PROJECT MANUAL and SPECIFICATIONS

February XX, 2016
edi Project No. 15021

for:
NMSU
Alamogordo Campus

Restroom Renovations
to Various Buildings

prepared by:
edi
regenerating architecture
INDEX TO PROJECT MANUAL & SPECIFICATIONS
NMSU Alamogordo
Restroom Renovations to Various Buildings

PREBID INFORMATION
REQUEST FOR PROPOSAL INFORMATION UNDER SEPARATE COVER; ITB# 201501051-P

NOTE THIS IS A PUBLIC WORKS PROJECT; WAGE RATE DECISION UNDER SEPARATE COVER

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NOT FOR CONSTRUCTION
DIVISION 1 – GENERAL REQUIREMENTS     NMSU-A – Restroom Renovations to Various Buildings

SECTION 01010 - SUMMARY OF WORK

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract and Division-1 Specification sections, apply to work of this section.
B. Section 01030 - ALTERNATES

1.02 PROJECT/WORK IDENTIFICATION

A. General: Name of project is, **NMSU-A Restroom Renovations to Various Buildings**, located in New Mexico as described on Contract Documents by the Architect Environmental Dynamics Inc. Drawings and Specifications are dated February XX, 2016. The site is located at 2400 Scenic Drive in Alamogordo, New Mexico 88310.

B. Description: Base Bid work as shown on drawings (see Section 01030 for alternate s) – Summary as follows:
   1. Remove existing ceilings, lights, tile, accessories and fixtures as shown on drawings.
   2. Provide new ceiling grid and tiles, lights and HVAC grilles, floor and wall tile, accessories and fixtures as shown on drawings
   3. Other work indicated on the Drawings and in the Specifications

C. Summary by References: Work of Contract can be summarized by reference to the Contract, specification sections as listed in the “Index of Specifications Sections” bound herewith, Drawings as listed in “Drawing Index” found on drawing sheet T-001, addenda and modifications to the Contract Documents issued subsequent to the initial printing of the Project Manual.

1.03 COORDINATION AND QUALITY CONTROL

A. General: The Work of this contract includes coordination of entire work of project including preparation of general coordination drawings/diagrams/schedules and control of site utilization from the beginning of activity through the project close-out and warranty periods.

B. Familiarity with Plans: All trades shall be responsible for work in their respective trade regardless of where references appear. For example, should electrical work appear on an architectural drawing, the electrical contractor will be held responsible for its completion; etc.

C. The Contractor shall warrant and guarantee all workmanship, labor and materials performed and supplied by him or his subcontractors, for a period of one (1) year from the date of completion as evidenced by date of Architect’s Final Certificate of Payment of this contract. This also includes all labor required for replacing materials or equipment found to be defective within the one (1) year period.

1.05 MISCELLANEOUS AND GENERAL PROVISIONS:

A. Substitution of Equipment: Any substitution of equipment makes other than those specifically named in the Contract Documents will be approved by the Architect and Owner for the following reasons only:

   1. In case of a difference in price, the Owner shall receive all benefits of the difference in
cost involved in any substitution, and the Contract altered by Change Order to credit Owner with any savings so obtained.

B. Permits, Taxes, and Codes: Contractor shall secure and pay for all building permits and all taxes or fees required for performance of this work. A Building Permit is required. All work shall be executed in accordance with the local and state codes, ordinances, and regulations governing the particular class of work involved. The Contractor shall be responsible for the final execution of the work to suit these requirements. On completion of the various parts of the work, the installation shall be tested, as required by the constituted authorities and approved, and, on completion of the work, the Contractor shall obtain and deliver to the Owner final Certificates of Acceptance. The Contractor shall furnish copies of each certificate to the Architect.

C. Mechanical/Electrical Requirements of General Work:

1. Refer to Division-15 and Division-16 sections for characteristics of mechanical and electrical services to be connected to units of general work, and provide units manufactured/fabricated for proper connection and utilization of available services as indicated.
2. Service Connections: Except as otherwise indicated, final connection of mechanical services to general work is defined as mechanical work, and final connection of electrical services to general work is defined as electrical work.
3. Electrical Requirements: Except as otherwise indicated, comply with applicable provisions of NEC and standards by NEMA, for electrical components of general work. Provide UL listed and labeled products where applicable.

D. Schedule: See General Conditions in RFP.

E. The Contractor’s request for payment shall conform with General Conditions in RFP.

F. Inspection Benchmarks: The contractor shall give four (4) working days notice to the Architect or Owners’ Representative prior to commencing each major item listed in 1.02 B above for comparison with the project schedule. The Contractor is to take photographs of major work items done each week and email images to the Architects office. If no activity has occurred on the site, document why and submit in lieu of photographs.

G. List of Subcontractors: Prior to the commencement of any work, the Contractor shall submit, for the Owner’s review and approval, a list of all Subcontractors and Materials Suppliers to be used on the Project. Any deviation from this list during construction shall first be approved, in writing, by the Owner.

H. Submittals: The Contractor, prior to the execution of any work shall submit for review shop drawings, product data, samples, warranties, color charts, and other information as noted on the submittal requirements chart or in the drawings. Following review of these Submittals by the Architect/Engineer/Owner and subsequent remarks, the Contractor may begin remaining work. A log of required Submittals is included in this manual.

1. Scheduling: All Submittals are to be transmitted to the Architect/Engineer within 15 calendar days of the owner/contractor agreement.
2. Action: Architect/Engineer shall review each submittal, mark with required “action” and return within 2 weeks of submission, including resubmittals. Contractor shall resubmit within 7 calendar days of receipt of reviewed submittal.
3. Other Submittal: For quality control, such as soils testing, concrete testing, etc. shall be submitted as results are available.

I. Temporary Facilities (coordinate requirements and locations with Owner):

2. General Job Condition: Establish and initiate use of each temporary facility at time first reasonably required for proper performance of the work, and remove facilities when no longer needed or when permanent facilities have replaced the need.

3. Services: Types may include, but are not limited to, potable water, sewerage, electrical power and telephones. Where possible and reasonable, connect to existing franchised utilities for required services or engage service companies to install services. Locate and relocate services, as necessary, to minimize interference with construction operations.

4. Security/Protection Provisions: Types may include, but are not limited to, fire protection (fire extinguishers, etc.), barricades, warning sign/lights, work area lock-up (temporary, building enclosures and lockup), and similar provisions intended to minimize property losses, personal injuries and claims for damages at project site. Provide security/protection services in a manner to achieve 24-hour, 7-day-per-week effectiveness, coordinated with the construction activities.

5. Temporary Support Facilities: Types include, but are not limited to, field office, storage sheds, first aid facilities, telephone, project identification sign, and similar miscellaneous general services, all as may be reasonably required for proficient performance of the work and accommodation of personnel at the site, including Owner’s and Architect’s/Engineer’s personnel. Discontinue and remove these facilities immediately before time of substantial completion. Locate these facilities for convenience of users, and for minimum interference with construction activities.

END OF SECTION
SECTION 01030 - ALTERNATES

PART 1 - GENERAL

1.01 SUMMARY

A. Provide list price for deductive alternates as requested in construction documents. Include credit for all Work associated with the Alternate no matter where it appears on the Drawings or Specifications. Include related costs such as overhead and profit.

DEDUCTIVE ALTERNATE 1 – Provide credit at Base Bid Restrooms (ProTech North and South, and Student Union Building) for substituting the specified solid plastic toilet enclosures and screens with powder coated metal enclosures and screens by Bradley Mills Partitions or approved equal – colors selected by architect from manufacturer’s full product line.

DEDUCTIVE ALTERNATE 2 – All work associated with the improvements to the restrooms at the Campbell Art Building

DEDUCTIVE ALTERNATE 3 - All work associated with the improvements to the restrooms at the Science Center

B. Owner will determine which alternates are selected for inclusion in the Contract.

C. Coordinate alternates with related work to ensure that work affected by each selected alternate is properly accomplished.

D. Contractor shall justify all claims for costs associated with the above list of Allowances by providing substantiating documentation of existing conditions requiring remediation.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Recycled contents, salvaged, rapidly renewable or otherwise resource efficient products are specified in appropriate sections.

B. Regional materials are specified in appropriate sections.

C. Low or no-VOC compliant products are specified in appropriate sections.

PART 3 – EXECUTION – Not Applicable To This Section

END OF SECTION
SECTION 01045 - CUTTING AND PATCHING

PART 1 - GENERAL

1.01 SUMMARY

A. Provide cutting and patching work to properly complete the work of the project, complying with requirements for:

1. Structural work.
2. Mechanical/electrical systems.
3. Visual requirements, including detailing and tolerances.
4. Operational and safety limitations.
5. Fire resistance ratings.
7. Cleaning.

B. Do not cut and patch in a manner that would result in a failure of the work to perform as intended, decreased energy performance, increased maintenance, decreased operational life, or decreased safety.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Match existing materials for cutting and patching work with new materials conforming to project requirements.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Inspect conditions prior to work to identify scope and type of work required. Protect adjacent work. Notify Owner of work requiring interruption to building services or Owner's operations.

B. Perform work with workmen skilled in the trades involved. Prepare sample area of each type of work for approval.

C. Cutting: Use cutting tools, not chopping tools. Make neat holes. Minimize damage to adjacent work. Check for concealed utilities and structure before cutting.

D. Patching: Make patches, seams, and joints durable and inconspicuous. Comply with tolerances for new work.

E. Clean work area and areas affected by cutting and patching operations.

F. Coordinate recycle, reuse and/or disposal of materials per section 01524

END OF SECTION
SECTION 01100 - PROJECT PROCEDURES

PART 1 - GENERAL

1.01 SUMMARY

A. Provide coordination of work.
   1. Supervisory personnel.
   2. Preconstruction conference.
   3. Construction Meetings twice a month; distribute minutes.
   4. Other meetings.

B. Submit monthly and special reports.

C. Submit progress schedule, bar-chart type, updated monthly.

D. Prepare submittal schedule; coordinate with progress schedule.

E. Submit schedule of values.

F. Submit schedule of required tests including payment and responsibility.

G. Perform surveys:
   1. Laying out the work and verifying locations during construction.
   2. Final site survey.

H. Submit and post a list of emergency telephone numbers and address for individuals to be contacted in case of emergency.

