

PROJECT SPECIFICATIONS

RENOVATIONS AT MHMRA'S BRISTOW FACILITY

2627 CAROLINE STREET

HOUSTON, TEXAS

June 15, 2009

MCCM ARCHITECTS, INC.
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DIVISION 1 - GENERAL REQUIREMENTS

SECTION 01000 - PROJECT REQUIREMENTS

- Summary:
1. The Project, RENOVATIONS AT MHMRA'S BRISTOW FACILITY, 2627 CAROLINE STREET, consists of improvements to three existing restrooms and outdoor activity area improvements as follows:
 - a. Expansion of existing covered activity area, construction of new covered pavilion and connecting covered walkways.
 - b. Improvements to First Floor Consumer Showers.
 - c. Improvements to Second Floor Staff Restroom.
 - d. Improvements to Two First Floor Staff Restrooms.
- Project Requirements:
1. Requirements for Sequence of Work, Phasing, and Occupancy:
 - a. The new pavilion shall be constructed prior to the demolition and expansion of the existing covered activity area, and access shall be maintained to the new pavilion from the existing building during the existing covered activity area demolition and construction work.
 - b. The Project site is a 24 hour facility and will be occupied continuously during the course of the Project.
 2. Prior or Concurrent Work by Owner or Others: Perimeter fence replacement under a separate contract may be concurrent with this Project.
 3. Existing Site Conditions and Restrictions: Parking on the site is limited. Provisions should be made for contractor personnel to park off-site.
 4. Contractor's Use of Premises: Except for contractor personnel parking, space will be provided on-site for contractor temporary toilet, construction office, trash containers and limited storage of construction materials.
- Permits:
1. Apply for, obtain, and pay for building permits, and all other permits required to perform the work. Submit copies to Architect.
- Intent:
1. Drawings and specifications are intended to provide the basis for the proper completion of the Project suitable for the intended use of the Owner.
 2. Items not expressly set forth but which are reasonably implied or necessary for the proper performance of this work shall be included.
- Coordination:
1. Coordinate the work of all trades.
 2. Prepare coordination drawings for areas above ceilings where close tolerances are required between building elements and mechanical and electrical work.
 3. Verify location of utilities and existing conditions. Notify Architect of conditions differing from those indicated on the Drawings.

4. Verify dimensions on Drawings with dimensions at the Project. Do not scale Drawings.
- Cutting and Patching:
1. Provide cutting and patching work to properly complete the Project.
 2. Do not remove or alter structural components without written approval.
 3. Cut with tools appropriate for materials to be cut.
 4. Patch with materials and methods to produce patch which is not visible from a distance of five feet.
 5. Do not cut and patch in a manner that would result in a failure of the work to perform as intended, decrease fire performance, decrease acoustical performance, decrease energy performance, decrease operational life, or decrease safety factors.
- Field Engineering:
1. Verify and locate utilities, existing facilities, and equipment.
 2. Survey and layout improvements, utilities, structures, and components.
- Project Meetings:
1. Arrange for a preconstruction conference prior to start of construction. Meeting shall be attended by Owner, Architect, Contractor, and major subcontractors.
 2. Arrange for progress meetings once a month during construction, prior to application for payment. Record minutes and distribute promptly.
- Submittals:
1. Submit a project schedule and update at least monthly.
 2. Submit for approval all submittals listed in individual sections with following number of copies:
 - a. Shop drawings, product data and warranties should be submitted electronically. Electronic submittals shall be in .pdf format, one copy of each submittal reviewed and annotated by the Contractor. Reviewed submittals shall be returned in .pdf format.
 - b. Samples: 3 sets plus range samples where applicable.
 3. Include details of construction and adjacent construction in shop drawings. Clearly indicate any deviations from requirements of the contract documents. Fabricate materials from approved shop drawings only.
- Quality Assurance:
1. Comply with applicable codes, regulations, ordinances and requirements of authorities having jurisdiction, including accessibility guidelines where applicable. Submit copies of inspection reports, notices and similar documents to Architect.
 2. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years.
 3. Use experienced installers. Furnish evidence of experience if requested.
 4. Deliver, handle, and store materials in strict accordance with manufacturer's instructions.
 5. Use of any supplier or subcontractor is subject to Owner's approval.
 6. Engage and pay for testing agencies as required. Refer to individual sections for additional requirements.

- Temporary Facilities:
1. Provide temporary facilities and connections as required for the proper completion of the project.
 2. Provide and maintain temporary utility services.
 3. Owner will pay for utility service consumed. Do not waste.
 4. Provide temporary protection for adjacent areas to prevent contamination by construction dust and debris.
 5. Provide temporary barricades as necessary to ensure protection of the public.
 6. Provide suitable waste disposal units and empty regularly. Do not permit accumulation of trash and waste materials.
 7. [Provide temporary sanitary facilities.] [Use of designated existing sanitary facilities in building is acceptable.]
 8. Maintain egress within and around construction areas.
 9. Maintain fire alarm systems in operation during construction.
 10. Provide fire extinguishers in work areas during construction.
 11. Provide temporary protection for adjacent construction. Promptly repair any damage at no additional cost to the Owner.
- Products and Substitutions:
1. Provide products and materials specified. Request Architect's selection of colors and accessories in sufficient time to avoid delaying progress of the work.
 2. Submit requests for substitutions shall be in writing, including reasons. Submit sufficient information for Architect to evaluate proposed substitution.
 3. Remove and replace work which does not conform to the contract documents at no additional expense to the Owner.
- Installation:
1. Inspect substrates and report unsatisfactory conditions in writing.
 2. Do not proceed until unsatisfactory conditions have been corrected.
 3. Take field measurements prior to fabrication where practical. Form to required shapes and sizes with true edges, lines and angles. Provide inserts and templates as needed for work of other trades.
 4. Install materials in exact accordance with manufacturer's instructions and approved submittals.
 5. Install materials in proper relation with adjacent construction and with proper appearance.
 6. Restore units damaged during installation. Replace units which cannot be restored at no additional expense to the Owner.
 7. Refer to additional installation requirements and tolerances specified under individual specification sections.
- Closeout:
1. Prepare punchlist for remaining work for review by the Architect.
 2. Complete punchlist items promptly at no additional expense to the Owner.
 3. Submit accurate record documents of building and site.
 4. Submit operating manuals, maintenance manuals, and warranty information.
 5. Obtain and submit copy of occupancy permits.
 6. Train Owner in use of building systems.
 7. Remove temporary facilities and provide final cleaning and touch-up.

