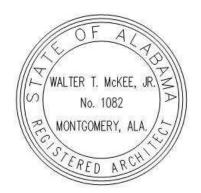
Addendum **No.** 2 Date: November 17, 2025

Project:

Renovation of the Arts Center To Goshen High School for the Pike County Schools Troy, Alabama MCKEE PROJECT NO. 20-119



#### ALABAMA DIVISION OF CONSTRUCTION MANAGEMENT NO.2025714

The following changes and/or substitutions to the plans and specifications are hereby made a part of same and are incorporated in full force as part of the contract.

Bidders shall acknowledge receipt of this Addendum in writing on his Proposal Form.

#### **A2.1 GENERAL MODIFICATIONS:**

A. Refer to the Table of Contents (Revised 11.17.25), herein.

## **A2.2 SPECIFICATION MODIFICATIONS:**

- A. Refer to Specification Section 08331 Coiling Counter Door (ADDED 11.17.25), herein.
- B. Refer to Specification Section 02200 Earthwork (ADDED 11.17.25), herein.

## A2.3 DRAWING MODIFICATIONS:

- A. See the attached Revised Drawings as follows:
  - 1. Sheet ...

## A2.4 CLARIFICATIONS AND RESPONSES TO RFI

A. The following are responses to RFI's received from Contractors.

**Question:** It says to relocate light power pole to be relocated see drawing sheet C-2. There is no location specified

**Answer:** The light pole can be relocated in the grassed area behind the sidewalk and in between the two additions (or removed if approved by owner)

**Question:** On drawing sheet C-1 you requiring relocating both septic (grease trap). You do not show a location to relocate them on sheet C-2. The Existing discharge on the tank go west towards the next building over. Are you suggesting the lines go under the new concrete areas AC pads, Storage Room.

**Answer:** The existing line needs to be rerouted from the cleanouts and around the new concrete pad. The tanks can be placed on the east side of the storage building. A new line will go from the tanks north of the two new additions (under the sidewalk is preferred) and tied back into the existing line going to the Pump station. Coordinate design/work with the PHD.

**Question:** Is there a Soils Report for this project? What is the requirements for the building pads under the new additions to the existing building? Undercut? Build-up?

**Answer:** No soils report. See section 02200 Earthwork included in this addendum.

**END OF ADDENDUM** 

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## Renovation of the Arts Center

to

## Goshen High School

for the

Pike County Schools Troy, Alabama

MCKEE PROJECT NO. 20.119

## **BIDDING REQUIREMENTS**

- Advertisement For Bids
- Instructions to Bidders (DCM Form C-2)
- Request For Information (McKee Form)
- Prior Approval/Substitution Request Form (McKee Form)
- Instructions to Bidders (DCM Form C-2)
- Proposal Form (DCM Form C-3)
- Form Of Bid Bond (DCM Form C-4)
- Special Instructions to Bidders (McKee Form)

### **CONTRACT FORMS**

- Preparation and Approval of Construction Contracts and Bonds (DCM Form B-7)
- Construction Contract (DCM Form C-5)
- Performance Bond (DCM Form C-6)
- Payment Bond (DCM Form C-7)
- General Conditions of the Contract (DCM Form C-8)
- Instructions for Contractor's Insurance Company (Article 37 of DCM Form C-8)
- Supplement to General Conditions of the Contract (McKee Form)
- State of Alabama Disclosure Statement Form, Required by Article 3B of Title 41, Code of Alabama 1975 with Information and Instructions regarding Relationships Between Contractor/Grantees and Public Officials/Employees.
- State of Alabama E-Verify Memorandum of Understanding Instructions with ABC Bulletin and Revised Alabama Immigration Law Guidance for School Boards
- E-Verify Memorandum of Understanding Supplemental (Mckee Form)
- Alabama Department of Revenue Sales and Use Tax Division Application for Sales and Use Tax Certificate of Exemption (ST:EX-01)

 Alabama Department of Finance Real Property Management Division of Construction Management Permit Fee and Re-Inspection Fee Calculation Worksheet

## **GENERAL CONDITIONS**

- Pre-Construction Conference Checklist (DCM Form B-8)
- Detail Of Project Sign (DCM Form C-15)
- Application and Certificate for Payment (DCM Form C-10)
- Schedule Of Values, (DCM Form C-10SOV) Attachment to DCM Form C-10
- Inventory Of Stored Materials, (DCM Form C-10SM) Attachment to DCM Form C-10
- Progress Schedule and Report (DCM Form C-11)
- Change Order Checklist, (DCM Form B-12) For Use with DCM Form C-12
- Contract Change Order (DCM Form C-12 (fully locally funded K-12 Schools)
- Change Order Justification (DCM Form B-11) Attachment to DCM Form C-12
- Change Order Proposal Recap Sheet (Lathan Mckee Form LM 0825)
- General Contractor's Roofing Guarantee (DCM Form C-9)
- Certificate of Substantial Completion (DCM Form C-13 & 13A)
- Form of Advertisement for Completion (DCM Form C-14)
- Final Payment Checklist (DCM Form B-13)
- Contractor's Affidavit of Payment of Debts and Claims (DCM Form C-18)
- Contractor's Affidavit of Release of Liens (DCM Form C-19)
- Consent of Surety to Final Payment (DCM Form C-20)
- Form of Advertisement for Completion (DCM Form C-14)
- Certificate of Asbestos Free Building Materials (McKee Form)