I. Submit record drawings and specifications; to be maintained and annotated by Contractor as work progresses.

J. Submit payment request procedures.

K. Perform quality control during installation.

L. Clean and protect the work.

PART 2 - PRODUCTS - Not Applicable To This Section

PART 3 - EXECUTION - Not Applicable To This Section

END OF SECTION
1.01 SUMMARY

A. Provide types of submittals listed in individual sections and number of copies required. (Number of copies can be modified during pre-construction meetings agreements)

   1. Shop drawings and Product data, reviewed and annotated by the Contractor – emailed to Architect's representative in pdf format for all 8.5”x11 or 11 x 17 documents. Copies to be mailed to Architect’s office for required larger format drawings. Architect will keep 2 copies and return remaining sets. Architect will mark up a maximum of 3 large document copies for return to Contractor;

   2. Samples – 2 sets, plus extra samples as required to indicate range of color, finish, and texture to be expected.

   3. Mock-ups - as required in the individual sections.

   4. Inspection and test reports (pdf format)

   5. Survey data - (pdf format)

   6. Warranties and Closeout submittals - 2 copies min.

B. Comply with project format for submittals.

C. Provide required resubmittals if original submittals are not approved. Provide distribution of approved copies including modifications after submittals have been approved. All alternates must go through the submittal process. No field changes will be allowed.

D. Samples and shop drawings shall be prepared specifically for this project. Shop drawings shall include dimensions and details, including adjacent construction and related work. Note any special coordination required.

E. Each submittal will be reviewed with the expectation that it complies with or exceeds the requirements listed in the Contract Documents. Any deviations from the requirements of the Contract Documents must be highlighted and noted by the Contractor for approval. The approval of the Submittal only applies to portions of the submittal that comply with or exceed the requirements listed in the Contract Documents, or were noted and specifically approved. The approval of the Submittal DOES NOT apply to portions of the submittal that were not noted for approval, or deviations that result in a conflict with other portions of the Work. The Contractor will be responsible for making any corrections required as a result of deviations not specifically approved.

   1. Submittal of the Architect’s or Engineer’s original construction drawings as a shop drawing submittal will not be accepted.

   2. The Architect will review and approve, or take other appropriate action upon, the 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.

   3. The Architect’s action will be taken with reasonable promptness while allowing sufficient time in the Architect’s professional judgment to permit adequate review. 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 the Contractor as required by the Contract Documents.
4. The Architect's review of the Contractor's submittals shall not constitute approval of safety precautions or, of any construction means, methods, techniques, sequences or procedures.

5. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

6. The Architect will provide a maximum of two reviews on each submittal

E. Provide warranties as specified; warranties shall not limit length of time for remedy of damages Owner may have by legal statute. Warranties shall be signed by contractor, supplier or installer responsible for performance of warranty.

F. See Submittal Requirements.

END OF SECTION
SECTION 01325 – Construction Progress Schedule

PART 1 - GENERAL

1.01 SECTION INCLUDES
   A. Preliminary schedule.
   B. Construction progress schedule.

1.02 RELATED SECTIONS
   A. Section 01100 - Summary: Project Procedures

1.03 SUBMITTALS
   A. Within 14 days after Notice to Proceed, submit preliminary schedule defining planned operations for the first 30 days of Work, with a general outline for remainder of Work.
   B. If preliminary schedule requires revision after review, submit revised schedule within 10 days.
   C. Within 15 days after review of preliminary schedule, submit draft of proposed complete schedule for review.
   D. Submit updated schedule with each Application for Payment.
   E. Submit the documents in .pdf format or provide number of opaque reproductions that the Contractor requires, plus two copies which will be retained by Environmental Dynamics, Inc.
   F. Submit under transmittal letterhead noting relevant specification section.

1.04 SCHEDULE FORMAT
   A. Format: Bar or Critical Path Method
   B. Listings: In chronological order according to the start date for each activity. Identify each activity with the applicable specification section number.
   C. Diagram Sheet Size: Maximum 11 x 17 inches or width required.
   D. Sheet Size: Multiples of 8-1/2 x 11 inches.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 CONTENT
   A. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction.
   B. Identify each item by specification section number.
   C. Show accumulated percentage of completion of each item, and total percentage of Work completed, as of the first day of each month.
   D. Indicate delivery dates for owner-furnished products.
   E. Provide legend for symbols and abbreviations used.
3.02 BAR CHARTS
   A. Include a separate bar for each major portion of Work or operation.
   B. Identify the first work day of each week.

3.04 REVIEW AND EVALUATION OF SCHEDULE
   A. Participate in joint review and evaluation of schedule with Environmental Dynamics, Inc. at each
      submittal.
   B. Evaluate project status to determine work behind schedule and work ahead of schedule.
   C. After review, revise as necessary as result of review, and resubmit within 10 days.

3.05 UPDATING SCHEDULE
   A. Maintain schedules to record actual start and finish dates of completed activities.
   B. Indicate progress of each activity to date of revision, with projected completion date of each
      activity.
   C. Annotate diagrams to graphically depict current status of Work.
   D. Identify activities modified since previous submittal, major changes in Work, and other identifiable
      changes.
   E. Indicate changes required to maintain Date of Substantial Completion.
   F. Submit reports required to support recommended changes.

3.06 DISTRIBUTION OF SCHEDULE
   A. Distribute copies of updated schedules to Contractor’s project site file, to Subcontractors,
      suppliers, Environmental Dynamics, Inc., Owner, and other concerned parties.
   B. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in
      schedules.

END OF SECTION
SECTION 01500 - TEMPORARY FACILITIES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. SECTION 01524 - CONSTRUCTION WASTE MANAGEMENT

1.02 SUMMARY

A. Provide temporary services and utilities, including utility costs:
   1. Toilet facilities.
   3. Recycling & refuse bins and/or enclosures

B. Provide construction facilities, including utility costs:
   1. Construction equipment.
   2. Enclosures.
   3. Access.

C. Provide security and protection requirements:
   1. Site enclosure fence, barricades, warning signs, and lights.
   2. Building enclosure and lock-up.
   3. Environmental protection.

D. Provide personnel support facilities if required:
   1. Contractor's field office.
   2. Sanitary facilities.
   3. Drinking water.
   4. Project identification sign.
   5. Cleaning and trash removal.

PART 2 - PRODUCTS - Not Applicable To This Section

PART 3 - EXECUTION - Not Applicable To This Section

END OF SECTION
SECTION 01524 - CONSTRUCTION WASTE MANAGEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
   A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY
   A. Section includes administrative and procedural requirements for the following:
      1. Salvaging nonhazardous demolition and construction waste.
      2. Recycling nonhazardous demolition and construction waste.
      3. Disposing of nonhazardous demolition and construction waste.
   B. Related Sections:
      1. Division 2 Section "Site Clearing" for disposition of waste resulting from site clearing and removal of above- and below-grade improvements.

1.3 DEFINITIONS
   A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
   B. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
   C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
   D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
   E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
   F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.4 PERFORMANCE REQUIREMENTS
   A. General: Practice efficient waste management in the use of materials in the course of the Work. Use all reasonable means to divert construction and demolition waste from landfills and incinerators. Facilitate recycling and salvage of all materials in project scope.

3.6 DISPOSAL OF WASTE
   A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction. See also hazardous material test reports provided by Owner for selected areas.
      1. Except as otherwise specified, do not allow waste materials that are to be disposed of to accumulate on-site.
      2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
   B. Burning: Do not burn waste materials.
   C. Disposal: Transport waste materials and dispose of at designated spoil areas on Owner's property.
   D. Disposal: Transport waste materials off Owner's property and legally dispose of them.

END OF SECTION
SECTION 01600 - PRODUCTS AND SUBSTITUTIONS

PART 1 - GENERAL

1.01 SUMMARY

A. Provide products from one manufacturer for each type or kind as applicable. Provide secondary materials as recommended by manufacturers of primary materials.

B. Provide products selected or approved equal when allowable. Products submitted for substitution shall be submitted with acceptable documentation and include costs of substitution including related work.

C. Request for substitution must be in writing. Conditions for substitution include:

1. An ‘or equal’ phrase in the specifications or drawings.
2. Specified material cannot be coordinated with other work.
3. Specified material is not acceptable to authorities having jurisdiction.
4. Substantial advantage is offered to the Owner in terms of cost, time, or other valuable consideration.

D. Substitutions shall be submitted prior to award of contract, unless otherwise acceptable. Approval of shop drawings, product data, or samples is not a substitution approval unless clearly presented as a substitution at the time of submittal.

E. Substitutions requiring extensive redesign, coordination, or detailing on the Architect/Engineer’s part (more than two (2) hours or more than two (2) affected drawing sheets, will be billed hourly or by approved lump sum per substitution to the Contractor.

1.1 ACTION SUBMITTALS

A. Prior Approval Requests (during bidding): Submit electronically each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

1. Substitution Request Form: Use Summary form approved by the Architect which, along with Documentation, contains at a minimum the required information below:

a. Coordination information, including a list of changes or revisions that will be necessary to accommodate proposed substitution.

b. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.

c. Product Data
d. Certificates and qualification data, where applicable or requested.
e. Contractor’s certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.

2. Architect’s Action: If necessary, Architect will request additional information or documentation for evaluation.

a. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.
3. Architect/Engineer’s review and acceptance of Prior Approvals is not a substitution for product data submittals under section 1.2 and acceptance is for the manufacturer only; profile, color, dimensions and other product selection information will be provided on the final product submittal by the selected Contractor.

1.2 SUBMITTALS

A. Product Data Submittals: Submit manufacturer’s standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers’ standard data to provide information specific to this Project.

B. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

C. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.

1. For selection from standard finishes, submit samples of the full range of the manufacturer’s standard colors, textures, and patterns.

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

PART 2 - PRODUCTS

2.02 NEW PRODUCTS

A. Provide new products unless specifically required or permitted by the Contract Documents.

B. Do not use products having any of the following characteristics:

1. Made using or containing CFC's or HCFC's.
2. Made of wood from newly cut old growth timber.

C. Where all other criteria are met, Contractors shall give preference to products that:

1. Are extracted, harvested, and/or manufactured closer to the location of the project.
2. Have longer documented life span under normal use.
3. Result in less construction waste.
4. Are made of vegetable materials that are rapidly renewable.