8. Restore portions of building, site improvements, landscaping and other items damaged by construction operations to the satisfaction of the Architect at no additional expense to the Owner.

SECTION 01020 – ALLOWANCES

- Summary:
1. Include scheduled allowances in the project cost; allowance is for cost of materials only, delivered and unloaded at the site. Installation and all other costs are to be included in base price and separate from allowance amounts.
 2. Submit invoices to indicate actual quantities of materials delivered and costs. Indicate amounts of applicable trade discounts.

- Allowances:
1. Outdoor Gas Grille: \$8,000.00
 2. Stainless Steel Top for Outdoor Gas Grille: \$3,000.00

SECTION 01030 – ALTERNATES (NOT USED)

END OF DIVISION 1

DIVISION 2 - SITEWORK

SECTION 02050 - DEMOLITION

- Summary:
1. Provide selective demolition of interior partitions, systems, and building components designated to be removed.
 3. Provide selective demolition of exterior facade, structures, and components designated to be removed.
 4. Protect portions of building, site and adjacent structures affected by demolition operations.
 5. Provide site demolition including designated paving, curbing, site walls, and utility structures.
 6. Provide demolition of below-grade foundations and site improvements to depth to avoid conflict with new construction and site work.
 7. Remove hollow items or items which could collapse.
 8. Remove abandoned utilities and wiring systems.
 9. Notify Owner of schedule of shut-off of utilities which serve occupied spaces.
 10. Provide temporary protection for the public from demolition operations.
 11. Provide pollution control during demolition operations.
 12. Provide removal and legal disposal of materials.

- Submittals:
1. Submit demolition schedule. Include methods for protecting adjacent work and location of temporary partitions if applicable.
 2. Submit proposed location for disposal of materials, and permit if applicable.

- Demolition:
1. Survey existing conditions and correlate with Drawings and specifications to verify extent of demolition required.
 2. Verify conditions at site to determine whether demolition methods proposed for use will not endanger existing structures by overloading, failure, or unplanned collapse.
 3. Perform demolition operations by methods which do not endanger adjacent spaces, structures, or the public.
 4. Perform demolition operations to prevent dust and pollutant hazards.

- Schedule:
1. Items to be Salvaged for Reinstallation: (())
 2. Items to be Salvaged for Delivery to Owner: (())

SECTION 02100 - SITE PREPARATION

- Summary:
1. Protect existing trees, vegetation, landscaping materials, and site improvements not scheduled for clearing which might be damaged by construction activities.
 2. Trim existing trees and vegetation as acceptable to Architect in writing.

3. Clear and grub site of stumps, vegetation, debris, rubbish, designated trees, and designated site improvements.
4. Provide temporary erosion control, siltation control, and dust control.
5. Provide temporary protection of adjacent property, structures, benchmarks, and monuments.
6. Provide temporary relocation of fencing, and site improvements scheduled for reuse.
7. Provide removal and legal disposal of cleared materials not to be stockpiled.

Products: 1. Tree protection, erosion control, siltation control, and dust control materials suitable for site conditions.

Installation: 1. Comply with requirements of Section 01000 - Project Requirements.

SECTION 02200 - EARTHWORK

Summary: 1. Provide excavation, filling, compaction, and grading for buildings, site improvements, and utilities.
 2. Provide suitable materials for subbase, drainage fill, and backfill for slabs, pavements, and improvements.
 3. Provide additional materials from offsite if required.
 4. Provide removal and legal disposal of excavated materials.
 5. Provide erosion control and control of runoff during earthwork operations.

Submittals: 1. Submit list and source of materials from offsite, and submit proposed location for disposal of excess materials.

Products: 1. Subbase Material: Graded mixture of natural or crushed gravel, crushed stone or slag, and natural or crushed sand.
 2. Drainage Fill: Washed, evenly graded mixture of crushed stone or gravel, with 100 percent passing a 1-1/2 inch sieve and not more than 5 percent passing a No. 200 sieve.
 3. Backfill and Fill Materials: Satisfactory soil materials free of clay, rock or gravel larger than 2 inches in any dimension, debris, waste, frozen materials, vegetation, and other unsuitable materials.

Installation: 1. Comply with requirements of Section 01000 - Project Requirements.
 2. Provide compaction under structures, building slabs, steps, pavements, and walkways; 95 percent maximum density, ASTM D 698, standard Proctor.
 3. Provide compaction under lawns or unpaved areas; 90 percent maximum density, ASTM D 698, standard Proctor.
 4. Provide grading tolerance for lawns, unpaved areas, and walks of plus or minus 1 inch.
 5. Provide grading tolerance for pavements of plus or minus 1/2 inch.

6. Provide grading tolerance for fill under building slabs of plus or minus 1/2 inch measured with 10 foot straightedge.

SECTION 02520 - PORTLAND CEMENT CONCRETE PAVING

- Summary: 1. Provide cast-in-place concrete paving over prepared subbase.
- Submittals: 1. Submit product data, mix design.
- Products: 1. Concrete: ASTM C 150, Type 1, Portland cement; ASTM C 33, normal weight aggregates; potable water.
 - a. Design Mix: ASTM C 94, 3000 psi, 28 day minimum compressive strength.
 - b. Slump Limits: 8 inches minimum with superplasticizer, 3 inches otherwise.
 - c. Air Content: 5 to 8 percent.
 - d. Finish: Broom finish.
3. Reinforcing Bars: Deformed steel bars, ASTM A 615, Grade 60.
4. Fabricated Bar Mats: Steel bar or rod mats, ASTM A 184, using ASTM A 615, Grade 60 steel bars.
5. Joint Dowel Bars: Plain steel bars, ASTM A 615, Grade 60.
6. Hook Bolts: ASTM A 307, Grade A threaded bolts.
7. Liquid-Membrane Forming and Sealing Curing Compound: ASTM C 309, Type I, Class A.
8. Bonding Compound: Polyvinyl acetate or acrylic base.
9. Epoxy Adhesive: ASTM C 881.
- Installation: 1. Comply with requirements of Section 01000 - Project Requirements.
2. Construction Tolerance: 1/8 inch in 10 feet for grade and alignment of top of forms; 1/4 inch in 10 feet for vertical face on longitudinal axis.

