Bid 2011-17

Air Handling Unit Replacement – UMC Surgery Dept.

Division 1 – General Requirements

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SECTION 01 00 00

GENERAL REQUIREMENTS

Division 01 contains the Owner's general requirements for the Project, which are written specifications by the Owner and shall be provided to the Design Team for incorporation into the Project manual. The Owner shall provide the most current addition for each Project. The section generally contains Owner's general, administrative and performance requirements for the Project.

SECTION 01 11 00

SUMMARY OF WORK

PART 1- GENERAL

1.01 SECTION INCLUDES

A. Contract Description.

B. Work by Contractor.

C. Work by Owner.

D. Work by Other Contractors.

E. Owner-Supplied Products.

F. Contractor Use of Site and Premises.

G. Owner Use of Site and Premises.

H. Future Work.

I. Work Sequence.

J. Owner Occupancy.

K. Streamlined Specifications.

1.02 CONTRACT DESCRIPTION

A. The "Project" of which the "Work" of the Contract is a part titled "Bid No. 2011-17, Air Handling Unit Replacement – Surgery Dept." and is located at 1800 West Charleston Blvd, Las Vegas, Nevada. The "Work" is described in the Project Drawings and Divisions 1 through 48 of the Project Manual.

B. The Work consists of the removal and replacement of two (2) air handling units that supply the surgery department at University Medical Center.

1.03 WORK BY CONTRACTOR

A. Review Contract Documents and Field Conditions:

1. Carefully study and compare the Contract Documents with each other and with information furnished by Owner and immediately report to Owner errors, inconsistencies, or omissions discovered. If Contractor performs any construction activity knowing it involves a recognized error, inconsistency, or omission in the Contract Documents without such notice to Owner, Contractor shall assume appropriate responsibility for such performance and shall bear an appropriate amount of the attributable costs of correction.

2. Take field measurements, verify field conditions, and carefully compare field measurements and conditions and other information known to Contractor with the Contract Documents before commencing activities. Report errors, inconsistencies, or omissions discovered to Owner at once.
3. Perform the Work in accordance with Contract Documents.

B. Supervision:

1. Submit name of the individual authorized to receive documents and be responsible for informing others in Contractor's employ or Subcontractors of changes to the Work.
2. Furnish in writing within 5 calendar days after award of the Contract, written phone numbers or instructions on how to contact key personnel. Key personnel shall be:

    a. Superintendent.
    b. Project Manager.
    c. Owner or Partner of the construction company under Contract.

3. Superintendent shall be present at the project site for a minimum of 8 hours each day that construction work is progressing, or that is a normal business day until all punch list items have been corrected.

    a. Superintendent shall also be present at the project site during all work performed at other than the above times.
    b. Arrange to have Superintendent, or an approved alternate superintendent with the authority and capacity to make decisions or receive instructions and react accordingly, available by cellular phone and/or radio on a 24-hour a day, 7-day a week basis throughout this Contract.

4. At the Owner's sole discretion, the Owner shall request and require, in writing, the replacement of a Superintendent and/or Project Manager.
5. Superintendent shall not be replaced by Contractor except in case of an emergency as approved by Owner or upon mutual agreement by Owner and Contractor. Any subsequent substitution, if approved, will require full time presence on-site of Contractor's Project Manager in addition to Superintendent.
6. If Contractor does not respond to a call within one hour, and a situation exists requiring Contractor's action; Owner may take appropriate action at Contractor's expense. Contractor, by failing to respond to the call, shall waive any rights to claims caused by Owner's action.

C. Performance of the Work:

1. Perform all work as may be necessary to complete the Contract in a satisfactory and acceptable manner.
2. Supervise and direct the Work, using Contractor's best skills and attention.
3. Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work under the Contract.

4. Contractor shall be responsible to Owner for acts and omissions of Contractor's employees, Subcontractors, and their agents and employees, and other persons performing portions of the Work under a contract.
5. Contractor shall not be relieved of obligations to perform the Work in accordance with the Contact Documents either by activities or duties of Owner in Owner's administration of the Contract, or by tests, inspections, or approvals required or performed by persons other than Contractor.

D. Materials, Labor, and Equipment:

1. Furnish and pay for all transportation, material, equipment, tools, labor, and incidentals necessary to complete the Work in the best possible and most expeditious manner.
2. Provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated in the Work.

E. Labor: Enforce strict discipline and good order among Contractor's employees and other persons carrying out the Contract. Contractor shall not permit employment of unfit persons not skilled in tasks assigned to them.

F. Contractor's Responsibilities:

1. Review Shop Drawings, Product Data, and Samples; before and after Architect's review.
2. Receive and unload Products at site.
3. Inspect for completeness or damage, jointly with Owner.
4. Handle, store, install, and finish Products.
5. Repair or replace items damaged after receipt.

1.04 WORK BY OWNER

A. Owner reserves the right to perform construction or operations related to the Project with Owner's own forces and to award separate contracts in connection with other portions of the Project or other construction or operations on the site under conditions of the Contract identical or substantially similar to these including those portions related to insurance and waiver of subrogation. If Contractor claims that delay or additional cost is involved because of such action by Owner, Contractor shall make such claim as provided elsewhere in the Contract Documents.

B. When separate contracts are awarded for different portions of the project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean Contractor who executes each separate Owner-Contractor Agreement.

C. Owner shall provide for coordination of the activities of Owner's own forces and of each separate contractor with the Work of Contractor, who shall cooperate with them.

1. Contractor shall participate with other separate contractors and Owner in reviewing their construction schedules when directed to do so.
2. Contractor shall make any revisions to the construction schedule and Contract Sum deemed necessary after a joint review and mutual agreement.
3. The construction schedules shall then constitute the schedules to be used by Contractor, separate contractors, and Owner until subsequently revised.

D. Unless otherwise provided in the Contract Documents, when Owner performs construction or operations related to the Project with Owner's own forces, Owner shall be deemed to be subject to the same obligations and to have the same rights which apply to Contractor under the Conditions of the Contract, including, without excluding other, those stated herein and elsewhere in the Contract Documents.

E. Items noted "Owner-Supplied Products" will be supplied by Owner and installed by Contractor. These items include but are not limited to:
1. None

F. Items noted NIC (Not in Contract) will be supplied and installed by Owner. These items include buy are not limited to:
1. None

G. Contractor shall remove and Owner will take possession of the items including but not limited to the following:
1. None

1.05 WORK BY OTHER CONTRACTORS

A. Owner has awarded separate contract(s) for supply and installation of the following work:
1. None

1.06 OWNER-SUPPLIED PRODUCTS

A. Owner's Responsibilities:

1. Arrange for and deliver Owner reviewed Shop Drawings, Product Data, and Samples as required to Contractor.
2. Arrange and pay for Product delivery to site.
3. On delivery, inspect Products jointly with Contractor.
4. Submit claims for transportation damage and replace damaged, defective, or deficient items.
5. Arrange for manufacturers' warranties, inspections, and service.
6. Provide access to specified items for inspection by Contractor.
7. Inspect specified items jointly with Contractor and record status and condition of each item.
8. Cooperate with Contractor on scheduling time and method of removal of Owner-supplied products from existing location for reinstallation in the Work of the Project.

B. Contractor's Responsibilities:

1. Inspect specified items jointly with Owner and record status and condition of each item.
2. Coordinate with Owner on schedule and method of removal of Owner-supplied products from their existing location.
3. Remove, transport, and reinstall specified Owner-supplied Products in locations shown on Drawings or as directed by Owner.

C. Information or services under Owner's control shall be furnished by Owner with reasonable promptness to avoid delay in orderly progress of the Work.

D. The above delineated responsibilities are in addition to other duties and responsibilities of Owner and Contractor.

1.07 CONTRACTOR USE OF SITE AND PREMISES

A. Contractor shall confine operations at the site to areas permitted by law, ordinances, permits, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

B. Limit use of site and/or premises to allow:

1. Owner occupancy.
2. Work by others, work by Owner, and work by public utility companies.
3. Use of site and premises by the public.

C. Maintain emergency exits from existing buildings during construction.

D. Construction operations shall be limited to areas approved by Owner.

E. Utility Outages and Shutdown: Provide 3 days notice of scheduled shutdowns and immediate notification of unscheduled utility interruptions to the site.

1.08 OWNER USE OF SITE AND PREMISES

A. Owner intends to occupy the existing buildings on the premises and will conduct public business during the entire period of construction. Schedule the Work to accommodate this requirement. Contractor will be responsible to work with Owner to coordinate the dates of removal of existing air handling units and installation of new units. The time of removal and installation shall be limited to 5 p.m. Friday through 4 am Monday on consecutive weekends, as mutually scheduled between Contractor and Owner.

B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations. Schedule the Work to accommodate this requirement.

C. Owner's Access to the Site: Provide Owner access to the Work in preparation and progress wherever located.

1.09 FUTURE WORK

A. None

1.10 WORK SEQUENCE

A. Construct Work in phases to accommodate Owner's occupancy requirements during the construction period, coordinate construction schedule and operations with Owner.

1.11 OWNER OCCUPANCY

A. Owner may occupy or use any complete or partially completed portion of the Work at any stage when such portion is designated by separate agreement with Contractor, provided such occupancy or use is consented to by the insurer as required herein and authorized by public authorities having jurisdiction over the Work.

1. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage if any, security, maintenance, heat, utilities, damage to the Work, and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents.
2. When Contractor considers a portion substantially complete, prepare and submit a list to Owner as specified.
3. Consent of Contractor to partial occupancy or use shall not be unreasonably withheld.
4. The stage of the progress of the Work shall be determined by written agreement between Owner and Contractor or, if no agreement is reached, by decision of Owner.

B. Immediately prior to such partial occupancy or use, Owner and Contractor shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

C. Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

1.12 STREAMLINED SPECIFICATIONS

A. These specifications are written in streamlined or declarative style, using incomplete sentences. This imperative language is directed to Contractor unless specifically noted otherwise.

B. Omissions of such words and phrases as "The Contractor shall," "in conformity therewith," "shall be," "as shown on the Drawings," "a," "an," "the," and "all" are intentional in streamlined sections.

1. Omitted words shall be supplied by inference in the same manner as when a note appears on the Drawings.
2. Omission of such words shall not relieve the Contractor from providing the items and work described herein or indicated on the Drawings.
3. Words "shall be" are included by inference where a colon (:) is used within sentences or phrases.

PART 2 - PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01 23 00

ALTERNATIVES

PART 1 GENERAL

1.01 SUMMARY

A. Alternatives (noted as Bid Options on the Drawings) specified herein are shown on Drawings and specified in appropriate sections of Specifications, but shall not be included in the Base Bid.

B. Lump sum bid for each Alternative shall include labor, materials, equipment, and services required to complete the Work as shown on Drawings, as specified, and as described below.

1.02 SUBMISSION REQUIREMENTS

A. Submit bids for Alternatives, as summarized in the Schedule of Alternatives below, by filling appropriate blank spaces provided in the Bid Form.

1.03 SELECTION AND AWARD OF ALTERNATIVES

A. Alternatives quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option.

B. Alternatives can only be accepted in numerical order, i.e., 2 cannot be taken unless 1 is accepted. Three cannot be taken unless 1 and 2 are accepted. Thus, the Base Bid in combination with any one or more Alternatives may determine low Bid.

C. Accepted Alternatives will be identified in the Contract for Construction.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.01 SCHEDULE OF ALTERNATIVES

A. Alternative No. 1: None

END OF SECTION

SECTION 01 25 00

SUBSTITUTION PROCEDURES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Selection of products.

B. Limitations on substitutions.

C. Requests for substitution of products.

D. Contractor representation.

E. Submittal procedures.

1.02 SELECTION OF PRODUCTS

A. Base bid on products, materials, or systems specified in Contract Documents to establish standard of quality required and to provide uniform basis for evaluating bids.

B. Products Specified by Naming More than One Manufacturer: Any listed manufacturer of that section may be used in bid.

C. When product or manufacturer's names are not specifically specified, provide products, materials, or systems in accordance with performance requirements and install such products in accordance with material manufacturer's recommendations.

D. "Or Equivalent": Where phrases "or equal," "or equivalent," "or approved equal," or "or approved equivalent" occur in Contract Documents, do not assume that products, materials, or system will be approved as equivalent (even if approved for use on previous projects) until item has been specifically so approved for this Work by Architect.

E. Decision of Architect shall be final.

1.03 LIMITATIONS ON SUBSTITUTIONS

A. Comply with policy and procedure specified in the General Conditions for Substitutions (Or Equal).

B. Substitutions will be considered only when listed on form provided at end of this Section (Substitution Request form).

C. Only proposed substitutions of Successful Bidder will be reviewed, providing adherence to following procedures:
   1. They have been listed on Substitution Request form as specified in "A" above.
   2. Substitution Request form for each product has been completely executed with substantiating data attached and signed by authorized representative of Contractor. Submit in quadruplicate.