D. Locally-Sourced Products:

1. Where possible:
   a. Locally-Manufactured Products: Provide a minimum of 20 percent of all products manufactured (final assembly) within a radius of 500 miles from the project site.
   b. Primary Materials: Provide a minimum of 50 percent of the locally manufactured products also extracted, harvested, or recovered within a radius of 500 miles from the project site.
2. Specific Product Categories: Provide locally-sourced products as specified elsewhere.

G. Urea-Formaldehyde Prohibition:

1. Overall Project Requirement: Provide composite wood and agrifiber products having no added urea-formaldehyde resins.
   a. Require each installer to certify compliance and submit product data showing product content.
2. Specific Product Categories: Comply with limitations specified elsewhere.

H. Adhesives:

I. Joint Sealants, Including Duct Sealers:

PART 3 - EXECUTION

3.01 SUBSTITUTION PROCEDURES
   A. Substitutions may be considered when a product becomes unavailable.
   B. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
   C. A request for substitution constitutes a representation that the submitter:
      1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
      2. Will provide the same warranty for the substitution as for the specified product.
      3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Client.
      4. Waives claims for additional costs or time extension which may subsequently become apparent.
   F. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
   G. Substitution Submittal Procedure:
      1. Submit three copies of request for substitution for consideration. Limit each request to one proposed substitution.
      2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
      3. Environmental Dynamics, Inc. will notify Contractor in writing of decision to accept or reject request.

3.02 TRANSPORTATION AND HANDLING
   A. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
   B. Transport and handle products in accordance with manufacturer's instructions.
   C. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
   D. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
   E. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
   F. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.03 STORAGE AND PROTECTION
   A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
   B. Store and protect products in accordance with manufacturers' instructions.
   C. Store with seals and labels intact and legible.
D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.

E. For exterior storage of fabricated products, place on sloped supports above ground.

F. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.

G. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.

H. Prevent contact with material that may cause corrosion, discoloration, or staining.

I. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

J. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

END OF SECTION
SECTION 01700 - CONTRACT CLOSEOUT

PART 1 - GENERAL

1.01 SUMMARY

A. The following are prerequisites to substantial completion. Provide the following:

1. Punch list.
2. Supporting documentation.
3. Warranties.
5. Certifications.
6. Certificate of Occupancy permit where required.
7. Start-up and testing of building systems.
8. Change over of locks.
9. As-built drawings.

B. Provide the following prerequisites to final acceptance:

1. Final payment request with supporting affidavits.
2. Completed punch list.

C. Provide a marked-up set of drawings including changes which occurred during construction.

D. Provide the following closeout procedures:

1. Submission of record documents.
2. Submission of maintenance manuals.
3. Training and turnover to Owner's personnel.
4. Final cleaning and touch-up.
5. Removal of temporary facilities.

PART 2 - PRODUCTS - Not Applicable To This Section

PART 3 - EXECUTION - Not Applicable To This Section

END OF SECTION
SECTION 02070 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.01 GENERAL

A. Definitions: As follows:
   1. Remove: Remove and legally dispose of items except those indicated to be reinstalled, salvaged, or to remain the Owner's property.
   2. Remove and Salvage: Items indicated to be removed and salvaged remain the Owner's property. Remove and deliver to Owner's designated storage area.
   3. Remove and Reinstall: Remove items indicated; clean, service, and otherwise prepare them for reuse; store and protect against damage. Reinstall items in locations indicated.
   4. Existing to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by the Architect, items may be removed to a suitable, protected storage location during selective demolition and then cleaned and reinstalled in their original locations.

B. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain the Owner's property, demolished materials shall become the Contractor's property and shall be removed from the site with further disposition at the Contractor's option.

C. Photographs or videotape, sufficiently detailed, of existing conditions of adjoining construction and site improvements that might be misconstrued as damage caused by selective demolition operations.

D. Record drawings at Project closeout according to Division 1 Section "Contract Closeout."
   1. Identify and accurately locate capped utilities and other subsurface structural, electrical, or mechanical conditions.

E. Regulatory Requirements: Comply with governing EPA notification regulations before starting selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

F. Storage or sale of removed items or materials on-site will not be permitted.

G. Protect supply and return ductwork from introduction of contaminants during demolition and construction. Coordinate with Owner for replacement of filters at project closeout.

1.02 PRODUCTS (Not Applicable)

1.03 EXECUTION

A. Survey the condition of the building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of the structure or adjacent structures during selective demolition.

B. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

C. Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.

D. Utility Requirements: Locate, identify, shut off, disconnect, and seal or cap off indicated utility services serving building to be selectively demolished.
DIVISION 2 - SITE WORK  

NMSU-A – Restroom Renovations to Various Buildings

1. Where utility services are required to be removed, relocated, or abandoned, provide bypass connections to maintain continuity of service to other parts of the building before proceeding with selective demolition.

E. Drain, purge, or otherwise remove, collect, and dispose of chemicals, gases, explosives, acids, flammables, or other dangerous materials before proceeding with selective demolition operations.

G. Conduct demolition operations and remove debris to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities.

H. Conduct demolition operations to prevent injury to people and damage to adjacent buildings, facilities, and site improvements to remain. Ensure safe passage of people around selective demolition area.

1. Provide temporary weather protection, during interval between demolition and removal of existing construction, on exterior surfaces and new construction to ensure that no water leakage or damage occurs to structure or interior areas.

2. Protect walls, ceilings, floors, and other existing finish work that are to remain and are exposed during selective demolition operations.

3. Cover and protect furniture, furnishings, and equipment that have not been removed.

J. Provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent movement, settlement, or collapse of building to be selectively demolished.

L. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

M. Return adjacent areas to condition existing before start of selective demolition.

N. Demolish and remove existing construction only to the extent required by new construction and as indicated. During demolition, protect adjacent areas and HVAC system from dust and debris with temporary enclosures.

O. Promptly patch and repair holes and damaged surfaces caused to adjacent construction by selective demolition operations.

P. Where repairs to existing surfaces are required, patch to produce surfaces suitable for new materials.

Q. Restore exposed finishes of patched areas and extend finish restoration into adjoining construction to remain in a manner that eliminates evidence of patching and refinishing.

R. Patch and repair floor and wall surfaces in the new space where demolished walls or partitions extend one finished area into another. Provide a flush and even surface of uniform color and appearance.

S. Patch, repair, or rehang existing ceilings as necessary to provide an even-plane surface of uniform appearance.

T. Disposal: Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site. Transport demolished materials off Owner's property and legally dispose of them.

U. Sweep the building broom clean on completion of selective demolition operation.

END OF SECTION
SECTION 06100 - ROUGH CARPENTRY

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

A. Rough carpentry includes carpentry work not specified as part of other sections and which is generally not exposed, except as otherwise indicated.

B. Provide rough carpentry:
   1. Wood grounds, nailers, and blocking.
   2. Sheathing.

1.03 SUBMITTALS

A. Submit for approval product data and shop drawings.

1.04 QUALITY ASSURANCE

A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.


D. Preservative Treatment: AWPA C2 for lumber and AWPA C9 for plywood; waterborne pressure treatment. Provide for wood in contact with soil, concrete, masonry, roofing, flashing, dampproofing and waterproofing.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Miscellaneous Lumber: Provide wood for support of attachment of other work including cant strips, bucks, nailers, blocking, furring, grounds stripping and similar members. Provide lumber of sizes indicated, worked into shapes shown, and as follows:

   1. Moisture Content: 19 percent maximum for wood items not specified to receive wood preservative treatment.
   2. Grade: Common grade light framing, No. 2 Common or Standard grade boards per WCLIB or WWPA rules or No. 2 boards per SPIB rules.

PART 3 - EXECUTION

3.01 INSTALLATION


C. Provide nailers, blocking and grounds where required. Set work plumb, level and accurately cut.

D. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials and systems in proper relation with adjacent construction. Coordinate with other work.

E. Comply with manufacturer's requirements for cutting, handling, fastening and working treated materials.

F. Restore damaged components. Protect work from damage.

G. Comply with recommendations of ANSI/AITC A 190.1 structural glue laminated timber.

END OF SECTION
SECTION 06402 - INTERIOR ARCHITECTURAL WOODWORK

PART 1 - GENERAL

1.01 SUMMARY
A. Provide interior architectural woodwork:
   1. Face panels at lavatory counters.

1.02 SUBMITTALS
A. Submit for approval samples, shop drawings, product data, mock-ups of typical trim and moldings.
B. Submit shop drawings showing location of each cabinet item, whether custom devices or pre-manufactured. Submit dimensional plans and elevations, large scale details, attachment devices and other components.
C. Samples: Submit the following for selection and approval:
   1. Laminate sample chips
   2. Exposed cabinet hardware
   3. Door and trim style options

1.03 QUALITY ASSURANCE
A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.
B. The work of this section shall comply with the following codes and standards including all current editions, revisions and supplements:
   1. Commercial Standard CS 236, Mat Formed Wood Particle Board.
   2. Product Standards PS 1, Construction and Industrial Plywood.
D. Formaldehyde Emission Levels:
   1. Particleboard: NPA 8 compliance.

PART 2 - PRODUCTS

2.01 MATERIALS
A. Rough Hardware: Nails, bolts, screws, anchors, etc., required for work under this section are to be provided.
B. Wood Trim:
   1. Species for Opaque Finish: Any closed-grain hardwood.
   2. Grade: Custom.
C. Interior Wood Casework:
   1. Species for Transparent Finish: Plain sawn/sliced natural birch or maple to match existing wood doors.
   2. Species for Opaque Finish: Closed grain hardwood.
   3. Grade: Custom
   4. Face Style: Flush overlay
   5. Frame Fabrication: Frameless.
6. Grain Matching: Vertical

D. Interior Plastic Laminate Clad Casework:
   1. Laminate: High pressure decorative laminate, NEMA LD-3.
   2. Grade: Custom.
   3. Face Style: Full overlay.

E. Casework Hardware and Auxiliary Materials:
   2. Hardware Finish and Base Metal: 630 (32D) – (verify to match existing) – stainless steel, satin.

