policy with an objective of prohibiting jobsite cell phone usage except as necessary for the performance of work tasks. At a minimum, the policy shall address the following:
 1. Cell phone policy should match Corewell's Policy.
 2. Cell phone for business use related to the project is acceptable.
 3. Designated "safe zones" for general use of cell phones by workers.
 4. A "No Walking While Talking" policy for work task related cell phone usage.

5. When a cell phone is part of an operation requiring a Job Hazard Analysis, the use of the cell phone shall be specifically detailed in the analysis. The site cell phone policy shall be prominently posted on the Job Safety Board.

3.04 CONFINED SPACE ENTRY

- A. In the event that it's necessary to enter a confined space that does require a permit, only certified contractors who adhere to confined space standards are allowed to enter the confined space. Contractor must coordinate entry into confined spaces with Corewell's Project Manager and Corewell Plant Operations and must follow Corewell's written policy and CFR 1910.146 (MIOSHA Part 90) on Confined Space Entry. It is the contractor's obligation to ensure that his/her employees are provided with required information and training and that Plant Operations is informed of the permit space entry program used by the contractor prior to entry.
 1. A permit will be filled out by the contractor per CFR1910.146 (MIOSHA par 790) Appendix D-1, and reviewed by the aligned supervisor. This permit will be valid for one day. The permit shall be posted at the entrance to the confined space area throughout the duration of the entry.
 2. The contractor shall isolate all sources of energy in accordance with lockout/tag out procedures and ensure that no hazards are present to employees in the area and also isolate pipelines entering the space by acceptable means.
 3. The contractor shall verify that conditions in the confined space are acceptable for entry and required safety measures applicable to the confined space area (i.e., lockout, etc.) have been met.
 4. The contractor shall ensure safety equipment is available and used as applicable.
 5. The contractor shall ensure that conditions are tested to determine if acceptable entry
 6. conditions exist prior to entry. Monitoring must be completed during entry to ensure acceptable entry conditions are maintained. Atmospheric conditions shall be tested in accordance with permissible exposure levels.

3.05 FOOD AND DRINK

- A. For protection of the contractors, food and drink shall not be consumed or stored in active construction sites unless there is a designated area to consume food and drink.

3.06 ID BADGING

- A. Contractor employees are required to participate in the Corewell contractor orientation program, prior to obtaining a badge or working on any construction or renovation project.
- B. Contractor must coordinate issuance of badges with Corewell Security. Contractor employees and subcontractors must wear their own badges at all times. Under no circumstances shall a person wear someone else's badge. Contractor employees must wear and display their badge on outer most clothing at approximately shoulder height at all times. There is a fee to replace lost badges.
- C. Badges expire annually. Coordinate with Corewell Project Manager to validate team members badge status.

3.07 ILLNESS/DISEASE

- A. A contractor will not be allowed to work on Corewell projects until evaluated by a physician if they have any of the following symptoms:
 1. Fever over 100 degrees Fahrenheit
 2. Diarrhea or Vomiting
 3. Eye Infection
 4. Draining wound that cannot be covered
 5. Undiagnosed rash
- B. Please see Occupational Health Services Policy for additional information and exclusion criteria.

- C. Special Care Areas include surgical suites and procedural areas, labor and delivery, newborn nursery, neonatal special care units and oncology units.
- D. Additional precautions must be taken in special care areas to prevent illness in high risk populations. This includes but is not limited to:
 - 1. Tools shall be wiped with hospital approved disinfectant before entering special care areas.
 - 2. Donning of hospital approved PPE in isolation rooms/areas and special care areas.
- E. Tools shall be wiped with hospital approved disinfectant or bagged for later disinfection before exiting contact isolation rooms.

3.08 INFECTION PREVENTION

- A. Due to the nature of the high risk patients that receive care at Corewell, it is important that all efforts are made to prevent the introduction and spread of infectious diseases in the facility.

3.09 PARKING

- A. All contractor and subcontractor employees must park their vehicles in approved designated areas coordinated with Corewell's Project Manager and Corewell Security. Contractors must not block public areas while loading and unloading materials and equipment. Corewell Security Services will issue Corewell parking violations in order to provide for the maximum availability of parking spaces and to protect against unsafe conditions.
- B. Parking violations may be issued for, but not limited to, the following:
 - 1. Parking in an unauthorized area
 - 2. Parking in a "No Parking" zone
 - 3. Parking in a 10 minute area longer than the allotted time limit
 - 4. Parking in a loading zone
 - 5. Parking in a Fire Lane
 - 6. Parking over the yellow line and occupying two or more spaces
 - 7. Staff who do not have a Corewell sticker displayed
 - 8. Parking in a "Handicapped" space without a permit

3.10 PERSONAL PROTECTIVE EQUIPMENT (PPE)

- A. Personal protective equipment (PPE) increases safety for individuals performing potentially hazardous tasks. All construction personnel are required to wear Personal Protective Equipment prescribed by all applicable MIOSHA Standards, regulatory rules, and good safety practices. Corewell employees who have a direct role in the execution of the project or need access to the project area must wear all required PPE's. PPE's to be provided for their use by contractor. All construction personnel must be protected from hazards in the workplace by using appropriate PPE, including but not limited to:
 - 1. Head protection (hard hats) are required 100% of the time on all designated construction sites and when there are potentials of falling objects, hair entanglement, burning, or electrical hazards. Hard hats are for protection against impact and penetration of falling objects. Hard hats must meet ANSI specifications. Hard Hats must be worn with the brim to the front and the knob to the back at all times.
 - 2. Safety glasses must be worn 100% of the time on all designated construction sites and face protection when there are potentials of hazards from flying objects or particles, chemicals, arcing, glare, or dust. Prescription glasses must have side shields attached.
 - 3. High visibility clothing must be worn 100% of the time on all designated construction sites.
 - 4. Protective footwear to protect from falling objects, chemicals, or stepping on sharp objects must be worn 100% of the time. High heels, open toed shoes, athletic or canvas- type shoes shall not be worn.
 - 5. Protective gloves or clothing, when required, to protect against a hazard.
 - 6. Harnesses and lanyards for fall protection as required in OSHA Construction Safety Standards.

7. Hearing protection for protection against the effects of noise exposure in accordance with the applicable OSHA Standard. Also, take appropriate measures to protect hospital occupants from noise pollution.
8. Respirators in accordance with the applicable OSHA Standard when such equipment is necessary to protect the health of the employee.
9. Infection Prevention required PPE if in designated isolation areas or special care areas.

