

**{TOP - always delete from here as final edit}**

**GRAY = WON'T BE USED THIS JOB**

**YELLOW SECTION TITLE = NEEDS COORDINATION WITH DRAWINGS**

**Yellow Text = Needs Editing / Review**

**NO HIGHLIGHT = EDITED AND READY TO GO**

### **SpecNotes Procedure**

1. Start with Master and proceed thru step 4 using Master. Do not delete anything until THIRD last step. Use SpecNotes-MASTER-NF if project is for Neighborhood Foundations.
2. Change highlighting on each Section so that parts not used are grayed out and everything else is yellow. Everything should be gray or yellow highlight at this point. **RED SECTION TITLES means never used section needing research.**
3. Within each section, remove yellow highlight from portions that are to be included, add new text as needed and gray out parts that are not appropriate.
4. When SpecNotes are fully edited, all yellow is gone, leaving only gray highlighted text and unhighlighted text.
5. Copy this edited master (in Word), changing the name to reflect the project, eg. SpecNotes Master becomes SpecNotes Project ID.
6. In the PROJECT COPY of the master, delete all grayed-out text. Change formatting as necessary. It may be necessary to change the line spacing format to fit the available length. Use Ariel, 11 pt. On the drawings create the titles – GENERAL REQUIREMENTS and SPECIFICATIONS at about 1/4" and make bold.
7. Change the width of the document including margins to 5" wide.
8. Insert project SpecNotes' Division 1 on Sheet G-002 (for Gen Reqmts) and Divisions 2 through 14 on Sheet A-801 (and following sheets as required). Adjust document width only if necessary, so text is reduced to no less than 1/16" height to avoid using more than 1 sheet; otherwise use additional sheet(s).

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## **NOTE: APPLIES TO THE WORK OF ALL TRADES**

### **DIVISION 1 -- GENERAL REQUIREMENTS**

#### **01100 - SUMMARY**

The Project consists of office remodeling. Included are demolition and removal of existing partitions and finishes and the installation of new partitions and finishes. Mechanical and electrical work is required. Furnishings are provided by the Owner. The Work must be completed in three phases as outlined below.

The Project is a Rental Housing Unit.

The existing structure is part masonry and part wood frame.

The existing wood frame portion of the existing building will be demolished and replaced with a new frame addition with slab on grade.

The existing masonry portion will be remodeled.

The Plumbing, HVAC and Electrical Work will be substantially replaced.

Site work is included.

There is no site work.

All work on the floor below must be scheduled in advance when the space will be unoccupied. Protect all finishes, furniture and equipment from dust and dirt. Temporarily move and replace furniture and equipment. Replace damaged finishes to Owner's satisfaction.

The Contract is a Construction Management Agreement with each Contractor having a prime contract based on a stipulated price directly with the Owner.

The Contract is a single prime contract based on a stipulated price.

Bid bond and Performance and Payment bonds are required.

Bid bond and Performance and Payment bonds may be required for portions of the Work.

PHASING OF THE WORK The Project must be completed in three sequential phases to accommodate continuous occupancy of this floor of the building.

PHASE 1A: Complete the demolition and entire remodeling of Rooms 512 and 516 including Certificate of Occupancy before starting the Work of any other phase. This Phase 1A is approximately 439 SF. See the drawings for the demarcation between Phases 1A and 1B.

PHASE 1B: Once Phase 1A has been occupied, begin Phase 1B. Complete the demolition and entire remodeling of Rooms 521, 521A, 521B, 521C, and 521D including Certificate of Occupancy before starting the Work of any other phase. This Phase 1B is approximately 1,016 SF.

PHASE 2: Once Phase 1B has been occupied, begin Phase 2, which consists of Rooms 540 through 547. This Phase 2 is approximately 2,262 SF.

The CHURCH PHASE of the Project is the Scope of Work under consideration. The CHURCH PHASE of the Project includes improvements to many of its fixtures and furnishings including lighting and acoustical systems, relocation and replacement of the baptismal font, refurbishing of the confessionals, and updating of the narthex, which will include replacement of the rest rooms. The Church electrical service will be improved to support this work and other potential future work.

The Owner will supply appliances and deadbolts for installation by the Contractor.

The Owner will provide remediation of Lead Based Paints before demolition may begin.

The Owner will provide termite treatment before backfilling foundations and placing floor slab, Coordinate and cooperate.

Substantial Completion for all Work must be achieved before June 1, 2011.

## **01200 - PRICE AND PAYMENT PROCEDURES**

Schedule of Values: Provide a schedule of values within 15 days of the Notice to Proceed in the format requested by the Owner.

Applications for Progress Payments: Submit Applications for Payment in triplicate on a calendar month basis using AIA Forms G702 and G703. List any approved Change Orders as separate line items. Submit additional documentation as required by the Agreement between Owner and Contractor.

### **01210 - ALLOWANCES**

Cash Allowances: Only the cost of the product to the Contractor or subcontractor shall be included in the allowances. Delivery, taxes, handling, storage, protection and the labor for installation are not part of the Allowance. Include delivery, taxes, handling, storage, protection and labor in your bid.

The amount of the allowance is specified in the technical specifications. (if any)

Section 02830 - Site Fencing and Gates: Include the stipulated sum of \$1,000 for the fence shown on the site plan.

Section 02900 - Plantings: Include the stipulated sum of \$1,500.00 for trees, shrubs and perennial plants.

Section 05700 - Ornamental Fence: Include the stipulated sum of \$1,000 for the railing and gate shown on the site plan.

Section 10800 - Toilet & Miscellaneous Accessories: Include the stipulated sum of \$1,500 for the accessories shown on the drawings.

### **01220 - ALTERNATES**

Alternates are described on the drawings (if any).

Alternates are described here and on the drawings.

Alternate T-1: 1950s TR TILE

The base bid for this alternate is providing the preparation and installation of a special coating over the existing Structural Glazed Tile. The Alternate T-1 eliminates the special coating system TI-OP-3S and provides instead a new wall tile installed over the existing SGT. See 09300 Tile for tile, thin-set mortar and grout.

Alternate T-2: GYM TR TILE

The base bid for this alternate is providing the preparation and installation of a special coating over the existing Structural Glazed Tile. The Alternate T-2 eliminates the special coating system TI-OP-3S and provides instead a new wall tile installed over the existing SGT. See 09300 Tile for tile, thin-set mortar and grout.

### **01300 – ADMINISTRATIVE REQUIREMENTS**

The Owner will schedule a Pre-Construction Meeting after the Notice to Proceed.

The Contractor will record and distribute minutes within two days of every meeting.

The Contractor will schedule and administer Progress Meetings at two week intervals.

The Contractor will provide a Construction Schedule within 15 days of the Notice to Proceed and will update the schedule at least once per month.

The Contractor will submit Product Data, Shop Drawings, and Samples to the Architect in a timely manner to allow 10 days for review and return of the Submittals to the Contractor.

Submittals in Portable Document Format [PDF] are preferred, except Samples. These will be reviewed, annotated and returned by email. Submit not more than three paper submittals. One will be retained by the architect. If additional copies are required for distribution, make additional copies from the marked-up and returned submittals.

Submit three samples; two will be retained by the Architect.

Submit two samples; one will be retained by the Architect.

#### **01400 – QUALITY REQUIREMENTS**

Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce first-class workmanship and quality.

Comply with every manufacturers' instructions, including each step in sequence.

Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding

Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

Have Work performed by persons qualified to produce required and specified quality.

Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.

Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

The Owner will employ and pay for services of an independent testing agency to perform testing and inspections. Cooperate with the testing agency.

#### **01500 - TEMPORARY FACILITIES AND CONTROLS**

Provide and pay for all electrical power, lighting, water, heating and cooling, and ventilation required during construction.

Provide for all electrical power, lighting, water, heating and cooling, and ventilation required during construction. Make use of existing utilities. Obtain Owner's approval of the use of any existing equipment or devices. The Owner will pay charges for power, water and gas.

Provide and pay for telephone and email service to the construction site.

Provide and maintain sanitary facilities and enclosures. Existing sanitary facilities may not be used except by specific approval by the Owner for specific time periods.

Provide barriers to prevent unauthorized entrance to site of remodeling.

Provide barriers to prevent unauthorized entrance to building and to site.

Provide all dust barriers and other controls necessary to prevent dust and dirt from entering other occupied areas of the building.

Install tight-fitting temporary filters in all return air ducts to prevent dust from entering existing or new systems.

Coordinate access, haul routes and parking with the governing authorities and the Owner.

Provide waste removal facilities and services as required to maintain the site in a clean and orderly condition.

Provide braced supports for single-sided 4'x4' project identification sign provided by Owner.

Provide braced, single-sided 8'x8' project identification sign from PDF provided by Architect.

Remove Temporary Utilities, Facilities and Controls prior to Substantial Completion and repair any damage caused by installation or use of temporary work.

Provide Owner with haul tickets or similar documentation to verify that all debris has been disposed in a licensed landfill.

#### **01510 - TEMPORARY UTILITIES**

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#### **01575 - TEMPORARY EROSION AND SEDIMENTATION CONTROL**

Comply with all requirements of US EPA for erosion and sedimentation control.