F. Interior Plastic Laminate Clad Countertops:
   1. Laminate: High pressure decorative laminate, NEMA LD-3, Nominal 0.050” thick.
   2. Grade: Custom.
   3. Edge: PVC

H. Solid Surfacing Material Countertops:
   1. Type: Synthetic countertops.
   2. Grade: Custom.
   3. Edge: Lumber.

O. Auxiliary Materials:
   3. Anchors: Type required for secure anchorage.

P. Factory Finishing:
   1. Finish: Custom grade with sheen to match existing wood doors.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Provide work to sizes, shapes, and profiles indicated. Install work to comply with quality standards referenced. Conceal fasteners to the greatest extent practical. Back prime work and install plumb, level and straight with tight joints; scribe work to fit.

B. Install materials and systems in accordance with manufacturer’s instructions and approved submittals. Install materials and systems in proper relation with adjacent construction. Coordinate with work of other sections.

C. Comply with manufacturer’s requirements for cutting, handling, fastening and working treated materials.

D. Repair minor damage, clean and protect.

END OF SECTION
SECTION 09216 - NON-STRUCTURAL METAL FRAMING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Non-load-bearing steel framing systems for interior gypsum board assemblies.
   2. Suspension systems for interior gypsum ceilings and soffits.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Fire-Test-Response Characteristics: Provide materials and construction identical to those tested according to ASTM E 119.

B. STC-Rated Assemblies: Provide materials and construction identical to those tested in assembly indicated according to ASTM E 90 and classified according to ASTM E 413.

2.2 FRAMING SYSTEMS

A. Recycled Content of Steel Products: Postconsumer recycled content plus one-half of preconsumer recycled content is not less than 25 percent.

B. Steel Studs and Runners: ASTM C 645.[ Use either steel studs and runners or dimpled steel studs and runners of equivalent minimum base-metal thickness.]

   1. <Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

      a. MRI Steel Framing, LLC.
      b. Armstrong.
      c. ClarkDietrich Building Systems.

   2. Minimum Base-Metal Thickness: As indicated on Drawings [0.018 inch (0.45 mm)] [0.027 inch (0.68 mm)] [0.033 inch (0.84 mm)].
3. Depth: As indicated on Drawings [3-5/8 inches (92 mm)] [6 inches (152 mm)] [4 inches (102 mm)] [2-1/2 inches (64 mm)] [1-5/8 inches (41 mm)].

C. Slip-Type Head Joints: Where indicated, provide one of the following in thickness not less than indicated for studs and in width to accommodate depth of studs:

1. Single Long-Leg Runner System: ASTM C 645 top runner with 2-inch- (51-mm-) deep flanges, installed with studs friction fit into top runner and with continuous bridging located within 12 inches (305 mm) of the top of studs to provide lateral bracing.
2. Double-Runner System: ASTM C 645 top runners, inside runner with 2-inch- (51-mm-) deep flanges and fastened to studs, and outer runner sized to friction fit inside runner.
3. Deflection Track: Steel sheet top runner manufactured to prevent cracking of finishes due to deflection of structure above.

D. Firestop Tracks: Manufactured to allow partition heads to expand and contract with movement of the structure while maintaining continuity of fire-resistance-rated assembly indicated; in thickness not less than indicated for studs and in width to accommodate depth of studs.

E. Flat Strap and Backing Plate: Steel sheet for blocking and bracing in length and width indicated.

1. Minimum Base-Metal Thickness: As indicated on Drawings [0.018 inch (0.45 mm)] [0.027 inch (0.68 mm)] [0.033 inch (0.84 mm)]

F. Cold-Rolled Channel Bridging: Steel, 0.053-inch (1.34-mm) minimum base-metal thickness, with minimum 1/2-inch- (13-mm-) wide flanges.

1. Depth: As indicated on Drawings [1-1/2 inches (38 mm)]
2. Clip Angle: Not less than 1-1/2 by 1-1/2 inches (38 by 38 mm), 0.068-inch- (1.72-mm-) thick, galvanized steel.


1. Minimum Base-Metal Thickness: As indicated on Drawings [0.018 inch (0.45 mm)] [0.033 inch (0.84 mm)]
2. Depth: As indicated on Drawings [7/8 inch (22.2 mm)] [1-1/2 inches (38.1 mm)].

H. Resilient Furring Channels: 1/2-inch- (13-mm-) deep, steel sheet members designed to reduce sound transmission.

1. Configuration: [Asymmetrical] or [hat shaped].

I. Cold-Rolled Furring Channels: 0.053-inch (1.34-mm) uncoated-steel thickness, with minimum 1/2-inch- (13-mm-) wide flanges.

1. Depth: As indicated on Drawings [3/4 inch (19 mm)]
2. Furring Brackets: Adjustable, corrugated-edge type of steel sheet with minimum uncoated-steel thickness of 0.033 inch (0.8 mm).
3. Tie Wire: ASTM A 641/A 641M, Class 1 zinc coating, soft temper, 0.062-inch- (1.59-mm-) diameter wire, or double strand of 0.048-inch- (1.21-mm-) diameter wire.
2.3 SUSPENSION SYSTEMS

A. Tie Wire: ASTM A 641/A 641M, Class 1 zinc coating, soft temper, 0.062-inch- (1.59-mm-) diameter wire, or double strand of 0.048-inch- (1.21-mm-) diameter wire.

B. Hanger Attachments to Concrete:
      a. Type: [Cast-in-place anchor, designed for attachment to concrete forms] [Postinstalled, chemical anchor] [Postinstalled, expansion anchor].

C. Wire Hangers: ASTM A 641/A 641M, Class 1 zinc coating, soft temper, 0.16 inch (4.12 mm) in diameter.

D. Flat Hangers: Steel sheet, in size indicated on Drawings [1 by 3/16 inch (25 by 5 mm) by length indicated] <Insert size>.

E. Carrying Channels: Cold-rolled, commercial-steel sheet with a base-metal thickness of 0.05 inch (1.34 mm) and minimum 1/2-inch- (13-mm-) wide flanges.
   1. Depth: As indicated on Drawings [2-1/2 inches (64 mm)] [2 inches (51 mm)] [1-1/2 inches (38 mm)].

F. Furring Channels (Furring Members):
   1. Cold-Rolled Channels: 0.053-inch (1.34-mm) uncoated-steel thickness, with minimum 1/2-inch- (13-mm-) wide flanges, 3/4 inch (19 mm) deep.
   2. Steel Studs and Runners: ASTM C 645. [Use either steel studs and runners or dimpled steel studs and runners of equivalent minimum base-metal thickness.]
      a. Minimum Base-Metal Thickness: As indicated on Drawings [0.018 inch (0.45 mm)] [0.027 inch (0.68 mm)] [0.033 inch (0.84 mm)].
      b. Depth: As indicated on Drawings [1-5/8 inches (41 mm)] [2-1/2 inches (64 mm)] [3-5/8 inches (92 mm)].
   3. Hat-Shaped, Rigid Furring Channels: ASTM C 645, 7/8 inch (22 mm) deep.
      a. Minimum Base-Metal Thickness: [As indicated on Drawings [0.018 inch (0.45 mm)] [0.033 inch (0.84 mm)].
   4. Resilient Furring Channels: 1/2-inch- (13-mm-) deep members designed to reduce sound transmission.
      a. Configuration: [Asymmetrical] or [hat shaped].
2.4 AUXILIARY MATERIALS

A. Fasteners for Metal Framing: Of type, material, size, corrosion resistance, holding power, and other properties required to fasten steel members to substrates.

B. Isolation Strip at Exterior Walls: Provide asphalt saturated organic felt or foam gasket.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Installation Standard: ASTM C 754.
   1. Gypsum Plaster Assemblies: Also comply with requirements in ASTM C 841 that apply to framing installation.
   2. Portland Cement Plaster Assemblies: Also comply with requirements in ASTM C 1063 that apply to framing installation.
   3. Gypsum Veneer Plaster Assemblies: Also comply with requirements in ASTM C 844 that apply to framing installation.
   4. Gypsum Board Assemblies: Also comply with requirements in ASTM C 840 that apply to framing installation.

B. Install supplementary framing, and blocking to support fixtures, equipment services, heavy trim, grab bars, toilet accessories, furnishings, or similar construction.

C. Install bracing at terminations in assemblies.

D. Do not bridge building control and expansion joints with non-load-bearing steel framing members. Frame both sides of joints independently.

3.2 INSTALLING FRAMED ASSEMBLIES

A. Install framing system components according to spacings indicated, but not greater than spacings required by referenced installation standards for assembly types.

B. Where studs are installed directly against exterior masonry walls or dissimilar metals at exterior walls, install isolation strip between studs and exterior wall.

C. Install studs so flanges within framing system point in same direction.

D. Install tracks (runners) at floors and overhead supports. Extend framing full height to structural supports or substrates above suspended ceilings, except where partitions are indicated to terminate at suspended ceilings. Continue framing around ducts penetrating partitions above ceiling.
   1. Slip-Type Head Joints: Where framing extends to overhead structural supports, install to produce joints at tops of framing systems that prevent axial loading of finished assemblies.
2. Door Openings: Screw vertical studs at jambs to jamb anchor clips on door frames; install runner track section (for cripple studs) at head and secure to jamb studs.
   a. Install two studs at each jamb unless otherwise indicated.
   b. Install cripple studs at head adjacent to each jamb stud, with a minimum 1/2-inch (13-mm) clearance from jamb stud to allow for installation of control joint in finished assembly.
   c. Extend jamb studs through suspended ceilings and attach to underside of overhead structure.

3. Other Framed Openings: Frame openings other than door openings the same as required for door openings unless otherwise indicated. Install framing below sills of openings to match framing required above door heads.

4. Fire-Resistance-Rated Partitions: Install framing to comply with fire-resistance-rated assembly indicated and support closures and to make partitions continuous from floor to underside of solid structure.
   a. Firestop Track: Where indicated, install to maintain continuity of fire-resistance-rated assembly indicated.

5. Sound-Rated Partitions: Install framing to comply with sound-rated assembly indicated.

6. Curved Partitions:
   a. Bend track to uniform curve and locate straight lengths so they are tangent to arcs.
   b. Begin and end each arc with a stud, and space intermediate studs equally along arcs. On straight lengths of no fewer than two studs at ends of arcs, place studs 6 inches (150 mm) o.c.