3. Requests must be delivered to Architect's office within 10 calendar days from date of Notice of Award. Late submittals will not be reviewed.

D. Subsequent requests will be considered in case of product unavailability.
1. Submit letter to this effect written by manufacturer accompanied by completed Substitution Request form.
2. If, in opinion of Architect, any product specified:
   a. Cannot be delivered during progress of Work.
   b. Will no longer be available during progress of Work, or
   c. If quality of material, as specified, no longer meets Specifications, Architect will specify substitute.
3. Material cost differential (credit or extra) between specified material and "substitute" will be reflected in Change Order to Contractor.
4. Contractor may submit request for subsequent substitutions no later than 30 days after Notice to Proceed is issued.
5. Allow Owner or Architect to audit product substitutions for unit cost, Contractor mark-up, and freight allowances. Significant departures from established mark-up shall be subject to review and approval.

E. Substitutions will not be considered when indicated on Shop Drawings or product data submittals, when requested directly by subcontractor or supplier, or when acceptance will require substantial revision of Contract Documents.

F. Do not order or install substitute products without written acceptance.

G. Only one request for substitution for each specified product will be considered. When substitution is not accepted, provide specified product.

H. Approval or rejection of request for substitution will be based on Architect's opinion, with concurrence by Owner, as to adaptability, durability, quality, aesthetics, and Contract Amount change, when compared to specified or noted items.

1.04 REQUESTS FOR SUBSTITUTIONS

A. Submit requests for substitutions using Owner's substitution form.

B. Identify product by Specification section and Article numbers. Provide manufacturer's name and address, trade name of product, and model or catalog number. List fabricators and suppliers as appropriate.

C. Attach product data as specified in Section 01 33 00.

D. List similar projects using product, dates of installation, and names of architects and owners.

E. Give itemized comparison of proposed substitution with specified product, listing variations.

F. Give quality and performance comparison between proposed substitution and specified product.

G. Give cost data comparing proposed substitution with specified product, and amount of net change to Contract Amount.

H. List availability of maintenance services and replacement materials.

I. State effect of substitution on construction schedule and changes required in other Work or products.

1.05 CONTRACTOR REPRESENTATION

A. Request for substitution constitutes representation that Contractor has investigated proposed product and has determined that it is equivalent to or superior in all respects to specified product. In addition:
   1. Provide same warranty for substitution as for specified product.
   2. Coordinate installation of accepted substitute, making such changes as may be required for Work to be complete in all respects.
   3. Certify that cost data presented is complete and includes all related costs under this Contract.
   4. Waive claims for additional costs related to substitution that may later become apparent.

1.06 SUBMITTAL PROCEDURES

A. Submit 4 copies of request for substitution.

B. After receipt of substitution request, Architect shall notify Contractor, in writing, of status of requested substitutions within 10 days.

C. For accepted products, submit Shop Drawings, product data, and samples under provisions of Section 01 33 00.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01 26 00

CONTRACT MODIFICATION PROCEDURES

PART 1 GENERAL

1.01 SUMMARY

A. Changes in the Work may be accomplished after execution of the Contract for construction, and without invalidating the Contract for construction, by Supplemental Instruction, by Change Order, or by Construction Change Directive, subject to the limitations stated in this Section and elsewhere in the Contract Documents.

B. Section Includes:
1. Modifications.
2. Supplemental Instructions.
3. Requests for Proposal/Change Order.
4. Construction Change Directive (Time and Material Change Orders).
5. Supplemental Instructions Procedures.
6. Change Order Procedures.
7. Construction Change Directive (Time and Material Change Orders).
8. Documentation of Change in Contract Amount and Contract Time.
9. Correlation of Contractor Submittals.

1.02 MODIFICATIONS

A. Changes in the Work shall be performed under applicable provisions of the Contract Documents, and Contractor shall proceed promptly, unless otherwise provided in the Supplemental Instruction, Construction Change Directive, or Change Order.

B. If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are so changed in a proposed Change Order that application of such unit prices to quantities or work proposed will cause substantial inequity to Owner or Contractor, the applicable unit prices shall be equitably adjusted.

C. Pending final determination of cost to Owner, amounts not in dispute may be included in Applications for Payment.

D. The amount of credit to be allowed by Contractor to Owner for a deletion or change which results in a net decrease in the Contract Sum shall be actual net cost as confirmed by Owner.

1.03 SUPPLEMENTAL INSTRUCTIONS

A. Architect has the authority to order minor changes in the Work not involving adjustment in Contract Sum or extension of Contract Time and not inconsistent with intent of Contract Documents.

B. Such minor changes shall be effected by written order and shall be binding on Owner and Contractor.

C. Contractor shall carry out such written orders promptly.

1.04 REQUESTS FOR PROPOSALS/CHANGE ORDERS

A. Architect may issue a Request for Proposal (RFP) which includes a detailed description of a proposed change in the Work, with or without supplementary or revised Drawings and Specifications.
   1. Within 7 calendar days of receipt of RFP, Contractor shall submit to Architect a statement describing the effects on Contract Amount and Contract Time with full documentation.
   2. Contractor shall include a statement describing the effect on Work by separate or other contractors.

B. Contractor may propose a change by submitting a request for change to Architect, which includes:
   1. Description of proposed change and its full effect on the Work.
   2. Statement describing the reason for the change.
   3. Description of the effect on the Contract Amount and Contract Time with full documentation.
   4. Statement describing the effect on Work by separate or other contractors.

C. Contractor's requests for change shall be submitted within 20 days of the occurrence. All requests made after 20 days from occurrence shall not be considered.

D. Change Orders: When Architect and Contractor agree with adjustments in Contract Amount and Contract Time, or otherwise reach agreement upon adjustments, such agreement shall be effective immediately and shall be recorded in the Change Order prepared by Owner and executed by all parties.

1.05 CONSTRUCTION CHANGE DIRECTIVE (TIME AND MATERIAL CHANGE ORDER)

A. Architect may, by Construction Change Directive and without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

B. In the absence of total agreement on the terms of a Change Order, Architect may issue a Construction Change Directive instructing Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order. The document will describe the changes in the Work, and will designate a method of determining any change in Contract Amount or Contract Time.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.01 SUPPLEMENTAL INSTRUCTIONS PROCEDURES

A. Architect will issue a Supplemental Instruction to Contractor describing minor changes in the Work not involving adjustment in Contact Sum or extension of Contract Time and not inconsistent with the intent of the Contract Documents.

B. Contractor shall carry out such written orders promptly.

3.02 CHANGE ORDER PROCEDURES

A. Contractor shall submit proposals and/or billings for materials and/or labor for all additional work:
   1. In conformance with and shall not exceed provisions, rates, and requirements set forth in the Prevailing Wage Rates outlined in the Construction Contract documents.
   2. With charges limited to those set forth below in this Article.

B. Materials:
   1. Cost of products or materials to Contractor or Subcontractor, less any applicable trade discounts, shall be subject to mark-up for overhead and profit as follows:
      a. Where Contractor supplies products or materials to Owner directly, Contractor will be allowed to add a maximum of 10 percent overhead and profit in his billing to Owner.
      b. Where Subcontractor supplies products or materials to Owner, through Contractor, Contractor will be allowed to add a maximum of 10 percent overhead and profit for Subcontractor, and above that, 5 percent overhead and profit for himself in his billing to Owner.
   2. Owner reserves the right to request copies of any or all invoices or contracts, including those from originating suppliers, subcontractors, or manufacturers.

C. Applicable taxes: No overhead and profit will be allowed.

D. Labor:
   1. Where Contractor supplies labor to Owner directly, Contractor will be allowed to add a maximum of 15 percent overhead and profit in his billing to Owner.
   2. Where Subcontractor supplies labor to Owner, through Contractor, Contractor will be allowed to add a maximum of 15 percent overhead and profit for Subcontractor; and above that, a maximum of 10 percent overhead and profit in his billing to Owner.
   3. Labor costs shall be in compliance with and shall not exceed the Prevailing Wage Rates as provided herein.
   4. Owner reserves the right to request copies of any or all invoices, time sheets, and so forth relevant to labor charged (see Documentation Article below).

E. Overhead and Profit:
   1. Overhead and profit at the rates outlined above includes costs of bonds and insurance, supervision, estimating, administrative and clerical personnel at the

base office and/or field office, use of power tools and equipment, incidental job burdens, payroll burdens and tax on labor (including but not limited to Workmans Comp, FICA, FUTA, etc.), and general office expenses.

2. No additional overhead and profit will be allowed for omitting work.
3. When both additions and credits covering related work or substitutions are involved in any one change, the allowance for overhead and profit shall be figured on the basis of the net increase, if any, with respect to that change.

F. Execution of Change Orders: A Change Order will be fully executed by Owner when the document is signed by Contractor, Architect, and Owner.

3.03 DOCUMENTATION OF CHANGE IN CONTRACT AMOUNT AND CONTACT TIME

A. Maintain detailed records on a time and material basis for all work done.

B. Document each quotation and provide full information required for evaluation of proposed changes to substantiate costs of changes in the Work.

C. Provide additional data to support computations:
1. Quantities of products, labor, and equipment.
2. Taxes.
3. Overhead and profit.
4. Justification for any change in Contract Time.
5. Credit for deletions from Contract similarly documented.

D. Support each claim for additional costs and for work done on a time and material force account basis with additional information:
1. Origin and date of claim.
2. Dates and time work was performed and by whom. Superintendent and/or Owner's representative shall be notified when work commences and when it is complete. Superintendent and/or Owner's representative shall sign the work log.
3. Time records and wage rates paid.
4. Invoices and receipts for products, equipment, and subcontractors similarly documented.

E. Contractor shall keep and present, in such form as Owner may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs shall be limited to the following:
1. Costs of labor, including social security, old age and unemployment insurance, fringe benefits required by agreement or custom, and workers' or workmen's compensation insurance.
2. Costs of materials, supplies, and equipment, including costs of transportation, whether incorporated or consumed.
3. Rental costs of machinery and equipment exclusive of hand tools, whether rented from Contractor or others.

3.04 CONSTRUCTION CHANGE DIRECTIVES (TIME AND MATERIAL CHANGE ORDER)

A. If a Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:
   1. Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation.
   2. Unit prices stated in the Contract Documents or subsequently agreed upon.
   3. Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee.
   4. As provided in Paragraphs D and E of Article 3.03.

B. Upon receipt of a Construction Change Directive, Contractor shall promptly proceed with the change in the Work involved and advise Owner of Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in Contract Sum or Contract Time.

C. A Construction Change Directive signed by Contractor indicates the agreement of Contractor therewith, including adjustment in Contract Sum and Contract time or the method determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

D. If Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the method and the adjustment shall be determined by Owner on the basis of reasonable expenditures and savings of those performing the Work attributable to the change.

3.05 CORRELATION OF CONTRACTOR SUBMITTALS

A. 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 Amount.

B. Promptly revise progress schedules to reflect any change in Contract Time. Revise sub-schedules to adjust time for other items of work affected by the change and resubmit.

C. Promptly enter changes in Project Record Documents.

END OF SECTION

SECTION 01 29 00

PAYMENT PROCEDURES

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Schedule of Values Format and Submittal.

B. Applications for Payment Preparation and Submittal.

C. Retention.

D. Applications for Final Payment and Release of Retention.

E. Substantiating Data.

1.02 SCHEDULE OF VALUES

A. As specified in the Instructions to Bidders, Contractor shall submit to Owner a Schedule of Values allocated to various portions of the Work, prepared in the form provided and supported by such data to substantiate its accuracy as Owner may require.

B. This schedule shall be used as a basis for reviewing Contractor's Applications for Payment.

1.03 APPLICATIONS FOR PAYMENT

A. Certificates of Insurance:

1. As a condition precedent to receiving payments, Contractor shall have on file with Owner current certificates of insurance evidencing required coverage.
2. Insurance certificates for Owner shall contain the information shown on the sample certificates provided in the Contract Documents.

B. Payment for stored materials may be made as specified in the General Conditions.

1.04 RETENTION

A. Retention on Payments: From the dollar amount of the Work in place, 10 percent retention will be deducted from each monthly progress payment.

B. Reducing Amount of Retention: At the option of Owner, upon completion of 50 percent of the Work in place and if in the opinion of Owner, the Work is progressing satisfactorily, retention monies will be suspended at current sum and future payments made without additional retention.

C. Release of Retention: The specified retention amount will be released following the Governing Body's approval of the Notice of Final Completion, provided that the following conditions are met:

1. All punch list items have been completed.
2. A Certificate of Occupancy has been received.
3. Final Record Drawings and Specifications have been submitted.
4. All operation and maintenance manuals have been approved by the Design Professional and turned over to the Owner.
5. No known premium delinquency exists with the Contractor's Workers' Compensation insurer.
6. All required documentation has been submitted to the Nevada State Labor Commissioner and no request has been made to the Owner to hold retention.