END OF DIVISION 2

DIVISION 3 - CONCRETE

SECTION 03300 - CAST-IN-PLACE CONCRETE

- Summary:
1. Provide plant-mixed cast-in-place concrete.
 - a. Footings and foundations.
 - b. Slabs
 2. Remodel existing concrete work as required for new construction.
 3. Comply with ACI 301, Specifications for Structural Concrete for Buildings, ACI 318, Building Code Requirements for Reinforced Concrete, and CRSI Manual of Standard Practice.
 4. Provide independent testing laboratory to sample concrete properties.
- Submittals:
1. Submit product data, shop drawings, mix design, test reports.
- Products:
1. Concrete Design Mixes, ASTM C 94, 28 Day Compressive Strength:
 - a. All concrete: 3000 psi.
 2. Formwork: Plywood or metal panel formwork sufficient for structural and visual requirements.
 3. Reinforcing Materials:
 - a. Reinforcing Bars: ASTM A 615, Grade 60, deformed reinforcing bars.
 - b. Steel Wire: ASTM A 82.
 4. Concrete Materials: ASTM C 150, Type I, Portland cement; potable water.
 - a. Normal weight aggregates, ASTM C 33.
 - b. Fly Ash: ASTM C 618, Type F.
 5. Concrete Admixtures: Containing less than 0.1 percent chloride ions.
 - a. Air-Entraining Admixture: ASTM C 260, for exterior exposed concrete and foundations exposed to freeze-thaw.
 - b. Water-Reducing Admixture: ASTM C 494, Type A, for placement and workability.
 - c. High-Range Water-Reducing Admixture, Super Plasticizer: ASTM C 494, Type F or G for placement and workability.
 - d. Water-Reducing, Accelerating Admixture: ASTM C 494, Type E for placement and workability.
 - e. Water-Reducing, Retarding Admixture: ASTM C 494, Type D for placement and workability.
 6. Auxiliary Materials:
 - a. Vapor Retarder: ASTM E 154 polyethylene sheet, 10 mils .
 - b. Liquid Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class A.
 - c. Water-Based Acrylic Membrane Curing Compound: ASTM C 309, Type 1, Class B.
 - d. Evaporation Control Compound: Monomolecular film-forming compound.

- e. Underlayment Compound: Free-flowing, self-leveling cement-based compound.
- f. Bonding Compound: Polyvinyl acetate or acrylic base.
- g. Epoxy Adhesive: ASTM C 881, two-component material.

- Installation:
- 1. Comply with requirements of Section 01000 - Project Requirements.
 - 2. Comply with ASTM C 94, CRSI Manual of Standard Practice, and ACI publications.
 - 3. Provide Concrete Finishes For Formed Surfaces:
 - a. Surfaces Not Exposed To View: As-cast form finish.
 - b. Surfaces Exposed To View: Smooth rubbed form finish.
 - 4. Provide Concrete Finishes for Monolithic Slabs:
 - a. Match existing finish where adding to existing slab.
 - b. Trowel and fine broom finish for surfaces to receive thin-set ceramic or quarry tile.
 - c. Nonslip broom finish for exterior concrete platforms.

END OF DIVISION 3

DIVISION 4 - MASONRY

SECTION 04200 - UNIT MASONRY

- Summary: 1. Provide Unit Masonry Construction:
- a. Concrete block walls and columns.
- Submittals: 1. Submit product data, samples, shop drawings, test reports.
- Products: 1. Products: As selected by Architect complying with the following.
2. Concrete Masonry Units:
 - a. Concrete Masonry Units: ASTM C 90, 1500 f'm compressive strength, light weight.
 - b. Size: Face dimension of 7-5/8 inches high by 15-5/8 inches long by width required for application unless otherwise indicated.
 - c. Special Shapes: As required by building configuration.
 - d. Bond Pattern: Running Bond.
 3. Mortar and Grout:
 - a. Mortar Mix: ASTM C 270, Type S, for reinforced masonry, masonry below grade and masonry in contact with earth and ASTM C 270, Type N, for above-grade loadbearing and nonloadbearing walls.
 - b. Mortar Materials: Portland cement, ASTM C 150, Type I or II materials.
 - c. Mortar Aggregate: Natural color, ASTM C 144.
 - d. Grout Aggregate: ASTM C 404.
 - e. Hydrated Lime: ASTM C 207, Type S.
 - f. Color: Natural color.
 4. Reinforcing Steel:
 - a. Reinforcing Bars: ASTM A 615, Grade 60.
 5. Joint Reinforcing: Welded wire with deformed side rods.
 - a. Steel Wire: 9 gage (.1875 mm) galvanized wire.
 - b. Type: Ladder or truss type.
 6. Ties and Anchors:
 - a. Bent Wire Ties: Galvanized steel.
- Installation: 1. Comply with requirements of Section 01000 - Project Requirements.
2. Comply with PCA Recommended Practices for Laying Concrete Block, Brick Institute of America Tech Notes, and NCMA TEK Bulletins.
 3. Comply with cold weather and warm weather protection procedures as recommended in BIA Tech Notes.
 4. Sawcut units when required. Maintain uniform joint width. Provide full bed, head and collar joints except at weepholes.
 5. Comply with applicable codes and regulations for spacing of ties and horizontal joint reinforcing.
 6. Remove and replace damaged units.