E. Direct Furring:
   1. Screw to wood framing.
   2. Attach to concrete or masonry with stub nails, screws designed for masonry attachment, or powder-driven fasteners spaced 24 inches (610 mm) o.c.

F. Z-Furring Members:
   1. Erect insulation vertically and hold in place with Z-furring members spaced [24 inches (610 mm)] [600 mm] o.c.
   2. Except at exterior corners, securely attach narrow flanges of furring members to wall with concrete stub nails, screws designed for masonry attachment, or powder-driven fasteners spaced 24 inches (610 mm) o.c.
   3. At exterior corners, attach wide flange of furring members to wall with short flange extending beyond corner; on adjacent wall surface, screw-attach short flange of furring channel to web of attached channel. At interior corners, space second member no more than 12 inches (305 mm) from corner and cut insulation to fit.

G. Installation Tolerance: Install each framing member so fastening surfaces vary not more than 1/8 inch (3 mm) from the plane formed by faces of adjacent framing.
3.3 INSTALLING SUSPENSION SYSTEMS

A. Install suspension system components according to spacings indicated, but not greater than spacings required by referenced installation standards for assembly types.

B. Isolate suspension systems from building structure where they abut or are penetrated by building structure to prevent transfer of loading imposed by structural movement.

C. Suspend hangers from building structure as follows:

1. Install hangers plumb and free from contact with insulation or other objects within ceiling plenum that are not part of supporting structural or suspension system.
   a. Splay hangers only where required to miss obstructions and offset resulting horizontal forces by bracing, countersplaying, or other equally effective means.

2. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with locations of hangers, install supplemental suspension members and hangers in the form of trapezes or equivalent devices.

3. Do not attach hangers to steel roof deck.

4. Do not attach hangers to permanent metal forms. Furnish cast-in-place hanger inserts that extend through forms.

5. Do not attach hangers to rolled-in hanger tabs of composite steel floor deck.

6. Do not connect or suspend steel framing from ducts, pipes, or conduit.

D. Fire-Resistance-Rated Assemblies: Wire tie furring channels to supports.

E. Seismic Bracing: Sway-brace suspension systems [with hangers used for support] <Insert requirements>.

F. Installation Tolerances: Install suspension systems that are level to within [1/8 inch in 12 feet (3 mm in 3.6 m)] measured lengthwise on each member that will receive finishes and transversely between parallel members that will receive finishes.

END OF SECTION
SECTION 09250 - GYPSUM BOARD ASSEMBLIES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS
A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to the work of this section.

1.02 SUMMARY
A. Provide gypsum board assemblies:
   1. Interior walls, partitions, and ceilings (water resistant at all 'wet' locations).
   2. Gypsum Board Attachment:
      1. Gypsum board screw-attached to stud framing and furring.

1.03 SUBMITTALS
A. Submit for approval product data and installation instructions for each gypsum drywall component.

1.04 QUALITY ASSURANCE
A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer’s instructions.
B. Obtain gypsum board products from a single manufacturer.
C. Tolerances: Not more than 1/16 inch difference in true plane at joints between adjacent boards before finishing. After finishing, joints shall be not be visible. Not more than 1/8 inch in 10 feet deviation from true plane, plumb, level and proper relation to adjacent surfaces in finished work.
E. Performance: Fire, structural, and seismic performance meeting requirements of building code and local authorities.

1.05 DELIVERY, STORAGE AND HANDLING
A. Store materials inside under cover and in manner to keep them dry, protected from weather, direct sunlight, surface contamination, corrosion and damage from construction traffic and other causes. Neatly stack gypsum boards flat to prevent sagging.

1.06 EXISTING PROJECT CONDITIONS
A. Comply with requirements of referenced gypsum board application standards and recommendations of gypsum board manufacturer, for environmental conditions before, during and after application of gypsum board.

PART 2 - PRODUCTS

2.01 MATERIALS
A. Manufacturers of Gypsum Board: All materials specified herein except as noted are based on United States Gypsum Products. Products manufactured by American Gypsum, Georgia-Pacific Corp., National Gypsum Co. are acceptable substitutions.
B. Gypsum Board:

1. Gypsum Wallboard: ASTM C 36, Type “X”, ¼ inch or 5/8 inch thick as indicated, with tapered edges.
2. Water-Resistant Gypsum Backing Board: ASTM C 630, Type “X”, 5/8 inch thick, with tapered edges.
4. Metal Resilient Channel: roll formed corrosion resistant 25 gage steel (1/2” x 2 ½” - U.S.G. RC-1)
5. Fasteners: ASTM C 646, corrosion-resistant self-tapping buglehead spiral-thread type screws, Type W, minimum 1” long except 1-5/8” for double layer walls, lengths to penetrate at lease 3/8”.
6. Joint compounds and Tape:
   a. USG CF ready mix types.
   b. USG Durabond 90.
   c. USG Perf-A-Tape reinforcing tape.

C. Metal Trim Accessories:

1. Corner Bead: Dur-A-Bead or approved substitution metal corner reinforcement, attached with nails or screws.
3. Expansion Control Joint: Number 093.
4. Reveal Type Trim: Number 400 series.
5. Edge Protection: Number 800 series.

D. Auxiliary Materials:

1. Fastening adhesive.
2. Concealed acoustical sealant.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Install wood framing in compliance with Section 06100 - Rough Carpentry. Install with tolerances necessary to produce substrate for gypsum board assemblies with tolerances specified. Include blocking for items such as railings, grab bars, casework, toilet accessories and similar items.

B. Install gypsum board assemblies in compliance with ASTM C 840 and GA 216, Recommended Specifications for the Application and Finishing of Gypsum Board. Install gypsum board assemblies true, plumb, level and in proper relation to adjacent surfaces. Provide continuous vapor retarder at exterior walls.

C. Provide fire-rated systems where indicated and where required by authorities having jurisdiction.

D. Install boards vertically. Do not allow butt-to-butt joints and joints that do not fall over framing members.

E. Provide insulation full height and thickness in partitions as indicated on drawings.

F. Provide acoustical sealant at both faces at top and bottom runner tracks, wall perimeters, openings, expansion and control joints.

G. Install trim and 3-coat joint treatment in strict compliance with manufacturer's instructions and recommendations. Joint treatment is required at all fasteners and edges between boards. Fill all surface defects. Sand between and after joint treatment coatings and leave ready for finish painting or wall treatment.
H.  Texturing: All gypsum wall board to receive paint shall be texture coated, except walls to receive vinyl wall covering. Coordinate with Owner for locations of walls to receive vinyl wall covering. Finish these walls with “slick” flat finish drywall taping. Mix and apply materials evenly to achieve a uniform “orange peel” texture. Machine apply coating. Roller or trowel application will not be acceptable. Uneven, blotched or irregular texture will be completely removed and re-textured.

END OF SECTION
SECTION 09313 - CERAMIC TILING

PART 1 - GENERAL

1.1 SUMMARY
   A. Section Includes:
      1. Glazed Porcelain tile.
      2. Porcelain tile
      3. Crack isolation membrane.
      4. Metal edge strips.

1.2 ACTION SUBMITTALS
   A. Product Data: For each type of product.
      1. Product Data: For adhesives, documentation including printed statement of VOC content.
      2. Product Data: For grout sealers, documentation indicating that products comply with requirements of FloorScore certification.
   B. Samples:
      1. Provide tile and grout samples from manufacturer’s standard selection

1.3 INFORMATIONAL SUBMITTALS
   A. Qualification Data: For Installer.

1.4 MAINTENANCE MATERIAL SUBMITTALS
   A. Furnish extra materials that match and are from same production runs as products installed and that are packaged with protective covering for storage and identified with labels describing contents.
      1. Tile and Trim Units: Furnish quantity of full-size units equal to 2 percent of amount installed for each type, composition, color, pattern, and size indicated.

1.5 QUALITY ASSURANCE
   A. Installer Qualifications:
      1. Installer is licensed tile contractor in State of New Mexico – GS-03
   B. Mockups: Build mockups to verify selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
      1. Build mockup of floor tile installation.
2. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

PART 2 - PRODUCTS

2.1 PRODUCTS, GENERAL
   A. ANSI Ceramic Tile Standard: Provide Standard-grade tile that complies with ANSI A137.1 for types, compositions, and other characteristics indicated.
   B. ANSI Standards for Tile Installation Materials: Provide materials complying with ANSI A108.02, ANSI standards referenced in other Part 2 articles, ANSI standards referenced by TCNA installation methods specified in tile installation schedules, and other requirements specified.

2.2 TILE PRODUCTS
   A. Ceramic Tile Type: Glazed porcelain tile.
      1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
         a. Crossville, Inc
         b. Daltile
         c. Emser Tile
      2. Certification: Tile certified by the Porcelain Tile Certification Agency.
      3. Face Size: 2 by 2 inches, or 11-13/16 by 23-13/16 inches as selected.
      4. Face Size Variation: Rectified.
      5. Thickness: 1/4 inch (6.4 mm) typical at walls and (3/8 inch (9.5 mm) at floors
      6. Face: Plain with square or cushion edges
      7. Dynamic Coefficient of Friction: Not less than 0.42 at floors
      8. Tile Color, Glaze, and Pattern: As selected by Architect from manufacturer's full range
      9. Grout Color: As selected by Architect from manufacturer's full range.
     10. Trim Units: Coordinated with sizes and coursing of adjoining flat tile where applicable and matching characteristics of adjoining flat tile. Provide shapes as follows, selected from manufacturer's standard shapes:
         a. Base Cap: Surface bullnose, module size same as adjoining flat tile
         b. Tapered Transition Tile: Shape designed to effect transition between thickness of tile floor and adjoining floor finishes of different thickness, tapered to provide reduction in thickness from 1/2 to 1/4 inch (12.7 to 6.4 mm) across nominal 4-inch (100-mm) dimension.
   B. Accessories: Provide vitreous china accessories of type and size indicated, suitable for installing by same method as used for adjoining wall tile.
1. One soap holder for each shower/tub indicated.
2. Color and Finish: As selected by Architect from manufacturer's full range.