3.11 RECORDKEEPING AND INCIDENT REPORTING

- A. If emergency assistance is summoned to the project site, the general contractor/construction manager is responsible for immediately notifying the Corewell Project Manager. The same immediate notification is also required for any fire, medical, environmental, and other emergencies. The General Contractor/Construction Manager is responsible for directly notifying any regulatory agencies as required as well as arranging for any necessary follow-up repairs, abatement, or other corrective actions.
- B. In addition to the monthly reporting requirements, additional reporting for recordable incidents, MIOSHA citations, and fire, medical, environmental, and other emergencies is required to be submitted within 24 hours to the Corewell Project Manager. The Corewell Incident Form shall be used to document these incidents.

3.12 REPORTABLE EVENTS

- A. Reportable events such as spills, injuries, and OSHA reportable injuries must be reported to the Corewell's Project Manager as soon as they occur. All near misses must also be reported to the Corewell Project Manager as soon as they occur. Failure to follow this policy will result in the immediate dismissal from all Corewell facilities.

3.13 SAFETY RULES

- A. ALL OF COREWELL HEALTH'S SAFETY RULES MUST BE OBEYED. FAILURE TO DO SO BY ANY CONTRACTOR'S EMPLOYEE WILL RESULT IN DISCIPLINARY ACTION AND/OR REMOVING THAT PERSON FROM THE PREMISES.
 1. A good job is a clean job, and a clean job is the start of a safe job. So, keep your working area free from rubbish, dust and debris.
 2. Keep your mind on your work at all times. No horseplay on the job. Injury or removal from the job (or both) can be the result.
 3. Personal safety equipment must be worn as prescribed for each job such as: safety glasses for eye protection, hard hats at all times within the confines of the construction area, gloves when handling materials, and protective footwear is necessary for protection against foot injuries.
 4. Precautions are necessary to prevent sunburn and to protect against burns from hot materials.
 5. If any part of your body should come in contact with an acid or caustic substance, rush to the nearest water available and flush the affected part. Secure medical aid immediately by calling Corewell Security Services at (616)391-1425.
 6. Watch where you are walking. Don't run.
 7. The use of illegal drugs, alcohol, or being under the influence of the same, on the project shall be cause for permanent removal from all Corewell facilities.
 8. Workplace violence will not be tolerated; Corewell has a zero-tolerance policy regarding workplace violence.
 9. Do not distract the attention of fellow workers. Do not engage in any act which would endanger another employee.
 10. Coordinate with Corewell's Project Manager on the use of sanitation facilities. Defacing or damaging these facilities is forbidden.
 11. Hand washing sinks are not to be used for construction or renovation purposes.
 12. Do not use a compressor to blow dust or dirt from your clothes, hair, or hands.

13. Never move an injured person unless it is absolutely necessary as further injury may result. Keep the injured person as comfortable as possible and utilize job site first-aid equipment until medical attention or an ambulance arrives.
14. Know your emergency exit routes and follow Corewell's policies and procedures that apply to emergency response and routine drills.
15. Know where firefighting equipment is located and be trained on how to use it.
16. Lift correctly - with legs, not the back. If the load is too heavy - GET HELP. Stay fit. Control your weight. Do stretching exercises. Approximately twenty percent of all construction related injuries result from lifting materials.
17. Nobody, but the operator, shall be allowed to ride on equipment unless proper seating is provided.
18. Do not use power tools and equipment until you have been properly instructed in the safe work methods and become authorized to use them.
19. Be sure that all guards are in place. Do not remove, displace, damage, or destroy any safety device or safeguard furnished or provided for use on the job, nor interfere with the use thereof.
20. Do not enter an area which has been barricaded.
21. Never oil, lubricate, or fuel equipment while it is running or in motion.
22. Use the "four and one" rule when using a ladder. One foot of base for every four feet of height.
23. All portable ladders in use shall be equipped with safety feet. Step ladders shall not be used as a straight ladder.
24. Use ladders according to related OSHA Standard, general ladder safety and manufactures' instructions.
25. Ladders must extend three feet above landing on roof for proper use.
26. Defective ladders must be properly tagged and removed from the project site.
27. Keep ladder bases free of debris, hoses, wires, materials, etc.
28. Build scaffolds according to manufacturers' recommendations and applicable OSHA Construction Safety Standards.
29. Scaffold planks shall be properly lapped, cleated or otherwise secured to prevent shifting.
30. Use only extension cords of the three-prong type. Use ground fault circuit interrupters at all times and when using tools in wet atmosphere (e.g. outdoors) or with any temporary power supply. Check the electrical grounding system daily.
31. Use approved fall protection procedures and comply with related OSHA Standards regarding fall protection.
32. Never throw anything "overboard." Someone passing below may be seriously injured.
33. Open flames are prohibited.
34. Know what emergency procedures have been established for your job site (location of emergency phone, first aid kit, stretcher location, fire extinguisher locations, evacuation plan, etc.). Call Corewell Security Services at (616)391-1425 from within the hospital facility to report emergency situations.

3.14 SUBSTANCE ABUSE

- A. Corewell is a drug and alcohol free workplace whereby its sole purpose is to ensure the safety of patients, employees, the general public and contractors' personnel and to promote productivity. This order applies to contractors, subcontractors and staff working on any Corewell projects. All contractors, subcontractors and associated staff are prohibited from using, possessing or being under the influence of illegal drugs, inhalants, alcohol, and prescription and over the counter drugs while working on any Corewell premises. We reserve the right to inspect our premises for these substances. In the event that such substances are found, we furthermore reserve the right to remove any and all individuals from the site and request full cooperation with any investigation into substance abuse. An investigation may include testing to detect the use of alcohol, drugs or inhalants.

3.15 TOBACCO/SMOKING POLICY

- A. All contractors and their personnel are prohibited from smoking or using tobacco products at all Corewell facilities and must abide by Corewell's Tobacco- Free Environment policy. This applies to all Contractor's employees or Contracted employees. Corewell has a zero tolerance for smoking or tobacco use on/in sites. Contractor's violating this policy will be terminated from the site and permanently banned from future Corewell projects.