7. Clean concrete masonry by dry brushing, NCMA TEK No. 28.

END OF DIVISION 4

DIVISION 6 - WOOD AND PLASTICS

SECTION 06100 - ROUGH CARPENTRY

- Summary: 1. Provide Rough Carpentry:
- a. Wood grounds, nailers, and blocking.
- Submittals: 1. Submit product data.
- Products: 1. Lumber Standards and Grade Stamps: PS 20, American Softwood Lumber Standard and inspection agency grade stamps.
- 2. Preservative Treatment: AWWPA C2 for lumber; waterborne pressure treatment, preservative retention 0.40 pcf.
 - 3. Fire-Retardant Treatment: AWWPA C20 for lumber; noncorrosive type.
 - 4. Miscellaneous Lumber, Blocking and Nailers:
 - a. Moisture Content: 19 percent.
 - b. Grade: Standard grade light framing.
- Installation: 1. Comply with requirements of Section 01000 - Project Requirements.
- 2. Comply with NFPA Manual for House Framing, NFPA Recommended Nailing Schedule, and NFPA National Design Specifications for Wood Construction.
 - 3. Comply with APA Design and Construction Guide, Residential and Commercial Construction.
 - 4. Provide nailers, blocking and grounds where required. Set work plumb, level and accurately cut.
 - 5. Comply with manufacturer's requirements for treated materials.

SECTION 06402 - INTERIOR ARCHITECTURAL WOODWORK

- Summary: 1. Provide Interior Architectural Woodwork:
- a. Countertops.
 - b. Shelving.
- Submittals: 1. Submit product data, samples, of each type.
- Products: 1. AWI Standards: Architectural Woodwork Institute (AWI) "Architectural Woodwork Quality Standards."
- 2. WIC Standards: Woodwork Institute of California (WIC) "Manual of Millwork."
 - 3. Interior Plastic Laminate Clad Countertops:
 - a. Laminate: High pressure decorative laminate, NEMA LD-3.
 - b. Grade: Custom.
 - c. Core: Plywood.
 - d. Edge: Laminate.

4. Shelving:
 - a. Species for Opaque Finish: Hardwood veneer plywood with solid hardwood edgeband.
 - c. Grade: Economy.
 - d. Shelf Supports: Surface mounted slotted standards.
5. Auxiliary Materials:
 - a. Screws: FS FF-S-111, countersunk.
 - b. Nails: FS FF-N-105, countersunk.
 - c. Anchors: Type required for secure anchorage.

- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.
 2. Comply with standards referenced.
 3. Backprime work before installation.
 4. Install work plumb, level and in proper alignment.
 5. Provide work free from tool marks and blemishes.
 6. Securely fasten to substrates.
 7. Install in lengths to minimize joints and seams.
 9. Touch-up damaged or abraded finishes.

END OF DIVISION 6

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

SECTION 07210 - BUILDING INSULATION

- Summary:
1. Provide Building Insulation:
 - a. Thermal insulation in exterior walls, blanket type.
 - b. Acoustic insulation at interior partitions, blanket type.
- Submittals:
1. Submit product data.
- Products:
1. Blanket/Batt Insulation:
 - a. Glass fiber or mineral slag fiber, ASTM C 665, Type I (unfaced).
 2. Accessories:
 - a. Adhesives and mechanical anchors.
 - b. Crack sealers and tapes.
- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.
 2. Install insulation with continuous coverage to provide optimum performance.

SECTION 07270 - FIRESTOPPING

- Summary:
1. Provide Firestopping at the Following Locations:
 - a. Penetrations through fire-resistance-rated floor and roof construction.
 - b. Penetrations through fire-resistance-rated walls and partitions.
 - c. Penetrations through smoke barriers and construction enclosing compartmentalized areas.
 - d. Sealant joints in fire-resistance-rated construction.
- Submittals:
1. Submit product data, test reports, mockup of each type of joint.
- Products:
1. Fire Performance: ASTM E 119, ASTM E 814, and local regulations.
 2. Through-Penetration Firestop Systems (Contractor's choice):
 - a. Ceramic-Fiber and Mastic Coating.
 - b. Endothermic, Latex Compounds.
 - c. Intumescent Latex Sealant.
 - d. Intumescent Putty.
 3. Fire-Resistive Elastomeric Joint Sealants (Contractor's choice):
 - a. Single-component, neutral-curing, silicone sealant.
 - b. Multicomponent, nonsag, urethane sealant.
 - c. Single-component, nonsag, urethane sealant.
- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.
 2. Inspect existing and new work for proper firestopping prior to close-in of ceilings and walls.

3. Provide material thicknesses necessary to provide fire-resistance ratings indicated or required by authorities having jurisdiction.

SECTION 07901 - JOINT SEALANTS

- Summary: 1. Provide joint sealers at interior and exterior vertical and horizontal joints.
- Submittals: 1. Submit product data, mockup of each joint type, adhesion test results for each joint type.
- Products:
1. Urethane Elastomeric Joint Sealants:
 - a. Nonsag Type and Application: One-part or Multi-part nonsag urethane sealant, ASTM C 920, for vertical [and horizontal] joints, exterior [and interior] use.
 - b. Pourable Type and Application: One-part or Multi-part pourable urethane sealant, ASTM C 920, for horizontal joints, exterior and interior use.
 2. Silicone Elastomeric Joint Sealants:
 - a. Type and Application: One-part mildew-resistant silicone sealant, ASTM C 920, for sanitary applications, interior use.
 3. Latex Joint Sealants:
 - a. Acrylic Type: Acrylic-emulsion, ASTM C 834.
 - b. Silicone Type: Silicone emulsion, ASTM C 834, and ASTM C 920.
 - c. Application: Interior joints in vertical and overhead surfaces with limited movement.
 4. Compression Seals:
 - a. Type: Preformed foam sealant.
 - b. Application: Wide exterior joints in vertical surfaces.
 5. Paving Joint Fillers:
 - a. Expanding Type: Self-expanding cork.
 - b. Cork Type: Cork.
 - c. Rubber Type: Sponge rubber.
 - d. Bituminous Type: Bituminous fiber.
 - e. Application: Filler for exterior paving joints.
 6. Auxiliary Materials:
 - a. Plastic foam joint fillers.
 - b. Elastomeric tubing backer rods.
 - c. Bond breaker tape.
- Installation: 1. Comply with requirements of Section 01000 - Project Requirements.
2. Test sealant adhesion for each substrate required.
3. Install in proper relation with adjacent work.
4. Clean adjacent surfaces soiled with sealant immediately.