## DIVISION 01 GENERAL REQUIREMENTS

01010	Scope of Work
01011	Contingency Allowances
01250	Contract Modification Procedures
01290	Payment Procedures
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01322	Photographic Documentation
01330	Submittal Requirements
01500	Temporary Facilities and Controls
01600	Product Requirements
01700	Execution Requirements
01770	Closeout Procedures

01781 Project Record Documents
 01782 Operation and Maintenance Data
 01820 Demonstration and Training

**DIVISION 02** SITE WORK

02070 Selective Demolition02100 Site Preparation

02200 Earthwork

02513 Asphaltic Concrete Paving02660 Water Distribution System

02830 Temporary Chain Link Fencing and Gates

**DIVISION 03 CONCRETE** 

03310 Cast-In Place Concrete

03950 Concrete Sealer

DIVISION 04 MASONRY

04200 Unit Masonry

04720 Architectural Cast Stone

**DIVISION 05 METAL** 

05310 Steel Decking

05450 Pre-Engineered Light Gauge Steel Trusses

05500 Miscellaneous Steel and Metal Fabrications (Handrails)

05510 Metal Stairs05540 Metal Studs

**DIVISION 06 CARPENTRY** 

06121 Structural Panel Concrete Subfloor

Solid Surface Fabrications (Window Sills)Custom Laminated Millwork (Wall Panels)

**DIVISION 07 INSULATION** 

07132 Rolled Self, Adhering Waterfproofing Membrane

07200 Insulation

07410 Standing Seam Metal Roofing

07421 Metal Wall Panels

07600 Flashing and Sheetmetal

07900 Joint Sealers

DIVISION 08 DOORS, WINDOWS, & GLASS

08100 Steel Doors and Steel Frames

08211 Wood Doors

O8310 Coiling Counter Door deleted

08331 Coiling Counter Door

08410 Aluminum Storefront

08700 Finish Hardware

**DIVISION 09 FINISHES** 

09250 Gypsum Drywall

09301 Porcelain Tile

09510 Acoustical Ceilings

09550 Wood Flooring

09650 Rubber Base, Stair Tread, and Riser

09651 Luxury Vinyl Tile (LVT)

09843 Fixed Sound-Absorptive Panels

09846 Fixed Sound Reflective Panels (Diffusers/Barrell) Deleted

09890 Brick Color Treatment

09900 Painting

**DIVISION 10 SPECIALTIES** 

10100 Markable Boards and Tackboards

10160 Toilet Partitions10410 Identifying Devices10800 Toilet Accessories

**DIVISION 11 EQUIPMENT** 

11520 Projectors-Deleted

11521 Projection Screens Deleted

11614 Stage Curtain and Accessories

**DIVISION 12 FURNISHINGS** 

12304 Laminate Clad Casework

**DIVISION 13 SPECIAL CONSTRUCTION** 

13670 **Extruded Aluminum Walkway Cover** 

**DIVISION 13** 

SPECIAL CONSTRUCTION

Not Applicable

**DIVISION 14 CONVEYING SYSTEM** 

14425 Vertical Wheelchair Lifts

**DIVISION 15 MECHANICAL** 

15010 General Mechanical Provisions

15400 Plumbing

15500 Sprinkler System

15700 Heating, Ventilating and Air Conditioning

**DIVISION 16 ELECTRICAL** 

16100 Electrical

16571 Theatrical Dimming System

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#### SECTION 02200 – EARTHWORK

#### **PART 1 - GENERAL**

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the contract including General and Supplementary Conditions and Division 1 Specification Sections apply to work of this section.

#### 1.2 DESCRIPTION OF WORK:

- A. Extent of earthwork is indicated on drawings.
  - 1. Rough grading
  - 2. Preparation of subgrade for building slabs and walks is included as part of this work.
  - 3. Drainage fill course for support of building slabs is included as part of this work.
- B. Excavation for Mechanical/Electrical Work: Refer to Division 15 and 16 sections for excavation and backfill required in conjunction with underground mechanical and electrical utilities and buried mechanical and electrical appurtenances; not work of this section.
- C. Codes and Standards: Perform excavation work in compliance with applicable requirements of governing authorities having jurisdiction.
- D. Testing and Inspection Service:
- E. The **Owner** will select a firm for soil testing and inspection service for quality control testing during earthwork, and Owner to pay costs.
- F. Retesting of rejected materials and installed work shall be done at the Contractor's expense.
- G. Referenced Standards: Where the term "Referenced Standard" is used in these Project Specifications, it shall be interpreted as referring to the current edition of "Standard Specifications for Highway Construction, 2018 or latest edition" of Alabama Department of Transportation". Referenced Divisions of the "Standard" are hereby made a part of this Project Specification insofar as they may be termed applicable. In no case will requirements for "Method of Measurement" and "Basis of Payment" be considered as applicable to this Project Specification.