3.16 VISITORS

- A. "Visitors" are individuals who do not have a direct role in the execution of the project work. Visitors require pre-approval for entry into the project site, and this entry will be defined as a "tour." Anyone without pre- approval or a direct role in the execution of the project work shall be denied access to the project site.
- B. Tour participants must be limited to those deemed to have a strategic purpose for entering the project site. Tour times will generally be limited to periods of no or low construction activity. Preplanning is required to identify and mitigate site hazards and designated tour areas. The General Contractor/Construction Manager will brief all tour participants on required PPE's. Visitors need to abide by all project-specific requirements and must stay with the designated tour leader.

END OF SECTION

**SECTION 01 3533
INFECTION CONTROL PROCEDURES**

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section includes policies and procedures required of the Contractor to prevent transmission of infectious agents, dust, particles and other airborne particulate to vulnerable patient populations, health care workers and visitors within the Hospital and clinical environments.

1.03 RELATED REQUIREMENTS:

- A. Document 01 3523 - Owner Safety Requirements
- B. Document 01 5000 - Temporary Facilities and Controls; for additional procedures and construction of temporary barriers.
- C. Division 15 Sections for cleaning heating, ventilation and air-conditioning systems and ductwork prior to operation.

1.04 DEFINITIONS

- A. Aspergillus: A thermotolerant fungus that causes significant disease among immuno-compromised hosts that will disseminate to other organs including the skin and the brain. These fungi are ubiquitous, found in soil, water, dust and decaying material. Aspergillus have been cultured from unfiltered air, ventilation systems, contaminated dust dislodged during hospital renovation and construction, horizontal surfaces, food, and ornamental plants. Aspergillus spores are easily suspended in the air and survive for prolonged periods. Because of their size, they are easily inhaled, which can lead to invasive infection of both the upper and lower respiratory tracts in a susceptible host.
- B. Biocide: A physical or chemical agent that is capable of killing microorganisms.
- C. Immunocompromised: A condition where a patient's immune response is reduced or absent. Because defense mechanisms are limited in immunocompromised patients, they are susceptible to infections by microorganisms that are present everywhere, but do not cause disease in healthy people.
- D. Hospital Acquired: An infection that is acquired in a hospital or as a result of medical care.
- E. Negative Pressure: The relative air pressure difference between two areas in a healthcare and clinical facilities. A space that is at negative pressure has a lower pressure than adjacent areas, ensuring that any directional air movement is from the clean air environment into the contained area and preventing contaminated air from escaping into adjacent rooms or areas through doors, openings and cracks.
- F. HEPA: An acronym that stands for high efficiency particulate air. A HEPA filter is an air filter capable of capturing 99.97% of particles as small as .3 microns.
- G. Multi-Stage Filtering: Successive, filtering that prevents early loading of filters with contaminants and thereby delaying reduced airflow. Typical multi-stage filters might consist of a large particulate filter (10 microns), a smaller particulate filter (5 microns), an activated charcoal filter (odors) and a HEPA filter (.3 microns).
- H. Negative Pressure Machine: Freestanding, portable device that creates a negative air pressure within a space. It does so by removing air via flexible ductwork from the containment area. The units can also be placed remotely from the containment area and use ductwork to remove air from the controlled environment.

- I. Portable Air Scrubber: Freestanding, portable device that removes airborne contaminants by recirculating air through a HEPA filter. Portable air scrubbers can also serve as negative pressure machines by exhausting the recirculated air from the containment area.
- J. Containment: The process of isolating a contaminated area from the rest of the facility. Depending on the work to be done and the equipment required, airlocks, pass throughs, and equipment rooms may be necessary. Full containment always requires that negative pressure be maintained inside the containment area.
 - 1. Containment Requiring Activities include, but are not limited to the following:
 - a. Demolition and removal of walls, floors, ceilings and other building finish materials.
 - b. Demolition of plumbing, mechanical and electrical systems and equipment.
 - c. Finish operations such as sanding, painting and application of special surface coatings.
 - d. All routine construction activity that can generate dust.
 - e. Sitework operations.
 - 2. Source containment can also be used with localized negative pressure if a very small area is involved. A small piece of plastic sheet can be taped around the area to be removed. A small HEPA vacuum is used for this purpose by inserting the inlet nozzle inside this small containment to create a negative pressure and to vacuum up released particles.
- K. Containment Area: The construction activity area, adjacent staging and storage areas, passages for construction personnel to access the project site and delivery and removal of supplies and waste. It includes the entire volume of the project area including ceilings spaces above and adjacent to the construction area. Containment areas are determined by the Construction Project Manager, the Hospital's ICRA Committee, and as indicated on the Drawings.
- L. Pressure Differential: The difference in magnitude between a reference pressure and a variable pressure.
- M. Air changes per hour is equal to the air filtered (in cubic feet) in one hour divided by the containment area size (in cubic feet), or

$$\text{Air Changes per Hour (AC/H)} = \frac{\text{Cubic Feet of Air filtered in 1 Hour}}{\text{Containment Area Size in Cubic Feet}}$$
- N. Protection Area: The designated project limits, hospital and clinical areas adjacent to containment area, either occupied or used for passage and areas connected to construction areas by mechanical system intake, exhaust and ductwork. Protection areas are determined by the Construction Project Manager and the Hospital's Infection Control Committee as indicated on the Drawings.
- O. Minor Ceiling Access: Removal of one ceiling or access panels for visual observation in 50'-0", minor adjustments or other activities that do not disturb dust. All acoustical and access panels shall be closed immediately upon leaving the worksite.
- P. Major Ceiling Access: Removal of ceiling panels or systems that is not defined as "minor".
- Q. Thorough Cleaning (Construction Clean): Cleaning of surfaces that become exposed to dust shall be accomplished by the use of either a HEPA-filtered vacuum cleaner or a wet mop.
- R. Terminal Cleaning: Completed by Hospital Environmental Service Staff after construction complete and space turned over for occupancy.
- S. Infection Control Risk Assessment (ICRA): A broad, long-range involvement of a Hospital's infection control/epidemiology leadership and safety staff, to assess the risk to patients and the Hospital environment to airborne contamination.

1.05 POLICY

- A. The intent of this policy is to minimize Hospital Acquired Infections (HAI) in patients that may arise as a result of exposure to organisms released into the environment during construction

and renovation activities. Controlling the dispersal of airborne or waterborne infectious agents concealed within building components is critical in all Corewell facilities.