2.3 SETTING MATERIALS
   A. Latex-Portland Cement Mortar (Thinset): ANSI A118.4.
      1. Pro-Lite from Customs
      2. Mapei
      3. Provide prepackaged, dry-mortar mix combined with liquid-latex additive at Project site.
      4. For wall applications, provide nonsagging mortar.

2.4 GROUT MATERIALS
   A. Water-Cleanable Epoxy Grout: ANSI A118.3, with a VOC content of 65 g/L or less.
      1. **Manufacturers:** Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
         a. Laticrete International, Inc.

2.5 MISCELLANEOUS MATERIALS
   A. Metal Edge Strips: Angle or L-shape, height to match tile and setting-bed thickness, metallic or combination of metal and PVC or neoprene base, designed specifically for flooring applications; to match faucet finish exposed-edge material.
      1. Schluter Systems
   B. Grout Sealer
      1. Grout sealers shall comply with requirements of FloorScore certification.
      2. Grout sealers shall comply with the testing and product requirements of the California Department of Public Health's (formerly, the California Department of Health Services') "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Small-Scale Environmental Chambers."

PART 3 - EXECUTION

3.1 EXAMINATION
   A. Examine substrates, areas, and conditions where tile will be installed, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
      1. Verify that substrates for setting tile are firm; dry; clean; free of coatings that are incompatible with tile-setting materials, including curing compounds and other
substances that contain soap, wax, oil, or silicone; and comply with flatness tolerances required by ANSI A108.01 for installations indicated.

2. Verify that concrete substrates for tile floors installed with thinset mortar comply with surface finish requirements in ANSI A108.01 for installations indicated.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Fill cracks, holes, and depressions in concrete substrates for tile floors installed with thinset mortar with trowelable leveling and patching compound specifically recommended by tile-setting material manufacturer.

B. Where indicated, prepare substrates to receive waterproofing by applying a reinforced mortar bed that complies with ANSI A108.1A and is sloped 1/4 inch per foot toward drains.

C. Blending: For tile exhibiting color variations, verify that tile has been factory blended and packaged so tile units taken from one package show same range of colors as those taken from other packages and match approved Samples. If not factory blended, either return to manufacturer or blend tiles at Project site before installing.

3.3 CERAMIC TILE INSTALLATION

A. Comply with TCNA's "Handbook for Ceramic, Glass, and Stone Tile Installation" for TCNA installation methods specified in tile installation schedules. Comply with parts of the ANSI A108 series "Specifications for Installation of Ceramic Tile" that are referenced in TCNA installation methods, specified in tile installation schedules, and apply to types of setting and grouting materials used.

1. For the following installations, follow procedures in the ANSI A108 series of tile installation standards for providing 95 percent mortar coverage:

B. Extend tile work into recesses and under or behind equipment and fixtures to form complete covering without interruptions unless otherwise indicated. Terminate work neatly at obstructions, edges, and corners without disrupting pattern or joint alignments.

C. Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. Carefully grind cut edges of tile abutting trim, finish, or built-in items for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap tile.

D. Exposed tile edges shall have exposed metal strips see 2.5.A above no tile specialty shapes required.

E. If there are accent tiles where accent tile differs in thickness from field tile, vary setting bed thickness so that tiles are flush.

F. Jointing Pattern: Lay tile in grid pattern unless otherwise indicated. Lay out tile work and center tile fields in both directions in each space or on each wall area. Lay out tile work to minimize the use of pieces that are less than half of a tile. Provide uniform joint widths unless otherwise indicated.

G. Joint Widths: Unless otherwise indicated, install tile with the following joint widths:
1. Porcelain Tile: 3/16 or 1/4" inch.

H. Metal Edge Strips: Install where exposed edge of tile wall meets wall.

3.4 INTERIOR CERAMIC TILE INSTALLATION SCHEDULE

1. Ceramic Tile Installation; thinset mortar on water-resistant gypsum board.
   a. Ceramic Tile Type: Glazed Porcelain
   b. Thinset Mortar: Latex-portland cement mortar. (set depth to match disinfectant mat at Isolation Room 113)
   c. Grout: Water-cleanable epoxy grout

END OF SECTION
SECTION 09512 - ACOUSTICAL TILE CEILINGS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

A. Provide replacement acoustical lay-in tile ceiling tiles as indicated on the drawings. Provide trim and exposed metal suspension system where required to patch damaged areas.

1.03 SUBMITTALS

A. Submit for approval samples, product data, installation instructions, extra stock. Include manufacturer’s recommendations for cleaning and refinishing acoustical units, including precautions against materials and methods which may be detrimental to finishes and acoustical performances.

1.04 QUALITY ASSURANCE

A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer’s instructions.

B. Performance: Fire, structural, and seismic performance meeting requirements of building code and local authorities. Acoustical performance based on project requirements.

C. Coordination of Work: coordinate layout and installation of acoustical ceiling units and suspension system components with other work supported by or penetrating through ceilings including light fixtures, HVAC equipment, fire-suppression system components (if any), and partition system (if any).

PART 2 - PRODUCTS

2.01 MATERIALS

A. Manufacturers: USG Interiors (basis of design) or approved equal

B. Vinyl Panels, with vinyl laminated face and sealed back and edges.
   1. Size: 24 by 24 inches by 1/2 inch.
   2. Edge Detail, Square
   3. Pattern: G
   4. Type: ClimaPlus Performance

E. Auxiliary Materials:
   1. Edge molding and trim. USG M9 Wall Molding for edge conditions.
   2. Hold down clips and impact clips
   3. Concealed acoustic sealant
PART 3 - EXECUTION

3.01 INSTALLATION

A. Install materials and suspension systems in accordance with manufacturer's instructions and recommendations, and ASTM C 636. Coordinate installation with location of mechanical and electrical work to ensure proper locations.

B. Level ceiling to within 1/8" in 10' in both directions. Scribe and cut panels to fit accurately. Measure and layout to avoid less than half panel units.

C. Arrange acoustical units and orient directionally-patterned units (if any) with pattern running in one direction.

D. Adjust, clean, and touch-up all system components.

E. Provide one full carton, wrapped and labeled of full sized maintenance stock of new material for each tile type installed.

END OF SECTION
PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract and Division-1 Specification sections, apply to work of this section.

SECTION 09250 – Gypsum Board Assemblies

1.02 SUMMARY

A. Provide the following:
   1. Painting and surface preparation for interior unfinished surfaces as scheduled.
   2. Painting and surface preparation for exterior unfinished surfaces as scheduled.

B. Surfaces to be Painted: Except where natural finish of material is specifically noted as a surface not to be painted, paint exposed surfaces whether or not colors are designated in “schedules”. Where items of surfaces are not specifically mentioned, paint the same as similar adjacent materials or areas. If color or finish is not designated, Architect will select these from standard colors or finishes available.

C. Following categories of work are not included as part of field-applied finish work:
   1. Pre-Finished Items: Unless otherwise indicated, do not include painting when factory-finishing or installer-finishing is specified.
   2. Concealed Surfaces: Unless otherwise indicated, painting is not required on surfaces such as walls or ceilings in concealed areas and generally inaccessible areas, foundation spaces, furred areas, utility tunnels, pipe spaces, duct shafts and elevator shafts.
   3. Finished Metal Surfaces: Unless otherwise indicated, metal surfaces of anodized aluminum, stainless steel, chromium plate, copper, bronze and similar finished materials will not require finish painting.
   4. Operating Parts: Unless otherwise indicated, moving parts of operating units, mechanical and electrical parts, such as valve and damper operators, linkages, sinkages, sensing devices, motor and fan shafts will not require finish painting.

D. Do not paint over any code-required labels, such as Underwriter’s Laboratories and Factory Mutual, or any equipment identification, performance rating, name, or nomenclature plates.

E. All paints and coatings must meet or exceed the VOC and chemical component limits of Green Seal as follows:
   1. Paint VOC Limits:
      - Non-flat - 150 g/L
      - Flat - 50 g/L
      - Stains - 250 g/L
      - Floor Coatings 100 g/L
      - Clear wood finishes: varnish 350 g/l; lacquer 550g/L

1.03 SUBMITTALS

A. Submit for approval samples, product data, 4’ by 4’ mock-ups, extra stock.
1.04 QUALITY ASSURANCE

A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

B. Single Source Responsibility: Provide primers and other undercoat paint produced by same manufacturer as finish coats. Use only thinners approved by paint manufacturer and use only within recommended limits.

C. Regulations: Compliance with VOC and environmental regulations.

D. Coordination of Work: Review other sections of these specifications in which prime paints are to be provided to ensure compatibility of total coatings system for various substrates. Upon request from other trade, furnish information or characteristics of finish materials provided for use, to ensure compatible prime coats are used.

1.05 DELIVERY AND STORAGE

A. Deliver materials to job site in original, new and unopened packages and containers bearing manufacturer’s name and label.

1. Thinning instructions.
2. Application instructions.
3. Color name and number.

B. Store materials not in use in tightly covered containers. Maintain containers used in storage of paint in a clean condition, free of foreign materials and residue.

1. Protect from freezing where necessary. Keep storage area neat and orderly. Remove oily rags and waste daily. Take all precautions to ensure that workmen and work areas are adequately protected from fire hazards and health hazards resulting from handling, mixing and application of paints.

1.06 EXISTING JOB CONDITIONS

A. Apply water based paints only when temperature of surfaces to be painted and surrounding air temperatures are between 50 degrees F (10 degrees C), unless otherwise permitted by paint manufacturer’s printed instructions.

B. Apply solvent-thinned paints only when temperature of surfaces to be painted and surrounding air temperatures are between 45 degrees F (7 degrees C) and 95 degrees F (35 degrees C), unless otherwise permitted by paint manufacturer’s printed instructions.

C. Do not paint in snow, rain, fog, or mist, or when relative humidity exceeds 85%, or to damp or wet surfaces, unless otherwise permitted by paint manufacturer’s printed instructions.

1. Painting may be continued during inclement weather if areas and surfaces to be painted are enclosed and heated within temperature limits specified by paint manufacturer during application and drying periods.
PART 2 - PRODUCTS

2.01 MANUFACTURERS:

A. Manufacturers: Subject to compliance with requirements, provide products of one of the following:
   1. Harmony by Sherwin Williams
   2. Pristine Eco-Spec by Benjamin Moore
   4. Pure Performance by PPG Architectural Finishes
   5. Promaster by Glidden

2.02 MATERIALS

A. Material Quality: Provide best quality grade of various types of coatings as regularly manufactured by acceptable paint materials manufacturers. Materials not displaying manufacturer’s identification as a standard, best grade product will not be acceptable.