## 1.3 **JOB CONDITIONS**

- A. Existing Utilities: Locate existing underground utilities in areas of work. If utilities are to remain in place, provide adequate means of support and protection during earthwork operations.
- B. Should uncharted or incorrectly charted, piping or other utilities be encountered during excavation, consult utility Owner immediately for directions. Cooperate with Owner and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of utility owner.
- C. Use of Explosives: The use of explosives is not permitted.
- D. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout and other hazards created by earthwork operations.
  - 1. Perform excavation within drip-line of large trees to remain by hand and protect the root system from damage or dryout to the greatest extent possible. Maintain moist condition for root system and cover exposed roots with burlap. Paint root cuts of 1" diameter and larger with emulsified asphalt tree paint.

PART 2 – PRODUCTS [NOT APPLICABLE]

#### **PART 3 - EXECUTION**

#### 3.1 GENERAL

- A. Prior to the start of excavation and fill placement, the site should be cleared of existing improvements. Additionally, remnant elements associated with previously demolished structures, should be removed. Demolition should include removal of pavements, slabs, and all below grade structures including basement slabs, foundations, and walls. Utility lines will require routing or removal, as appropriate.
- B. Any existing fill materials that are encountered in the planned building area should be completely removed, plus 10 feet beyond.
- C. Areas that are at final grade, or that will require new fill placement, should be evaluated through proofrolling, prior to new fill placement or construction.
- D. Vegetation, topsoil, rootmat, and all organic materials should be completely removed from the site. Excavations resulting from demolition and vegetation removal should be backfilled in a controlled manner with engineered fill.

#### 3.2 FILL PLACEMENT

- A. All material used as structural fill should be relatively free of organics and other deleterious materials. Soil fill should exhibit a Liquid Limit less than 50, a Plasticity Index less than 30, and a maximum dry density of at least 100 pcf. Soil fill should contain no more than 30% rock, and individual rock fragments in the fill should be less than 4 inches in largest dimension.
- B. Soil fill must be placed in an environment free of excess water. Therefore, free-draining granular material (such as ALDOT # 57 crushed aggregate) should be used as the initial lift(s) of fill in areas containing water seepage.
- C. Soil fill should be placed in lifts not exceeding eight inches in loose measure. Individual lifts of fill should be moisture conditioned to with ± 2% of the optimum moisture content and compacted to a minimum of 98% of the Standard Proctor (ASTM D -698) maximum dry density.
- D. Soil may require wetting or drying to achieve proper compaction. Thinner lifts and manually operated equipment will be required to achieve proper compaction in limited access areas such as utility trenches and around manholes and inlets.
- E. Soil compaction testing should be performed during fill placement. Testing will give an indication of the contractor's performance with regard to soil density and moisture content requirements established in the project specifications. Compaction testing should be performed at random locations on each lift of fill placed to provide statistically relevant testing data. The frequency of density testing should be at least one test per lift for every 2,500 square feet of fill placed in building areas and 10,000 square feet in pavement and sidewalk areas (minimum of 3 tests per lift). Each lift of fill placed in utility trenches should be tested on 50-foot centers. A minimum of 3 tests should be performed on all fill lifts.
- F. Following construction, the foundations and underlying soils should be isolated from sources of excess water. Grades adjacent to the structure should be adjusted so that surface water flows away from the foundations. In no case should water be allowed to pond over newly-constructed footings. Roof drains and downspouts from the new buildings should be directed away from the foundations. Additionally, soils adjacent to foundations should consist of properly compacted, engineered fill to minimize water infiltration. The on-site soils contained fine-grained particles and will be adversely affected by excess water.
- G. To reduce the potential for water migration through the floor slab, ground-supported slabs should be underlain by a capillary break consisting of a minimum of 4 inches of compacted, freedraining, coarse, granular material (such as ALDOT #57 crushed stone). Depending on the type of floor coverings to be used, the owner may also elect install a vapor barrier typically consisting of 10 mil polyethylene sheeting. The sheeting will reduce the infiltration of water vapor through the slab and the potential for damage to floor coverings. Note, that the use of a vapor barrier will increase the potential for plastic shrinkage cracking during curing of the concrete slab.