- B. Patient Care Objectives: All construction and renovation activities shall be defined and managed in such a way that occupants' exposure to dust, moisture and their accompanying hazards is limited.
1. Aspergillosis and related nosocomial fungal infections are caused through inhalation by immunocompromised patients of aspergillus spores, or other related spores, that can be present in the construction environment. The spores are known to be prolifically present in construction dust, debris and earthwork excavation dust. Outbreaks are associated with unfiltered air, contaminated ventilation systems at intake and exhaust ducts, and dust that is dislodged by renovation and construction. Control of construction dust, debris and excavation dust is imperative to help prevent outbreaks of aspergillosis or related nosocomial fungal infections in immunocompromised patients.
 2. Inhalation of aspergillus spores or other fungal spores by immunocompromised patients can lead to serious complications and death.
 3. Airborne contaminant control is critical in all areas. Contractor shall limit dissemination of airborne contaminants produced by construction-related activities, in order to provide protection of immunocompromised patients, other patients, staff, diagnostic operations and sensitive procedures and medical equipment from possible undesirable effects of exposure to such contaminants.
 4. Dust in ceilings and construction debris contains fungus spores. Construction activities causing disturbance of existing dust, or creating new dust, or other airborne contaminants, must be conducted in tight enclosures cutting off any flow of particles into patient areas.
 5. Ceilings and walls in protected areas and other areas within Hospital and clinical area as indicated on Drawings must be secure from airborne transmissions at all times. If access into the ceiling in occupied areas is required, procedures described within this Section shall be followed.
 6. Enclosed and wiped clean carts must be used when transporting construction debris and materials throughout the environment. The Construction Project Manager and Hospital ICRA Committee shall approve the transportation path and destination terminus prior to commencing the project.

1.06 PROCEDURES

- A. The Owner's Representative (CPM) in conjunction with the Hospital's ICRA Committee will:
1. Determine the infection control project classification using the matrices located below.
 2. Coordinate the relocation of affected patients and pedestrian traffic routes to areas where there is less potential for exposure to airborne contaminants with the responsible departments.
 3. Coordinate the preparation of the project area, including the removal of medical supplies, waste, and equipment, prior to the commencement of project activities with the responsible departments.
- B. Infection Control Risk Assessment (ICRA) Guidelines
1. STEP 1: Identify the Construction Project Activity Type (Types A-D) by selecting the appropriate construction activity type from the table below. Construction activity type is determined by the amount of dust that is generated, the duration of the activity and the involvement with HVAC systems.

Construction Project Activity by Type (A-D)	
Type A	Inspection and Non-Invasive Activities. Includes, but is not limited to: removal of ceiling tiles for visual inspection only, e.g., limited to 1 tile per 50 square feet painting (but not sanding)

	Inspection of wallcovering, electrical trim work, minor plumbing, and activities that do not generate dust or require cutting of walls or access to ceilings other than for visual inspection.
Type B	Small scale, short duration activities which create minimal dust Includes, but is not limited to: installation of data, telephone and computer cabling access to chase spaces cutting of walls or ceiling where dust migration can be controlled
Type C	Work that generates a moderate to high level of dust or requires demolition or removal of any fixed building components or assemblies Includes, but is not limited to: sanding of walls for painting or wall covering removal of floorcoverings, ceiling tiles and casework new wall construction minor duct work or electrical work above ceilings major cabling activities any activity that cannot be completed within a single workshift.
Type D	Major demolition and construction projects. Includes, but is not limited to: activities which require consecutive work shifts new construction requires heavy demolition or removal of complete cabling system any activity that requires temporary partitions

- C. STEP 2: Identify the Patient Risk Group that will be affected by selecting the appropriate Patient Risk Group from the table below. The Patient Risk Groups defined are based on project location and occupancy. If more than one risk group will be affected, select the higher risk group. For all construction classes, patients must be removed from the room while work is performed.

Infrast ructur e (electr ical closet s, mech anical rooms) Office areas Public Areas Outpa tient Clinics	Burn Clinic Cardio logy Echoc ardiog raphy Endos copy Nucle ar Medici ne Physic al Thera py Radiat	Emerg ency Room Kitch en / Cafete ria Labor & Delive ry Labor atorie s (speci men) Medic al and	Any area caring for immu noco mpro mised patien ts Burn Unit Cardia c Cath Lab Centr al Sterile	Pati ent Risk Gro up	Low Risk	Mediu m Risk	High Risk	Critica l Risk
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Shell Space	ion Oncol ogy Radiol ogy/C T/MRI Respir atory Thera py Occup ational Thera py	Surgic al Units Newb orn Nurse ry Outpa tient Surge ry Pediat rics Pharm acy Post Anest hesia Care Unit Progr essive Care Inpati ent Rehab Servic es Rehab Unit Long Term Care Unit / Skilled Nursin g Facilit y (SNF)	Suppl y Dialysi s Intensi ve Care Units Interv ention al Radiol ogy Negati ve press ure isolati on rooms (includ ing Bronc hosco py Suites) Oncol ogy / BMT Opera ting rooms includi ng C- sectio n rooms Pediat ric Sedati on Sterile Proce ssing					
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1. Note: If an area requiring work is located within an area listed as a higher patient risk group it will be treated as if it is the higher patient risk group (e.g. a mechanical closet located within an operating room area.)
- D. STEP 3: Match the Patient Risk Group (Low (L), Medium (M), High (H), Critical Risk (X)) with the Construction Project Type (A, B, C, D) to find the Class of Precautions (I – IV). Using the Construction Activity Type and the Patient Risk Group selected from the tables above, use the infection control matrix below to determine Construction Classification (Class). Construction Classification (Class) determines the procedures to be followed during construction and renovation projects.

Patient Risk Group / Construction Project Type Comparison				
Patient Risk Group	TYPE A	TYPE B	TYPE C	TYPE D
Low Risk Group	I	II	II	III / IV
Medium Risk Group	I	II	III	IV
High Risk Group	I / II	II	III / IV	IV
Critical Risk Group	II	III / IV	III / IV	IV

1. Note: Infection Control approval will be required when the Construction Activity and Risk Level indicate that Class III or Class IV control procedures are necessary.
- E. STEP 4: Description of Required Infection Control Precautions by Class. Implement the appropriate Construction Guideline based on the project classification selected from the Construction Activity matrix above (STEP 3). Construction Classification (Class) Guidelines are procedures to control release(s) of airborne contaminants resulting from construction, demolition, or renovation activities.