END OF DIVISION 7

DIVISION 8 - DOORS AND WINDOWS

SECTION 08110 - STEEL DOORS AND FRAMES

- Summary:
1. Provide Steel Doors and Frames:
 - a. Interior doors and frames.
 - b. Security screens and screen doors.
 - b. Remodel existing doors and frames.
 - c. Refinish existing doors and frames.
- Submittals:
1. Submit product data, shop drawings.
- Products:
1. Products: Ceco, Curries, Republic or approved equal complying with the following:
 2. Standards: ANSI/SDI-100, Recommended Specifications for Standard Steel Doors and Frames.
 3. Fire-Rated Assemblies: NFPA 80, and acceptable testing agency listing.
 4. Steel Doors: Standard seamless steel doors with hollow or composite construction.
 - a. Interior Doors: ANSI/SDI-100, Grade II, heavy-duty, minimum 18 gage cold-rolled steel, 1-3/4 inches thick.
 - b. Accessories: Sight proof stationary louvers where applicable.
 - d. Finish: Factory primed and field painted.
 5. Steel Frames:
 - a. Interior Frames: Welded type, 16 gage sheet steel, mitered or coped corners.
 - b. Accessories: Door silencers and plaster guards.
 - c. Finish: Factory primed and field painted.
- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.
 2. Comply with SDI-100, and NFPA 80 for fire-rated assemblies.

SECTION 08305 - ACCESS DOORS

- Summary:
1. Provide access doors for walls and ceilings.
- Submittals:
1. Submit product data.
- Products:
1. Products: J.L Industries, Milcor, Bilco or approved equal complying with the following:
 2. Frames: 16 gage stainless steel. AISI No. 4 satin finish with flange suitable for adjacent material.
 3. Doors: 14 gage stainless steel, AISI No. 4 satin finish doors.
 4. Door Type: Flush panel.
 5. Locking Devices: Screwdriver locks.

6. Fire Rating: NFPA 80.

Installation: 1. Comply with requirements of Section 01000 - Project Requirements.

SECTION 08530 - ALUMINUM SECURITY SCREENS AND SCREENED DOORS

Summary: 1. Provide aluminum screens and screen doors.

Submittals: 1. Submit product data, mockup, shop drawings.

Products: 1. Products: Centurion Security Screen Co., Ltd. or approved equal.
2. Security Screens: Equal to Model H-4000 Type III Impact Screen by Centurion Security Screen Co. complete with screen, subframe and accessories.
3. Screen Doors: Equal to Security Screen Door by Centurion Security Screen Co. complete with screen, door frame and accessories.
4. Finish: Factory applied finish. Color to be selected from manufacturer's standard colors.

Installation: 1. Comply with requirements of Section 01000 - Project Requirements.

SECTION 08710 - DOOR HARDWARE

Summary: 1. Provide hardware for swinging doors.
2. Remodel existing hardware.
3. Comply with code and accessibility requirements.

Submittals: 1. Submit product data, samples, proposed hardware schedule, maintenance data.

Products: 1. Products: Refer to Hardware Schedule for products. Equal products to those listed by other manufacturers approved by the Architect will be acceptable.
2. Product Requirements:
a. Hardware for Fire-Rated Openings: NFPA 80, and local requirements.
b. Handicapped Accessibility: ANSI A117.1, ADAAG, and local requirements.
c. Materials and Application: ANSI A156 series standards.
3. Locksets and Latchsets: Mortise type.
4. Lock Cylinders: Interchangeable type.
5. Keying: Match existing keying and key control system.
6. Hinges and Butts: Full-mortise type.
7. Closers: Barrier-free type.
10. Push/Pull Units: Through-bolted type.
11. Hardware Finishes: As indicated on Hardware Schedule

- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.
 2. Comply with DHI "Recommended Locations for Builder's Hardware" and hardware manufacturers instructions.
 3. Refer to the door schedule for hardware sets.

- Hardware Schedule:
1. H.W. Set 1 – Single Doors 2 & 5
3 ea McKinney Butts TA2314 4.5”x 4.5” US32D
1 ea Sargent Mortise Lever Lockset 8250 LNL US32D
1 ea Sargent Door Closer EN-351-O
3 ea McKinney Silencers.
1 ea McKinney Floor Stop FSD-05 US26D
 2. H.W. Set 2 – Single Door 3
3 ea McKinney Butts TA2314 4.5”x 4.5” US32D
1 ea Sargent Mortise Lever Lockset 8250 LNL US32D
1 ea Sargent Door Closer EN-351-O
3 ea McKinney Silencers.
 3. H.W. Set 3 – Single Doors 1 & 4
3 ea McKinney Butts TA2314 4.5”x 4.5” US32D
1 ea Sargent Mortise Lever Lockset 8237 LNL US32D
1 ea Sargent Door Closer EN-351-O
3 ea McKinney Silencers.