PART 2 - PRODUCTS

2.01 SCHEDULE OF VALUES

A. Format:

1. Comply with the form included in the Bidding Documents for the initial submittal.
2. Subsequent submittals be same as Continuation Sheet for Application of Payment.
3. Fill in left-most three columns (Item Number, Description of Work, and Scheduled Value).

B. Schedule of Values shall include, but not be limited to, the following items:

1. Division 0 – Procurement and Contracting Requirements

   a. Reimbursement allowance for permits and fees.

2. Division 1 – General Requirements: One value for entire division, except as follows:

   a. Mobilization: maximum of one/half percent of Contract amount.
   b. Overhead and profit to be spread equally to all scheduled line items.

3. Division 2 – Existing Conditions.

   a. Utilities up to 5 feet from building.
   b. Earthwork and paving.
   c. Landscape and irrigation.

4. Division 3 - Concrete.

   a. Building Concrete.
   b. Sitework Concrete.

5. Division 4 - Masonry.
6. Division 5 - Metals.
7. Division 6 – Woods, Plastics and Composites.
8. Division 7 - Thermal and Moisture Protection.

a. Waterproofing.
b. Insulation.
c. Cementitious Fireproofing
d. Built-up Asphalt Roofing.
e. Metal Roofing System.
f. Metal Framed Skylights.

9. Division 8 – Openings.

   a. Frames, Doors, and Hardware.
   b. Aluminum Storefront, Curtain Wall, and Glazing.

10. Division 9 - Finishes.

    a. Drywall and Painting.
    b. Acoustical Tile Ceilings.
    c. Carpet.
    d. Ceramic Tile.

11. Division 10 - Specialties.

    a. Interior and Exterior Signs.
    b. Plastic Toilet Compartments and Toilet Accessories.

12. Division 11 - Equipment.
13. Division 12 - Furnishings.
14. Division 13 - Special Construction.

    a. Fire Alarm and Smoke Detection Systems.
    b. As designated.

15. Division 14 - Conveying Equipment
16. Division 21 – Fire Suppression.

    a. Fire Sprinklers.

17. Division 22- Plumbing

    a. Plumbing Piping to 5 feet out of Building.
    b. Plumbing Fixtures

18. Division 23 – Heating Ventilating and Air-Conditioning.

    a. Ductwork and HVAC Equipment.
    b. HVAC Piping.

19. Division 25 - Integrated Automation

20. Division 26 - Electrical.

a. Building Service per NV Energy
b. Rough-in Conduit and Wire.
c. Distribution apparatus (standing sections, panelboards, motor controls, cabinets and enclosures, dry type transformers).
d. Wiring Devices.
e. Fixtures.
f. Packaged Engineer Generator Systems.

21. Division 27 - Communications.

    a. Building Service per Sprint and Cox Cable.
    b. Rough-in Conduit and Wire.
    c. Distribution apparatus (standing sections, panelboards, motor controls, cabinets and enclosures).
    d. Wiring Devices.
    e. Fixtures.
    f. Audio Video Systems.

22. Division 28 – Electronic Safety and Security
23. Division 31 – Earthwork.
24. Division 32 – Exterior Improvements.

    a. Earthwork and paving.
    b. Landscape and irrigation.

25. Division 33 – Utilities

    a. Utilities up to 5 feet from building.

26. Division 34 – Transportation.
27. Division 35 – Waterway and Marine.
28. Division 40 – Process Integration.
29. Division 41 – Material Processing and Handling Equipment,.
30. Division 42 – Process Heating, Cooling, and Drying Equipment.
31. Division 43– Process Gas and Liquid Handling, Purification and Storage Equipment.
32. Division 44 – Pollution Control Equipment.
33. Division 45 – Industry-Specific Manufacturing Equipment.
34. Division 48 – Electrical Power Generation.
35. Construction Conflicts and Additional Work.

C. Owner reserves the right to request further breakdown of any item as required.

2.02 APPLICATION FOR PAYMENT

A. Format:

1. Payment Application forms shall be a format similar to AIA G702 - Application and Certificate for Payment and AIA G703 - Continuation Sheet.
2. Contractor's electronic media driven forms including continuation sheets in the same format will be considered.

B. Continuation sheet(s): For each item, provide a column for listing each of the following:

1. Item Number.
2. Description of work.
3. Scheduled Values.
4. Previous Applications.
5. Work in place under this application.
6. Authorized change orders.
7. Total completed to date of application.
8. Percentage of completion.
9. Balance to finish.
10. Retainage.

PART 3 - EXECUTION

3.01 SCHEDULE OF VALUES PREPARATION AND SUBMITTAL PROCEDURES

A. As specified in the Instruction to Bidders, submit a Schedule of Values of the various portion of the Work, aggregating the total Contract Amount, divided so as to facilitate payments to subcontractors and materials suppliers in accordance with the project requirements.

B. Each item in the Schedule of Values shall be identified with the Specification section number that applies.

3.02 APPLICATION FOR PAYMENT PREPARATION AND SUBMITTAL PROCEDURES

A. Draft Copy of Application:

1. Seven calendar days before the date established for each progress payment, Contractor shall prepare and submit to Architect and Owner a draft copy of the continuation sheets listing total percentage of completed Work for each item to date and the percentage complete for the previous approved application.
2. Support this draft by such data substantiating Contractor's right to payment as Architect and Owner may require, such as copies of requisitions for Subcontractors and material suppliers.
3. Progress payments shall be tied to the Progress Schedule. See Section 01 32 16.

B. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of Work performed.

C. Site Visit to Review Draft:

1. Owner, Architect, and Contractor shall meet at the Site to review Contractor's draft copy of Payment Application.
2. If Owner and Contractor cannot agree on percentage of Work complete, Owner will pay the amount for which Architect is able to substantiate to Owner.

D. Submit complete copy: Upon Owner's and Architect's acceptance of the percentage amount complete for each item, Contractor shall complete the entire application form, and submit this report to Architect:

1. Submit an updated Construction Schedule with each Application for Payment.
2. Owner may require submission of lien waivers.
3. Present required information in typewritten form.
4. Execute certification by signature of authorized officer of Contractor.
5. List each authorized Change Order as an extension on AIA G703 - Continuation Sheet, listing Change Order number and dollar amount as for an original item of Work.
6. Payment Period: Submit at intervals stipulated in the Agreement but not more than one submittal per calendar month unless approved by Owner.
7. Submit with transmittal letter listing all required items.
8. Submit four (4) copies of signed and notarized Application for Payment.

E. Following Owner and Architect review and approval of the completed application, the application will be processed for payment.

F. Contractor shall promptly pay each Subcontractor, upon receipt of payment from Owner, out of the amount paid to Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor in entitled, reflecting percentages actually retained from payments to Contractor on account of such Subcontractor's portion of the Work. Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in similar manner.

G. Owner shall have no obligation to pay or to see to the payment of money to a Subcontractor or material supplier except as may otherwise be required by law.

H. Decisions to Withhold Certification:

1. Owner may decide not to make payment or, because of subsequently discovered evidence or subsequent observations, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in Owner's opinion to protect Owner from loss because of:

   a. Defective Work not remedied.
   b. Third party claims filed or reasonable evidence indicating probable filing of such claims.
   c. Failure of Contractor to make payments properly to Subcontractors or for labor, materials, or equipment.

d. Reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum.
e. Damage to Owner or another contractor.
f. Reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay.
g. Persistent failure to carry out the Work in accordance with the Contract Documents.

2. Progress payments may be withheld if Progress Record Documents are not current at the time of Application for Payment.
3. When the above reasons for withholding certification are removed, certification will be made for amounts previously withheld.

I. Failure of Payment:

1. If Owner does not pay Contractor within 30 days after the date established in the Contact Documents the amount agreed to by Contractor, Owner, and Architect or awarded by arbitration, then Contractor may, upon 7 additional days' written notice to Owner, stop the Work until payment of the amount owing has been received.
2. Contract Time shall be extended appropriately and Contract Amount shall be increased by the amount of the Contractor's reasonable costs of shut-down, delay, and start-up, which shall be accomplished as provided in Section 01 26 00 - Contract Modification Procedures.

3.03 APPLICATION FOR PAYMENT FOR COMPLETION OF THE WORK

A. Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, Owner and Architect will promptly make such inspection and, when Owner and Architect find the Work acceptable under the Contract Documents and the Contract fully performed, Owner will issue a final Certificate for Payment stating that to the best of Owner's knowledge, information and belief, and on the basis of Architect's observations and inspection, the Work has been completed in accordance with terms and conditions of the Contract Documents and that the entire balance found to be due Contractor and noted in said final Certificate is due and payable.

B. Final payment for any retained percentage shall not become due until Contractor submits to Owner:

1. An affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which Owner or Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied.
2. A certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 days prior written notice has been given to Owner.

3. A written statement that Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents.
4. Consent of surety, if any, to final payment.
5. If required by Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the contract, to the extent and in such form as may be designated by Owner.

C. If a Subcontractor refuses to furnish a release or waiver required by Owner, Contractor may furnish a bond satisfactory to Owner to indemnify Owner against such lien. If such lien remains unsatisfied after payment is made, Contractor shall refund to Owner all money that Owner may be compelled to pay in discharging such lien, including all cost and reasonable attorneys' fees.

D. If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of Contractor or by issuance of Change Orders affecting final completion, Owner shall, upon application by Contractor, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted.

1. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds and the written Consent of Surety has been furnished, Contractor shall submit to Architect an Application for Payment for that portion of the Work fully completed and accepted.
2. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

E. Acceptance of final payment by Contractor, a Subcontractor, or material supplier shall constitute a waiver of claims by the payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

3.04 APPLICATION FOR PAYMENT OF RETENTION

A. Procedure same as interim application process.

B. Application only after Project acceptance by governing board.

C. A certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by Owner shall not constitute acceptance of Work not in accordance with the Contact Documents.

D. Such applications may include requests for payment on account of changes in the Work which have been properly authorized by Construction Change Directives but not yet included in Change Orders.

E. Such applications may not include requests for payment of amounts Contractor does not intend to pay to a Subcontractor or material supplier because of a dispute or other reason.

F. Contractor warrants that title to all Work covered by an Application for Payment shall pass to Owner no later than the time of payment. Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from Owner shall, to the best of Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials and equipment relating to the Work.

3.05 SUBSTANTIATING DATA

A. When Owner requires substantiating information, Contractor shall submit such data as Owner deems necessary to justify the dollar amounts in question.

B. Provide one copy of data with cover letter for each copy of submittal. Show application number and date, and line item by number and description.

END OF SECTION

SECTION 01 29 13

REQUESTS FOR INFORMATION (RFI)

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Administrative and procedural requirements for handling and processing Requests for Interpretation (RFI).

B. RFI form is attached at the end of this Section.

C. Do not use RFI form during bidding. Direct questions during bidding phase as indicated in Contract Documents.

1.02 PROCEDURE

A. When conditions require clarification of Contract Documents, comply with following:
   1. Subcontractors, manufacturers, and suppliers shall submit request for additional information and clarification to Contractor.
   2. Contractor shall contact Architect with requests for interpretation or additional information using the attached form. Architect shall **not** accept requests for interpretation or information submitted directly from subcontractors, manufacturers, or suppliers.
   3. Architect shall provide response to Contractor.
   4. Generate RFI by one source per project and number accordingly.
   5. Submit one request for information or clarification per form.

B. Architect shall review RFI's from Contractor with reasonable promptness and Contractor shall be notified in writing of decisions made. [Specify a time frame to respond]

C. Architect's written response to RFI shall not be considered as a Pricing Order or Pricing Directive, nor does it authorize changes in Contract Sum or Contract Schedule.

D. Contractor shall maintain a log of RFIs sent to and responses from Architect.

E. Contractor shall make every reasonable effort to answer questions pertaining to Construction Documents before submitting an RFI.

1.03 RFI FORM

A. Submit RFIs on attached form. Architect shall not respond unless using proper form.

B. If submittal form or format does not provide space needed for complete information, additional sheets may be attached.

PART 2 – PRODUCTS

Not Used.

SECTION 01 29 13

REQUESTS FOR INFORMATION (RFI)

PART 3 – EXECUTION

Not Used.

END OF SECTION

SECTION 01 29 13

REQUESTS FOR INFORMATION

UNIVERSITY MEDICAL CENTER
FACILITIES DEPARTMENT

REQUEST FOR INTERPRETATION

Project: _____ R.F.I. Number: _____

_____ From: _____

To: _____ Date: _____

_____ Project Number: _____

Re: _____ Contract for: _____

Specification Section: Paragraph: Drawing Reference: Detail:

Request:

Signed by:

Response:

☐ Attachments

Response From: To: Date Rec'd: Date Ret'd:

Signed by:

Copies: ☐ Owner ☐ Consultants ☐ _____ ☐ _____ ☐ _____ ☐ _____ ☐ File

Based on CSI Form 13.2A

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Page 1 of __

SECTION 01 31 13

PROJECT COORDINATION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Provide complete project coordination throughout the duration of the Contract, including the following:
   1. Coordination of various Work elements.
   2. Contacts.
   3. Construction Mobilization.
   4. Schedules.
   5. Submittals.
   6. Construction Documents.
   7. Coordination Drawings.
   8. Closeout Procedures.