Description of Required Infection Control Precautions by Class		
During Project Construction		Upon Project Completion
Class I	1. Execute work by methods to minimize raising dust from construction operations. 2. Immediately replace a ceiling tile displaced for visual inspection. 3. If more than once ceiling tile is removed for inspection in a non-critical area, a containment unit must be used. 4. No particulate testing required.	1. Clean work area upon completion of task.
Class II	1. Provide active means to prevent airborne dust from dispersing into atmosphere. 2. Water mist work surfaces to control dust while cutting. 3. Seal unused doors with duct tape. 4. Block off and seal air vents with filter media.	1. Wipe work surfaces with cleaner/disinfectant. 2. Contain construction waste before transport in tightly covered containers. 3. Wet mop and/or vacuum with HEPA filtered vacuum before leaving work area. 4. Remove isolation of HVAC systems in areas where work

	5. Place dust mat at entrance and exit of work area 6. Remove or isolate HVAC system in areas where work is being performed. 7. No particulate testing required.	is being performed.
Class III	1. Remove or Isolate HVAC system in area where work is being done to prevent contamination of duct system. Block supply vents and filter return ducts. 2. Complete all critical barriers i.e. sheetrock, plywood, plastic, to seal area from non work area or implement control cube method (cart with plastic covering and sealed connection to work site with HEPA vacuum for vacuuming prior to exit) before construction begins. 3. Document and Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. 4. Contain construction waste before transport in tightly covered containers. 5. Cover transport receptacles or carts. Tape covering unless solid lid. 6. Minimum particulate testing required is baseline, midway, and at end of project.	1. Do not remove barriers from work area until completed project is inspected by the owner's Safety Department and Infection Prevention & Control Department and thoroughly cleaned by the owner's Environmental Services Department. 2. Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction. 3. Vacuum work area with HEPA filtered vacuums. 4. Wet mop area with cleaner /disinfectant. 5. Remove isolation of HVAC systems in areas where work is being performed. 6. Conduct final particulate testing
Class IV	1. Isolate HVAC system in area where work is being done to prevent contamination of duct system. 2. Complete all critical barriers i.e. sheetrock, plywood, plastic, to seal area from non work area or implement control cube method (cart with plastic covering and sealed connection to work site with HEPA vacuum for vacuuming prior to exit)	1. Do not remove barriers from work area until completed project is inspected by the owner's Safety Department and Infection Prevention & Control Department and thoroughly cleaned by the owner's Environmental Services Dept. 2. Remove barrier material carefully to minimize spreading of dirt and debris associated with construction. 3. Contain construction waste before transport in tightly covered

	before construction begins. 3. Document and Maintain negative air pressure within work site utilizing HEPA equipped air filtration units. 4. Seal holes, pipes, conduits, and punctures appropriately. 5. Construct anteroom and require all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving work site or they can wear cloth or paper coveralls that are removed each time they leave work site. 6. All personnel entering work site are required to wear shoe covers. Shoe covers must be changed each time the worker exits the work area. 7. Minimum particulate testing required is baseline, midway, and at end of project.	containers. 4. Cover transport receptacles or carts. Tape covering unless solid lid. 5. Vacuum work area with HEPA filtered vacuums. 6. Wet mop area with cleaner /disinfectant. 7. Remove isolation of HVAC systems in areas where work is being performed. 8. Conduct final particulate testing
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1.07 PERFORMANCE REQUIREMENTS

- A. Owner's Representative (CPM) Responsibilities:
 - 1. Determine that the Containment and Protection Areas are properly defined and adequately enclosed by the Contractor.
 - 2. Issue a Statement of Requirements in both graphic and written form to communicate the above, based upon an evaluation of the construction area and the impact of the project on patient care.
 - 3. Approve all enclosures constructed by the Contractor.
- B. Owner's Responsibilities:
 - 1. Assist Owner's Representative to determine the Containment and Protection Areas.
 - 2. Coordinate access to Infection Prevention.
- C. Contractor's Responsibilities:
 - 1. Comply with applicable codes and referenced controls using installation procedures and methods that satisfy code requirements and referenced infection control procedures.
 - 2. Determine specific means and methods of achieving and maintaining control of airborne contaminants during construction.
 - 3. Propose work plan and procedures for control of airborne contaminants.
 - 4. Submit Contractor's work plan for control of contamination for review in advance of performing any construction activities. Follow procedures established for product shop drawing submittals.
 - a. Owner's Representative and Architect shall review work Plan Submittal for general compliance.

- b. Contractor shall possess a signed copy of the reviewed submittal prior to proceeding with the work.
- 5. Conform to notification requirements in Quality Assurance Article.
- 6. Provide and maintain all dustproof enclosures, measurement devices, warning signs and warning lighting to protect the patients, Hospital and clinical areas, staff and public. Contractor shall remain responsible for compliance with all contamination control requirements.
- 7. Verify that all construction personnel have reviewed infection control procedures by using sign-in method. Provide a copy of attendees.

1.08 PRECONSTRUCTION CONFERENCE

- A. Pre-Construction Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination." Review methods and procedures related to Infection Control Risk Assessment (ICRA) including, but not limited to, the following:
 - 1. Identify Infection Control Risk Assessment.
 - 2. Review infection control policy.
 - 3. Review infection control procedures.
- B. Attendees shall include the Owner's Representative, the Hospital's Infection Control Coordinator, the Architect, the Construction Manager, the Contractor the major Subcontractors, and any other parties involved with the project.

1.09 SUBMITTALS

- A. Progress Schedule: Submit work and procedure schedules for temporary containment construction. Incorporate infection control milestones within the master project schedule.
- B. Work Plan: Submit drawings and construction details of temporary barriers, descriptions of procedures to be used to achieve and maintain control of construction- related airborne contaminants.
- C. Product Data: Include standard specifications, material descriptions, furnished specialties and accessories, rated capacities and capabilities of individual components for achieving containment.
- D. Special Reports:
 - 1. Provide written report of Infection Control procedures, including locations, exit routes, details of dust barriers, and means of creating negative pressure prior to commencing the project.
 - 2. Provide written report confirming specified air velocity whenever enclosure is erected or modified in designated Protection Area.
- E. All reports, work plans, and other supporting documentation should be submitted and reviewed by Hospital ICRA staff.

1.10 QUALITY ASSURANCE

- A. Testing Agency Qualifications: An independent agency qualified for testing indicated.
- B. Testing: Owner will engage a qualified independent testing agency to test air quality and pressure for compliance with specified requirements for performance and test methods.