END OF DIVISION 8

DIVISION 9 - FINISHES

SECTION 09255 - GYPSUM BOARD ASSEMBLIES

- Summary:
1. Provide Gypsum Board Assemblies:
 - a. Interior walls, partitions, and ceilings for tape and joint compound finish.
 - b. Cementitious backer units for application of tile.
 - f. Remodeling gypsum drywall systems at areas of new construction.
 2. Gypsum Board Attachment:
 - a. Gypsum board screw-attached to steel framing and furring.
- Submittals:
1. Submit product data.
- Products:
1. Products: By USG Corporation, G-P Gypsum, National Gypsum Company or approved equal complying with the following:
 2. Gypsum Board:
 - a. Gypsum Wallboard: ASTM C 36, regular, foil-backed, and fire-rated types, [3/8 inch] [1/2 inch] [5/8 inch] typical thickness.
 - b. Water-Resistant Gypsum Backing Board: ASTM C 630, regular and fire-rated types, 5/8 inch typical thickness.
 - c. Joint Treatment: ASTM C 475 and ASTM C 840, 3-coat system.
 - d. Installation Standard: ASTM C 840.
 3. Cementitious Backer Units:
 - a. Type: ANSI A 118.9, cement-coated Portland cement panels.
 - b. Thickness: 5/8 inch nominal.
 4. Trim Accessories:
 - a. Material: Metal or plastic trim.
 - b. Types: Cornerbead, edge trim, and control joints.
 5. Steel Framing for Walls and Partitions:
 - a. Steel Studs and Runners: ASTM C 645, 25 gage (.0179 inch)] steel studs, 3-5/8 inch typical depth, unless otherwise indicated.
 - b. Furring Channels: ASTM C 645, 25 gage (.0179 inch).
 - c. Auxiliary Framing Components: Furring brackets, resilient furring channels, Z-furring members, and non-corrosive fasteners.
 - d. Installation Standard: ASTM C 754.
 6. Steel Framing for Suspended and Furred Ceilings:
 - a. Furring Channels: ASTM C 645, 25 gage (.0179 inch) standard channels unless otherwise indicated.
 - b. Steel Studs: Match steel studs used for walls.
 - c. Accessories: Hangers and inserts.
 - d. Installation Standard: ASTM C 754.
 7. Auxiliary Materials:
 - a. Gypsum board screws, ASTM C 1002.
 - b. Fastening adhesive.

- c. Concealed acoustical sealant.
- d. Mineral fiber sound attenuation blankets.
- e. Polyethylene vapor retarder, 6 mils.

- Installation:
- 1. Comply with requirements of Section 01000 - Project Requirements.
 - 2. Comply with standards referenced above and ASTM C 840 and GA 216.
 - 3. Install wall and ceiling framing members at 16" o.c. unless otherwise indicated.
 - 4. Install joints only over framing members. Do not allow butt-to-butt joints.
 - 5. Provide blocking for items such as railings, grab bars, casework, toilet accessories, and similar items.
 - 6. Provide acoustical sealant at runner tracks, wall perimeters, openings, expansion, and control joints.
 - 7. Install gypsum board assemblies true, plumb, level and in proper relation to adjacent surfaces.
 - 8. Where new partitions meet existing construction, remove existing cornerbeads to provide smooth transition.
 - 9. Provide 3-coat joint treatment such that, after finishing, joints are not visible.
 - a. Sand and leave ready for no-texture finish painting.

SECTION 09300 - TILE

- Summary:
- 1. Provide tile for the following applications:
 - a. Wall tile over tile backer board.
 - b. Floor tile over concrete slab.
 - 2. Remodeling of existing tile work where indicated.

- Submittals:
- 1. Submit product data, samples.

- Products:
- 1. Products: By Dal-Tile, American Olean, Lone Star Ceramics or approved equal complying with the following ;
 - 2. Tile Materials: ANSI A 118 series standard specifications.
 - 3. Unglazed Ceramic Mosaic Tile:
 - a. Type: Porcelain factory-mounted flat tile.
 - b. Size: 2 by 2 inches.
 - c. Thickness: 1/4 inch nominal.
 - d. Face: Plain face or patterned face with cushion edges.
 - e. Color: To be selected by Architect from full range of colors.
 - 4. Tile Accessories:
 - a. Matching trim units.
 - b. Marble thresholds.
 - 5. Setting Materials:
 - a. Latex-Portland cement mortar, ANSI A118.4.
 - 6. Grout:
 - a. Latex-Portland cement grout, ANSI A118.6.

7. Setting Accessories:
 - a. Membrane waterproofing under tile.
 - b. Cementitious tile backer board.
14. Elastomeric Sealants:
 - a. One-part mildew-resistant silicone sealant for non-traffic areas.

- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.
 2. Comply with ANSI 108 series standard specifications and Tile Council of America, Handbook for Ceramic Tile Installation.
 3. Layout tile in grid pattern with alignment of grids, to provide uniform joint width, and to minimize cutting.
 4. Grout, cure, clean and protect tile surfaces.

- Schedule:
1. Toilet Room Walls: Unglazed ceramic mosaic tile over cementitious backer board with thin-set latex-Portland cement mortar and latex-Portland cement grout.
 2. Toilet Room Floors: Unglazed ceramic mosaic tile over concrete slab with latex-Portland cement mortar and latex-Portland cement grout.]

SECTION 09511 - ACOUSTICAL CEILINGS

- Summary:
1. Remodel existing acoustical lay-in ceilings, trim, and metal suspension system where affected by restroom improvements.

- Submittals:
1. Submit product data, samples.

- Products:
1. Products: Match existing.
 2. Acoustical Panel Ceilings: Match existing.
 3. Suspension Systems: Match existing

- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.
 2. Measure and layout acoustical ceilings to avoid less than 1/2 panel units whenever practical.
 3. Install suspension systems in accordance with ASTM C 636.
 4. Install panels with pattern or grain matching existing direction.

SECTION 09660 - RESILIENT FLOORING

- Summary:
1. Remodel existing resilient flooring where affected by restroom improvements. .

- Submittals:
1. Submit product data, samples.

- Products:
1. Products: Match existing
 2. Tile Flooring: Match existing.

3. Sheet Flooring: Match existing.
4. Auxiliary Materials: Match existing.
 - a. Edge strips and terminations.
5. Installation Accessories:
 - a. Concrete Slab Primer: Nonstaining type.
 - b. Trowelable Underlayments and Patching Compounds: Latex-modified, Portland-cement-based formulation.
 - c. Adhesives: Water-resistant type.

- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.
 2. Prepare surfaces by cleaning, leveling and priming.
 3. Level to 1/8 inch in 10 feet tolerance.
 4. Install tile with tight joints and required patterns.

SECTION 09678 - RESILIENT WALL BASE AND ACCESSORIES

- Summary:
1. Remodel existing resilient wall base and accessories where affected by restroom improvements.

- Submittals:
1. Submit product data, samples.

- Products:
1. Products: Match existing.
 2. Resilient Wall Base: Match existing.
 3. Resilient Accessories: Match existing.
 4. Installation Accessories:
 - a. Adhesives: Water-resistant type.

- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.

SECTION 09900 - PAINTING

- Summary:
1. Provide painting and surface preparation for interior and exterior unfinished surfaces as scheduled.
 2. Provide painting and surface preparation of exposed mechanical and electrical piping, conduit, ductwork, and equipment.
 3. Provide repainting and surface preparation at areas of remodeling.
 4. Provide painting of entire surface where patch painting is required.

- Submittals:
1. Submit product data, samples, 1 foot by 1 foot mockup of each color, extra stock consisting of 1 unopened gallon of each type of paint used.

- Products:
1. Products: Sherwin Williams, Benjamin-Moore, ICI, Glidden, Kelly Moore, KWAL or approved equal subject to specification compliance.
 2. Regulations: Compliance with VOC and environmental regulations.
 3. First-line commercial-quality products for all coating systems.

- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.
 2. Provide field-applied mock-ups of each color and finish selected on actual surfaces to be painted.
 3. Test sample area for adhesion for each type of paint.
 4. Remove cover plates and protect hardware and adjacent surfaces.
 5. Sand before painting until smooth and flat and sand between coats.
 6. Apply paint to achieve manufacturer's recommended dry film thicknesses.
 7. Paint entire surface where patch painting is required.
 8. Recoat areas which show bleed-through or defects.
 9. Clean paint spatter from adjacent surfaces and glass.
 10. Touch-up damaged surfaces at completion of construction.
- Schedule:
1. Provide paint systems complying with the following schedule.

INTERIOR PAINT SCHEDULE

Gypsum Drywall Walls	Flat Gloss	1 coat latex primer 2 coats latex finish
Gypsum Drywall Ceilings	Flat Gloss	1 coat latex primer 2 coats latex finish
Gypsum Drywall Walls and Ceilings in Restrooms	Semi Gloss With Smooth Texture.	1 coat latex primer 2 coats alkyd finish
Ferrous Metals	Semi Gloss	1 coat rust-inhibiting primer 2 coats alkyd enamel

EXTERIOR PAINT SCHEDULE

Ferrous Metal	Semi Gloss	1 coat, rust-inhibiting primer 2 coats alkyd enamel finish
Galvanized Metal	Semi Gloss	1 coat, galvanized metal primer 2 coats alkyd enamel finish

END OF DIVISION 9

DIVISION 10 - SPECIALTIES

SECTION 10155 - TOILET COMPARTMENTS

- Summary: 1. Provide toilet compartments.
- Submittals: 1. Submit product data, samples, shop drawings.
- Products: 1. Products: Global, Bobrick, Comtec, Santana or approved equal complying with the following:
2. Type and Mounting:
a. Compartments: Floor and ceiling supported compartments.
b. Style: Standard privacy style.
c. Color: Selected by Architect from manufacturer's full range of colors.
3. Toilet Compartment Materials:
a. Soild Polymer Compartments: Constructed from high-density polyethelene (HDPE) resins.
- Installation: 1. Comply with requirements of Section 01000 - Project Requirements.

SECTION 10310 – OUTDOOR GAS GRILLE

- Summary: 1. Provide built-in outdoor gas grille.
- Submittals: 1. Submit product data, shop drawings, warranty, maintenance data.
- Products: 1. Products: Refer to Section 01020 Allowances.
- Installation: 1. Comply with requirements of Section 01000 - Project Requirements.

SECTION 10425 - SIGNS

- Summary: 1. Provide building signage to comply with code and accessibility regulations.
- Submittals: 1. Submit product data, samples.
- Products: 1. Products: Andco Industries, ASI Sign Systems, Vomar Products or approved equal complying with the following:
2. Panel Signs:
a. Type: Unframed] type with raised border.
b. Size: 6 inches wide by 8" high.

- c. Material: Aluminum material.
 - d. Copy: Raised lettering with Grade II Braille and Accessibility Symbol complying with TAS and ADAAG standards. Signs shall be for first floor staff restrooms and second floor staff restroom.
3. Metal Finishes:
 - a. Aluminum: Baked enamel finish with anodized aluminum copy and border.
 4. Anchorage: Vandal resistant fasteners.

- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.
 2. Mount signs at 60 inches above finish floor to centerline on strike side of door approximately 8 inches from jamb.

SECTION 10530 – PROTECTIVE COVERS

- Summary:
1. Provide canopies and associated structural components for the complete installation as indicated including:
 - a. Decking
 - b. Facia/Gutter
 - c. Anchors
 - d. Columns
 - e. Beams

- Submittals:
1. Product Data: Manufacturer's product data, specifications, component performance data and installation instructions.
 2. Shop Drawings: Detailed drawings, layout of canopy and walkway systems, bent locations (including drain columns and wet bents), all mechanical joint locations with complete details, connection, jointing and accessories. Include details of concrete footings and bent anchorage.
 3. Calculations: Provide signed and sealed structural calculations for the proposed canopies and walkway covers, by a professional registered structural engineer registered in the State of Texas.

- Products:
1. Products: Aluminum canopy and walkway cover systems manufactured by Superior Metal Product Company, Inc., Dittmer Architectural Aluminum, Peachtree Protective Covers, or approved equal, ASI Sign Systems, Vomar Products or approved equal complying with the following:
 - 2. Roof Panels: Extruded aluminum from alloy 6063, temper T6, with nominal wall thickness of .062".
 - 3. Facia/Gutter: Extruded aluminum from alloy 6063, temper T6, with nominal wall thickness of .094".
 - 4. Columns: Extruded 4"x4" with nominal wall thickness of .125".

5. Finish: Factory painted with electron statically applied, high solid, polyester enamel or satin anodized 204-R1 meeting AA-M-10C-22A-21. Color to be selected from manufacturer's standard colors

Installation: 1. Comply with requirements of Section 01000 - Project Requirements.

SECTION 10800 - TOILET AND BATH ACCESSORIES

Summary: 1. Provide toilet and bath accessories and metal framed mirrors.

Submittals: 1. Submit product data, samples.