B. Color Pigments: Pure, non-fading, applicable types to suit substrates and service indicated.
   1. Lead content in pigment, if any, is limited to contain not more than 0.06% lead, as lead metal based on the total volatile (dry-film) of paint by weight.
   2. This limitation is extended to interior surfaces and those exterior surfaces, such as stairs, decks, porches, railings, windows, and doors.

PART 3 - EXECUTION

3.01 INSPECTION

A. Applicator must examine areas and conditions under which painting work is to be applied and notify contractor in writing of conditions detrimental to proper and timely completion of work. Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to applicator.

B. Starting of painting work will be construed as Applicator’s acceptance of surfaces and conditions within any particular area.

C. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions otherwise detrimental to formation of a durable paint film.

3.02 SURFACE PREPARATION

A. General: Perform preparation and cleaning procedures in accordance with paint manufacturer’s instructions and as herein specified, for each particular substrate condition.
   1. Provide barrier coats over incompatible primers or remove and reprime as required. Notify Architect in writing of any anticipated problems in using the specified coating systems with substrates primed by others.
   2. Remove hardware, hardware accessories, machined surfaces, plates, lighting fixtures, and similar items in place and not to be finish-painted, or provide surface-applied protection, prior to surface preparation and painting operation. Remove, if necessary, for complete painting of items and adjacent surfaces. Following completion of painting of each space or area, reinstall removed items.

B. Ferrous Metals: Clean ferrous surfaces which are not galvanized or shop-coated of oil, grease, dirt, loose mill scale and other foreign substances by solvent of mechanical cleaning.
   1. Touch-up shop-applied prime coats wherever damaged or bare, where required by other sections of these specifications. Clean and touch-up with same type shop primer.
3.03 MATERIALS PREPARATION
A. Mix and prepare painting materials in accordance with manufacturer’s directions.
B. Maintain containers used in mixing and application of paint in a clean condition, free of foreign materials and residue.
C. Stir materials before application to produce a mixture of uniform density, and stir as required during application. Do not stir surface film into material. Remove film and, if necessary, strain material before using.

3.04 APPLICATION
A. General: Apply paint in accordance with manufacturer’s directions. Use applicators and techniques best suited for substrate and type of material being used.
B. Mechanical and Electrical Work: Painting of mechanical and electrical work is limited to those items exposed in mechanical equipment rooms and in occupied spaces.
C. Completed Work: Match approved mock-ups for color, texture, and pattern. Re-coat or remove and replace work which does not match or shows loss of adhesion.
D. Clean up, touch up and protect work.

INTERIOR PAINT SCHEDULE
General: Provide the following systems for the various substrates, as indicated.

<table>
<thead>
<tr>
<th>Substrate</th>
<th>Finish</th>
<th>Coats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferrous Metals</td>
<td>Semi Gloss</td>
<td>1 coat zinc chromate, rust-inhibiting primer 2 coats alkyd enamel</td>
</tr>
</tbody>
</table>

EXTERIOR PAINT SCHEDULE
General: Provide the following systems for the various substrates, as indicated.

<table>
<thead>
<tr>
<th>Substrate</th>
<th>Finish</th>
<th>Coats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferrous Metal</td>
<td>Semi Gloss</td>
<td>1 coat, zinc chromate, rust-inhibiting primer 2 coats alkyd enamel finish</td>
</tr>
<tr>
<td>Galvanized Metal</td>
<td>Semi Gloss</td>
<td>1 coat, galvanized metal primer 2 coats alkyd enamel finish</td>
</tr>
</tbody>
</table>

3.05 CONSTRUCTION WASTE MANAGEMENT
A. Separate and recycle excess material and/or reuse on job site. Follow requirements of Construction Waste Management Plan to divert as much material as possible from the landfill. See section 01524 – Construction Waste Management.

END OF SECTION
SECTION 10213 - PLASTIC TOILET COMPARTMENTS

PART 1 - GENERAL

1.1 SUMMARY
A. Section includes solid-plastic toilet compartments configured as toilet enclosures, entrance screens, and bracing panels and urinal screens.

1.2 ACTION SUBMITTALS
A. Product Data: For each type of product.
B. Shop Drawings: For toilet compartments. Include dimensioned plans, elevations, sections, details, and attachment details.
C. Product data: Manufacturer’s descriptive data for panels, hardware and accessories
D. Samples and standard colors for each type of toilet compartment material indicated.

1.3 INFORMATIONAL SUBMITTALS
A. Product certificates.

1.4 CLOSEOUT SUBMITTALS
A. Maintenance data.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS
A. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
   1. Flame-Spread Index: [25] or less.
   2. Smoke-Developed Index: 450 or less.
B. Recycled Content of Solid-Plastic Components: Postconsumer recycled content plus one-half of preconsumer recycled content not less than 25 percent.
C. Regulatory Requirements: Comply with applicable provisions in ICC A117.1 for toilet compartments designated as accessible.
2.2 SOLID-PLASTIC TOILET COMPARTMENTS

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
   a. Scranton Products
   b. ASI Global Partitions

B. Toilet-Enclosure Style: [Overhead braced, Floor anchored]

C. Entrance-Screen Style: [Overhead braced, Floor anchored]

D. Urinal-Screen Style: [Wall hung, Floor anchored]

E. Door, Panel, Screen, and Pilaster Construction: Solid, high-density polyethylene (HDPE) panel material, not less than 1 inch (25 mm) thick, seamless, with eased edges,[ no-sightline system,] and with homogenous color and pattern throughout thickness of material. See plans for dimensions.
   1. Integral Hinges: Configure doors and pilasters to receive integral hinges.
   2. Heat-Sink Strip: Manufacturer's standard continuous,[ extruded-aluminum] [or] [stainless-steel] strip fastened to exposed bottom edges of solid-plastic components to hinder malicious combustion.
   3. Color and Pattern: [Two colors and patterns] in each room as selected by Architect from manufacturer's full range.

F. Pilaster [Shoes] [and] [Sleeves (Caps)]: Manufacturer's standard design; [stainless steel].

G. Urinal-Screen Post: Manufacturer's standard post design of [material matching the thickness and construction of pilasters] [or] [1-3/4-inch- (44-mm-) square, aluminum tube with satin finish] >; with shoe and sleeve (cap) matching that on the pilaster.

H. Brackets (Fittings):
   1. Stirrup Type: Ear or U-brackets, [chrome-plated zamac] [clear-anodized aluminum].
   2. Full-Height (Continuous) Type: Manufacturer's standard design; [polymer or extruded aluminum].
      a. Polymer Color and Pattern: [Matching panel]

2.3 HARDWARE AND ACCESSORIES

A. Hardware and Accessories: Manufacturer's standard operating hardware and accessories.
   1. Material: [Chrome-plated zamac] [Clear-anodized aluminum]
   2. Provide units that comply with regulatory requirements for accessibility at compartments designated as accessible.
   3. Provide one (1) heavy duty hook at approved location in each toilet stall
B. Hardware and Accessories: Manufacturer's heavy-duty stainless-steel operating hardware and accessories.

1. Provide units that comply with regulatory requirements for accessibility at compartments designated as accessible.

C. Overhead Bracing: Manufacturer's standard continuous, extruded-aluminum head rail with antigrip profile and in manufacturer's standard finish.

D. Anchorages and Fasteners: Manufacturer's standard exposed fasteners of stainless steel, finished to match the items they are securing, with theft-resistant-type heads. Provide sex-type bolts for through-bolt applications. For concealed anchors, use stainless-steel, hot-dip galvanized-steel, or other rust-resistant, protective-coated steel compatible with related materials.

2.4 FABRICATION

A. Fabrication, General: Fabricate toilet compartment components to sizes indicated. Coordinate requirements and provide cutouts for through-partition toilet accessories where required for attachment of toilet accessories.

B. Overhead-Braced Units: Provide manufacturer's standard corrosion-resistant supports, leveling mechanism, and anchors at pilasters to suit floor conditions. Provide shoes at pilasters to conceal supports and leveling mechanism.

C. Floor-Anchored Units: Provide manufacturer's standard corrosion-resistant anchoring assemblies with leveling adjustment nuts at pilasters for structural connection to floor. Provide shoes at pilasters to conceal anchorage.

D. Ceiling-Hung Units: Provide manufacturer's standard corrosion-resistant anchoring assemblies with leveling adjustment nuts at pilasters for connection to structural support above finished ceiling. Provide assemblies that support pilasters from structure without transmitting load to finished ceiling. Provide sleeves (caps) at tops of pilasters to conceal anchorage.

E. Floor-and-Ceiling-Anchored Units: Provide manufacturer's standard corrosion-resistant anchoring assemblies with leveling adjustment nuts at tops and bottoms of pilasters. Provide shoes and sleeves (caps) at pilasters to conceal anchorage.

F. Urinal-Screen Posts: Provide manufacturer's standard corrosion-resistant anchoring assemblies with leveling adjustment nuts at [tops and] bottoms of posts. Provide shoes[ and sleeves (caps)] at posts to conceal anchorage.

G. Door Size and Swings: Unless otherwise indicated, provide 24-inch- (610-mm-) wide, in-swinging doors for standard toilet compartments and 36-inch- (914-mm-) wide, out-swinging doors with a minimum 32-inch- (813-mm-) wide, clear opening for compartments designated as accessible.
PART 3 - EXECUTION

3.1 INSTALLATION

A. General: Comply with manufacturer's written installation instructions. Install units rigid, straight, level, and plumb. Secure units in position with manufacturer's recommended anchoring devices.

1. Maximum Clearances:
   a. Pilasters and Panels: 1/2 inch (13 mm).
   b. Panels, brackets and Walls: 1 inch (25 mm).

2. Stirrup Brackets: Secure panels to walls and to pilasters with no fewer than [three brackets attached at midpoint and] near top and bottom of panel.
   a. Locate wall brackets so holes for wall anchors occur in masonry or tile joints.
   b. Align brackets at pilasters with brackets at walls.