PART 2 - PRODUCTS

2.01 PRODUCTS, GENERAL

- A. Provide products and materials that comply with stated requirements for each type of products or materials specified.
- B. Products identified below are recommended as appropriate to the task at hand. Other manufacturers than those listed may be submitted for approval, but it is the Contractor's responsibility to provide effective documentation that adequately supports a substitute product or material.

2.02 ACCESSORIES

- A. Protective Clothing: The Owner will provide disposable paper jumpsuits or reusable, fabric coveralls, head, and shoe coverings for use by construction personnel outside or inside of the Containment Area.
- B. Respiratory Gear: Provide respiratory gear as required by OSHA regulation 29 CFR 1926 (Construction Safety Regulations).

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine containment area and protection area, with Owner Representative (CPM) and Infection present, for compliance with Infection Control requirements.
 - 1. For the record, prepare written report, endorsed by Owner Representative, listing conditions detrimental to Infection Control performance.

3.02 CONTAINMENT AREA

- A. Maintain levels of airborne contaminants within Containment Area and Protective Area limits as defined by the Owner's Representative and Infection Control Risk Manager.
- B. Any ceiling panels opened for investigation beyond sealed areas shall be replaced immediately when unattended or covered with an appropriate temporary barrier.
- C. Removal of construction barriers and ceiling protection shall be done carefully.

3.03 CLEANING

- A. Provide thorough cleaning of all surfaces that become exposed to dust each day. Thoroughly clean each temporary access when work is completed or at the end of each work shift, using approved methods.
- B. Provide a final thorough construction cleaning of area before turning space over to Owner for final cleaning.
- C. Final cleaning of construction (to medically clean standards) shall be performed by the Owner's own housekeeping forces.

3.04 ENFORCEMENT

- A. Failure to maintain containment areas will result in issuance of a written warning. If the situation is not corrected within (8) eight hours of receipt of warning, Owner will have cause to stop the work as provided in the General Conditions.
 - 1. Failure of Contractor to correct deficiencies in containment will result in corrective action taken by Owner and all costs deducted from the Contractor.
- B. The Owner's Representative will perform periodic inspections to determine compliance with infection control procedures. Written documentation shall be filed as part of the project documentation. Photographs may be taken to document work site conditions.

END OF SECTION 013533

**SECTION 01 3553
SECURITY PROCEDURES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Security measures including formal security program, entry control, personnel identification, and miscellaneous restrictions.

1.02 RELATED REQUIREMENTS

- A. Section 01 3523 - Owner Safety Requirements.

1.03 SECURITY PROGRAM

- A. Protect Work , existing premises and Owner's operations from theft, vandalism, and unauthorized entry.
- B. Initiate program in coordination with Owner's existing security system at project mobilization.
- C. Maintain program throughout construction period until Owner acceptance precludes the need for Contractor security.

1.04 ENTRY CONTROL

- A. Restrict entrance of persons and vehicles into Project site and existing facilities.
- B. Allow entrance only to authorized persons with proper identification.

1.05 PERSONNEL IDENTIFICATION

- A. Provide Corewell issued identification badge to each person authorized to enter premises.
- B. Badge To Include: Personal photograph, name, expiration date and employer.
- C. Maintain a list of accredited persons, submit copy to Owner on request.
- D. Require return of badges at expiration of their employment on the Work.
- E. Badge to be worn at all times on Project Site.
- F. There is a fee to replace lost badges.

1.06 RESTRICTIONS

- A. Do not allow cameras on site or photographs taken except by written approval of Owner.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

**SECTION 01 4100
REGULATORY REQUIREMENTS**

PART 1 GENERAL

1.01 SUMMARY OF REFERENCE STANDARDS

- A. Regulatory requirements applicable to this project are the following:
 - 1. Validate with Authority of Jurisdiction dates and versions of codes currently in use for the State and Municipality.
 - 2. Notify Corewell of any changes or errors in this list.
- B. 29 CFR 1910 - Occupational Safety and Health Standards; Current Edition.
- C. ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design; 2010.
- D. All approved Building Codes and Regulations as adopted by the Authority Having Jurisdiction (AHJ)
- E. NFPA 101 Life Safety Code 2012 edition, for all CMS regulated buildings (I-2 Hospitals, Nursing Homes, or Ambulatory Surgical Centers) in addition to the Life Safety Code as adopted by the AHJ
- F. ICC A117.1 - Accessible and Usable Buildings and Facilities; 2009.
- G. NFPA 101 - Life Safety Code; 2015.
- H. Building Code: Michigan Building Code, current adopted version.
- I. Plumbing Code: Michigan Plumbing Code, current adopted version.
- J. Mechanical Code: Michigan Mechanical Code, current adopted version.
- K. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- L. Energy Code: Michigan Energy Code, current adopted version.
- M. Facility Guidelines Institute: Hospitals; Residential Health Care, and Support Facilities; and Outpatient Facilities 2018 (or as adopted by the State of Michigan)

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 4516
ARCHITECT QUALITY CONTROL

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. This Section includes requirements for architect performance, including, but not limited to, the following:
 - 1. Architect Performance Evaluation (APE). The APE process is managed and conducted by the Corewell Construction Project Manager (CPM).
- B. Related Sections include pertinent Sections of these Specifications for the individual Specifications required.
- C. Corewell and the Facilities, Planning, Design, & Construction (FPD&C) department value excellence, integrity, compassion, respect, and teamwork. Architects shall uphold these core values through their behavior on Corewell projects. Each of these core values help to ensure a safe, high quality experience for patients, staff, and architects. Architects must strive for excellence in all they do; therefore, Corewell expects excellence, without exception, from all architects, which includes, but not limited to, the following:
 - 1. Excellence - Take action, demonstrate accountability, always strive for the best high quality outcome in every situation on every project, and provide high quality, safe work.
- D. Corewell as an organization is committed to quality, health, and safety performance standards. This commitment is recognized by Corewell's Accreditation with The Joint Commission (formerly known as The Joint Commission on Healthcare Accreditation, or JCAHO), Commission on Accreditation of Rehabilitation Facilities (CARF), and Centers for Medicare & Medicaid Services (CMS) through Conditions for Coverage (CfC's) and Conditions of Participations (CoP's). Corewell as an organization is committed to delivering high quality and safe care in accordance with these requirements, which includes architect quality control.
- E. Architects must be prequalified before performing any work on Corewell facilities or grounds. Architect performance evaluations will be utilized as a holistic tool to evaluate architects against overall project performance and determine if they are eligible for requalification or disqualification. Corewell will recognize architects that promote safe, quality projects as determined by this specification, and will disqualify architects that do not.
- F. The primary purpose and goals of this specification are as follows:
 - 1. Drive cultural and behavioral habits in construction projects that help ensure high quality, safety, and overall performance on all Corewell construction projects.
 - 2. Measure, monitor, and hold architects accountable.
 - 3. Recognize and reward architects that consistently deliver a high level of quality, safety, and performance.
 - 4. Reduce cost and schedule implications from poor quality, and safety and performance issues.
 - 5. Provide a consistent, fair, and objective (i.e. free of bias or prejudice based on personal feelings or relationships) process for architect performance evaluations and architect appeals process.