Products: 1. Products: Bobrick or approved equal subject to specification compliance.
2. Toilet Accessories:
a. Toilet tissue dispensers, doubleroll: Bobrick B-4388. One each in each first floor and second floor staff restrooms; one in each consumer restroom toilet stall. (TTD)
b. Electric hand dryers: Bobrick B-750, One in each restroom. (EHD)
c. Grab bars: Bobrick B-6806x36 and B-6806x42. One each in each first floor and second floor staff restrooms; one in each consumer restroom accessible toilet stall. (GB36 & GB42)
d. Sanitary napkin disposal units: Bobrick B-4353. One in women's first floor staff restroom; one in second floor staff restroom; one in each women's consumer restroom toilet stall. (SND)
e. Soap dispensers: Bobrick B-822. One in each restroom. (SD)
g. Framed mirrors: Bobrick B-165-1836. One above each lavatory.
h. Robe hooks: Bobrick B-983. One outside each shower stall. (RH)
i. Shower curtain rod: Bobrick B-6047. One at each shower stall. (SCR)

Installation: 1. Comply with requirements of Section 01000 - Project Requirements.

END OF DIVISION 10

DIVISION 15 - MECHANICAL

SECTION 15400 - PLUMBING

- Summary:
1. Provide plumbing, waste, and vent systems indicated on the drawings.
 2. Provide water supply and distribution system sized for domestic systems as indicated on the drawings.
 3. Provide natural gas distribution system piping, specialties, and accessories as indicated on the drawings.
 4. Provide sewerage and drainage systems, specialties, and accessories as indicated on the drawings.
 5. Modify, relocate and extend existing service to accommodate new work as indicated on the drawings.
 6. Do not cut structural elements without prior written approval.
 7. Refer to notes on plumbing drawings. If discrepancy exists between notes on drawings and this specification, notes on drawings shall govern.
- Submittals:
1. Submit product data, piping types by application, warranties, operating and maintenance data.
- Products:
1. Provide new materials suitable for service intended as indicated on the plumbing drawings.
 2. Provide accessory materials such as hangers and pipe insulation.
 3. Provide fixtures complying with water consumption requirements and accessibility requirements.
- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.
 2. Comply with applicable codes, regulations, ordinances and requirements of authorities having jurisdiction. Vent all fixtures.
 3. Conceal piping to the greatest extent practical.
 4. Maintain indicated fire ratings of walls, partitions, ceilings, and floors at penetrations. Seal with firestopping to maintain fire rating.
 5. Test all systems for proper operation.
 6. Instruct Owner's personnel in proper operation of systems.
- Fixture Schedule:
1. Refer to fixture schedule on plumbing drawings.

SECTION 15500 - HEATING, VENTILATING, AND AIR CONDITIONING

- Summary:
1. Provide equipment, systems, and controls ventilation systems indicated on the drawings.
 2. Coordinate location of ductwork to avoid interference with location of electrical and plumbing systems.
 3. Modify, relocate and extend existing service to accommodate new work as indicated on the drawings.

4. Do not cut structural elements without prior written approval.
5. Refer to notes on HVAC drawings. If discrepancy exists between notes on drawings and this specification, notes on drawings shall govern.

Design
Conditions:

1. Refer to notes on HVAC drawings.

Submittals:

1. Submit product data, warranties, operating and maintenance data,

Products:

1. Provide new materials suitable for service intended as indicated on the HVAC drawings.

Installation:

1. Comply with requirements of Section 01000 - Project Requirements.
2. Comply with applicable codes, regulations, ordinances and requirements of authorities having jurisdiction and SMACNA recommendations.
3. Conceal piping and ductwork to the greatest extent practical.
4. Center ceiling-mounted elements in center of ceiling panels where applicable.
5. Insulate piping and ductwork. Provide vapor barrier on insulated piping operating below 60 degrees F.
4. Maintain indicated fire ratings of walls, partitions, ceilings, and floors at penetrations. Seal with firestopping to maintain fire rating.
5. Test all systems for proper operation.
6. Instruct Owner's personnel in proper operation of systems.

END OF DIVISION 15

DIVISION 16 - ELECTRICAL

SECTION 16000 - ELECTRICAL

- Summary:
1. Provide electrical systems for the following:
 - a. Power.
 - b. Lighting, interior and exterior.
 - c. Exit lighting.
 - d. Emergency lighting.
 - e. Electric service for site lighting to extent indicated on the drawings.
 2. Modify, relocate and extend existing service to accommodate new work as indicated on the drawings.
 3. Coordinate location of electrical systems and fixtures to avoid interference with plumbing and HVAC systems.
 4. Do not cut structural elements without prior written approval.
 5. Refer to notes on electrical drawings. If discrepancy exists between notes on drawings and this specification, notes on drawings shall govern.
- Submittals:
1. Submit product data, warranties, operating and maintenance data.
- Products:
1. Provide new materials suitable for service intended as indicated on the electrical drawings. Provide accessories such as controls, cover plates, and connections to equipment. Finishes as indicated on drawings
- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.
 2. Comply with applicable codes, regulations, ordinances and requirements of authorities having jurisdiction and National Electrical Code.
 3. Provide core drilling as required for new work.
 4. Conceal conduit to the greatest extent practical and as indicated on the drawings.
 6. Install light switches at uniform height above finished floor. Locate switches within rooms at strike side of door unless noted otherwise. Comply with TAS and ADAAG accessibility requirements.
 7. Install thermostats centered above light switches where applicable.
 8. Gang-mount multiple switching locations. Mount multiple types of controls as close together as possible and in-line with each other at uniform height above finished floor unless noted otherwise.
 9. Group multiple junction boxes, telephone and electrical outlets together on walls. Avoid back-to-back box locations.
 10. Maintain indicated fire ratings of walls, partitions, ceilings, and floors at penetrations. Seal with firestopping to maintain fire rating.
 11. Test all systems for proper operation.
 12. Label circuits in electrical panels.
 13. Instruct Owner's personnel in proper operation of systems.
- Fixture
1. Refer to fixture schedule on electrical drawings.

Schedule:

END OF DIVISION 16