1.02 COORDINATION

A. Coordinate scheduling, submittals, and Work of the various sections of the Project Manual to assure efficient and orderly sequence of installation of interdependent construction elements.

B. Verify that utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate Work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.

C. Coordinate space requirements and installation of mechanical and electrical Work which are indicated diagrammatically on Drawings.
   1. Follow routing shown for pipes, ducts, and conduit as closely as practicable; place runs parallel with line of building.
   2. Utilize spaces efficiently to maximize accessibility for other installation, for maintenance and for repairs.

D. Coordinate, in cooperation with Owner, work by Owner's own forces and/or that of other contractors as outlined in Section 01 11 00.
   1. Provide Owner, Owner's own forces, and separate contractor(s) reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities and connect and coordinate construction and operations with theirs as required by the Contract Documents.
   2. If any part of Contractor's Work depends for proper execution or results upon the work of Owner or any separate contractor, Contractor shall, prior to proceeding with the Work, promptly report to Owner's Coordinator any apparent discrepancies or defects in such other work that render it unsuitable for such proper execution and results. Failure of Contractor to so report shall constitute an acceptance of Owner's or separate contractor's work as fit and proper to receive the Work, except as to defects which may subsequently become apparent in such work by others.

3. Costs caused by delays or by improperly timed activities or defective construction shall be borne by the party responsible thereof.
4. Promptly remedy damage wrongfully caused by Contractor to completed or partially completed construction or to property of Owner or separate contractors as provided in Section 01 45 00.
5. Claims and other disputes and matters in question between Contractor and a separate contractor shall be subject to the provisions of Construction Contracts.

E. In finished areas, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.

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

G. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

1.03 CONTACTS

A. Owner's Project Representative/Coordinator:
UMC Facilities Department
1800 West Charleston Blvd
Las Vegas, Nevada 89102
David Brice, (702) 383-2301, Fax (702) 383-2240

B. All questions regarding Contract Documents shall be in written form and sent via facsimile to UMC Facilities Department - Attention: David Brice.

1.04 CONSTRUCTION MOBILIZATION

A. Cooperate with Owner in allocation of mobilization areas of site, for field offices and sheds, and for job site access, traffic, and parking facilities.

B. During construction, coordinate use of site and facilities through Owner.

C. Comply with Architect's procedures for intra-project communications; submittals, reports and records, schedules, coordination drawings and recommendations; and resolution of ambiguities and conflicts.

D. Comply with instructions of Owner for use of temporary utilities and construction facilities.

E. Coordinate field engineering and layout work under instructions of the Architect.

1.05 SCHEDULES

A. Submit preliminary progress schedule in accordance with Section 01 33 00. Coordinate with Project Construction Schedule.

B. After review, revise and resubmit schedule to comply with revised Project Schedule.

C. During progress of Work, revise and resubmit Project Schedule with each Application for Payment.

1.06 SUBMITTALS

A. Submit preliminary shop drawings, product data, and samples in accordance with Section 01 33 00 for review and compliance with Contract Documents, for field dimensions and clearances, for relation to available space, and for relation to work of separate contracts. Revise and resubmit as required.

B. Submit application for payment forms for review and for transmittal to Architect.

C. Submit Requests for Interpretation of Contract Documents (RFI) and obtain instructions through the Architect.

D. Process request for substitutions and change orders through the Architect.

E. Deliver closeout submittals and preliminary inspection reports for review to the Architect.

1.07 CONSTRUCTION DOCUMENTS

A. Owner will furnish 10 complete sets of Drawings and Project Manuals. Contractor may purchase additional complete sets.

1.08 COORDINATION DRAWINGS

A. In areas where multiple disciplinary work must be located, prepare coordination drawings at a scale not less than 1/8" equals 1'-0".

B. These drawings shall be mutually prepared by all contractors and subcontractors with initial meeting and review meetings in conjunction with the A/E team. The contractor shall initiate the drawing production based on the A/E construction drawing backgrounds. Each additional trade shall provide their systems design as required to complete full coordination. Each trade shall date and sign composite drawings.

C. If locations arise during construction where multiple disciplinary systems cannot fit in the space allocated as a result of one non-coordinate disciplinary system installation. The general contractor or the subcontractor who fails to coordinate shall be responsible for the system modifications required to make them fit.

D. Where conflicts arise during the compilation of the coordination drawings, the A/E team, Owner and general contractor shall provide final agreed upon resolution.

E. Provide information required by Architect for preparation of coordination drawings as a minimum.

F. Review drawings and stamp with contractor's review stamp prior to submission to Architect.

1.09 CLOSEOUT PROCEDURES

A. Notify Architect when Work is considered ready for Substantial Completion. Accompany Owner and Architect on preliminary inspection to determine items to be listed for completion or correction in Contractor's Notice of Substantial Completion.

B. Comply with Architect's instructions to correct items of Work listed in executed Certificate of Substantial Completion. Coordinate with Owner for access to Owner-occupied areas.

C. Notify Architect when Work is considered finally complete. Accompany Owner and Architect on preliminary final inspection.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01 31 19

PROJECT MEETINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Preconstruction Conference.

B. Progress Meetings.

C. Pre-installation Meetings.

D. Coordination Meetings.

E. Other Meetings.

1.02 PRECONSTRUCTION CONFERENCE

A. Purpose of Conference: Following Owner's issuance to Contractor of the Notice of Award and following Owner's receipt, review, and acceptance of Contractor's post award submittals, a Preconstruction Conference will be called for the purpose of reviewing the Contract Documents in detail, to set expectations of performance of all parties, and to set the date of the Notice to Proceed.

B. Comply with requirements in the Special Conditions for Preconstruction Conference.

1.03 PROGRESS MEETINGS

A. Purpose: To review project progress, update schedule, clarify questions concerning Work underway and plan for the future.

B. Frequency: Weekly for the duration of the Work, at a time mutually agreed upon by Owner, Architect, and Contractor.

C. Location: Job site office.

D. Attendees: Team members consisting of:
1. Owner.
2. Architect.
3. Architect's consultants as applicable for work in progress or under discussion.
4. Contractors Project Manager.
5. Contractor's Superintendent.
6. Other parties appropriate to the Work in progress or under discussion.

E. General format:
1. During the Progress Schedule Update portion of the meeting, Contractor shall provide to each team member a copy of Contractor's current Progress Schedule.
2. During the Status of Shop Drawings, Product Data, and Samples portion of the meeting, Contractor shall provide to each team member a copy of Contractor's current Submittals Log, Request For Interpretation Log, Request For Proposal Log and Change Order Log.

F. Daily Manpower Reports:
   1. Provide daily manpower reports of all subcontractors to be turned in at each weekly progress meeting.
   2. Use the form provided at the end of this section.

G. Minutes:
   1. Meetings may be recorded on tape.
   2. Meeting minutes will be written by Owner or Owner's designed representative and distributed to Team Members within 5 calendar days following the meeting.

H. Record Drawings to be reviewed by Team members.

1.04 PRE-INSTALLATION MEETINGS

A. Pre-installation Conference will be held prior to start of work in certain specification sections (i.e., roofing).

B. Purpose:
   1. To review all construction and quality control procedures for the Work for which the conference is required.
   2. To coordinate and sequence the Work with the Work of all related sections.

C. Time: Not less than 10 days prior to the start of the Work or the preparatory work.

D. Attendees: As listed above for the Progress Meetings.

1.05 COORDINATION MEETINGS

A. Purpose: To coordinate the efforts of Contractor and others performing work on the Project. For example: Owners additional contractors.

B. Attendees: As listed above for the Progress Meetings plus the new party with work to perform.

1.06 OTHER MEETINGS

A. Project Manager will coordinate and conduct such additional special purpose meetings as may be required to realize timely problem resolution.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01 32 16

CONSTRUCTION PROGRESS SCHEDULE

PART 1 GENERAL

1.01 SUBMITTAL SCHEDULE

A. Prepare and keep current a schedule for the submittal of shop drawings, product data and samples, including Owner-furnished products.

B. Coordinate Submittal Schedule with Contractor's Construction Schedule.
   1. Allow Architect reasonable time to review submittals.
   2. Indicate decision dates for selection of finishes.

1.02 CONSTRUCTION SCHEDULE

A. Contractor shall be responsible for planning, scheduling, and reporting the progress of Work to ensure timely completion of the Contract.

B. Prepare and submit for Architect's information, a Construction Schedule (bar chart and CPM) for the Work at the Pre-Construction Meeting. Construction Schedule shall:
   1. Not exceed time limits currently under the Contract Documents.
   2. Be related to the entire Project to the extent required by the Contract Documents.
   3. Provide for expeditious and practicable execution of the Work.

C. Contractor's Schedule shall be cost-loaded to reflect the bid amount. Perform work according to the approved schedule.

1.03 PROGRESS REPORT

A. Update the Construction Schedule weekly and submit to Owner for discussion at weekly construction meetings.

B. Submit monthly progress report with request for payment.

C. Contractor's "Anticipated Activities" or "Three Week Look Ahead" shall be directly linked to progress report.

1.04 CASH FLOW PLAN

A. Prepare and submit in duplicate to Owner and Architect at the Pre-Construction Conference, a Cash Flow Plan for the entire performance period of the Contract.

1.05 Left Blank Intentionally

PART 2 PRODUCTS

2.01 CONSTRUCTION SCHEDULE

A. Prepare a Construction Schedule for the Contract and submit to Owner at the Pre-Construction Conference.

B. Construction Schedule shall be:
   1. A Precedence Diagram, showing, as a minimum, the Schedule of Values in the Contract as "Summary Activities."
   2. Cost loaded at the Schedule of Values level to provide a comparison of progress to the Payment Application.
   3. Detailed sufficiently for tracking quantity of Work performed and the quantity of Work remaining. Schedule shall detail compliance with Contract Documents, compliance with completion dates, and all milestones as reviewed and accepted by Owner.

C. Reports shall include, as a minimum:
   1. Actual Start Date.
   2. Percent Complete.
   3. Remaining Duration.
   4. Actual Finish Date.
   5. Earned-Value as compared to the Baseline Cost (Contract Schedule of Values).

D. Reports shall include a tabular status and a Gantt view providing a comparison of the current schedule with the target schedule.

E. Provide recovery schedule as required by Project.

2.02 DETAIL NETWORK SCHEDULE

A. In addition to the Construction Schedule, provide a Detail Network Schedule on all projects over $1.5 million; or as required by Owner on projects under $1.5 million. Contractor's schedule, submitted and accepted by Owner, shall reflect a total completion time allowed by the Contract under General Conditions article titled Time: Completion of Project.

B. Detail Network Schedule shall include:
   1. Complete Critical Path schedule to cover Contractor's anticipated time schedule.
   2. Detailed Precedence Diagram acceptable to Real Property Management (Owner).

C. Accepted Precedence Diagram shall be used as a baseline to evaluate progress; criteria for acceptance shall include the following features for the Precedence Diagram:
   1. Time-scaled in calendar days.
   2. Plot all activities on their anticipated early start and finish dates.
   3. Show activities in sufficient detail to allow monitoring.
   4. Size hardcopy to fold to a standard 8.5-inch by 11-inch.
   5. Show the order and interdependence of activities and the sequence of work as reflected in the Schedule Report specified below.
   6. Prominently distinguish critical activities on all reports by using color or symbols.
   7. Include, in addition to all construction activities, such tasks as:
      a. Mobilization and demobilization.
      b. Submittal and approval of samples of materials and shop drawings.
      c. Procurement of significant or long-lead time materials and equipment.
      d. Fabrication of special items.
      e. Installation and testing.

f. Permits.
g. Interfacing with utilities.
h. Interfacing with other projects.

D. Activities shall be sufficiently detailed so that a reviewer can follow the sequence. For example, the activities shall show forming, reinforcing, and placement of concrete on the calendar days they are scheduled to be performed.

E. Precedence Diagram shall show for each activity the preceding and following event numbers or activity numbers, the activity description, the total float, if any, and the anticipated duration of the activity in working days.

F. Organize and describe activities to conform to the Contract bid items as closely as possible. Activity descriptions shall be unique and specific with respect to the type of work and location.

G. Each Activity representing the Schedule of Values shall be loaded with the bid cost as "Budgeted Cost." Manpower (by Craft or Subcontractor) or material quantities shall be loaded at activities at least one level below the Schedule of Values Activity.