1.03 DEFINITIONS

- A. Facilities, Planning, Design & Construction (FPD&C).
- B. Submittal: Information sent by Contractor to convey information about systems, equipment, materials, products, testing reports, operation and maintenance manuals, and administrative matters for the Work.

- C. Resubmittal: Submittal sent for review a second or further time.

1.04 SUBMITTAL PROCEDURES

- A. Submittals:
 - 1. Submittals are a critical part of architect quality control and performance. Architects will be evaluated on submittal management in accordance with the contract documents, submittal procedures, Section 01 3000 Administrative Requirements and this Specification.
- B. Delivery Method:
 - 1. Submittals must be delivered as electronic files.
 - 2. Where Submittals include information that is intended to be printed on sheets larger than 11 inches X 17 inches, or where scale or drawing size are critical for proper review, submit [2] paper copies for review.
 - 3. Electronic Files:
 - a. Unless indicated otherwise, submit 1 copy of each Submittal securely in PDF format.
 - b. Scanned Submittals shall be produced in such a way as to not compromise the graphic quality or accuracy of scale, where applicable; and text shall be searchable.
 - c. One copy of each Submittal will be reviewed and returned to the Contractor.
 - d. Submittals may be transmitted via electronic mail (e-mail) or on a CD or DVD. Submittals that are transmitted electronically may be returned electronically at the owner's discretion.
 - e. Electronic submittals must be complete, organized, and packaged into a single indexed file incorporating submittal requirements with hyperlinks that allow for navigation to each tab, section, article, or individual item.
- C. Coordination and Timing:
 - 1. Submittals as required per this Specification Section, and they must be submitted, reviewed, and approved by the PM before any construction or production work begins.
 - 2. Contractor is responsible for all costs caused by lack of coordination or tardiness of Submittals.
 - 3. Incomplete and unorganized Submittals will be rejected.
- D. Processing Time: Allow [5] full working days for PM to review each Submittal, including Resubmittals. Time for review shall commence on receipt of Submittals. No extension of the Contract Time will be authorized because of failure to transmit Submittals enough in advance, including Resubmittals. PM will advise Contractor when a Submittal being processed must be delayed.
- E. Identification: Provide a separate cover sheet on each submittal.
 - 1. Indicate name of firm or entity that prepared Submittal.
 - 2. Provide space to record Contractor's review and approval markings, action taken by Engineer (where applicable), and CPM or RPR review, comments, and stamp.
 - 3. Include the following information:
 - a. Project name.
 - b. Date.
 - c. Name and address of Engineer.
 - d. Name and address of Contractor.
 - e. Name and address of Subcontractor(s).
 - f. Submittal number, including revision identifier.
 - g. Other necessary identification.
- F. Deviations: Not allowed. Deviations on submittals required per this specification are not allowed without written authorization from the CPM.
- G. Transmittal: Package each Submittal individually and appropriately for transmittal and handling. Transmit each Submittal using a transmittal form. CPM will reject Submittal(s) received from sources other than the responsible Contractor.

- H. Resubmittals: Make Resubmittals in same form and number of copies as initial Submittal.
 - 1. Note date and content of previous Submittal.
 - 2. Clearly identify additions and revisions.
 - 3. Resubmit Submittals until they are marked, "Reviewed, No Exceptions Noted" or "Reviewed With Corrections Noted."
- I. Distribution: Furnish copies of Submittals with mark indicating, "Reviewed, No Exceptions Noted" or "Reviewed With Corrections Noted," to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance, quality, and safety of construction activities. A transmittal must be provided with each distributed copy along with a signature/print sheet including date. The signature sheet must be included in the submittal to the CPM.
- J. Use for Construction: Unless otherwise indicated by CPM, use only Submittals with mark indicating, "Reviewed, No Exceptions Noted" or "Reviewed With Corrections Noted."

PART 2 PRODUCTS

2.01 ACTION SUBMITTALS

- A. Safety and Health Management Program:
 - 1. At Corewell safety is part of our culture for patient, employee, and visitor safety. Corewell is also very concerned with the safety of architects working within our facilities. Architects are responsible for providing a safe work environment and ensuring that their employees on project sites are safe in accordance with all applicable safety codes/laws and applicable Corewell policies.
 - 2. Architect should be aware of all construction safety policies and communicate with owner and contractor situations that may pose safety issues.
 - 3. The safety objective for Corewell and contractors is zero accidents and injuries on construction projects on any Corewell facility or grounds. Therefore, in accordance with MIOSHA Construction Safety Standards - Part 1. General Provisions, the prime contractor and all subcontractors must submit an electronic copy and hard-copy of their written Accident Prevention Program (APP) that addresses site-specific hazards to the CPM/RPR before any construction or production begins.
 - a. The APP template can be downloaded from MIOSHA's website. The APP submitted by the contractor(s) must be project specific, and must meet the requirements of MIOSHA.
 - b. A project specific and comprehensive APP can be submitted from the prime contractor; however, it must include applicable work categories or trades for all subcontractors, and all subcontractors must be trained in the APP content. In accordance with Part 1 from MIOSHA, employers/contractors are responsible for an effective APP. As an example, the prime contractor may write a project specific APP and attach subcontractor APP's to it as an appendix.
 - 1) A hard copy of the APP must be maintained and available on-site, and upon request shall be readily available at all times.
 - 2) All contractors or vendors that will be on-site must be trained on the content within the APP and must sign and date a signature sheet that acknowledges this training; signature sheet(s) must be submitted to the CPM.
 - 3) The APP shall identify a designated on-site project safety representative (PSR). The PSR must be on-site at all times while work is being performed. The PSR can be the on-site superintendent or foreman from the prime contractor. The PSR must be 30-hour OSHA certified or have completed the MIOSHA level 1 certificate program through the MIOSHA Training Institute. Evidence of certification must be provided with the submission of the APP to the CPM. Refer to Section 01 3523 Part 2.02 for more detail for the PSR.