Develop an Erosion and Sedimentation Prevention Plan; obtain and pay for permits from the authority having jurisdiction.

Provide a combination of staked, straw bales and silt fence fabric to control sedimentation runoff from the site as required by the authorities having jurisdiction.

Maintain Erosion and Sedimentation control in good condition until no longer needed. Remove.

#### **01600 – PRODUCT REQUIREMENTS**

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

Do not use products made using or containing asbestos, CFCs or HCFCs.

Basis of Design means that the products listed meet the project requirements. Other products that can be shown to be equivalent to the Basis of Design may be used if approved by the Architect. Submit complete information to show equivalence.

Substitutions will not be considered when they are indicated or implied on shop drawings or product data submittals without a separate written request, or when acceptance will require revision to the

Contract Documents. A separate written request must show that quality, warranty, installation and coordination with other work is identical or superior; that any subsequent costs made necessary by the substitution will be borne by the Contractor, including review and redesign services associated with re-approval by authorities having jurisdiction.

Store and protect materials in accordance with manufacturer's instructions with seals and labels intact.

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

#### **01700 – EXECUTION REQUIREMENTS**

Examination: Verify that site conditions and substrate surfaces are acceptable for subsequent work.

Preparation: Clean substrate, seal cracks, and apply recommended primers, sealers, conditioners before proceeding.

General Installation Requirements: Install all products as specified and in accordance with the manufacturer's instructions and recommendations. Install plumb and level with neat transitions to adjacent surfaces.

Cutting and Patching: Obtain written approval from the Architect before cutting any structural or weather resistant work. Patch or replace surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. Repair substrate prior to patching finish. Finish patches to produce uniform finish and texture over entire area. When finish cannot be matched, refinish entire surface to nearest intersections.

Cleaning: Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition. Prior to Substantial Completion, clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces. Replace all filters. Sweep paved areas; clean debris from site, roofs, gutters, downspouts.

Protect installed work from damage by construction operations.

Adjust operating products and equipment to ensure smooth and unhindered operation.

#### **01780 - CLOSEOUT SUBMITTALS**

Record drawings and manuals are required from all trades.

Maintain at the site, one copy of all drawings, specifications, addenda, approved shop drawings, change orders and other modifications, in good order and marked to record all changes made during construction. These drawings shall be marked "Official Field Copy" and shall be available to the Owner's Representative. The drawings, marked to record all changes made during construction, shall be delivered to the Owner upon completion of the work as part of the Closeout procedure.

Submittals required at Closeout include Project Record Documents, Operation and Maintenance Manuals, Warranties and Bonds, Consent of Surety, Waiver of Liens.

Closeout submittals are required from all trades.

# **SPECIFICATIONS**

## **DIVISION 2 -- SITE CONSTRUCTION**

### **02060 - DEMOLITION AND REMOVALS**

See the drawings for the extent of building demolition.

See the drawings for the portion of the existing structure which remains and must be protected.

Do not begin demolition until receipt of notification to proceed with demolition from Owner.

Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public. Obtain required permits. Conduct operations to minimize effects on and interference with adjacent structures and occupants. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon or limit access to their property.

Protect existing structures and other elements that are not to be removed.

Protect existing utilities to remain from damage.

Remove debris, junk and trash from site. Leave site in clean condition, ready for subsequent work, and clean up spillage and wind-blown debris from public and private property.

Provide Owner with haul tickets or similar documentation to verify that all debris has been disposed in a licensed landfill.

### **02200 - SITE PREPARATION**

Remove scoreboard, backstop and "C". Store where directed by Owner.

Remove vegetation as indicated on the drawings. Remove and stockpile topsoil. Remove other existing improvements as indicated on the drawings.

### **02223 – MINOR DEMOLITION FOR REMODELING**

Erect and maintain temporary partitions to prevent spread of dust, odors, and noise to permit continued building occupancy.

Protect existing materials and building systems that are not to be demolished.

Disconnect, remove, and identify designated utilities within demolition areas.

Demolish in an orderly and careful manner. Protect existing supporting structural members and buildings.

Remove demolished materials from site except where specifically noted otherwise. Do not burn or bury materials on site. Dispose of materials legally.

Remove materials as demolition progresses. Upon completion of demolition, leave areas in clean condition.

Provide Owner with haul tickets or similar documentation to verify that all debris has been disposed in a licensed landfill.

Remove temporary facilities.

SALVAGE ALL DOORS AND HARDWARE that are shown to be removed. Prevent damage to removed items. Replace damaged doors and hardware. Any removed doors or hardware that are undamaged may be re-used in the work. Doors and hardware shall be re-used in the work. Unused Other

Undamaged doors and hardware shall be turned over to the Owner.

#### **02310 - GRADING**

Restore grades and lawn areas; re-spread topsoil to a uniform depth. Import topsoil as needed to maintain a minimum depth of 4" for all sodded and planting areas.

Refer to the Geotechnical Report prepared by Thelen & Assoc. for additional information. Comply with all recommendations.

#### **02315 - EXCAVATION**

Excavate soil to lines and levels required for the installation of the work.

Refer to the Geotechnical Report prepared by Thelen & Assoc. for additional information. Comply with all recommendations.

#### **02316 - FILL AND BACKFILL**

See Structural Drawings for sequence of operations and bracing requirements before backfilling.

Earth fill and backfill are on-site suitable soils placed and compacted in 8" lifts. Demolished masonry and cementitious materials are suitable earth fill materials if crushed to less than 2" in any dimension and mixed with sand or soil.

Granular or gravel fill and backfill are #57 gravel, placed in 8" lifts and compacted with a vibrating plate.

Provide earth fill outside the building and granular fill inside the building.

Cooperate with Owner's Quality Testing Firm and notify them 24 hours in advance of placing fill.

Refer to the Geotechnical Report prepared by Thelen & Assoc. for additional information. Comply with all recommendations.

#### **02317 - TRENCHING FOR SITE UTILITIES**

Trench for utilities in the narrowest trench feasible to maintain safety.

Provide sand bedding and cover for all utilities.

Below planted areas, backfill with compacted earth.

See Geotechnical Report for compaction requirements.



Below the building and paving backfill with controlled density fill to subgrade.

**02510 - WATER DISTRIBUTION**

Submit product data, shop drawings, samples, warranty.

Copper line in PVC pipe from Knochleman Bldg

**02535 - SANITARY SEWER PIPING**

Submit product data, shop drawings, samples, warranty.

Connect to sewer at grease trap outside kitchen

**02551 - SITE GAS DISTRIBUTION**

Submit product data, shop drawings, samples, warranty.

Extend from Knochleman Bldg

**02582 - UNDERGROUND ELECTRICAL DUCTS AND MANHOLES**

Submit product data, shop drawings, samples, warranty.

New feed from transformer near gym

**02620 - SUBDRAINAGE**

Submit product data.

Provide 5" perforated PVC with geotextile cloth wrap at perimeter of below grade foundation walls and elsewhere as shown. Connect to existing storm lines or extend to daylight with a concrete collar for pipe.

See drawings for subdrainage required to drain subgrade during construction.

**02635 - STORM DRAINAGE**

Submit product data.

Provide products by ADS, Basis of Design. See drawings for specific products required. Provide Nyoplast Drain Basins. Provide ductile iron drop-in grates.

Pipe is corrugated polyethelene [PE] or smooth wall polyvinyl chloride [PVC] as noted on the drawings.

Tie into existing storm system near running track.

**02721 - AGGREGATE BASE COURSE**

Provide compacted #57 gravel x 4" thick below all building slabs on grade, concrete paving and sidewalks.

**02741 - BITUMINOUS CONCRETE PAVING**

Provide full depth asphalt at restorations. Match thickness of existing paving. Place in two courses. Provide fine aggregate surface (wearing) course of 1-1/2".

#### **02751 - PORTLAND CEMENT CONCRETE PAVING**

Submit design mix.

Match existing thickness at restorations; and provide thickness and reinforcing (if any) as shown on the drawings for paving and sidewalks. Provide 4000 psi concrete, 5% air entrained. Provide reinforcing (if any) as called for on the drawings.

Provide sponge rubber expansion joint fillers.

At restorations, match finish and jointing.

New Paving Slabs: Provide light broom finish. Provide sawn control joints as shown. Provide spray on curing compound.

New Sidewalks: Provide light broom finish. Provide hand tooled joints as shown. Provide spray on curing compound.

See schedule on drawings for curing and finishing requirements.

Cooperate with Owner's Quality Testing Firm and notify them 24 hours in advance of placing concrete.

#### **02830 - SITE FENCING AND GATES**

Submit product data, and shop drawings of fences and gates (if any).

Re-establish existing fencing, match existing.

Provide new wood fence as shown on the drawings and provided for by allowance in Section 01210.

#### **02834 - MODULAR CONCRETE RETAINING WALLS**

Submit product data, shop drawings, samples.

See drawings for Basis of Design.

#### **02843 - PARKING BUMPERS**

Provide 5" high x 8' long reinforced precast concrete bumpers with coped base for drainage. Basis of Design is Baxter Concrete Products.

Drill pavement and anchor each bumper with two driven 5/8" diameter steel rods.

See drawings for locations and quantity.