H. Accompany Precedence Diagram by a Schedule Report of the network with a tabulation of the following data for each activity:
1. Activity Number.
2. Activity Description
3. Activity Duration
4. Earliest start date
5. Earliest finish date
6. Latest start date
7. Latest finish date
8. Total float times
9. Responsibility for activity – e.g., Contractor, subcontractor, supplier, and so forth.
10. A balanced resource loading for each activity listing personnel, equipment, and anticipated revenue.

2.03 DETAIL NETWORK SCHEDULE - MONTHLY REPORTS

A. Monthly Report shall:
1. Show the activities or portions of activities completed during the one month reporting period and the portion completed on the Project to date, showing actual start and finish dates plus all future activities.
2. Include the percent complete and remaining duration at the Activity level.
3. State the actual quantity-to-date of materials or manpower expended and the amount or percentage of revenue actually earned compared to the baseline as of the report date.
4. Include a summary of all activities sequenced by a total float from least to greatest float and ordered by early start.
5. Include a detailed predecessor/successor analysis showing the predecessors, successors, logic ties, and constraints for each activity scheduled. These activities shall be sorted by event numbers or activity numbers in ascending order.

B. Monthly Report shall be accompanied by a narrative description of job progress, problem area, current and anticipated delaying factors and their expected effect, and any corrective actions proposed or taken.
   1. Narrative description shall also clearly identify any departures from earlier schedules including, but not limited to, changes in logical sequence or logical times, constraints, changes in activity durations and changes, additions, or deletions in event numbers, activity numbers, and activity descriptions.
   2. Include the reasons for each departure in the narrative description; corrective action to return to the original schedule shall be approved by Owner.
   3. Additions and deletions of activities or milestone events shall be approved by Owner.

C. Extra Work or additional work scope shall be shown on an updated schedule.

D. The Cash Flow Plan shall be the Contractor's best estimate of monthly billings.

PART 3 EXECUTION

3.01 SUBMITTALS LOG

A. Include/ incorporate as specified in Section 01 33 00.

B. The required schedules and reports shall be submitted to the Owner as follows:
   1. Construction Schedule - 2 Originals
   2. Detail Network Schedule/Diagram - 2 Originals
   3. Revision to Detail Network Diagram - 2 Originals
   4. Monthly Report - Original plus 2 copies of the narrative
   5. Cash Flow Plan - 2 Originals may be requested by Owner

3.02 CONSTRUCTION SCHEDULE

A. Following submittal of a Construction Schedule, Owner will advise Contractor of the acceptability of the Construction Schedule.

B. If the Contract requires only a Construction Schedule, Contractor shall monitor the actual progress of the Contract against the schedule.

3.03 DETAIL NETWORK SCHEDULE AND MONTHLY REPORT

A. Submit the Detail Network Schedule for the Owner's acceptance within 7 calendar days after the Construction Schedule in Part 2 is accepted.

B. Submit a Monthly Report of actual construction progress with the monthly pay request by updating the Schedule Report to reflect complete and in progress activities on the Project. Negative float shall be explained in detail. If the detailed Precedence Diagram requires revision, either wholly or in part, Owner shall so direct Contractor and Contractor shall submit such revision within 10 calendar days.

C. Provide one electronic backup of the Precedence Diagram with each Monthly Report. If Contractor uses software other than Primavera, Contractor shall furnish an unopened

licensed disc package of the software to the Owner for use during the duration of the project. The software shall be IBM PC compatible and shall calculate "Earned-Value" compared to the Baseline Budget as opposed to Current Estimated Budget.

D. Update Cash Flow Plan and submit monthly to incorporate actual expenditures to date with the Application for Payment.

E. Provide a revised Cash Flow Plan for each executed Change Order.

3.04 SCHEDULE PROGRESS AND PAYMENT VALIDATION

A. No measurement or direct payment will be made for Contractor's costs relating to preparation and submission of schedules and reports and revisions thereto, the cost being considered as included in the prices paid for Contract items.

B. Failure of Contractor to comply with the monthly updated schedule requirements specified herein, will be grounds for Owner to withhold an additional 10 percent of the monthly progress payments, in addition to the normal retention, until Contractor is in compliance. Upon compliance, additional money withheld will be paid to Contractor in the next scheduled monthly payment.

C. Activities denoting the completion of System or Equipment installations will be considered complete only after verified receipt of Operation & Maintenance Manuals, Certifications, Manufacturer's Documents, and completed Inventory Forms provided by Owner.
   1. Failure to provide the required documentation will result in the retention of 10 percent of that month's Payment Request until documentation is provided.
   2. Upon compliance, retained monies will be paid with the next payment.

D. Acceptance of Contractor's schedules by Owner is not to be construed as relieving Contractor of the obligation to complete the Work within the Contract time; or as granting, rejecting, or in any other way acting upon Contractor's requests for adjustments to the date for completing Contract Work, or claims for additional compensation. Such requests shall be processed in strict compliance with other relevant provisions of the Contract.

E. Contractor shall participate in a review and evaluation of the proposed Construction Schedule, Detailed Network Schedule, and Monthly Updated Schedule by Owner. Revisions necessary as a result of the review shall be submitted for acceptance to Owner within ten calendar days after the review. The accepted Detail Network Schedule shall then be used by Contractor for planning, organizing, executing, and directing the Work and for reporting progress of Work accomplished.

F. Contractor shall provide a schedule of anticipated adverse weather delays based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the Project location, which will constitute the baseline for the total Contract time adverse weather delay evaluations.
   1. Contractor's progress schedule shall assume to anticipate this degree of adverse weather delays in all weather dependent activities.

2. Monthly Report shall record actual weather delay days and correct the forecasted schedule for anticipated delay days not used.

G. Provide written notification to Owner of the occurrence of adverse weather delay days and resultant impact to normally scheduled Work, within 10 calendar days of each occurrence, when such weather prevents Work on critical activities for 50 percent or more of Contractor's scheduled workday.
   1. A time extension may be granted when the number of actual adverse weather days calculated from the Notice To Proceed (NTP) date to the date Contractor asserts the request exceeds the total anticipated adverse weather delays.
   2. Request for "Time Extension" will be governed by the Contract.
   3. If Contractor wishes to assert additional claim(s) for time adjustment at a later date(s), each succeeding claim shall address the time period from NTP date to the date of the request.
   4. No compensation will be made for monetary damages due to adverse weather delay(s).
   5. Supporting data from Daily Reports and Equipment Utilization Reports shall accompany requests for additional time due to weather delays.

END OF SECTION

SECTION 01 32 33

PHOTOGRAPHIC DOCUMENTATION

PART 1 GENERAL

1.01 SUMMARY

A. Provide monthly photographs of site and construction throughout progress of Work.

1.02 SUBMITTALS

A. Deliver prints with pay request with transmittal letter.

B. Submit 2 copies of each monthly photo.

C. Submit 1 copy of each monthly photo in digital JPG format.

1.03 QUALITY ASSURANCE

A. Qualifications: Photographs shall be produced by an experienced, commercial photographer, experienced in construction photography.

PART 2 PRODUCTS

2.01 PRINTS

A. Full color.

B. Paper Surface: Smooth, matte.

C. Contrast: High.

D. Size: 4-inch by 6-inch mounted for binder and tabs.

E. Identify each print on back with:
1. Name of project.
2. Contract number.
3. Phase.
4. Orientation of view.
5. Date and time of view.
6. Name and address of photographer.
7. Photographer's numbered identification of exposure.

PART 3 EXECUTION

3.01 CONSTRUCTION PHOTOGRAPHY

A. Take photographs each month of site and construction as evidence of existing project conditions.

B. Submit copies of each photo as specified above under Submittals.

C. Technique:
   1. Provide factual presentation.
   2. Provide correct exposure and focus, high resolution and sharpness, maximum depth of field and minimum distortion.

D. Views:
   1. Provide a minimum of eight different views, acceptable to Owner.
   2. Provide photos from same views each month as a minimum.

END OF SECTION

SECTION 01 33 00

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.01 SUMMARY

A. Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents.

B. Purpose of submittal items is to demonstrate for those portions of the Work for which submittals are required, the way Contractor proposes to conform to information given and design concept expressed in Contract Documents.

C. Section Includes:
1. Proposed Products List.
2. Submittal Schedule.
3. Shop Drawings.
4. Product Data.
5. Samples.
6. Manufacturer Installation Instructions.
7. Manufacturer Certificates.
8. Contractor's Action.
9. Architect's Action.

D. Contractor to review shop drawings, product data and samples and stamp with Contractors review stamp prior to submission to Architect.

1.02 PROPOSED PRODUCTS LIST

A. Within 7 days after Preconstruction Conference, provide to Architect a list of the major Products proposed for use, with name of manufacturer, trade name, and model number of each product.

B. For Products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

1.03 SUBMITTAL SCHEDULE

A. Within 7 days after preconstruction conference, prepare and submit to the Architect a list for the submittal of Shop Drawings, Samples and Product Data, including Owner-furnished Products. This list shall include:
1. Expected time for delivery to the Architect of each submittal.
2. Time allowed for the Architect's review.
3. Dates reviewed submittals will be required from the Architect.

B. Keep current this list for the submittal of Shop Drawings, Product Data, and Samples, including Owner-furnished products.
1. List of Submittal of Shop Drawings shall be reviewed at Project Meetings.
2. Coordinate this list with the Contractor's construction schedule.
3. Allow the Architect reasonable time to review submittals in accordance with paragraph 3.02D of this section.
4. Indicate decision dates for selection of finishes.

C. Conform to the most recent schedule.

1.04 SHOP DRAWINGS

A. Submit Shop Drawings in the form of one reproducible xerographic copy on vellum material transparency and 4 opaque reproductions which will be retained by Architect.

B. Indicate special utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

1.05 PRODUCT DATA

A. Submit the number of copies of Product Data which Contractor requires, in 8-1/2-inch by 11-inch format, plus 4 copies which will be retained by Architect.

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

C. Indicate Product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

D. After review, distribute in accordance with the Submittal Schedule Article above and for Record Documents purposes described in Section 01 78 39.

1.06 SAMPLES

A. Submit Samples to illustrate functional and aesthetic characteristics of the Product with integral parts and attachment devices. Coordinate Sample submittals for interfacing Work.

B. Submit Samples of finishes from the full range of manufacturers' standard colors, or in custom colors selected, textures, and patterns for Architect's selection,

C. Include identification on each Sample with full Project Information.

D. Submit the number of Samples specified in individual specification sections, but not less than 2 which will be retained by Architect.

E. Reviewed Samples which may be used in the Work are indicated in individual specifications sections.

1.07 MANUFACTURER INSTALLATION INSTRUCTIONS

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

B. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

1.08 MANUFACTURER CERTIFICATES

A. When specified in individual specification sections, submit certification by manufacturer to Architect, in quantities specified for Product data.

B. Indicate material or Product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits and certifications as appropriate.

C. Certificates may be recent or previous test results on material or Product, but must be acceptable to Architect.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.01 CONTRACTOR'S ACTIONS

A. Perform no portion of the Work requiring submittal and review of Shop Drawings, Product Data, Samples, or similar submittals until the respective submittal has been approved by Architect. Such Work shall be in accordance with approved submittals.

B. Submittals made by Contractor which are not required by the Contract Documents may be returned without action.

C. Review, approve, and submit to Architect Shop Drawings, Product Data, Samples, and similar submittals required by Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of Owner or of separate contractors.
   1. Transmit each submittal with the form acceptable to Architect.
   2. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.
   3. Identify project, Contractor, Subcontractor, or Supplier, pertinent drawing and detail number and specification section number as appropriate.
   4. Apply Contractor's stamp, signed or initialed certifying that review, verification of Products required, field dimension, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents.
   5. Schedule submittals to expedite the Project and deliver to Architect at the location designated by Architect. Coordinate submission of related items.
   6. For each submittal for review, allow 15 calendar days excluding delivery time to and from Contractor. Longer review times may be required for complex submittals involving major components or systems.
   7. Clearly identify any variations from Contact Documents and product or system limitations.
   8. Provide space for Contractor and Architect's review stamps.
   9. Revise and resubmit. Identify all changes made since previous submission.

D. By approving and submitting Shop Drawings, Product Data, Samples, and similar submittals, Contractor represents that Contractor has determined and verified

materials, field measurements, and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

E. Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by Architect's approval of Shop Drawings, Product Data, Samples, or similar submittals unless Contractor has specifically informed Architect in writing of such deviation at the time of submittal and Architect has given written approval to the specific deviation. Contractor shall not be relieved of responsibility for errors or omission in Shop Drawings, Product Data, Samples, or similar submittals by Architect's approval thereof.

F. Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by Architect on previous submittals.

G. Informational submittals upon which Architect is not expected to take responsive action may be so identified in Contract Documents.