#### 3.3 EXCAVATION

- A. Excavation is Unclassified, and includes excavation to subgrade elevations indicated, regardless of character of materials and obstructions encountered.
- B. Earth Excavation includes excavation of pavements and other obstructions visible on ground surface; underground structures, utilities and other items indicated to be demolished and removed; together with earth and other materials encountered that are not classified as rock or unauthorized excavation.
- C. Unauthorized excavation consists of removal of materials beyond indicated subgrade elevations or dimensions without specific direction of Architect/Engineer. Unauthorized excavation, as well as remedial work directed by Architect/Engineer, shall be at Contractor's expense.
- D. Under footings, foundation bases, or retaining walls, fill unauthorized excavation by extending indicated bottom elevation of footing or base to excavation bottom, without altering required top elevation. Lean concrete fill may be used to bring elevations to proper position, when acceptable to Architect/Engineer.
- E. Elsewhere, backfill and compact unauthorized excavations as specified for authorized excavations of same classification, unless otherwise directed by Architect/Engineer.
- F. Additional Excavation: When excavation has reached required sub-grade elevations, notify Architect/Engineer who will make an inspection of conditions.
- G. If unsuitable bearing materials are encountered at required subgrade elevations, carry excavations deeper and replace excavated material as directed by Architect/Engineer.
- H. Removal of unsuitable material and its replacement as directed will be paid on basis of contract conditions relative to changes in work.
- Stability of Excavations: Slope sides of excavations to comply with local codes and ordinances
  having jurisdiction. Shore and brace where sloping is not possible because of space restrictions
  or stability of material excavated.
- J. Maintain sides and slopes of excavations in safe condition until completion of backfilling.
- K. Dewatering: See civil drawings for drainage plan recommendation for controlling ground water during initial construction phase. Prevent surface water from flowing into excavations and from flooding project site and surrounding area.
- L. Do not allow water to accumulate in excavations. Remove water to prevent softening of foundation bottoms, undercutting footings, and soil changes detrimental to stability of subgrades and foundations. Provide and maintain pumps, well points, sumps, suction and discharge lines, and other dewatering system components necessary to convey water away from excavations.
- M. Establish and maintain temporary drainage ditches and other diversions outside excavation limits to convey rainwater and water removed from excavations to collecting or run-off areas. Do not use trench excavations as temporary drainage ditches.
- N. Material Storage: Stockpile satisfactory excavated materials where directed, until required for backfill or fill. Place, grade and shape stockpiles for proper drainage.
- Locate and retain soil materials away from edge of excavations. Do not store within drip line of trees indicated to remain.
- P. Dispose of excess soil material and waste materials as herein specified.
- Q. Excavation for Structures: Conform to elevations and dimensions shown within a tolerance of plus or minus 0.10', and extending a sufficient distance from footings and foundations to permit placing and removal of concrete formwork, installation of services, other construction, and for inspection.
- R. In excavating for footings and foundations, take care not to disturb bottom of excavation. Excavate by hand to final grade just before concrete reinforcement is placed. Trim bottoms to required lines and grades to leave solid base to receive other work.

- S. Excavation for Pavements: Cut surface under pavements to comply with cross-sections, elevations and grades as shown.
- T. Excavation for Trenches: Dig trenches to the uniform width required for particular item to be installed, sufficiently wide to provide ample working room. Provide 6" to 9" clearance on both sides of pipe or conduit. Excavate trenches to depth indicated or required. Carry depth of trenches for piping to establish indicated flow lines and invert elevations.
- U. Where rock is encountered, carry excavation 6" below required elevation and backfill with a 6" layer of crushed stone or gravel prior to installation of pipe.
- V. Except as otherwise indicated, excavate for exterior waterbearing piping (water, steam, condensate, drainage) so top of piping is not less than 2'-6" below finished grade.
- W. Grade bottoms of trenches as indicated, notching under pipe bells to provide solid bearing for entire body of pipe.
- X. Backfill trenches with concrete where trench excavations pass within 18" of column or wall footings and which are carried below bottom of such footings, or which pass under wall footings. Place concrete to level of bottom of adjacent footing.
  - 1. Concrete is specified in Division 3.
- Y. Do not backfill trenches until tests and inspections have been made and backfilling authorized by Architect/Engineer. Use care in backfilling to avoid damage or displacement of pipe systems.
- Z. Excavation for utilities shall conform to manufacturer's recommendations for the type material used.
- AA. Cold Weather Protection: Protect excavation bottoms against freezing when atmospheric temperature is less than 35 degrees F.