#### **02921 - SEEDING**

Submit proposed mix prepared by the local Cooperative Extension Service.

Restore all disturbed areas. Protect seeded areas from erosion.

Assume that all Planting Areas will be seeded.

### **02930 - EXTERIOR PLANTS**

Submit planting plan after discussion with Owner on requirements.

Propose plantings, including trees, shrubs, perennial plants and mulch. See Allowance in Section 01210.

## **DIVISION 3 -- CONCRETE**

### **03100 - INSULATED CONCRETE FORMS**

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### **03300 - CAST-IN-PLACE CONCRETE**

Submit proposed mix designs, and shop drawings of reinforcing steel.

Provide 4000 psi concrete unless shown otherwise on the drawings.

Provide 10 mil polyethylene vapor retarder below all building slabs. Lap joints 6" and tape. Repair any damage immediately before placing concrete.

Provide small aggregate mix for stair pan concrete fill.

Provide reinforcing as shown on the drawings, grade 40 steel.

Provide sawn contraction joints in all building slabs on grade to form panels no larger than 13' x 13'.

Building Slabs: Provide method of curing that is compatible with finished flooring. Provide steel trowel finish.

See schedule on sheet AE-60X for curing and finishing requirements.

See structural drawings for additional requirements.

See drawings for additional requirements.

Cooperate with Owner's Quality Testing Firm and notify them 24 hours in advance of placing concrete.

## **DIVISION 4 -- MASONRY**

### **04720 - CAST STONE**

Submit product data, shop drawings, samples, warranty.

Cast stone is Arriscraft Nutmeg or equal in appearance. Nominal 4" thick units.

8" high band at perimeter of building

#### **04810 - UNIT MASONRY ASSEMBLIES – General**

Submit product data.

Submit samples for approval of color.

Provide an allowance of \$750 per thousand brick.

Accessories, anchors and ties are Hohmann & Barnard product numbers, Basis of Design.

Mortar is ASTM C 270, using the Proportion Specification.

Provide Type M mortar for foundation walls.

Grout is ASTM C 476, using consistency that will fill all voids.

Provide horizontal joint reinforcing in all masonry walls at 16" o.c.

Provide additional reinforcing 8" above and below openings extending 40" beyond the jambs of the opening.

Clean masonry with non-acidic cleaning solution. Protect other materials.

See Architectural and Structural drawings for additional requirements.

Cooperate with Owner's Quality Testing Firm and notify them 24 hours in advance of placing grout.

#### **04810 - UNIT MASONRY ASSEMBLIES – Utility Veneer**

Brick Veneer is 4 x 4 x 12 nominal units. Match existing high school building.

Masonry Anchors shall include the following:

At brick veneer with CMU locations provide Hohmann & Barnard, Inc., #180 S.I.S. Dub'l Loop-Lok Truss w/ Seismiclip Interlock System. Veneer anchor clip fabricated to accommodate insulation depth as noted on drawings. Loop-Lok to mechanically lock insulation in place. 3/16" dia Box Byna-tie, length per mfg; #187-A seismiclip with 3/16" dia continuous wire; hot dip galvanized; 16" o.c. vert and 16" o.c. horiz.

At brick veneer and CMU Bond Beam lintel locations provide Hohmann & Barnard, Inc., #HB-200 veneer anchor; hot dip galvanized; legs fabricated to accommodate insulation depth as noted on drawings; 3/16" pintle, length per mfg; #187-A seismiclip with 3/16" dia continuous wire; 12 gage; 16" o.c. vert and 16" o.c. horiz.

At interior CMU wall locations provide Hohmann & Barnard, Inc., #345 corrugated buck anchor; hot dip galvanized; 1 1/4" wide x 4 1/2" long; 12 gage; 5/16" hole; 16" o.c. vert and 24" o.c. horiz.

Provide weep holes at 24" o.c. at base of wall and at lintels over openings.

#### **04810 - UNIT MASONRY ASSEMBLIES – Modular Veneer**

Brick Veneer is modular units.

Masonry Anchors shall include the following:

At wood studs provide Hohmann & Barnard #345-Corrugated Buck Anchor, 1-1/4" x 16 ga. x length as required, hot dip galvanized. Anchor to studs with hot dip galvanized screws or ring shank nails. Provide anchors at 24" o.c. horiz and 16" o.c. vert.

At brick veneer with CMU backup provide Hohmann & Barnard, Inc., #180 S.I.S. Dub'l Loop-Lok Truss w/ Seismiclip Interlock System. Veneer anchor clip fabricated to accommodate insulation thickness as noted on drawings. Loop-Lok to mechanically lock insulation in place. 3/16" dia Box Byna-tie, length per mfg; #187-A seismiclip with 3/16" dia continuous wire; hot dip galvanized; 16" o.c. vert and 16" o.c. horiz.

At brick veneer and CMU Bond Beam lintel locations provide Hohmann & Barnard, Inc., #HB-200 veneer anchor; hot dip galvanized; legs fabricated to accommodate insulation depth as noted on drawings; 3/16" pintle, length per mfg; #187-A seismiclip with 3/16" dia continuous wire; 12 gage; 16" o.c. vert and 16" o.c. horiz.

Provide weep holes at 24" o.c. at base of wall and at lintels over openings.

#### **04810 - UNIT MASONRY ASSEMBLIES – Concrete Masonry Units**

Provide ASTM C 90 load bearing concrete block, lightweight.

Interior CMU is standard face dimensions of 16" x 8". Exterior CMU is Ready Brick, by Reading Rock (Basis of Design). Provide integral color to match existing High School building. Provide a contrasting color as selected for highlight bands.

Provide MGS Mortar/Grout Screen for open bottom bond beams and other grouted anchors.

Provide horizontal joint reinforcement at 16" o.c. vertically in all interior and exterior CMU walls. Provide #220-EH Ladder Mesh Reinforcement with 3/16" side rods and 9 ga cross rods, hot dip galvanized.

At interior non-load bearing CMU wall intersections provide MWT Mesh Wall Tie; hot dip galvanized; 1/2" x 1/2" x 16 gage; 16" o.c. vert.

At interior load-bearing wall intersections with exterior walls or with interior load-bearing walls, provide #344 Rigid Partition Anchors x 1/8" x 1-1/2". Provide hot dip galvanized finish. Space anchors 16" o.c. vertically.

#### **04??? - MASONRY RESTORATION**

Provide ASTM C 90 load bearing concrete block, lightweight.

### **DIVISION 5 -- METALS**

#### **05120 - STRUCTURAL STEEL**

Submit shop drawings.

See Structural Drawings for requirements.

#### **05210 - STEEL JOISTS**

Submit shop drawings.

See Structural Drawings for requirements.

#### **05310 - STEEL DECK**

Submit shop drawings.

See Structural Drawings for requirements.

#### **05500 - METAL FABRICATIONS**

Submit shop drawings.

Provide loose, hot dipped, galvanized, angle lintels for openings in exterior walls unless shown otherwise. Provide 8" bearing each end, coped 1/2" for mortar and milled to 5/16" for thick angles.

Provide roof frames for mechanical equipment and loose angles for duct openings in masonry walls.

See drawings for lintel schedule, and additional items and requirements.

#### **05510 - METAL STAIRS**

Submit shop drawings.

Provide concrete-filled 12 ga x 2" pan stair treads and 10 ga x 3" pan landings. Stringers are MC12x10.6 with 4"x4"x5/16" seat angles at bearing. Provide clip angles with a 3/8" expansion bolt at each stringer bearing on concrete.

Support intermediate landing with 3"x3"x1/4" steel posts with 1/2" bearing plates bolted to floor.

See the drawings for additional requirements.

#### **05520 - HANDRAILS AND RAILINGS**

Submit shop drawings.

Interior railings are aluminum with internal fittings for hairline seams. No exposed fasteners.

Finish of aluminum railings is Class 1 clear anodizing.

All handrails and railings are steel.

Exterior handrails and railings are steel.

Provide painted interior handrails and railings.

Provide hot dipped galvanized exterior handrails and railings – no paint.

See the drawings for additional requirements.

#### **05700 - ORNAMENTAL FENCE**

Submit shop drawings.

Basis of Design is Virginia Railings and Gates, Concord Model FE0060.

Provide black pre-finished aluminum railing and gate.

Install in accordance with manufacturer's written instructions.

Provide new railing and gate as shown on the drawings and provided for by allowance in Section 01210.

See the drawings for additional requirements.

## **DIVISION 6 -- WOOD AND PLASTICS**

### **06100 – ROUGH CARPENTRY**

Submit product data, shop drawings, samples, warranty.

Provide structural and non-structural dimension lumber framing, rough opening framing, wall and roof sheathing, preservative and fire retardant treated wood materials, subflooring, underlayment, miscellaneous framing and sheathing, concealed blocking, nailers and supports, roofing nailers, and mounting boards for electrical equipment.

Blocking at roof openings and under coping

Comply with PS 20. Provide Southern Yellow Pine or Douglas Fir. Old growth timber is not permitted.

Provide all lumber that is S4S, kiln dry or MC15, Grade No. 1 & Better (SPIB). Nominal sizes are given on the drawings.