3. Full-Height (Continuous) Brackets: Secure panels to walls and to pilasters with full-height brackets.
   a. Locate bracket fasteners so holes for wall anchors occur in masonry or tile joints.
   b. Align brackets at pilasters with brackets at walls.

3.2 ADJUSTING

A. Hardware Adjustment: Adjust and lubricate hardware according to hardware manufacturer's written instructions for proper operation. Set hinges on in-swinging doors to hold doors open approximately 30 degrees from closed position when unlatched. Set hinges on out-swinging doors[and doors in entrance screens] to return doors to fully closed position.

END OF SECTION
SECTION 10425 - INTERIOR SIGNAGE

PART 1 - GENERAL

1.01 SECTION INCLUDES
   A. Interior Signage

1.03 REFERENCES
   A. 2010 ADA Standards for Accessible Design
   C. USATBCB - Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities (ADAAG).

1.04 SUBMITTALS
   A. Submit under provisions of Section 01300.
   B. Shop Drawings: Shop drawings containing plans, elevations, sections and details for all work in this section with letter style, general layout for each sign type, sizes, edge and corner treatment and mounting methods shown.
   C. Selection Samples: For each finish specified, two complete sets of color chips representing manufacturer's standard choices for color(s), pattern(s) and finish(es).
   D. Message Schedule: Architect to provide schedule of messages for all signs.

1.05 QUALITY ASSURANCE
   A. Manufacturer Qualifications: Manufacturer shall have five years experience manufacturing and fabricating products of similar type and scope as those specified in this section.
   B. Installer Qualifications: Minimum five years documented experience in work of this section.
   C. Single Source Requirements: Obtain all products in this section from a single supplier.
   D. Mock-Up: As requested by architect, provide a mock-up of select sign types for evaluation of finishes and application workmanship.
      1. Finishes designated in shop drawing and selected by Architect.
      2. Do not proceed with remaining work until workmanship, color and finish are approved by Architect.
      3. Refinish mock-up area as required to produce acceptable work.

1.06 DELIVERY, STORAGE AND HANDLING
   A. Comply with manufacturer's ordering instructions and lead-time requirements to avoid construction delays. Thoroughly inspect products upon receipt.
   B. Deliver products in manufacturer's original, unopened, undamaged containers and packaging with labels clearly identifying product name and manufacturer intact.
C. Store products protected from weather, temperature and other harmful conditions in accordance with manufacturer's instructions.

D. Protect materials during handling and installation to prevent damage.

1.07 PROJECT CONDITIONS
A. Maintain environmental conditions (temperature, humidity and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.08 WARRANTY
A. Provide written documentation of manufacturer’s warranty.
   1. Warranty must guarantee interior signs for the life of the building.

PART 2 - PRODUCTS

2.01 MANUFACTURERS
Basis of design for signage: Century Sign Builders, which is located at 2117 Commercial NE: Albuquerque, NM 87106 | (505) 888-2901 | hello@csbsigns.com | www.csbsigns.com

2.02 INTERIOR SIGNAGE
A. Basic Sign System by Century Sign Builders, or approved equal
   1. General Characteristics
      a. Regulatory Compliance: All signs shall conform to the requirements of regulations list in section 1.3 and shall be designed to meet the stated requirements for color, contrast, letter height, install location and other characteristics required for accessibility and by local, state and federal regulations.
      b. Base material or chassis: Non-Glare plastic sign panel
         i. Colored non-glare acrylic multi-polymer by Rowmark plastics.
         ii. Products with painted or otherwise applied coloration method are not acceptable.
         iii. Finishes and color as per approved shop drawings.
      c. Lens or cover material: lens and covers shall be constructed using 0.125” (342-101) or 0.0625” (322-101) clear single-ply non-glare acrylic multi-polymer (Rowmark),
      d. Changeable message insert will be fabricated from commonly available transparency media no less than 5 mil thick that is compatible with inkjet or laser printers such as 3M CG3710 or equivalent.
      e. Printed graphic inserts: Printed inserts will be created using a satin-coated, tear-resistant, rigid PVC media with eco-solvent waterfast & UV stable inks.
         i. Printed background inserts must be manufactured in color managed workflow with the following capacities:
         ii. All printing must be done using a profiled printer with transmissible ICC profile.

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iii. All approved colors used in final design must have LAB values recorded and submitted to architect owner for future reference and duplication.

iv. Printing must be performed on calibrated printer such that future orders of insert can be reproduced within 5 Delta E of recorded LAB values.

f. Tactile Raised Lettering/Graphic method: Tactile lettering and symbols shall be formed using rotary engraving method and bonded to sign plaque using 3M Scotch 467HP adhesive. Text, numbers and symbols must have 1/32" return cut to 22 degree angle. Text, numbers and symbols must be constructed with materials having embedded coloration that is the final approved color for the signs. Products with painted or otherwise applied coloration method are not acceptable.

g. Braille Method: Braille must be constructed using the Edgerton Grade 2 Braille System using clear Raster beads.

h. Other Lettering Method: Permanent sign messages not requiring tactile lettering shall be formed using a reverse engraved method whereby letter forms are engraved from the second surface of a base substrate which is a clear material with a thin permanent layer of color on the rear (second) surface. Letter forms, reversed to read properly from the front, are engraved through the second surface to reveal the clear core and then paint-filled in an approved color.

i. Other features:

i. Snap-N-Place fasteners: as indicated on the shop drawings, provide flexible rubber fasteners to secure lenses over changeable message inserts to allow for tool-free update to changeable inserts. Patent pending design, Century Sign Builders.

ii. Stand-off fasteners: as indicated on the shop drawings, provide fine finished aluminum stand-off fasteners consisting of a top cap, through bolt and (optionally) a stand-off barrel.

iii. Allen bolt fasteners: as indicated on the shop drawings, provide Allen bolts to secure lenses over changeable message inserts.

j. Installation method:

i. Wall mounted signs: signs shall be mounted using double-sided vinyl foam tape (1/16" thickness), silicon adhesive or mechanical anchors as per the approved shop drawings.

ii. Flag mount hardware: provide custom mounting bracket for flag mounted signs as indicated on shop drawings.

iii. Wall mount hardware: provide custom mounting hardware for wall mounted signs as indicated on shop drawings.

iv. Suspended mount hardware: provide custom mounting hardware for ceiling suspended mounted signs as indicated on shop drawings.

v. Free standing hardware: provide base plate and floor fasteners (optional) for free standing signs as indicated on the shop drawings.

vi. Cubicle mounted hardware: provide removable mounting method for mounting sign at cubicles, workstations or systems furniture partitions as indicated on the shop drawings.

vii. Work surface hardware: provide angle bottom flange or stand to allow signs to be displayed in a vertical (slightly angled) fashion when placed on transaction counters, desks, etc. as indicated on the shop drawings.

2. Color Selections

a. Tactile lettering/graphics: As per approved shop drawings

b. Graphic insert: As per approved shop drawings

c. Changeable insert: As per approved shop drawings
d. Frame and mounting hardware: As per approved shop drawings

3. Font Selections
   a. Tactile lettering: As per approved shop drawings
   b. Graphic insert lettering: As per approved shop drawings
   c. Changeable insert lettering: As per approved shop drawings

PART 3 - EXECUTION

3.01 EXAMINATION
   A. Examine signage for defects prior to installation. Do not install damaged signage.
   B. Inspect conditions of installation areas and other conditions which may affect installation of signage to ensure that conditions are suitable for installation.
   C. Do not begin installation until installation areas are within manufacturer's specified tolerances and have been prepared in accordance with manufacturer's instructions.
   D. If installation area preparation is the responsibility of another installer, do not proceed with installation. Notify Architect of unsatisfactory preparation immediately.
   E. Commencement of work is deemed as acceptance of installation conditions.

3.02 PREPARATION
   A. Verify mounting heights and locations for signage will comply with specified requirements.
   B. Clean mounting locations of dirt, dust, grease or similar conditions that would prevent proper installation.
   C. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
   D. Verify completion of other installation conditions needed for sign installation including backing materials, reinforcement, electrical and data.

3.03 INSTALLATION
   A. Install in accordance with manufacturer's instructions.
   B. Locate signs in accordance with approved shop drawings and project requirements.

3.04 CLEANING, PROTECTION AND REPAIR
   A. Protect installed products until completion of project.
   B. Touch-up, repair or replace damaged products before Substantial Completion.

3.05 TRAINING & CLOSEOUT
   A. Provide manufacturer’s written warranty and cleaning/maintenance instructions.
   B. Provide digital templates for end-user updatable inserts.
   C. Provide necessary tools and source for consumables for end-user updateable inserts.

END OF SECTION
SECTION 12360 - SIMULATED STONE COUNTER TOPS

PART 1 - GENERAL

1.1 SUMMARY
A. Section Includes:
   1. Solid surface countertops with 4” backsplash (adjacent to walls) to match countertops
   2. 4” face panels to match countertops

1.2 ACTION SUBMITTALS
A. Product Data: For countertop materials.
B. Samples: For each type of material exposed to view.

PART 2 - PRODUCTS

2.1 ENGINEERED STONE PANELS
A. Configuration: Provide with the following front and backsplash style:
   1. Countertops: 13 mm thick, with 26 mm front edge built up with same material
   2. Backsplashes: 13 mm thick, Straight, slightly eased at top
   3. Front Panels: 13 mm thick, Straight, slightly eased at bottom

2.2 MATERIALS
A. Quartz Agglomerate: Solid sheets consisting of quartz aggregates bound together with a matrix of filled plastic resin and complying with the "Physical Characteristics of Materials" Article of ANSI SS1.
   1. Basis-of-Design Product: “French Blue Melange” by Wilsonart (or selected Wilsonart level 3 product line) as shown on the drawings, or comparable product by one of the following:
      a. Cambria.
      b. LG Chemical, Ltd.
      c. Silestone
   2. Colors and Patterns: As selected by Architect from Manufacturer’s Level 3 line.

PART 3 - EXECUTION

3.1 INSTALLATION
A. Fasten countertops by adhering to substrate with approved adhesive. Align adjacent surfaces and, form seams to comply with manufacturer's written instructions. Carefully dress joints smooth, remove surface scratches, and clean entire surface.

END OF SECTION