#### 3.4 COMPACTION

- A. General: Control soil compaction during construction providing minimum percentage of density specified for each area classification indicated below.
- B. Percentage of Maximum Density Requirements: Compact soil to not less than the following percentages of maximum density for soils which exhibit a well-defined moisture density relationship (cohesive soils) determined in accordance with ASTM D 698; and not less than the following percentages of relative density determined in accordance with ASTM D 2049, for soils which will not exhibit a well-defined moisture-density relationship (cohesionless soils).
  - Structures, Building Slabs and Steps and Pavements: Compact top 6" of subgrade and each layer of backfill (not exceeding 8" maximum) or fill material to not less than 98% of maximum density.
  - 2. Lawn or Unpaved Areas: Compact top 6" of subgrade and each layer or backfill or fill material to not less than 90% of maximum density for cohesive soils and 90% of relative density for cohesionless soils.
  - 3. Walkways: Compact top 6" of subgrade and each layer of backfill or fill material to notless than 95% of maximum density.
- C. Moisture Control: Where subgrade or layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of subgrade, or layer of soil material, to prevent free water appearing on surface during or subsequent to compaction operations.
- D. Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density.
  - 1. Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread and allowed to dry. Assist drying by discing, harrowing or pulverizing until moisture content is reduced to a satisfactory value.

#### 3.5 BACKFILL AND FILL

- A. General: Place acceptable soil material in layers to required subgrade elevations, for each area classification listed below.
  - Utility Trenches backfill according to manufacturer's recommendation for the type material used.
  - In excavations, use satisfactory excavated or borrow material.
  - 3. Under grassed areas, use satisfactory excavated or borrow material.
  - Under structures, building slabs, steps and pavements and after grading operations, thoroughly mix top 6" of subgrade and compact to a density not less than 98% of maximum density.
  - 5. Under walks and pavements, use satisfactory excavated or borrow material, or combination of both,
  - 6. Under building slabs, use drainage fill material.
- Backfill excavations as promptly as work permits, but not until completion of the following:
  - 1. Acceptance of construction below finish grade including, where applicable, dampproofing, waterproofing, and perimeter insulation.
  - 2. Inspection, testing, approval, and recording locations of underground utilities.
  - 3. Removal of concrete formwork.
  - Removal of trash and debris.
- C. Ground Surface Preparation: Remove vegetation, debris, unsatisfactory soil materials, obstructions, and deleterious materials from ground surface prior to placement of fills. Plow, strip, or break-up sloped surfaces steeper than 1 vertical to 4 horizontal so that fill material will bond with existing surface.
- D. When existing ground surface has a density less than that specified under "Compaction" for particular area classification, break up ground surface, pulverize, moisture-condition to optimum moisture content, and compact to required depth and percentage of maximum density.
- E. Placement and Compaction: Place backfill and fill materials in layers not more than 8" in loose depth for material compacted by heavy compaction equipment, and not more than 4" in loose depth for material compacted by hand-operated tampers.
- F. Before compaction, moisten or aerate each layer as necessary to provide optimum moisture content. Compact each layer to required percentage of maximum dry density or relative dry density for each area classification. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.
- G. Place backfill and fill materials evenly adjacent to structures, piping or conduit to required elevations. Take care to prevent wedging action of backfill against structures or displacement of piping or conduit by carrying material uniformly around structure, piping or conduit to approximately same elevation in each lift.

#### 3.6 GRADING

- A. General: Uniformly grade areas within limits of grading under this section, including adjacent transition areas. Smooth finished surface within specified tolerances, compact with uniform levels or slopes between points where elevations are indicated, or between such points and existing grades.
- B. Grading Outside Building Lines: Grade areas adjacent to building lines to drain away from structures and to prevent ponding.
- C. Finish surfaces free from irregular surface changes, and as follows:
  - 1. Lawn or Unpaved Areas: Finish areas to receive topsoil to within not more than 0.2' above or below required subgrade elevations.

- 2. Walks: Shape surface of areas under walks to line, grade and cross-section, with finish surface not more than 0.10' above or below required subgrade elevation.
- 3. Pavements: Shape surface of areas under pavement to line, grade and cross-section, with finish surface not more than 0.10' above or below required subgrade elevation.
- D. Grading Surface or Fill under Building Slabs: Grade smooth and even, free of voids, compacted as specified, and to required elevation. Provide final grades within a tolerance of 1/2" when tested with a 10' straightedge.
- E. Compaction: After grading, compact subgrade surfaces to the depth and indicated percentage of maximum or relative density for each area classification.

#### 3.7 BUILDING SLAB DRAINAGE COURSE

- A. General: Drainage course consists of placement of drainage fill material, in layers of indicated thickness, over subgrade surface to support concrete building slabs.
- B. Placing: Place drainage fill material on prepared subgrade in layers of uniform thickness, conforming to indicated cross-section and thickness. Maintain optimum moisture content for compacting material during placement operations.
- C. When a compacted drainage course is shown to be 6" thick or less, place material in a single layer. When shown to be more than 6" thick, place material in equal layers, except no single layer more than 6" or less than 3" in thickness when compacted.