Provide all Construction Panels that are APA rated, exterior exposure, and thickness and span rating as shown here and on the drawings. Nail all sheathing with 8d nails at 6" OC at panel edges and 12" OC at intermediate supports unless noted otherwise.

32/16 APA rated Roof Sheathing, Exposure 1.

24/16 APA rated Wall Sheathing, Exposure 1.

Where indicated, provide Fire Retardant Treated [FRT] wood meeting AWPA Use Category UCFA, Commodity Specification H, meeting a flame spread rating of 25 per ASTM E84, kiln dried.

Where indicated and for all lumber in contact with masonry, concrete, roofing, flashing or waterproofing, provide Preservative Pressure Treated [PT] lumber, AWPA Use Category UC3B, Commodity Specification A (TreatmentC2), kiln dried.

Provide hot-dipped galvanized steel fasteners and anchors. Provide bugle head, hardened steel, power driven drywall screws for sheathing 3 times sheathing thickness.

Provide size and number of nails in accordance with the KY Residential Code. No staples permitted anywhere.

Provide die-stamped connectors as indicated. Basis of Design is Simpson Strong Tie Anchors.

Provide 1/4" thick x plate width Sill Gasket of closed cell plastic foam in continuous lengths.

Provide member sizes and fastener size and spacing as indicated but not less than required by codes and AFPA Wood Frame Construction Manual.

Provide solid blocking for all wall and ceiling mounted items. Call for inspection by Architect before covering any blocking. If subsequent work has been installed before blocking can be inspected, remove and reinstall work without charge so that blocking can be verified.

#### **06114 - WOOD BLOCKING AND CURBING**

Provide Southern Yellow Pine lumber, S4S, kiln dry or MC 15.

Provide Fire-Retardant Treated [FRT] and Preservative-Treated [PT] wood as noted.

Provide Preservative-Treated wood wherever in contact with masonry or concrete.

Provide FRT blocking in all metal stud partitions where items of any type will be attached.

#### **06150 – WOOD TRUSSES**

Submit product data, layout drawings, and shop drawings.

Shop drawings shall bear the designer's engineering seal, show all design and fabrication data, temporary and permanent bracing requirements, and handling and erection instructions. Shop drawings shall clearly show permanent bracing requirements for web compression members. An erection plan locating all trusses shall be provided.

When required, the General Contractor shall submit copies of stamped erection / shop drawings of the pre-fabricated wood trusses to the Building Official. Coordinate with authority having jurisdiction.

All work shall conform to "Design Specification for Metal Plate Connected Wood Trusses" (TPI) or "Design Specification for Metal Plate Connected Parallel Chord Trusses" (PCT) by Truss Plate Institute, Inc.

Design trusses for loads listed below. Site-built trusses are not permitted.

Gable end wall framing shall be 2x wood stud framing. When approved and applicable, gable end trusses may be used as an alternative to a framed gable end wall provided that the manufacturer design and provide calculations of all miscellaneous lateral brace requirements per WTCA Standards. This bracing and material shall be supplied and provided by the manufacturer of the wood trusses and be considered the responsibility of the truss manufacturer.

Brace all trusses during erection per "Commentary and Recommendations for Handling, Installing and Bracing Metal Plate Connected Wood Trusses, HIB-91" by the Truss Plate Institute, unless more strict bracing is required by the truss manufacturer. This bracing shall remain as permanent bracing. Bracing in the plane of the top chord may be removed when the top chord is laterally braced by plywood sheathing.

The bottom chord of all wood trusses shall be designed as unbraced for a length equal to the spacing between bottom chord braces. Bottom chord braces shall be supplied by truss manufacturer.

#### **DESIGN LOADS**



ROOF LOAD:

- i. MINIMUM LIVE LOAD OR SNOW LOAD (Pf) 20 PSF\*
  - ii. ROOF SHEATHING 3 PSF
  - iii. INSULATION 3 PSF
  - iv. SHINGLES 6 PSF
  - v. ROOF TRUSS FRAMING 3 PSF
  - vi. CEILING (5/8" DRYWALL) 3 PSF
  - vii. DUCTS, LIGHTS, MISC. MECHANICAL 2 PSF
- TOTAL LOAD ON JOISTS 40 PSF MIN.
- i. BEAM / JOIST GIRDER LOAD 2 PSF

TOTAL ON BEAMS / JOIST GIRDERS 42 PSF MIN.

\* MINIMUM SNOW LOAD GOVERNED BY  $P_f = 20 * I$  (PSF)  
SNOW LOAD:

- i. GROUND SNOW LOAD,  $P_g = 20$  PSF MODIFIED BY APPLICABLE DRIFT COEFFICIENTS.
- ii. FLAT ROOF SNOW LOAD,  $P_f = 17$  PSF MODIFIED BY APPLICABLE BUILDING COEFFICIENTS
- iii. SNOW LOAD IMPORTANCE FACTOR  $I = 1.00$
- iv. SNOW EXPOSURE FACTOR  $C_e = 1.0$
- v. THERMAL FACTOR,  $C_t = 1.00$

WIND LOAD:

- i. MAIN WINDFORCE - RESISTING SYSTEM: 90 MPH PER ASCE 7 (3-SECOND GUST),
- ii. WIND EXPOSURE C
- iii. WIND LOAD IMPORTANCE FACTOR  $I_e = 1.00$
- iv. BASIC WIND VELOCITY PRESSURE,  $q_h = 14.96$  PSF.
- v. INTERNAL GUST PRESSURE COEFFICIENT  $G_{Cp} = 0.18$ , ENCLOSED BUILDING.

**06200 – FINISH CARPENTRY**

Submit product data, shop drawings, samples.

All wood trim is species as shown on the drawings, stained to match architect's sample.

All wood trim is red oak, stained to match manufactured items.

All wood trim is primed pine for field painting. Match profiles indicated on the drawings.

Window stools are 3/4" plastic laminate.

Window stools are 3/4" Silestone.

Provide Endure-stone plain tapered column, 8" base with Tuscan Capital and Base as manufactured by Pacific Columns suitable for field painting. ([pacificcolumns.com](http://pacificcolumns.com)). Use Simpson Hollow Column uplift connection - threaded rod with, CN coupler, Bearing Plate and Epoxy-Tie anchoring system.

## **06410 - CUSTOM CABINETS**

Submit product data, shop drawings.

See the drawings for additional requirements.

Basis of Design: Quality Cabinets, Woodstar Series, color as selected by Architect.

Wood faced kitchen cabinets

Wood faced kitchen and vanity cabinets

Cabinet Frame, drawer fronts, drawer box - solid lumber

All cabinets are plastic laminate. High Pressure Decorative Laminate (HPDL), NEMA LD 3; HGL for horizontal surfaces, VGS for vertical surfaces, CLS for cabinet liner, and BKL laminate backer for backside of all surfaces faces with high pressure decorative laminate.

Provide AWI Grade II / Custom quality for all cabinets. Cabinet style is flush overlay.

Counter tops are plastic laminate, 1-1/2" overall thickness with matching edge strip on all exposed edges.

Provide Nevamar plastic laminate, ALN002T, Decadent Allusion, or as selected by Architect.

Counter tops are plastic laminate, 1-1/2" overall thickness with black rubber drive-in edge strip on all exposed edges.

Exterior corners of counter tops are radiused 1".

Door and Drawer Fronts: 3/4 inch thick; overlay style.

Provide two adjustable shelves in all wall and base cabinets. See drawings for special shelves.

Adjustable Shelf Supports: Standard side-mounted system using recessed metal shelf standards or multiple holes for pin supports and coordinated self rests, polished chrome finish, for nominal 1 inch spacing adjustments.

Drawer and Door Pulls: "U" shaped wire pull, aluminum with polished finish, 4 inch centers.

Drawer and Door Pulls: Atlas Homewares, Model #AHW-A807-BN, brushed nickel.

Cabinet and Drawer Locks: Keyed cylinder, two keys per lock, master keyed, steel with chrome finish.

Drawer Slides: Standard extension, Heavy Duty grade, side mounted with integral stops, with self-closing/stay-closed feature.

Hinges: European style concealed self-closing type, stainless steel.

Counter tops are Silestone with a 2" edge, seamed as shown.

Provide 4" high (UNO) backsplashes and endsplashes at all edges of counters abutting a wall. Mechanically fasten back splash to countertops with steel brackets at 16 inches on center.

Carefully scribe casework abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim for this purpose.

Countersink anchorage devices at exposed locations. Conceal with solid plugs to match surrounding surfaces; finish flush with surrounding surfaces.

Use fixture attachments in concealed locations for wall mounted components.

Casework dimensions (30x24x12) are the width x height x depth. Height includes countertop as occurs.

Provide finished ends at knee spaces and where exposed to view.

Shallow base cabinets are wall cabinets set on a 2x4 base frame with a 1/2" plywood top. Provide resilient base.

All drawers and doors have locks.

All counter tops over knee spaces are 1-1/2" thick for the full depth and width. Reinforce counter top edges where span exceeds 40".

## **DIVISION 7 -- THERMAL AND MOISTURE PROTECTION**

### **07115 – BITUMINOUS DAMPPROOFING**

Submit product data, warranty.