H. When professional certification of performance criteria of materials, systems, or equipment is required by Contract Documents, Architect shall be entitled to rely upon the accuracy and completeness of such calculations and certifications.

3.02 ARCHITECT'S ACTION

A. Architect will review or take other appropriate action upon Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.
   1. Architect's review of Contractor's submittals shall not relieve Contractor of the obligations under other requirements of Contract Documents.
   2. Architect's review of a specific item shall not indicate approval of an assembly of which the item is a component.

B. Architect's review shall not constitute approval of safety precautions or unless otherwise specifically stated by Architect, of any construction means, methods, techniques, sequences, or procedures.

C. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of Contractor as required by Contract Documents.

D. Architect's action will be taken with such reasonable promptness and in conformance with approved submittal log as to cause no delay in the Work or in the activities of Owner, Contractor, or separate contractors, while allowing sufficient time to permit adequate review.

END OF SECTION

SECTION 01 35 16

ALTERNATIVE PROJECT PROCEDURES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Products for patching and extending Work.

B. Examination and Preparation.

C. Installation.

D. Transitions and Adjustments.

E. Repair of damaged surfaces.

F. Finishes and Cleaning.

PART 2 PRODUCTS

2.01 PRODUCTS FOR PATCHING AND EXTENDING WORK

A. New Materials: As specified in Product sections. Match existing Products and Work for patching and extending Work.

B. Type and Quality of Existing Products: Determine by inspecting and testing Products where necessary, referring to existing Work as a standard.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that demolition is complete and areas are ready for installation of new Work.

B. Beginning of restoration Work means acceptance of existing conditions.

3.02 PREPARATION

A. Cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion.

B. Remove unsuitable material not marked for salvage, such as rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished Work.

C. Remove debris and abandoned items from area and from concealed spaces.

D. Prepare surface and remove surface finishes to provide for proper installation of new work and finishes.

E. Close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity. Insulate ductwork and piping to prevent condensation in exposed areas.

3.03 INSTALLATION

A. Coordinate work of alterations and renovations to expedite completion sequentially and to accommodate Owner occupancy.

B. Remove, cut, and patch Work in a manner to minimize damage and to provide a means of restoring Products and finishes to original or specified condition.

C. Refinish visible existing surfaces to remain in renovated rooms and spaces, to specified condition for each material with a neat transition to adjacent finishes.

D. Recover and refinish exposed mechanical and electrical work exposed accidentally during the work.

E. Install Products as specified in individual sections.

3.04 TRANSITIONS

A. Where new Work abuts or aligns with existing, perform a smooth and even transition. Patch Work to match existing adjacent Work in texture and appearance.

B. When finished surfaces are cut so that a smooth transition with new Work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Owner.

3.05 ADJUSTMENTS

A. Where removal of partitions or walls results in adjacent spaces becoming one, rework floors, walls and ceilings to a smooth plane without breaks, steps, or bulkheads.

B. Where a change of plane of 1/4 inch or more occurs, submit recommendation for providing a smooth transition for Architect's review.

C. Trim existing doors as necessary to clear new floor finish. Refinish trim as required.

3.06 REPAIR OF DAMAGED SURFACES

A. Patch or replace portions of existing surfaces that are damaged, lifted, discolored or showing other imperfections.

B. Repair substrate prior to patching finish.

3.07 FINISHES

A. Finish surfaces as specified in individual Product sections.

B. Finish patches to produce uniform finish and texture over entire area. When finish cannot be matched, refinish entire surface to nearest intersections.

3.08 CLEANING:

A. In addition to cleaning specified in Section 01 74 00, clean Owner-occupied areas of work immediately adjacent to renovation area and any other Owner-occupied areas affected by renovation work.

END OF SECTION

SECTION 01 35 53

SECURITY PROCEDURES

PART 1 – GENERAL

1.01 SECTION INCLUDES

A. Security Program.

B. Entry Control.

1.02 SECURITY PROGRAM

A. At all times, conduct operations under the Contract Documents to avoid unauthorized entry and to avoid the risk of loss, theft, or damage by vandalism, sabotage, or other means to the Work or Owner's operations.

B. At Project mobilization, initiate a security program to protect Work and Owner's operations from unauthorized entry or a risk of loss, theft, or damage to Contractor's property, Owner's property, and the Project Site.

C. Promptly take all reasonable precautions that are necessary and adequate against any conditions that involve unauthorized entry or a risk of loss, theft, or damage to Contractor's property, Owner's property, and the Project Site.

D. Continuously inspect Work, materials, equipment, and facilities to discover and determine any such conditions and be solely responsible for discovery, determination, and correction of any such condition.

E. Prepare and maintain accurate reports of incidents of loss, theft, or vandalism and furnish these reports to Owner within 24 hours. Date of the report shall not be later than 24 hours after the event or discovery of the event.

F. All Contractor employees and subcontractor employees shall be required to submit to the Owner the results of a background investigation. No employee with a felony conviction will be allowed on the project. Contractor will pay cost related to said investigation, which is to be performed by the Las Vegas Metropolitan Police Department. The Owner will provide each worker that successfully completes the background check with a UMC vendor badge. The ID badge must be worn at all times while on campus. Access badges will be programmed at the Owner's discretion. The project superintendent and the project manager will receive immediate access coding upon issuance of a formal notice to proceed by the Owner. Contractor shall confine daily operations to areas identified on a reviewed project schedule or as otherwise deemed appropriate by the Owner.

G. Cooperate with Owner on all security matters and promptly comply with any Project security requirements established by Owner. Such compliance with these security requirements shall not:

1. Relieve Contractor of Contractor's responsibility for maintaining proper security for the above noted items.

2. Be construed as limiting in any manner Contractor's obligation to undertake reasonable action as required to establish and maintain secure conditions at the Site.

PART 2 – PRODUCTS

2.01 CONSTRUCTION SECURITY FENCE

1. Not applicable

PART 3 – EXECUTION

3.01 ENTRY CONTROL

A. Provide barriers to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.

B. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

C. Employ a uniformed guard service to provide watchmen at site during non-working hours, as Contractor deems necessary.

END OF SECTION

SECTION 01 42 13

ABBREVIATIONS AND ACRONYMS

4-PC	4 Phenyl Cyclohexene
AHC	Architectural Hardware Consultant
AI	Analog Input
AO	Analog Output
AWG	American Wire Gauge
BAS	Building Automation System
BTU	British Thermal Unit
CCU	Central Control System
CD	Conduit Distribution
CDs	Construction Documents
CDC	Certified Door Consultant
CEC	Cation Exchange Capacity
COM	Central Output Module
COS	Change of State
CPVC	Chlorinated Poly Vinyl Chloride
CRW	Concrete Retaining Walls units
CV	Constant Volume
DDC	Direct Digital Control
DI	Digital Input
DO	Digital Output
EDP	Electronic Data Processing
EMS	Energy Management System
EPD	Environmental Product Division
ER	Equipment Room
ET	EvapoTranspiration

ABBREVIATIONS AND ACRONYMS

FCI	Fire Control Instruments
FACP	Fire Alarm Control Panel
FCR	Fire Control Room
FLP	Fail to Last Position
FMS	Facility Management System
GUI	Graphic User Interface
HVAC	Heating, Ventilating & Air-Conditioning
IAQ	Indoor Air Quality
IDC	Initiation Device Circuits
I/O	Input/Output
IP	Internet Protocol
IPS	Iron Pipe Size
LAN	Local Area Network
LCD	Liquid Crystal Display
LED	Light Emitting Diodes
MC	Main Cross-connect
MDF	main Distribution Frame
MM	Multi Mode
MNI	Metasys Network Integrator
MSIP	Multi-System Integration Platform
MZ	Multizone
NAC	Notification Appliance Circuit
NCM	Network Control Module
NDL	No Dollar Limit
NEXT	Near End Cross Talk

ABBREVIATIONS AND ACRONYMS

NRP	Non-Removable Pins
NTP	Notice to Proceed
OID	Operator Interface Device or Operator Interface Display
OPC	OLE for Process Control
P&ID's	Process and Instrumentation Diagrams
PCBs	Polychlorinated biphenyls
PICS	Protocol Implementation Conformance Statement
PID	Proportional-Integral-Derivative
PLC	Programmable Logic Controller
PMP	Pressure Maintenance Pump
PMW	Pulse Width Modulation
PSI	Pounds per Square Inch
PVC	Poly Vinyl Chloride
OWS	Operator Workstation
QAA	Quality Assurance Associate
RCDD	Registered Communication Distribution Designer
RFI	Request for Information
RT	Ring-Tite
SCR	Signal-to-Crosstalk Ratio
SLC	Signal Line Circuits
SM	Single Mode
SRW	Segmental Retaining Wall units
STI	Smart Terminal Interface
STP	Shielded Twisted Pair
TC	Telecommunication Closets

SECTION 01 42 13

ABBREVIATIONS AND ACRONYMS

TCLP	Toxic Characteristic Leaching Procedures
TCP	Transmission Control Protocol
TR	Telephone Room/Telecommunication Room
UTP	Unshielded Twisted Pair
VDC	Volts of Continuous Current
VFD	Variable Frequency Drive
VOC	Volatile Organic Content
WAN	Wide Area Network

END OF SECTION

SECTION 01 42 16

DEFINITIONS

Aggregate Mix Testing: Gradation testing shall be conducted by the approved testing firm. Two samples shall be taken from stockpile of material for approval before placement of aggregate begins. The testing firm shall also determine the maximum density per ASTM D1557. During placement of aggregate, one sample per day shall be taken for gradations.

As Directed: As directed, in writing, by Owner.

Backbone: Cabling and/or pathways used to interconnect equipment rooms.

Building Height: "Building Height" shall mean the maximum height of a structure as measured from curb elevation to the highest point on the parapet.

Category 3: Cabling and components which comply with all the applicable mechanical and electrical specifications for Category 3 cabling and connecting hardware as defined in ANSI/TIA/EIA568A *Commercial Building Telecommunications Cabling Standard* and TIA/EIA TSB67 *Field Testing of Unshielded Twisted Pair Cabling Systems*, as applicable.

Category 6: Cabling and components which comply with all the applicable mechanical and electrical specifications for Category 6 cabling and connecting hardware as defined in ANSI/TIA/EIA 568A *Commercial Building Telecommunications Cabling Standard* and TIA/EIA TSB67 *Field Testing of Unshielded Twisted Pair Cabling Systems*, as applicable.

Change Order: A written instrument prepared by Owner and signed by Owner, Contractor and Architect, stating their agreement upon a change in the Work which results in a change in the Contract Time and/or Contract Amount.

Channel: End-to-end cabling from the desk top equipment to the equipment port in the equipment room, including all cabling, cross connects, patched, connectors, termination hardware and patch cables.

Committee: "Committee" shall mean the Design Review Committee made up of End User and Real Property Management Project Representative.

Concealed: Embedded in masonry or other construction, installed behind walls, furrings or within double partitions or installed within hung ceilings or under raised floors.

Conduit or Cable Tray or Ladder Rack or Ladder Rack: The inclusion of all fittings, couplings, brushing, hangers, supports, sleeves, grounding hardware, etc.

Construction Change Directive: A written order prepared by Architect and signed by Owner and Architect, directing a change in the Work. Construction Change Directive allows the Work to proceed when Owner and Contractor do not agree upon a change to the Contract Sum or Contract Time required by a Change Order. Construction Change Directive requires agreement by Owner and Architect and may or may not be agreed to by Contractor.

SECTION 01 42 16

DEFINITIONS

Design Criteria: "Design Criteria" shall mean "Design Guidelines for Clark County Owned Facilities" as established and as amended from time to time.

Drip and Emitter Irrigation: Defined as being the same process and procedure. The terms may be used interchangeably.

Enhanced Performance: Cabling, termination hardware, Basic Links and Channels whose electrical characteristics are specified or otherwise defined to exceed the requirements for such characteristics defined in ANSI/TIA/EIA 568A *Commercial Building Telecommunications Cabling Standard* and TIA/EIA TSB67 *Field Testing of Unshielded Twisted Pair Cabling Systems*, as applicable.

Equipment Rooms: Service Entrance Rooms, Telecommunications Closets, Data Closets, Telephone Closets, Server Rooms, IDF Closets, Computer Rooms, etc.

Exposed: Not installed underground or CONCEALED as defined above.

Extended Frequency: Cabling, termination hardware, basic links and channels who's electrical characteristics are specified or otherwise defined for frequency ranges beyond those defined in ANSI/TIA/EIA 568A *Commercial Building Telecommunications Cabling Standard* and TIA/EIA TSB67 *Field Testing of Unshielded Twisted Pair Cabling Systems*, as applicable.

Front Yard: "Front Yard" shall mean the area between the building setback and property line which parallels any street.

Floor Area: "Floor Area" shall be gross floor area inclusive of all occupiable levels.