## 3.8 FIELD QUALITY CONTROL

- A. Quality Control Testing During Construction: Allow approved testing laboratory to inspect and approve subgrades and fill layers before further construction work is performed.
  - 1. Perform field density tests in accordance with ASTM D 1556 (sand cone method) or ASTM D 2167 (rubber balloon method), or ASTM D 2922 (nuclear method) as applicable.
  - Footing Subgrade: For each strata of soil on which footings will be placed, conduct at least
    one test to verify required design bearing capacities. Subsequent verification and approval of
    each footing subgrade may be based on a visual comparison of each subgrade with related
    tested strata, when acceptable to Architect/Engineer.
  - 3. Paved Areas Subgrade: Make at least one field density test of subgrade for every 10,000 sq. ft. of paved area, but in no case less than 2 tests. In each compacted fill layer, make one field density test for every 10,000 sq. ft. of overlaying paved area, but in no case less than 2 tests
  - 4. Building Slab Subgrade: Make at least one field density test of subgrade for every 2500 sq. ft. of paved area or building slab, but in no case less than 2 tests. In each compacted fill layer, make one field density test for every 2500 sq. ft. of overlaying building slab or paved area, but in no case less than 2 tests.
  - 5. Foundation Wall Backfill: Take at least 2 field density tests, at locations and elevations as directed.
- B. If in opinion of Architect/Engineer, based on testing service reports and inspection, subgrade or fills which have been placed are below specified density, provide additional compaction and testing at no additional expense.

## 3.9 MAINTENANCE

- A. Protection of Graded Areas: Protect newly graded areas from traffic and erosion. Keep free of trash and debris.
- B. Repair and re-establish grades in settled, eroded, and rutted areas to specified tolerances.
- C. Reconditioning Compacted Areas: Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, re-shape, and compact to required density prior to further construction.

D. Settling: Where settling is measurable or observable at excavated areas during general project warranty period, remove surface (pavement, lawn or other finish), add backfill material, compact, and replace surface treatment. Restore appearance, quality, and condition of surface or finish to match adjacent work and eliminate evidence of restoration to greatest extent possible.

## 3.10 DISPOSAL OF EXCESS AND WASTE MATERIALS

A. Removal from Owner's Property: Remove waste materials, including unacceptable excavated materials, trash and debris, and legally dispose of it off Owner's property site, in area approved by all local authorities and ADEM.

**END OF SECTION** 

#### **SECTION 08331 - FIRE RATED COILING COUNTER DOORS**

#### **PART 1 - GENERAL**

#### 1.1 SECTION INCLUDES

- A. Overhead coiling counter fire doors.
  - 1. Model 640 Counter Fire Doors. FireKing® rolling counter fire door with exposed components made of primed galvanized steel, available in labels up to 3 hours.

#### 1.2 RELATED SECTIONS

- A. Section 05500 Metal Fabrications: Support framing and framed opening.
- B. Section 06200 Finish Carpentry: Wood jamb and head trim.
- C. Section 08700 Door Hardware: Product Requirements for cylinder core and keys.
- D. Section 09900 Painting: Field applied finish.
- E. Section 16000 Raceway and Boxes: Conduit from electric circuit to door operator. Wiring Connections: Power to disconnect.

## 1.3 REFERENCES

- A. ASTM A 653 Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- B. ASTM A 666 Standard Specification for Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
- C. ASTM A 924 Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.
- D. NEMA 250 Enclosures for Electrical Equipment (1000 Volts Maximum).
- E. NEMA MG 1 Motors and Generators.
- F. NFPA-80 Standard for Fire Doors and Fire Windows.

## 1.4 DESIGN / PERFORMANCE REQUIREMENTS

A. Fire Rated Assemblies: Provide assemblies complying with NFPA 80 and listed in UL Directory or Intertek Testing Services (Warnock Hersey Listed) Directory.

## 1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Details of construction and fabrication.
  - 4. Installation methods.
- C. Shop Drawings: Include detailed plans and elevations, details of framing members, anchoring methods, clearances, hardware, and accessories.
- D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- E. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) long, representing actual product, color, and patterns.
- F. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
- G. Operation and Maintenance Data: Submit Iubrication requirements and frequency, and periodic adjustments required.

#### 1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in performing Work of this section with a minimum of five years experience.
- B. Installer Qualifications: Installer Qualifications: Company approved by manufacturer, specializing in performing Work of this section with minimum three years experience, with IDEA Certified Installers and service technicians on staff.

## 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Protect materials from exposure to moisture. Do not deliver until after wet work is complete and dry.
- C. Store materials in a dry, warm, ventilated weathertight location.

#### 1,8 PROJECT CONDITIONS

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

#### 1.9 COORDINATION

 Coordinate Work with other operations and installation of adjacent materials to avoid damage to installed materials.

#### 1.10 WARRANTY

- A. Manufacturer's Warranty: Provide manufacturer's two year limited warranty.
- B. Warranty: Manufacturer's limited door and operators System warranty of all parts and components of the system except counterbalance spring and finish for 3 years or 20,000 cycles, whichever comes first.