Apply one heavy coat of ASTM D 1227 asphaltic dampproofing with non-asbestos fiber reinforcing from 2" below proposed finish grade to top of footing. Prime wall first with compatible asphalt primer – ASTM D 41. Seal around any projections with mastic (ASTM D 2822, Type I).

Cover immediately with 1/8" biodegradable hardboard. Install dampproofing before adjacent waterproofing.

### **07170 - BENTONITE WATERPROOFING**

Submit product data, warranty. Provide 5 year warranty against penetration of water.

All below grade walls of occupiable spaces shall receive waterproofing.

Provide Cetco, Volclay Type 1 Panels and Waterstop-RX 101, Basis of Design.

Provide 1/4" biodegradable, hardboard, protection board over bentonite panels.

Protect installation with temporary polyethylene sheeting. Remove before backfilling.

### **07190 - PARGING / WATERPROOFING**

Submit product data.

Provide (2) coats Thoroseal waterproof cement-based coating with Acryl 60, color as selected, in strict compliance with manufacturer's instructions.

Apply to all exposed concrete masonry and stone foundation walls.

#### **07212 - BOARD AND BATT INSULATION**

Submit product data.

See drawings for locations, types and requirements of insulation.

See Insulation Schedule on AE-600 series of sheets for locations, types and requirements of insulation.

#### **07214 – FOAMED–IN–PLACE INSULATION**

Submit product data.

Insulation: ASTM C 1029, Type I, polyurethane.

See Insulation Schedule on sheet A9.2 for other requirements of insulation.

#### **07240 – EXTERIOR INSULATION AND FINISH SYSTEMS**

Submit product data, shop drawings, samples, warranty.

The Patterns show in the EIFS are intended to duplicate the appearance of the Cast Stone in the Brick.

Submit Shop Drawings Of Patterns And Joints And Drips for approval.

#### **07261 - WEATHER RESISTANT MEMBRANES**

Submit manufacturer's installation instructions.

Basis of Design is Tyvek(R) Water Resistant Barrier.

Provide spunbonded olefin, nonwoven, non-perforated. ASTM E 1677, Type I; Water Vapor Transmission: Greater than 20 perms per ASTM E 96/E 96M Procedure B.

Install in compliance with the manufacturer's written instructions using the recommended fasteners and tape.

#### **07311 - ASPHALT SHINGLES**

Submit product data.

Provide Certaineed XT25 EXTRA TOUGH

Color: Weathered Wood

Provide shingle-over ridge vent. Basis of Design is Air Vent Inc. in color to match shingles.

Install shingles in accordance with the manufacturer's instructions.

Include the cost of replacing (4) sheets of roof sheathing on the existing building.

#### **07410 - METAL WALL PANELS**

Submit product data, shop drawings, samples, warranty.

For Equipment Screen: Provide MBCI 12" NuWall panels, 24 gage, galvanized steel, with Kynar finish both sides. Color as selected.

#### **07463 - ALUMINUM SOFFITS AND TRIM**

Submit product data.

Provide 0.019" polyester finished aluminum. Use concealed aluminum fasteners to install.

Basis of Design is xxx by Alcoa

Provide pre-finished soffits and trim, color as selected. Install soffits and trim in strict compliance with manufacturer's written instructions.

See drawings for sizes and profiles required.

#### **07466 - FIBER CEMENT SIDING**

Submit product data, installation instructions.

Basis of Design is HardiePlank products by James Hardie USA.

Provide lap siding, trim pieces and bead board soffit.

Provide smooth finish, primed materials for field painting.

Install all work in strict compliance with manufacture's written instructions.

See drawings for sizes and exposure required.

#### **07530 - ELASTOMERIC MEMBRANE ROOFING**

Submit product data, warranty. Provide 15 year, all-inclusive, warranty against water penetration.

Provide one ply, 0.045 inch thick, black, EPDM membrane loose-laid over insulation with ballast.

Provide (2) layers 1 1/2" Polyisocyanurate board roofing insulation, 48" x 96" with square edges, stagger joints. Thermal Characteristics; LTTR value is 18. Glass fiber mat face on both faces. Provide any tapered insulation as indicated on drawings. Comply with ASTM C 1289.

The Typical Roof Insulation Is 2.5" Polyisocyanurate With A 0.5" Layer Of Wood Fiber Board Over It.

Tapered roof insulation may be of any type and is intended to provide a slope of 1/8" / ft toward roof drains.

Provide aggregate ballast of 1,000 lb/square.

Existing Building – provide systems, materials and methods that maintain the Owner's warranties on existing roofs.

Drywall Sheathing Is Required For The 'High' Roof Over The Theater And Scenery Shop Only.

#### **07620 - SHEET METAL FLASHING AND TRIM**

Submit shop drawings and 4" x 8" sample of each finished metal.

Provide flashing as shown on the drawings. Provide terne metal for painting.

Provide pre-finished aluminum vented edge trim. Basis of Design is "The Edge" Vent by Air Vent, Inc. Install in accordance with the manufacturer's written instructions. Color as selected by Architect.

Provide scuppers and conductor heads fabricated of stainless steel with soldered or welded seams. Remove fabrication marks. See drawings for other requirements.

Future = thru wall counter flashing, surface mounted counter flashing, metal base flashing, gutters, etc.

#### **07631 - GUTTERS AND DOWNSPOUTS**

Submit product data.

Provide aluminum gutters and downspouts, 0.032" thick polyester pre-finished aluminum, color as selected.

Provide standard OG gutter profile. Anchor gutters at 32" OC with gutter hangers. Nail and ferrule not acceptable.

Provide downspouts with corrugated rectangular profile. Match finish and color of gutters.

Provide sizes as shown on the drawings.

Submit sample, 6" long single piece.

Provide aluminum downspouts, 0.063" thick mill finish aluminum, with corrugated rectangular profile. Size as shown on the drawings.

#### **07710 - MANUFACTURED ROOF SPECIALTIES**

Submit product data, installation instructions, ,warranty.

Submit shop drawings.

Basis of Design is Velux SUN TUNNEL skylight. See drawings for model, size and location.

Basis of Design is Solatube Model #160DS with 10" reflective tubing, Vusion ceiling diffuser, pre-formed roof flashing and roof dome.

Provide all required accessory items for a complete weathertight installation in strict accordance with manufacturer's instructions.

#### **07720 - ROOF ACCESSORIES**

Submit product data, color selection samples, and shop drawings of special transitions, corners and end pieces.

Aluminum Coping: Basis of Design is Architectural Products, AP Snap-Tight Coping, 0.063" smooth 5005-H34 alloy formed aluminum with welded corners and offsets and a standard color fluorocarbon finish. ([www.archprod.com](http://www.archprod.com))

Gravel Stop: Basis of Design is Architectural Products, Facia System Type MB and Galvanized Water Dam, 0.063" smooth 5005-H34 alloy formed aluminum with welded corners and a standard color fluorocarbon finish. ([www.archprod.com](http://www.archprod.com))

#### **07724 - ROOF HATCHES AND VENTS**

Submit product data, shop drawings, samples, warranty.

Basis of Design is Bilco, [www.bilco.com](http://www.bilco.com), Single leaf roof scuttle, listed by FM, Type NB-40, Steel curb and aluminum cover. Size is 2'-6" x 4'-6".

Accessories: Safety post, pop-up style extending above the curb. Bilco model LU-1.

Heat Vents: Basis of Design is Bilco, [www.bilco.com](http://www.bilco.com), Double Leaf Steel Fire Vent with Acoustical Rating of STC 45, Model No. ACDSH4896 <4>

#### **07840 - FIRESTOPPING**

Submit product data.

Provide 3M Fire Protection Products ([www.3m.com/firestop](http://www.3m.com/firestop)) assemblies , Basis of Design, at all penetrations of fire rated walls and floors.

Use system listed by UL or tested in accordance with ASTM E 814 that has F Rating equal to fire rating of penetrated assembly. Provide 3 HR rating at all floor penetrations for M/E work.

Provide safing insulation at all joints in masonry fire rated walls and as shown.

#### **07900 - JOINT SEALERS**

Submit product data, and color selection samples.

Provide exterior sealants with a documented 20 year life.

Provide sealants where shown on the drawings and called for in the listing below.

See AE-600 series of sheets for Sealant Schedule for types of sealants and applications required.

Provide the following sealants:

##### **GENERAL PURPOSE EXTERIOR SEALANT**

Polyurethane or polysulfide; ASTM C 920; Grade NS, Class 25; single or multi-component. Provide at joints between dissimilar materials, at door and window frames, and other exterior joints.

##### **EXTERIOR METAL LAP JOINT SEALANT**

Butyl or polyisobutylene, non-drying, non-skinning, non-curing. Provide concealed sealant bead in sheet metal work.

## GENERAL PURPOSE INTERIOR SEALANT

Acrylic emulsion latex; ASTM C 834, Type OP, Grade NF, single component, paintable. Provide at door and window frames and interior joint for which no other type of sealant is indicated.

## BATH/TILE SEALANT

White silicone; ASTM C 920; single component, mildew resistant. Provide at joints between plumbing fixtures and floor and wall surfaces, and any joints in shower.

## EXTERIOR PAVING JOINT SEALANT

Polyurethane, self-leveling; ASTM C 920, Class 25; single or multi-component. Provide at sidewalk expansion joints.