High Fiber Count Cable: Cabling which contains 4 individual optical fibers under a common outer jacket.

High Pair Count Cable: Cabling which contains 5 or more individual pairs of conductors under a common outer jacket.

In-Place Dry Density: Wherever the term "in-place dry density" is used, it shall mean the dry density as determined by (a) the ASTM D1556 methods for determining the density of soil by the sand cone method, or by (b) the ASTM D2922 method for determining the density of soil-in-place by the nuclear method and D3017 method for determining moisture content of soil-in-place by nuclear methods.

Install: To move from property line, set in place, join, unite, fasten, link, attach, set up or otherwise connect together before testing and turning over to Owner or provider of equipment supplied under another division. Installations shall be complete and ready for regular operation.

Link or Basic Link: End-to-end cabling from the work area outlet to the initial termination hardware in the equipment

Owner: "Owner" shall mean University Medical Center of Southern Nevada.

DEFINITIONS

Mixing Dampers: Includes Outside Air, Return Air, and Exhaust Air Dampers within an AH.

Modification: A Supplemental Instruction; A Change Order; A Construction Change Directive; or a written amendment to the Contract signed by Owner, Architect, and Contractor.

Net Parcel Area: "Net Parcel Area" shall mean the area of a Parcel as measured to the property line or right-of-way limits of any public or private street, railroad, or highway.

Optimum Moisture: Wherever the term "optimum moisture" is used, it refers to that moisture content determined to be the optimum for compaction by the ASTM D1557 compaction test method.

Pathways: Conduits, cable trays, ladder racks, cable ladders, in -ceiling, under floor, riser or backbone cable routes, etc.

Parking Areas: "Parking Areas" shall mean parking lots provided for passenger type vehicles located in the front of a Parcel and visible from the street.

Product Data: Illustrations, standard schedules, performance charts, instruction brochures, diagrams, and other information furnished by Contractor to illustrate materials or equipment for some portion of the Work.

Provide or Furnish: To supply, purchase, transport, place, erect, connect, test and turn over to Owner, complete and ready for regular operation, the particular work referred to.

Rear Yard: "Rear Yard" shall mean the area between the building setback and property line which is opposite of the Front Yard. When two Front Yards occur on a corner Parcel, the Rear Yard shall be opposite of the longest Front Yard.

Relative Compaction: Wherever the term "relative compaction" is used, it refers to the required in-place dry density of soil expressed as a percentage of the maximum dry density of the same soil type as determined by the ASTM D1557 compaction test method.

Relative Density: Wherever the term "relative density" is used, it refers to the required in-place density of a granular soil expressed as the ratio of (1) difference between the void ratio of a cohesion less soil in the loosest state and any given void ratio of (2) the difference between its void ratios in the loosest and densest states.

Request for Information (RFI): Formal process used during construction phase to facilitate communication between Contractor and Architect or owner's Representative with regard to requests for additional information and clarification of intent of Contract Documents (Drawings and Specifications).

Samples: Physical examples which illustrate materials, equipment, or workmanship and establish standards by which the Work will be judged

SECTION 01 42 16

DEFINITIONS

Service Areas: "Service Areas" shall mean areas and yards used for loading facilities, vehicle and trailer storage, storage of materials, products, or waste products and trash on developed Parcels. (Also known as outdoor storage.)

Shop Drawings: Drawings, diagrams, schedules, and other data specially prepared fir the Work by Contractor, subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work

Side Yard: "Side Yard" shall mean the area between the building setback and property line which is generally perpendicular to the Front Yard. When two Front yards occur on a corner Parcel, the Side Yard shall be generally perpendicular to the longest Front Yard.

Supplemental Instruction: An order for a minor change in the Work issued by Architect involving no changes in the Contract Amount or Contract Time.

Supply: To purchase, procure, acquire, and deliver complete with related accessories.

System Workstation/Printer: The computer and printer utilized to access the system. This will be on-site if an on-site computer/printer is specified, otherwise it describes the head-end equipment located at the EMS department.

Telecommunications Cabling System: Includes all cables, connectors, termination hardware, supports, cable trays, ladder racks, equipment cabinets and cable termination frames described herein and in the associated specifications sections.

Termination Hardware: Jacks, plugs, connectors, couplers, patch panels and punch down blocks for copper or optical fiber cabling.

Wiring or Cabling: The inclusion of all conductors, connectors, connections, terminations and termination hardware and all other items necessary and/or required in connection with such work.

Work Area: The location of the telecommunications outlets in offices, equipment rooms, furniture systems, floor boxes, surface mounted boxed, poke-thru fittings, and so forth.

END OF SECTION

SECTION 01 42 19

REFERENCE STANDARDS

PART 1 - GENERAL

1.01 REQUIREMENTS IN GENERAL

A. Comply with and give notices required by laws, ordinances, rules, regulations, and lawful orders of public authorities bearing on performance of the Work.

B. It is not Contractor's responsibility to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, building codes, and rules and regulations. However, if Contractor observes that portions of the Contract Documents are at variance therewith, Contractor shall promptly notify Owner in writing, and necessary changes shall be accomplished by appropriate Modification.

C. If Contractor performs Work knowing it to be contrary to laws, statues, ordinances, building codes, and rules and regulations without such notice to Architect and Owner, Contractor shall assume full responsibility for such Work and shall bear the attributable costs.

D. Permits and Fees: Comply with requirements specified in the General Conditions.

E. Taxes: Comply with requirements specified in the General Conditions.

F. Business Regulations:

1. Comply with all federal, state, and local laws relative to conducting business in Clark County including, but not limited to, licensing, labor, and health laws, and including NRS 338.010 through 338.180, as amended, if applicable.
2. The laws of the State of Nevada will govern as to the interpretation, validity, and effect of this bid, its award, and any contract entered into.

1.02 QUALITY ASSURANCE

A. For products or workmanship specified by association, trades, or federal standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

B. Conform to reference standard by date of issue current on date of Contract Documents unless a date is specified in a technical section.

C. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.

D. Contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.03 SCHEDULE OF REFERENCES

A. The following are definitions of abbreviations that occur, or may occur, elsewhere in these general requirements and technical requirements. Inclusion here of a reference to an industry standards group is for the purpose of the definition of the abbreviation. Inclusion in the work of this construction contract industry's standards group is referenced elsewhere in these general requirements and/or technical requirements.

AA	Aluminum Association 1525 Wilson Boulevard, Suite 600 Arlington, VA 22209 www.aluminum.org
AABC	Associated Air Balance Council 1518 "K" Street N. W. Washington, DC 20005 www.aabc.com
AAMA	American Architectural Manufacturers Associations 1827 Walden Office Square, Suite 550 Schaumburg, IL 60173 www.aamanet.org
AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol Street N. W., Suite 249 Washington, DC 20001 www.transportation.org
AI	Asphalt Institute 2696 Research Park Dr. Lexington, KY 40511 www.asphaltinstitute.org
AIA	American Institute of Architects 1735 New York Avenue N. W. Washington, DC 20006 www.aia.org
ACI	American Concrete Institute 38800 Country Club Drive Farmington Hills, MI 48331 www.concrete.org
ACGIH	American Conference of Governmental Industries Hygienists 6500 Glenway, Building D-7 Cincinnati, OH 45211 www.acgih.org

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REFERENCE STANDARDS

ADA	Americans with Disabilities Act US Department of Justice 950 Pennsylvania Ave., N.W. Civil Rights Divisions Disability Right Section- NYA Washington, DC 20530 www.ada.gov
ADC	Air Diffusion Council 1901 N. Roselle Road, Suite 800 Schaumburg, IL 60195 www.flexibleduct.org
AF&PA	American Forest & Paper Association 1111 19th St., NW Suite 800 Washington, DC 20036 www.afandpa.org
AGC	Associated General Contractors of America 2300 Wilson Blvd., Suite 400 Arlington, VA 22201 www.agc.org
AHA	American Hardwood Association 1210 West N.W. Highway Palatine, IL 60067 www.hardwoodinfo.com
AI	Asphalt Institute 2629 Research Park Drive Lexington, KY 40511 www.asphaltinstitute.org
AIA	American Institute of Architects 1735 New York Avenue N.W. Washington, DC 20006 www.aia.org
AISC	American Institute of Steel Construction One East Wacker Dr., Suite 700 Chicago, IL 60601 www.aisc.org
AISI	American Iron and Steel Institute 1140 Connecticut Ave., NW Washington, DC 20036 www.steel.org

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REFERENCE STANDARDS

AITC	American Institute of Timber Construction 7012 S. Revere Parkway, Suite 140 Centennial, CO 80112 www.aitc-glulam.org
ALI	Automotive Lift Institute PO Box 85 Cortland, NY 13045 www.autolift.org
AMA	Air Movement and Control Association 30 West University Drive Arlington Heights, IL 60004 www.amca.org
ANSI	American National Standards Institute 25 West 43rd Street, 4th Floor New York, NY 10036 www.ansi.org
APA	American Plywood Association 7011 S. 19th St Tacoma, WA 98466 www.apawood.org
ARI	Air-Conditioning and Refrigeration Institute 2111 Wilson Boulevard, Suite 500 Arlington, VA 22201 www.ari.org
ASAE	American Society of Agriculture Engineers 2950 Niles Road St. Joseph, MI 49085 www.asabe.org
ASCE/SEI	American Society of Civil Engineers Structural Engineering Institute 1801 Alexander Bell Drive Reston, VA 20191 www.asce.org
ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers 1791 Tullie Circle N. E. Atlanta, GA 30329 www.ashrae.org

ASME	American Society of Mechanical Engineers Three Park Avenue New York, NY 10016 www.asme.org
ASPA	Turfgrass Producers International *Formerly American Sod Producers Association* 2 East Main Street East Dundee, IL 60118 www.turfgrasssod.org
ASTM	American Society for Testing and Materials 100 Barr Harbor Drive PO Box C700 West Conshohocken, PA 19428 www.astm.org
AWCI	The Association of the Wall and Ceiling Industries International 513 West Broad Street, Suite 210 Fall Church, VA 22046 www.awci.org
AWI	Architectural Woodwork Institute 46179 Westlake Drive Suite 120 Potomac, Falls, VA 20165 www.awinet.org
AWPA	American Wood-Preservers' Association 7735 Old Georgetown Road Bethesda, MD 20014 www.awpa.com
AWS	American Welding Society 550 LeJeune Road N. W. Miami, FL 33135 www.aws.org
AWWA	American Water Works Association 6666 West Quincy Avenue Denver, CO 80235 www.awwa.org
BIA	Brick Institute of America 1850 Centennial Park Drive, Suite 301 Reston, VA 22091 www.bia.org

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REFERENCE STANDARDS

BHMA	Builders Hardware Manufacturers Association 355 Lexington Avenue, 17th Floor New York, NY 10017 www.buildershardware.com
BICSI	Building Industry Consulting Services International Standards 8610 Hidden River Parkway Tampa, FL 33637 www.bicsi.org
CDA	Copper Development Association 57th Floor, Chrysler Building 405 Lexington New York, NY 10174 www.copper.org
CGSB	Canadian General Standards Board 222 Queens Street 14th Floor, Suite 1402 Ottawa, Ontario, Canada KIA 1G6 www.tpsgc-pwgsc.gc.ca.
CLFMI	Chain Link Fence Manufacturers Institute 10015 Old Columbia Road, Suite B-215 Columbia, MD 21046 www.associationsites.com/main-pub.cfm?usr=clfma
CRSI	Concrete Reinforcing Steel Institute 933 Plum Grove Road Schaumburg, IL 60195 www.crsi.org
CSA	Canadian Standards Association 5060 Spectrum Way, Suite 100 Mississauga, Ontario, L4W 5N6 Canada www.csa.ca
CPSC	Consumer Product Safety Commission 4330 East West Highway Bethesada, MD 20814 www.cpsc.gov
CSSB	Cedar Shake and Shingle Bureau PO Box 1178 Sumas, WA 98295 www.cedarbureau.org

DASMA	Door and Access Systems Manufacturers Association International 1300 Sumner Avenue Cleveland, OH 44115 www.dasma.com
DHI	Door and Hardware Institute 14150 Newbrook Drive, Suite 200 Chantilly, VA 20151 www.dhi.org
DOL	U.S. Department of Labor c/o Superintendent of Documents U.S. Government Printing Office Washington, DC 20402 www.dol.gov
DOTn	U.S. Department of Transportation c/o Superintendent of Documents U.S. Government Printing Office Washington, DC 20402 www.dot.gov
EJCDC	Engineers' Joint Contract Documents Committee American Consulting Engineers Council 1015 15th Street N. W., 8th floor Washington, DC 20005 www.ejcdc.org
EJMA	Expansion Joint Manufacturers Association 25 North Broadway Tarrytown, NY 10591 www.ejma.org
EPA	Environmental Protection Agency 1200 Pennsylvania Avenue NW Washington, DC 20004 www.epa.gov
FEMA	Federal Emergency Management Agency Federal Center Plaza 500 C Street S.W. Washington, DC 20472 www.fema.gov