## **PART 2 - PRODUCTS**

#### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Overhead Door Corporation, 2501 S. State Hwy. 121, Suite 200, Lewisville, TX 75067. ASD. Tel. Toll Free: (800) 275-3290. Phone: (469) 549-7100. Fax: (972) 906-1499. Web Site: <a href="https://www.overheaddoor.com">www.overheaddoor.com</a>. E-mail: info@overheaddoor.com.
- B. Raynor; 1101 East River Road, Dixon, IL 61021-0448; www.raynor.com; PH: 815.285.7144.
- C. Cookson; 1901 South Litchfield Road, Goodyear, AZ 85338; <a href="https://www.cooksondoor.com">www.cooksondoor.com</a>; PH: 800.294.4358

#### 2.2 OVERHEAD COILING COUNTER FIRE DOORS

- A. Overhead Coiling Counter Fire Doors: Model 640 Counter Fire Doors. FireKing® rolling counter fire door with exposed components made of primed galvanized steel, available in labels up to 3 hours.
  - 1. Label: Provide rolling fire doors certified with the following listing.
    - a. UL 3-Hour Class A Label for installation on masonry or steel jamb walls (face mounted). Door may be welded to the face of steel jambs.
    - b. ULC 3-Hour Class A Label for installation on masonry or steel jamb walls (face mounted). Door may be welded to the face of steel jambs.
    - c. FM 3-Hour Class A Label for masonry or concrete walls, steel wall jambs or with steel tubes set against fire walls (masonry or non-masonry construction).
    - d. UL 1-1/2-Hour Class B Label for installation in non-masonry walls, face mounted or between jambs.

- e. FM 1-1/2-Hour Class B Label when installed on 2-hour fire-rated gypsum dry walls.
- 2. Curtain: Interlocking slats, Type F-158 fabricated of 22 gauge galvanized steel. Endlocks shall be attached to ends of alternate slats to maintain curtain alignment and prevent lateral slat movement.
- 3. Glazing: Fire-rated vision panels, four panels 3 inch by 5/8 inch (76 by 16 mm).
- 4. Finish:
  - a. Galvanized Steel: Slats and hood galvanized steel to ASTM A 653 finished with a rust-inhibitive roll coating process, including bonderizing, a 0.2 mils thick baked prime paint, and a 0.6 mils thick baked top coat.
    - i. Powder coat: PowderGuard
      - 1) PowderGuard Premium: Weather resistant polyester powder coat color as selected by the Architect after Bid Date.
  - b. Non-galvanized exposed ferrous surfaces shall be black powder coated.
- 5 Bottom Bar:
  - a. Tubular locking bottom bar.
- 6. Guides:
  - a. Roll-formed black powder coated steel with brush smoke seals.
  - b. Finish: PowderGuard Weathered finish with iron/black powder.
  - c. Finish: PowderGuard Zinc Finish for guides, bottom bar and head plate.
  - d. Fastening Guides to Masonry Fire Walls: UL listed expansion anchors, or by throughbolts on soft brick or hollow block walls, or by bolts on steel jambs.
  - e. Fastening Guides to Non-Masonry Fire Walls: Comply with the manufacturer's listing.
- 7. Brackets: Black powder coated steel to support counterbalance, curtain and hood.
- 8. Counterbalance: Helical torsion spring type. Counterbalance shall be housed in a steel tube or pipe barrel.
- 9. Hood:
  - a. Galvanized painted steel. Hood support provided for wall openings over 13 feet 6 inch (4.11 m) wide.
  - b. FM approved hood shall be equipped with thermally controlled, internal flame baffle.
  - c. Provide with exterior UL Listed, brush smoke seal.
- 10. Manual Operation:
  - a. Manual push.
- 11. Automatic Closure:
  - a. Standard Fire Door: UL approved release mechanism equipped with a 165 degree fusible link
  - Fire Sentinel time-delay release mechanism provides an added measure of safety to control the doors' closure.
- 12. Locking:
  - a. Cylinder lock for manually operated doors.
- 13. Wall Mounting Condition:
  - a. As Indicated On Drawings.
- 14. Plastic Laminated Fire Rated Countertops: Provide counter fire doors with Overhead Door Corporation plastic laminated fire rated countertops.

- a. Label: Plastic laminated fire rated countertops shall bear Warnock Hersey International 1-1/2 hour label for countertops up to 8 feet by 4 feet (2.44 m by 1.22 m). Sizes over 8 feet by 4 feet (2.44 m by 1.22 m) will bear an Warnock Hersey International Oversize Label.
- b. Shape: Provide shape as indicated on the Drawings. To include: I or T copable for face mounted doors; Rectangular H (no cope), I or T copable for between mounted doors. No aprons or additional pieces shall be allowed.
- c. Core: Interior core of Georgia Pacific Firestop composite and high density particleboard.
- d. Finish: Top, bottom and all edges shall be covered with plastic laminate.
- e. Color: Top and all edges as selected by the Architect from any color from Formica, Wilsonart or Nevamar brands of plastic laminate.
- f. Mounting Hardware: Provide with all necessary mounting hardware.