## EXTERIOR EXPANSION JOINT FILLER

Sponge rubber. Provide at all sidewalk expansion joints.

## **DIVISION 8 -- DOORS AND WINDOWS**

### **08110 - STEEL DOORS AND FRAMES**

Submit product data, shop drawings.

If doors and frames are damaged in removal, provide new doors and/or frames.

All hollow metal doors are 1-3/4" thick. All doors and frames are factory primed for field finishing.

Exterior Door Grade: ANSI A250.8 [Level 3, physical performance Level A, Model 2, seamless](#) with Door Top Closures - Flush with top of faces and edges; Core - [Polystyrene foam](#); Galvanizing - all components hot-dipped zinc-iron alloy-coated (galvannealed) in accordance with ASTM A 653/A 653M, [with manufacturer's standard coating thickness](#).

Interior Door Grade: ANSI A250.8 [Level 2, physical performance Level B, Model 2, seamless](#) with core of [vertical steel stiffeners](#). Provide units listed and labeled by [UL as scheduled](#).

Frames for Steel Doors: Comply with the requirements of grade specified for corresponding [door](#).

Frames for Wood Doors: Comply with frame requirements specified in ANSI A250.8 for Level 2.

Provide knocked-down style frames for all interior doors.

Provide set up arc welded frames for all interior doors.

Provide set up arc welded frames for all interior and exterior doors.

Provide mortar guard boxes for hardware cut-outs in frames to be installed in masonry or to be grouted.

### **08150 - PRE-ASSEMBLED METAL DOOR AND FRAME UNITS**



Submit Product Data

Basis of Design is Jen-Weld - Builder's Choice

1 3/4" Thickness

25 Gage Galvanized Steel

Embossed Sheets

Core: Polyurethane R-15 Minimum

Style: As Noted on Drawings

Exterior Frames: Wood, heavy duty, to meet conditions shown, White Pine, Finger Joints Permitted, prime painted.

### **08211 - FLUSH WOOD DOORS**

Submit product data, shop drawings, samples, warranty.

Lifetime warranty, pre-finished and pre-machined, solid core, red oak

Lifetime warranty, pre-machined and field-finished, solid core, smooth face for paint finish.

Provide manufacturer's standard louvers and trim for glass lights as occurs.

Provide doors by Marsh, Eggers, or Weyerhaeuser.

Existing doors that are removed may be re-used in the work provided that they are undamaged.

### **08250 - INTERIOR WOOD DOORS**

Submit product data.

Provide prime painted wood doors. See drawings for sizes, thickness and style.

### **08310 - ACCESS DOORS AND PANELS**

Submit product data. , shop drawings, samples, warranty.

Basis of Design is Acudor.

See drawings for model/type, size, location and application.

Model No. UF-5000 for CMU wall applications, size as indicated on drawings.

### **08331 - OVERHEAD COILING DOORS**

Submit product data, shop drawings, samples, warranty.

### **08333 – OVERHEAD COILING WOOD COUNTER DOORS**

Submit product data, shop drawings, samples, warranty.

Basis of Design is Overhead Door Corporation, Model 665, size as indicated on drawings. Provide select red oak with matching wood guides and bottom bar, crank operated. Submit complete shop drawings and wood samples.

### **08341 - ACOUSTICAL DOORS AND FRAMES**

Submit product data, shop drawings, samples, warranty.

Basis of Design is Industrial Acoustics Company ([www.industrialacoustics.com](http://www.industrialacoustics.com)) Noise-Lock Doors, size and rating as indicated on drawings. Provide complete shop drawings for coordination with wall opening construction and rough openings.

### **08410 - METAL-FRAMED STOREFRONTS**

Submit product data, shop drawings, samples, warranty.

Basis of Design is Vistawall Storefront, Series FG-3000 Thermal Multiplane.

Interior and Exterior Finish is Class 1, light bronze.

### **08520 - ALUMINUM WINDOWS**

Submit product data, shop drawings, samples, warranty.

Provide new operable, aluminum, replacement windows for the 1950s Toilet Rooms. Match the finish, design and appearance of other replacement windows nearby in the building.

### **08550 - WOOD WINDOWS**

Submit product data, shop drawings, warranty.

Provide aluminum clad, wood double hung windows. Basis of Design is Jeld-Wen, Tradition Plus Wood, color as selected by the Architect.

Provide custom sized windows as shown on the drawings. Bedroom windows must comply with the minimum clear opening emergency egress requirements of 20" wide, 24" high, 5.7 square feet, and less than 44" AFF to the sill.

See section 08800 for glazing.

Provide removable insect screens, tilt-in feature for cleaning, prime painted interior surfaces, aluminum clad exterior surfaces.

### **08620 - UNIT SKYLIGHTS**

Submit product data, shop drawings, samples, warranty.

### **08710 - DOOR HARDWARE**

Submit product data, and hardware schedule.

Door and frame preparation. Before hardware installation, verify that all doors and frames are properly prepared to receive the specified hardware. Hollow metal frames shall be prepared for ANSI strike plates per A115.1-2 (4-7/8" high), hinge preps will be mortised and reinforced with a minimum 10 gage reinforcement material; minimum of 14 gage reinforcement material for closer. Hollow metal doors shall be properly prepared and reinforced with a minimum 16 gage material for either mortised or cylindrical locks as specified.

Hardware installation. The manufacturer's representative for the locking devices and closing devices must inspect and approve, in writing, the installation of their products. Hardware installed incorrectly must be reported to the architect prior to the architect's final punch list.

Hinges. The Basis of Design is Hager mortise hinges. Equal hinges by Bommer or Stanley are acceptable.

Locksets. Provide Best, Sargent, or Corbin Russwin heavy duty mortise locks with Best Peaks Patented cylinders with NKU's proprietary Best Peaks Patented keyway. Basis of Design is Best 45H series Mortise locksets. Provide lever handle trim for all locksets and latchsets with US26D polished chrome finish.

Closers. Provide LCN closers. No substitutions are permitted.

Door Stops. Basis of Design is Ives. Equal stops by Trimco or Rockwood are acceptable.

Accessories. Basis of Design is Ives. Equal accessories by Trimco or Rockwood are acceptable.

Investigate the extent to which re-use of hardware will be satisfactory before submitting a bid. Include all costs in your bid for meeting the Owner's Door Hardware Specification Guideline.

Prepare an inventory of existing hardware for re-use. Provide new floor stops for each relocated door.

Prepare a hardware schedule showing where existing hardware will be used.

Re-key each re-used lockset to the Owner's master key system. Provide three keys per lock and six master keys.

Provide keying to match Owner's master-key system. Provide three keys per lock.

Adjust hardware for smooth operation and to Owner's satisfaction.

ALLOWANCE: Allow \$300 per leaf for each door shown to receive new hardware. See Section 01210 Allowances.

Provide five card reader [CR] security locks.

See Hardware Schedule on drawings for generic requirements.

See Hardware Schedule on drawings for specific requirements.

## **08800 - GLAZING**

Submit product data, sample of each glass type and warranty.

Submit product data.

All glass is q1.

Provide clear glass at all interior doors, sidelights and borrowed lights.

Provide clear glass at all exterior doors and windows.

Provide clear glass at all exterior doors.

Provide specialty glass for obscure glass as indicated on the drawings.

Insulating glass units are 5/8" thick.

Insulating glass units are 1" thick with 1/4" glass.

Provide a Low-E coating on the No. 2 surface for exterior insulated glass.

Provide Low-E glass equal to PPG SolarBan 80

Provide Low-E glass equal to PPG SolarBan xx

Provide tempered glass in all doors, and sidelights.

Provide safety glass for sliding window above counter.

Provide 10 year warranty on all insulated units.

## **DIVISION 9 -- FINISHES**

### **09260 - GYPSUM BOARD ASSEMBLIES**

Submit product data.

Tapered edges, square ends, sizes to minimize joints, thickness of drywall and spacing of studs as shown on the drawings.

Non-Loadbearing Framing System Components: ASTM C 645; galvanized sheet steel, of size and properties necessary to comply with ASTM C 754 for the spacing indicated, with maximum deflection of wall framing of L/240 at 5 psf.

Gypsum Wallboard: ASTM C 1396/C 1396M.

Foil-backed Gypsum Wallboard: SHEETROCK® brand foil-back gypsum panels or equal.

Gypsum Veneer Plaster - ASTM C 587 (if any)

Fire Rated Gypsum Wallboard: (if any) ASTM C 36/C 36M; Type X, UL rated.

Water-Resistant Gypsum Backing Board: ASTM C 630/C 630M. Provide on all fixture walls and where wall tile will be installed.

Provide Water-resistant GWB throughout the bath room (except shower enclosure), and on wet walls of the kitchen and laundry area.

Gypsum Sheathing Board: ASTM C 1396/C 1396M, moisture resistant type; sizes to minimize joints in place; water repellent paper faces; ends square cut. Glass mat faced.

Abuse-Resistant Gypsum Board: (if any) USG FIBEROCK VHI, thickness as shown on the drawings, tapered edges.

Cementitious Backer Board: ANSI A118.9; High density, cementitious, glass fiber reinforced, 1/2 inch thick; 2 inch wide coated glass fiber tape for joints and corners. Provide for shower walls.