PART 3 EXECUTION

3.01 ARCHITECT'S REVIEW AND APPROVAL

- A. Review each Submittal and check for compliance with the Contract Documents. Mark with approval stamp before submitting to CPM.
- B. Submittals that are not organized, do not meet the requirements of Part 1 & 2, and are not approved and stamped by the Architect will be rejected.

3.02 CONSTRUCTION PROJECT MANAGER (CPM) SUBMITTAL REVIEW

- A. Submittals: The CPM shall review Submittals, make marks to indicate corrections or modifications required, and return Submittal. The CPM shall stamp each Submittal with an action stamp to indicate action taken, as follows:
 - 1. Reviewed, No Exceptions Noted.
 - 2. Reviewed With Corrections Noted.
 - 3. Revise and Resubmit. Corrections are provided by the CPM.
 - 4. Rejected, Resubmit: Submittal as a whole is incomplete, unorganized, and not assembled correctly.

3.03 ARCHITECT PERFORMANCE EVALUATION PROCESS

- A. The Corewell project management team shall lead the architect performance evaluation process for the project.
- B. The architect performance evaluations are maintained and managed by the Corewell facilities department including the project management team.
- C. The Corewell project management team, as assigned and determined at Corewell's sole discretion, shall complete a performance evaluation regarding the architect.
- D. Upon completion of each architect performance evaluation, the architect shall be provided an electronic PDF copy of the evaluation.
- E. All evaluations with a final score of less than 75% will be reported to, and reviewed by, Corewell Leadership.
- F. All architects and sub consultants shall be evaluated per the following:
 - 1. Projects with a duration of one year or less: Individual project contractor performance evaluations will be performed by the Corewell project management team at the substantial completion of each project.
 - 2. Contractors engaged in multiyear projects will be evaluated by the Corewell project management team as determined in the project kickoff meeting. For example, a two year project will be evaluated at 50% completion and at substantial completion, and longer duration projects may be evaluated at 33%, and 66% of completion, and at substantial completion. The purpose of performing the evaluation process is to identify deficiencies, and implement corrective actions as necessary throughout projects of longer duration.
 - 3. All evaluations will be performed utilizing a format and process to ensure consistency, objectiveness, and fairness in the evaluation.
 - 4. The architect performance evaluation:
 - a. See architect performance evaluation form for reference.
 - b. The architect performance evaluation is based eight performance categories. Each category contains 5 questions that are scored on a scale of 1-5. 1-unacceptable, 2-poor, 3-average, 4-good, and 5 excellent. Each category is calculated for an average score, and each category is calculated based on a 100% scale.
 - c. The eight performance categories are listed below:
 - 1) Document Quality Management.
 - 2) Scheduling and Productivity Management.
 - 3) Project Design and Quality
 - 4) Sub-Consultant Management.

- 5) Project Management.
 - 6) Cost Management/Control.
 - 7) Construction Contract Administration.
 - 8) Close-out Procedures.
 - 9) The average score and total score of each category shall be recorded in a scoring summary where the overall average score and total score are calculated based on the average. The total score for each category is calculated by multiplying the total score by the weighted percentage (%) for each category. As an example, quality management has a weight of 15%, so the total score is multiplied by the weight to achieve a final score. The final score of each category is then added together to get the aggregate total score for the evaluation.
5. Corewell has a specific scoring summary workbook for each architect where all evaluations are documented and averaged on a summary page for Corewell reference. The most recent five evaluations are averaged and summarized as well as the cumulative total for all evaluations. This allows Corewell's facilities department leadership to review recent performance history, overall performance history and continuously evaluate each architect to ensure the best performance from our architect.
- G. ARCHITECT APPEALS PROCESS
1. Upon receipt of an architects performance evaluation score of less than 75% the architect may respond to the SH Leadership with comments regarding the performance evaluation.
 2. A meeting can be scheduled to review the performance evaluation with the underperforming architect. Upon further review with SH Leadership and discussion with the architect, the performance evaluation may be revisited and altered as necessary.

END OF SECTION 01 4516

**SECTION 01 5500
VEHICULAR ACCESS AND PARKING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Parking.
- B. Existing pavements and parking areas.
- C. Traffic signs and signals.
- D. Maintenance.
- E. Removal, repair.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Temporary Construction: Contractor's option.

PART 3 EXECUTION

3.01 PARKING

- A. Use of designated areas of existing parking facilities by construction personnel is permitted.
- B. Arrange for temporary parking areas to accommodate use of construction personnel.
- C. When site space is not adequate, provide additional off-site parking.
- D. Coordinate with Corewell Parking Services (391-0904) for additional information and requirements

3.02 TRAFFIC SIGNS AND SIGNALS

- A. At approaches to site and on site, install at crossroads, detours, parking areas, and elsewhere as needed to direct construction and affected public traffic.

3.03 MAINTENANCE

- A. Maintain traffic and parking areas in a sound condition free of excavated material, construction equipment, products, mud, snow, and ice.
- B. Maintain existing paved areas used for construction; promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original, or specified, condition.

3.04 REMOVAL, REPAIR

- A. Remove temporary roads when permanent paving is usable.
- B. Repair damage caused by installation.

END OF SECTION

**SECTION 01 7800
CLOSEOUT SUBMITTALS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Project Record Documents.

1.02 RELATED REQUIREMENTS

- A. Section 01 3000 - Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.

1.03 SUBMITTALS

- A. Project Record Documents: Submit documents to Architect with claim for final Application for Payment.
- B. Operation and Maintenance Data:
 - 1. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit completed documents within ten days after acceptance.
 - 2. Submit one copy of completed documents 15 days prior to final inspection. This copy will be reviewed and returned after final inspection, with Architect comments. Revise content of all document sets as required prior to final submission.
 - 3. Submit two sets of revised final documents in final form within 10 days after final inspection.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress. Record Drawings will be reviewed at each progress meeting to verify compliance with concurrent updating requirements.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Changes made by Addenda and modifications.
- F. Record Drawings: Legibly mark each item to record actual construction including:
 - 1. Measured depths of foundations in relation to finish first floor datum.
 - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 - 4. Field changes of dimension and detail.
 - 5. Details not on original Contract drawings.

END OF SECTION