FCC	Federal Communications Commission 445 12th Street, SW Washington, DC 20554 www.fec.gov
FGMA	Glass Association of North America (GANA) Formerly Flat Glass Marketing Association 2945 SW Wanamaker Drive, Suite A Topeka, KS 66614 www.glasswebsite.com
FM	Factory Mutual System 21860 Burbank Blvd. Suite 300 South Lobby Woodland Hills, CA 91367 www.FMGlobal.com
FS	Federal Specification General Services Administration Specifications and Consumer Information, Distribution Section (WFSIS) Washington Navy Yard, Bldg. 197 Washington, DC 20407 www.gsa.gov
GA	Gypsum Association 6525 Belcrest Road, Suite 480 Hyattsville, MD 20782 www.gypsum.org
HPVA	Hardwood Plywood Veneer Association 1825 Michael Faraday Drive Reston, VA 20190 www.hpva.org
ICBO	International Conference of Building Officials 5360 S. Workman Mill Road Whittier, CA 90601 www.icbo.org
ICC	International Code Council, Inc. 500 New Jersey Ave., NW 6th Floor Washington, DC 20001 www.iccsafe.org

REFERENCE STANDARDS

IEEE	Institute of Electrical and Electronics Engineers 3 Park Avenue, 17th Floor New York, NY 10016 www.ieee.org
IFCI	International Fire Code Institute ICC Headquarters 500 New Jersey Ave., NW 6th Floor Washington, DC 20001 www.ifci.org
IMIAC	International Masonry Industry All-Weather Council International Masonry Institute The james Brice house 42 East Street Annapolis, MD 21401 www.imiweb.org
IPEMA	International Playground Equipment Manufacturers Association 4305 North Sixth Street, Suite A Harrisburg, PA 17110 www.ipema.org
ISO	International Standards Organization ISO central Secretariat, rue de Varembee, Case postale 56 CH-1211 Geneva 20, Switzerland www.iso.org
ITA	Intertek Testing Services Americas intertek Suite 200 2200 West Loop South Houston, TX 77027 www.intertek-etlsemko.com
MBMA	Metal Building Manufacturer's Association 1300 Sumner Ave. Cleveland, OH 44115 www.mbma.com
MFMA	Maple Flooring Manufacturers Association 111 Deer Lake Road, Suite 100 Deerfield, IL 60016 www.maplefloor.org

REFERENCE STANDARDS

MIL	Military Specification Naval Publications and Forms Center 5801 Tabor Avenue Philadelphia, PA 19120 www.dtic.mil http://navalforms.daps.dla.mil
ML/SFA	Metal Lath/Steel Framing Association National Association of Architectural Metal Manufacturers 800 Roosevelt Rd. Bldg. C, Suite 312 Glen Ellyn, IL 60137 www.naamm.org
NAAMM	National Association of Architectural Metal Manufacturers 800 Roosevelt Rd. Bldg. C, Suite 312 Glen Ellyn, IL 60137 www.naamm.org
NADCA	National Air Duct Cleaners Association 1518 K. St NW, Suite 503 Washington, DC 20005 www.nadca.com
NAAQS	National Ambient Quality Standards Ariel Rio building 1200 Pennsylvania Ave., N.W. Washington, DC 20004 www.epa.gov/air/criteria.html
NCMA	National Concrete Masonry Association 13750 Sunrise Valley Drive Herndon, VA 20171 www.ncma.org
NEMA	National Electrical Manufacturer's Association 1300 North 17th Street, Suite 1752 Rosslyn, VA 22209 www.nema.org
NEMA	National Electrical Manufacturer's Association 1300 North 17th Street, Suite 1752 Rosslyn, VA 22209 www.nema.org

REFERENCE STANDARDS

NEC	National Electric Code National Fire Protection Association 1 Batterymarch Park Quincy, MA 02269 www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=70
NECA	National Electrical Contractors Association 3 Bethesda Metro Center, Suite 1100 Bethesda, MD 20814 www.necanet.org
NFPA	National Fire Protection Association 1 Batterymarch Park Quincy, MA 02269 www.nfpa.org
NFPA	National Forest Products Association 1619 Massachusetts Avenue N. W. Washington, DC 20036 www.afandpa.org
NOAA	National Oceanic and Atmospheric Administration 1401 Constitution Avenue, NW Room 5128 Washington, DC 20230 www.noaa.gov
NRCA	National Roofing Contractors Associations 10255 W. Higgins Rd., Suite 600, Rosemont, IL 60018-5607 (847) 299-9070 www.nrca.net
NSWMA	National Solid Wastes Management Association 4301 Connecticut Avenue, NW Suite 300 Washington, DC 20008 www.environmentalistseveryday.org
NTMA	The National Terrazzo and Mosaic Association, Inc. 201 North Maple, Suite 208 Purcellville, VA 20132 www.ntma.com
NWMA	National Woodwork Manufacturers Association 205 W. Touhy Avenue Park Ridge, IL 60068 www.wdma.com

NWWDA	National Wood Window and Door Association 1400 E. Touhy Avenue Ohare, IL 60018 www.nwwda.org
PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077 www.cement.org
PCI	Prestressed Concrete Institute 209 W. Jackson Blvd. Chicago, IL 60606 www.pci.org
PIMA	Polyisocyanurate Insulation Manufacturers Association 7315 Wisconsin Avenue, Suite 400E Bethesda, MD 20814 www.pima.org
PS	Product Standard US Department of Commerce 1401 Constitution Ave., N.W. Washington, DC 20203 www.commerce.gov
PTI	Post-Tensioning Institute 38800 Country Club Drive Farmington Hills, MI 48331 www.post-tensioning.org
RCSHSB	Red Cedar Shingle and Handsplit Shake Bureau 515 116th Avenue Bellevue, WA 98004 www.cedarbureau.org
RIS	Redwood Inspection Service 818 Grayson Road, Suite 201 Pleasant Hill, CA 94523 www.redwoodinspection.com
RMI	Rack Manufacturers Institute 8720 Red oak Boulevard, Suite 201 Charlotte, NC 28217 www.mhia.org

SDI	Steel Deck Institute P. O. Box 25 Fox River Grove, IL 60021 www.sdi.org
SDI	Steel Door Institute 30200 Detroit Avenue Westlake, OH 44145 www.steeldoor.org
SIGMA	Insulating Glass manufacturers Alliance (IGMA) *Formerly Sealed Insulating Glass Manufacturers Association* 27 North Wacker Drive, Suite 365 Chicago, IL 60606 www.igmaonline.org
SJI	Steel Joist Institute 1173B London Links Drive Forest, VA 24551 www.steeljoist.org
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association 4201 Lafayette Center Drive Chantilly, VA 20151 www.smacna.org
SPRI	Single-Ply Roofing Institute 411 Waverly Oaks Road, Suite 331B Waltham, MA 02452 www.spri.org
SSPC	Steel Structures Painting Council 40 24th Street, 6th Floor Pittsburgh, PA 15222 www.sspc.org
TCA	Tile Council of North America, Inc. 100 Clemson Research Blvd. Anderson, SC 29625 www.tileusa.com
TIA/EIA	Electronic Industries Association/Telecommunications Industries Association 2500 Wilson Boulevard Arlington, VA 22201 www.eia.org

TDMM	Telecommunications Distribution Methods Manual BICSI 8610 Hidden River Parkway Tampa, FL 33637 www.bicsi.org/distribution_design.aspx
TMS	The Masonry Society 3970 Broadway, Unit 201-D Boulder, CO 80304 www.masonrysociety.org
TPI	Truss Plate Institute 218 N. Lee Street, Suite 312 Alexandria, VA 22314 www.tpinst.org
UBC	Uniform Building Code International Code Council 500 New Jersey Ave., N.W. 6th Floor Washington, DC 20001 www.iccsafe.org
UFC	Uniform Fire Code National Fire Protection Association 1 Batterymarch Park Quincy, MA 02269 www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=1
UL	Underwriters' Laboratories, Inc. 333 Pfingston Road Northbrook, IL 60062 www.ul.com
USC	United States Code U.S. Government Printing Office 732 North Capitol Street N.W. Washington, DC 20401 www.gpoaccess.gov/uscode/index.html
WCLIB	West Coast Lumber Inspection Bureau 6980 S. W. Varns Road, Box 23145 Tigard, OR 97223 www.wclib.org

REFERENCE STANDARDS

WDMA	Window and Door Manufacturer Association 1400 East Touhy Avenue #470 Des Plaines, IL 60018 www.nwwda.org
WHI	Warnock Hersey Mark Suite 200 2200 West Loop South Houston, TX 77027 www.intertek-etlsemko.com
WIC	Woodwork Institute of California PO Box 980247 West Sacramento, CA 95798 www.wicnet.org
WRI	Wire Reinforcement Institute, Inc. 942 Main Street, Suite 300 Hartford, CT 06103 www.wirereinforcementinstitute.org
WWPA	Western Wood Products Association 522 SW Fifth Avenue, Suite 500 Portland, OR 97204 www.wwpa.org

Arboriculture, The Care of Trees, Shrubs, and Vines, 1983, Richard W. Harris, Prentice-Hall, Pruning Standards.

Applicable Electric Utility- Electric Service Requirements (Nevada Power Company, Overton Power District No. 5, or Valley Electric Association)

American Standard for Nursery Stock; Edition approved 1990 by American national Standards Institute, Inc. (Z60.1)

Applicable Telephone Utility- Outside Plant Engineering/Contact Work/Underground Construction Requirements (Sprint, mountain-Bell, Rio Virgin, or Moapa Valley Telephone).Building Distribution Standards/Guidelines

Carcinogen List of the National Toxicology Program

Clark County Applicable Cable Television Utility- Service requirements (Cox or other).

Clark County Cable Administration Standard- See attached information.

Clark County Department of Air Quality Management Air Pollution Control Regulations

Clark County Labeling Standards

REFERENCE STANDARDS

Clark County Uniform Standard Specifications for Public Works Construction, Off-Site Improvements

Hortus Third, 1976; Cornell University- plant nomenclature.

Industrial Workplace Standard

International Agency for Research on Cancer list of Chemical Carcinogens

Nevada Work Zone Traffic Control for Public Works' Construction, Off-site Improvements, Clark County Area, Nevada

Southern Nevada Health District
www.southernnevadahealthdistrict.org

Recommended Tree Specifications, Arizona Nursery Association Grower's Grower's Committee, 1997, Arizona Nursery Association.

Reproductive Toxin List of the Catalog of Teratogenic Agents

Uniform Standard Specifications for Public Works' Construction, Off-Site Improvements, Clark County Area, Nevada

Uniform Traffic Devices Manual, 1988

1.04 STATUTORY REQUIREMENTS FOR CONSTRUCTION CONTRACTS AND SUBCONTRACTS

A. Each Contractor or subcontractor shall comply with laws and all applicable standards, orders, or regulations issued pursuant thereto; including but not limited to the following:

1. The Copeland "Anti-Kickback" Act, as amended (18 USC 874) as supplemented in Department of Labor regulations (41 CFR Chapter 60).
2. Nondiscrimination, Title VI of the Civil Rights Act of 1964 (PL 88-352), as amended, (42 USC 2000d) and the requirements imposed by the regulations of the Department of Commerce (15 CFR Part 8) issued pursuant to that title.
3. The Flood Disaster Protection Act of 1973 (PL 93-234), as amended.
4. Architectural Barriers Act (PL 90-480), 42 USC 4151, as amended.
5. Rehabilitation Act of 1973, 29 USC 794, Executive Order 11914.
6. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (PL 91-646, as amended) 15 CRF Part 916.
7. The National Environmental Policy Act of 1979 (PL 90-1890); the National Historic Preservation Act of 1966 (80 Stat 915, 16 USC 470); and Executive Order No. 11593 of May 31, 1971.
8. Equal Employment Opportunity, Executive Order 11246, as amended by Executive Order 11375, and as supplemented in Department of Labor regulations (41 CFR Chapter 60).

9. Certification of Nonsegregated Facilities as Required by the May 9, 1967, Order (32 FR 7439, May 19, 1967) on Elimination of Segregated Facilities, by the Secretary of Labor.
10. The Clean Air Act, as amended, 42 USC 1857 et seq., the Federal Water Pollution Control Act, as amended, 33 USC 1251 et seq., and the regulations of the Environmental Protection Agency with respect thereto, at 40 CFR Part 15, as amended from time to time.
11. The Power Plant and Industrial Fuel Use Act of 1978 (92 Stat. 3318. PL 95-620) relating to the conservation of petroleum and natural gas.

PART 2 – PRODUCTS (Not Used).

PART 3 – EXECUTION (Not Used).

END OF SECTION