Accessories: Corner Beads - Galvanized steel; Edge Trim - L bead, as defined in ASTM C 840; Joint Materials - ASTM C 475 and as recommended by gypsum board manufacturer for project conditions; Screws - ASTM C 1002; self-piercing tapping type; cadmium-plated for exterior locations; Acoustic Insulation - ASTM C 665, preformed glass fiber, friction fit type, unfaced; Acoustic Sealant - Non-hardening, non-skinning, for use in conjunction with gypsum board. Nails are not permitted anywhere.

### **09300 - TILE**

Submit product data, and color selection samples.

Thin set floors in showers and toilet rooms - ceramic mosaic tile.

Mud set floors in toilet rooms - ceramic mosaic tile.

Thin set walls in showers and toilet rooms - ceramic mosaic tile.

Provide Dal-Tile Castle De Verre Chalice Gold CV11 floor and wall tile. Provide bullnose and cushioned edges.

Provide special pieces for cove base and bullnose edges where tile terminates.

Sizes as shown on the drawings.

ALLOWANCE: Provide an allowance for tile and trim shapes of \$8.00 per square foot of wall or floor. See Section 01210 Allowances. The same allowance applies for Alternates T-1 and T-2.

Patterns and colors as selected by Architect from price group 1 or 2.

Provide Dal-Tile Softone Glazed Wall Tile, Basis of Design. Provide bullnose and cushioned edges. Sizes as shown on the drawings. Patterns and colors as selected by Architect from price group 1 or 2.

### **THIN SET METHOD FOR FLOORS**

Over interior concrete substrates, install in accordance with TCA Handbook Method F113, latex-Portland cement bond coat, with standard grout except silicone grout at showers.

### **FULL MORTAR BED METHOD FOR FLOORS**

Over interior concrete substrates, install in accordance with TCA Handbook Method F111, with cleavage membrane, with standard grout except silicone grout at showers.

### **THIN SET METHOD FOR WALLS OF SHOWERS**

Over cementitious backer units on studs, install in accordance with TCA Handbook Method W244, using membrane, with silicone grout.

#### THIN SET METHOD FOR WALLS, EXCEPT SHOWERS

Over gypsum wallboard on studs, install in accordance with TCA Handbook Method W243, thin-set with latex-Portland cement bond coat, with standard grout in color as selected.

#### THIN SET METHOD FOR SGT WALLS (ALTS T-1 & T-1)

Over existing structural glazed tile walls, install new tile using Versabond Flex Fortified Thin-Set Mortar manufactured by Custom Building Products. Install tile in accordance with TCA Handbook Method W243 and the mortar manufacturer's printed instructions. Provide standard grout in color as selected.

Thresholds: Marble, white, honed finish; 2 inches wide by full width of wall or frame opening; thickness to fit application; beveled one long edge with radiused corners on top side; without holes, cracks, or open seams. Comply with ANSI 2003 Accessibility Code for profile.

Grout: Polymer modified cement grout, unsanded, as specified in ANSI A118.7.

Silicone Rubber Grout: Silicone sealant, moisture and mildew resistant type, standard color as selected; use for shower floors and shower walls.

Uncoupling Membrane: 1/8 inch thick polyurethane matting with three-dimensional grid structure with dovetail shaped cavities and fleece webbing laminated to the underside to provide a mechanical bond to the substrate adhesive. Acceptable Product: Schluter Systems "DITRA." Provide below all tile floors.

Provide waterproof shower pan for roll-in shower floor. Provide Chloraloy sheet membrane, 1.0mm, ASTM D 4068, IPC and IAPMO.

Cementitious Backer Board: ANSI A118.9; High density, cementitious, glass fiber reinforced, 1/2 inch thick; 2 inch wide coated glass fiber tape for joints and corners. Provide for shower walls.

### **09511 - SUSPENDED ACOUSTICAL CEILINGS**

Submit product data, shop drawings, samples, warranty.

Basis of Design is Armstrong as follows:

AC-1 is Fissured #755, 24x48x5/8, 81% light reflectance, 0.55 NRC, square edge, white, 15/16" Prelude suspension system.

AC-2 is Fine Fissured #1820, 24x24x3/4, 84% light reflectance, 0.70 NRC, angled Tegular edge, white, 15/16" Prelude suspension system.

AC-3 is Optima Open Plan Tegular #3250, 24x24x1", 90% light reflectance, 0.95 NRC, square Tegular edge, white, 15/16" Prelude suspension system.

Provide hold-down clips in all areas with an exterior door and throughout all corridors.

Concealed Suspension System for attachment of gypsum drywall: Formed steel, commercial quality cold rolled; intermediate-duty; profile is 1-3/8" knurled-face wide tee. Basis of Design is 640 or 660 by Chicago Metallic.

### **09600 - BAMBOO FLOORING**

Submit product data, installation instructions, color selection samples, warranty.

The Basis of Design is Natural Interiors – Solid Bamboo.

By Green Building Resource, LLC

Color: Chosen By Owner

The Basis of Design is xxx yyy.

Install in strict compliance with manufacturer's written instructions.

Two installation types are required - concrete substrate and wood subfloor.

Provide matching wood transition strips where flooring type changes.

### **09650 - RESILIENT FLOORING**

Submit product data, color samples.

Submit product data, shop drawings, samples, warranty.

Resilient Flooring shall be Marmoleum 12"x12"x1/8" gage tile in five colors installed in a random pattern, a sample of which will be provided by the Owner. The five colors that are required and their percentage of the total area of each room or space is as follows:

- Color T1 is Piano #3604 Hidden Pink (72%)
- Color T3 is Walton #180 (8%). There is no Color T2.
- Color T4 is Real Authentic #3136 Concrete (8%)
- Color T5 is Real Authentic #3032 Mist Grey (8%)
- Color T6 is Piano #3601 Warm Grey (4%)

Provide Roppe resilient base to match existing where existing base is the majority of base in the space. Otherwise provide Roppe Brown Black, coved 4" x 1/8" gage base with pre-molded exterior corners.

Provide Roppe resilient base to match existing. Otherwise provide Roppe in color as selected, coved 4" x 1/8" gage base.

Provide pre-molded exterior corners.

VCT Basis of Design is Armstrong Standard Excelon vinyl composition tile. Color group 1.

See Finish Schedule for standard and premium colors required.

Provide 12"x12"x1/8" ga tile. Patterns and colors as selected by Architect.

from Arteffects, Imperial Texture or Rave. Three colors are required – one field color and two accent colors.

Provide Johnsonite, Basis of Design, coved rubber base x 1/8" ga with premolded exterior corners. Height is 4" unless noted otherwise. Colors as selected by Architect.

Provide one-piece stair treads with abrasive strips for all stairs. Set nosings in full bed of adhesive. Fish mouth edges and poor contact are not acceptable. Vinyl risers are required.

### **09680 - CARPET**

Submit product data, color samples, warranty.

Submit layout drawings.

The Owner is providing the carpet material.

The Basis of Design is Advantage Express Collection

Style: Special Effects

Color: Jungle Beige

The Basis of Design is Lee's Faculty IV.

Provide all installation materials for a direct glue-down installation.

Use low-VOC glues and adhesives.

Clean and protect the installed carpet. Turn over all carpet scraps larger than four square yards.

#### **09685 - CARPET TILE**

Submit product data, shop drawings, samples, warranty.

The carpet shall be Interface Cubic style #1380102500, color is #6393, Height; installation is non-directional. Carpet tiles are 50cm x 50cm.

Provide all installation materials for a direct glue-down installation.

Use low-VOC glues and adhesives.

Clean and protect the installed carpet. Turn over all left over carpet to Owner, but at least 20 full tiles.

#### **09900 - PAINTS AND COATINGS**

Submit product data, and color selection samples.

Comply with 40 CFR 59, Subpart D--National Volatile Organic Compound Emission Standards for Architectural Coatings.

Provide Sherwin Williams Super Paint for gypsum board and ICI Glidden Devflex for metal surfaces.

The Basis of Design is Sherwin-Williams products.

Alkyd Enamel – SW Industrial Enamel B54 Series

Latex – SW ProGreen 200 Interior Latex, B20W651

Primer for gypsum wall board - SW Prep & Prime PVA Wall 1030-1200, tinted

Primer for masonry - Prep & Prime Gripper Multi-Purpose

Provide the following paint systems:

EXTERIOR MASONRY: one coat masonry primer, two coats alkyd enamel, eggshell finish



EXTERIOR PRIMED SURFACES: two coats alkyd enamel, eggshell finish (doors: gloss)

INTERIOR GYPSUM WALLS: gypsum primer - tinted, two coats latex, Swiss Coffee color, eggshell finish

INTERIOR GYPSUM CEILINGS: gypsum primer, two coats latex, flat white

INTERIOR PRIMED WOOD: two coats latex, white, semi-gloss

The Painting Schedule is based on Pratt & Lambert products except as shown otherwise. The Bases of Design are Pratt & Lambert products: Alkyd Enamel - RedSeal Interior/Exterior Oil (Effecto); Latex for walls - RedSeal Interior Latex Eggshell Finish (Acrylic latex); Latex Enamel - Accolade Interior High-Gloss (100% Acrylic). ; Block Filler - Pro-Hide Silver Heavy Duty Latex Block Filler (100% Acrylic).