## 2.3 FIRE SENTINEL TIME-DELAY RELEASE

# A. Model FSBX120V Release Device: For non-motorized doors with voltage input 120VAC with battery backup.

- 1. Capable of operating on a voltage of 120VAC, and contain internal fuse and transient protection to guard against power surges; a red, enclosure-mounted LED shall indicate power to the device.
- 2. Capable of holding and releasing up to a 40 lb. load imposed by a fusible link/sash chain assembly attached to a release mechanism within the door construction.
- 3. Provide with an internal battery backup system capable of providing up to 24 hours of battery power to support alarm logic, smoke detector, release capability and audible and visible signaling appliances. Device shall monitor battery charge and annunciate the need for battery replacement via an integral sounder; a green, enclosure-mounted LED that indicates the presence of the battery backup system.
  - a. Battery backup/power system shall contain a management system providing trickle charge capabilities.
  - b. During a power outage, and upon depletion of the battery, the device will initiate door closure by releasing the fusible link/sash chain assembly and initiating gravity closure of the door.
  - c. A DIP-switch selectable feature shall provide the capability of operating on battery power upon loss of line power or closing the door through the release of the fusible link assembly initiating gravity closure of the door
- 4. Includes DIP-switch selectable delay settings of 10, 20, or 60 seconds upon alarm activation to allow for passageway clearance before initiating door closure.
- 5. Capable of receiving an alarm input from compatible 2-wire normally open smoke detectors, 4-wire normally open smoke detectors, or normally open heat detectors, or input from a fire alarm control panel via a relay module providing a Form C dry contact output to the release device.
  - a. Capable of receiving input from a maximum of two smoke detectors.
  - b. Use with an End-of-Line (EOL) device to ensure the integrity of the wiring
- 6. Provide with optional audible and visual signaling appliances to operate during the alarm closing cycle. Device shall be capable of activating and powering a maximum of two audible/visible notification devices, e.g. strobes, horns or horn/strobes. Device shall recognize that the door is in the closed position via input received from a proximity switch, located underneath the door and activated when the door is in the closed position and resting upon the switch, to prevent accidental release of the fusible link/sash chain (or 1/16th cable) assembly; an amber, enclosure-mounted LED shall indicate activation of the proximity switch.
- Provide with relay and trouble outputs to provide notification to a fire alarm control panel when an alarm or trouble state exists.

- 8. Circuit board shall have diagnostic LEDs to assist with field installation by indicating alarm or trouble conditions present within the smoke detector loops, as well as activation of the proximity switch.
- 9. Includes an enclosure-mounted test switch that simulates an alarm condition when depressed and held for a length of time equal to the DIP-switch selectable delay setting, either 10, 20, or 60 seconds. A remote key test switch is also provided to simulate an alarm condition during testing procedures.

#### **PART 3 - EXECUTION**

#### 3.1 EXAMINATION

- A. Verify opening sizes, tolerances and conditions are acceptable.
- B. Examine conditions of substrates, supports, and other conditions under which this work is to be performed.
- C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

#### 3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

#### 3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install rolling counter fire doors in compliance with requirements of NFPA 80. Test fire-release system and reset components after testing.
- Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.
- D. Securely and rigidly brace components suspended from structure. Secure guides to structural members only.
- E. Fit and align assembly including hardware; level and plumb, to provide smooth operation.
- F. Coordinate installation of electrical service with Section 16150. Complete wiring from disconnect to unit components.
- G. Install and test Fire Sentinel release device(s) in accordance with the manufacturer's instructions and in compliance with applicable regulations and codes of the local authority having jurisdiction.
- H. Coordinate installation of sealants and backing materials at frame perimeter as specified in Section 07900.
- I. Install perimeter trim and closures.

#### 3.4 ADJUSTING

- A. Test for proper operation and adjust as necessary to provide proper operation without binding or distortion.
- B. Release device(s) shall be tested and witnessed for proper operation with the door manufacturer recommendations
- C. Adjust hardware and operating assemblies for smooth and noiseless operation.

#### 3.5 FIELD QUALITY CONTROL

A. Functional testing of fire door and window assemblies shall be performed by IDEA Certified personnel with knowledge and understanding of the operating components of the type of door being subject to testing.

## 3.6 CLEANING

- A. Clean curtain and components using non-abrasive materials and methods recommended by manufacturer.
- B. Remove labels and visible markings.
- C. Touch-up, repair or replace damaged products before Substantial Completion.

## 3.7 PROTECTION

A. Protect installed products until completion of project.

**END OF SECTION**