See Finish Schedule for scope of painting. All new and scheduled existing exposed surfaces shall be painted. Assure complete coverage. Repaint as needed to provide a uniform appearance without defects or holidays.

See Finish Schedule for scope of painting. See Painting Schedule on Sheet A601 for painting systems required.

See Painting Schedule on series AE-600 sheets for painting systems required.

#### **09960 - HIGH-PERFORMANCE COATINGS**

Submit product data, installation instructions, color samples, warranty.

High-Build Decorative Coating (Epoxy): Two coats, epoxy, minimum 15 mils total dry film thickness; color coat and clear top coat over wall primer. Basis of Design is Carboline Carboguard.

High-Build Decorative Coating (Acrylic): One coat primer sealer. Two coats, acrylic, minimum 5 mils total dry film thickness; color coats over wall primer. Basis of Design is PPG Porter. Primer sealer is STA-KIL WB. Acrylic coating is Porter Guard Acrylic Enamel.

High-Build Decorative Coating over existing structural glazed tile. See Painting Schedule on AE-600 series sheets for coating system. Follow manufacturer's printed instructions.

Preparation:

A] Solvent Clean per SSPC-SP 1 to clean the surface with a strong abrasive detergent using an abrasive pad. Rinse well and allow to dry.

B] Apply one coat of XIM ETCH-I-M Etching Cream, allow to work for 5 minutes. Scrape off excess cream and return to container. Rinse remaining Etching Cream from surface using clean water and an abrasive pad. Dry with a clean cloth.

Required products:

Primer: XIM UMA (Urethane Modified Acrylic) Bonding Primer, applied at 1.0 mils DFT.

Epoxy: Sherwin Williams Waterbased Catalyzed Epoxy, B70 series/B60V25 hardener; applied at approximately 6.5 - 8.0 mils WFT; 2.5 - 3.0 mils DFT per gallon.

Mock Up: Provide a mock-up test area to evaluate adhesion of the primer to substrate. Once cured for 1 week test for adhesion per ASTM D3359. If adhesion is poor, provide additional surface preparation in the form of mechanical abrasion may be necessary. Test again.

See Finish Schedule for scope of coatings. Assure complete coverage. Repaint as needed to provide a uniform appearance without defects or holidays.

## **DIVISION 10 -- SPECIALTIES**

### **10100 - VISUAL DISPLAY BOARDS <6/20/08>**

Submit product data, shop drawings, samples, warranty.

Claridge Products and Equipment, Incorporated ([www.claridgeproducts.com](http://www.claridgeproducts.com)) is the Basis of Design

Marker Boards: LCS, Series 3 Frame with hollow aluminum chalk tray with end caps. One 8x4 board per locker room and one 4x4 board per Training Room and Strength Training Room.

Tack Boards: Natural Cork, Series 3 Frame. One 4x4 board per locker room and Strength Training Room.

### **10160 - METAL TOILET COMPARTMENTS**

Submit product data, shop drawings, samples, warranty.

### **10170 - PLASTIC TOILET COMPARTMENTS**

Submit product data, shop drawings, color selection samples.

Solid plastic overhead braced. Basis of Design is Comtec Industries – HDPE ([www.comtecindustries.com](http://www.comtecindustries.com))

### **10210 - WALL LOUVERS**

Submit product data, shop drawings, samples, warranty.

Basis of Design is Airlite Company.

Provide Model No. K605, 5" deep, horizontal sight-proof drainable blade; free area is 47 percent.

### **10260 - WALL AND CORNER GUARDS**

Submit product data and color samples for selection of color.

Basis of Design is Constuction Specialties Inc. Product: Acrovyn SSM-20 corner guards.

Provide corner guards where shown on the plans.

Provide six corner guards to be located on gypsum drywall electrical chases.

Extend corner guards from above base to 4'-0" AFF.

### **10440 - INTERIOR SIGNAGE**

Interior signage will be provided by the Owner and installed by this Contractor.

Each room in the Area of Work shall receive a new sign. Remove existing signs and turn over to Owner. Repair any damage to substrate.

Submit product data, shop drawings, and color selection samples.

The Basis of Design is xxx by zzz.

ALLOWANCE: Provide an allowance of \$500 to purchase signs. See Allowances 01210.

Plastic ADA signs for interior and exterior toilet rooms located on wall adjacent to door - top at 5' AFF. Mount with vandal-resistant system.

Six signs are required.

### **10500 - LOCKERS**

Submit product data, shop drawings, samples, warranty.

Basis of Design is Penco Products, Inc. ([www.pencoproducts.com](http://www.pencoproducts.com))

Provide welded stadium lockers with perforated sides, Model No. 6WFD03 – 18" wide x 18" deep x 76" high. Include shelf, footlocker and security box. Provide each locker with a number plate, hanging rod, two hooks. Provide solid side panels at inside corners and where lockers abutt walls. Provide front and top filler panels at walls and inside corners.

Bolt lockers to the floor and to the walls as recommended by the locker manufacturer.

Provide a combination lock for each security box, except in Room 210, provide latch for padlock.

### **10523 - FIRE EXTINGUISHERS, CABINETS AND ACCESSORIES**

Submit product data.

Fire Extinguishers, Cabinets and Accessories Basis of Design is J.L Industries.

Model Number: Class ABC (Dry Chemical) Cabinet Model No. C1526G25 w/ Saf-T-Lok and Cosmic 10E Extinguisher, designated on plans as 'FEC'.

Cosmic 10E Extinguisher and mounting brackets at locations designated 'FE'.

Provide two extinguishers. Mount where directed.

### **10800 - TOILET & MISCELLANEOUS ACCESSORIES**

Submit product data.

Submit shop drawings of compartments and screens.

Provide accessories as shown on the drawings and provided for by allowance in Section 01210.

Basis of Design is Bobrick. Equivalent products by others are acceptable.

See drawings for locations and models required.

Blocking is required for all accessories.

## **10900 - MISCELLANEOUS SPECIALTIES**

Provide custom pipe covers as shown on AE-701 and as called out on the AE-400 series of sheets.

Provide house number. Basis of Design is DeSign-It Model # 11201 with brushed nickel finish. See additional requirements on the drawings.

Provide mail box. Basis of Design is Fulton Model # 3237 with black, steel baked enamel finish, 8.5" W x 10" H x 3" D with magazine rack. See additional requirements on the drawings.

## **DIVISION 11 -- EQUIPMENT**

### **11450 - RESIDENTIAL EQUIPMENT**

Appliances will be furnished by the Owner. The Contractor shall provide utility hookups and install the appliances.

### **11165 – DOCK BUMPERS**

Submit product data.

Provide Durable B4520-11 bumpers. ([www.durablecorp.com](http://www.durablecorp.com))

## **DIVISION 12 -- FURNISHINGS**

### **12100 - WINDOW TREATMENTS**

Provide white, custom sized, aluminum, mini-blinds at all windows.

## **DIVISION 13 – SPECIAL CONSTRUCTION**

### **13080 – SOUND BARRIERS**

Submit product data.

Seal joist penetrations of acoustic drywall partition using sound stop curtains fitted around the joists. Provide material manufactured by E.J. Davis Company (203-239-5391) Sound Stop Curtain or by Kinetics Noise Control, Inc.(800-959-1164) KNM-100AL/AL Cross Talk Barrier. Install per manufacturer's instructions.

## **DIVISION 15 -- MECHANICAL**

### **GENERAL**

Insert some general stuff for HVAC

### **PLUMBING**

Submit product data, shop drawings, samples, warranty.

Floor set water closets with flush valves.

China sinks.

Floor set urinals with flush valves.

Two electric water coolers in stainless steel finish.

2x2 molded floor sink

Floor drains as required.

Copper water lines, PVC drain, waste and vents.

Hot water heater, electric.

Limited area sprinklers in storage and mechanical rooms.

## **HVAC**

Submit product data, shop drawings, samples, warranty.

Heat and Ventilation only for Batting Cages and Public Toilet Rooms. Avoid ductwork in the Batting Cages.

The balance of the building is air conditioned. Provide separate thermostats for each locker room and the weight room. Provide means of air conditioning the offices and training room without the full load of the locker rooms. Provide equipment screen if rooftop equipment is used.

## **DIVISION 16 -- ELECTRICAL**

### **POWER & LIGHTING**

Submit product data, shop drawings, samples, warranty.

Provide duplex outlets at 16' oc of all interior walls on average. GFI for toilet rooms, Provide 4 special circuits, All wiring is concealed. Light switches at all doors, 3 or 4 way where needed. Surface mounted fluorescent 1x4 fixtures in toilet rooms, 2x4 lay-in fixtures in acoustical ceilings. Heavy duty protected fixtures in Batting Cages. Power for score board. 8 building mounted 400 watt metal halide exterior lights, shoe box design, anodized aluminum housing. Wall sconce compact fluorescent lights in stair. Low energy lamps and ballasts throughout. LED exit lights. Battery pack emergency lights with remote exterior heads.

Provide clocks matching school. Provide wiring for twelve combination phone / date devices connected to school phone and network systems.