

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE	PAGE 1 OF 2 PAGES
2. AMENDMENT/MODIFICATION NO. 0001	3. EFFECTIVE DATE 13 Jan 03	4. REQUISITION/PURCHASE REQ. NO. W38XGR-2309-6369	5. PROJECT NO. (If applicable)	
6. ISSUED BY DEPARTMENT OF THE ARMY CORPS OF ENGINEERS, MEMPHIS DISTRICT 167 N. MAIN ST., B202 MEMPHIS, TN 38103-1894	CODE B1P0100	7. ADMINISTERED BY (If other than Item 6) See Item 6		
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)			(<input checked="" type="checkbox"/>)	9A. AMENDMENT OF SOLICITATION NO. DACW66-03-B-0003
			(<input checked="" type="checkbox"/>)	9B. DATED (SEE ITEM 11) 12/23/02
				10A. MODIFICATION OF CONTRACTS/ORDER NO.
				10B. DATED (SEE ITEM 13)
CODE	FACILITY CODE			

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(<input checked="" type="checkbox"/>)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

This solicitation for Phase 1-A Short Fork Wastewater Treatment Facility, near Hernando, DeSoto County, Mississippi is amended as follows:

1. SECTION 00010, PAGE 00010-1, STANDARD FORM 1442, BLOCK 13A.

THE HOUR AND DATE FOR OPENING BIDS ARE RESCHEDULED TO 2:30 P.M. LOCAL TIME AT PLACE OF BID OPENING, 04 FEBRUARY 2003.

(AMENDMENT # 0001 - CONTINUED ON NEXT PAGE)

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
_____ (Signature of person authorized to sign)		BY _____ (Signature of Contracting Officer)	

SPECIFICATIONS

2. SECTION 00800, The Storm Water Pollution Prevention Plan at the end of Section 00800 is deleted in its entirety and the attached Storm Water Pollution Prevention Plan is substituted therefor.
3. SECTION 09260, This section is deleted in its entirety and the attached Section 09260 is substituted therefor.
4. SECTION 09511, This section is deleted in its entirety and the attached Section 09511 is substituted therefor.

DRAWINGS

5. On Drawing E.10, delete Note 2 and substitute the following: "Note 2: Motor Monitors are described in Specification Section 16480/2-02 (Power Control Center Spec)."
6. On Drawing E.10, delete Note 3 and substitute the following: "Note 3: Numerical identifications are indicated in Detail 2A - Power Control Center Riser Diagram on E.10 and Specification Section 16480/2-02 (Power Control Center Spec)."
7. On Drawing E.10, delete Note 5 and substitute the following: "Note 5: Alarm and annunciator are described in Specification Section 16480/2-02 (Power Control Center Spec)."

SHORT FORK WASTEWATER TREATMENT FACILITY
DESOTO COUNTY, MISSISSIPPI
STORM WATER POLLUTION PREVENTION PLAN
U.S. ARMY CORPS OF ENGINEERS, MEMPHIS DISTRICT

1. SITE DESCRIPTION

1.1 Nature of Construction

This project consists of preparation and dewatering of site, removal of debris, excavation and backfill, driving of piling, construction of wastewater treatment facility and access road, and seeding and fertilizing of disturbed areas. The facility will be located near Hernando in Desoto County, Mississippi.

1.2 Sequence of Major Activities

The work, which will disturb soils, consists of excavation and backfill for wastewater treatment facility.

1.3 Area Affected

The total area of the site, within the right-of-way limits, which may be impacted by construction, is approximately 110 acres.

1.4 Runoff Coefficient and Soils

The runoff coefficient immediately after construction is estimated to range between 0.10 and 0.30. Once the construction has been completed and the disturbed areas have been revegetated, the runoff coefficient should return to pre-construction conditions. Soils in this area consist of silt, silty sands with a mixture of fat and lean clays underlain by sand.

1.5 Site Map

A set of construction drawings showing the project location as well as indicated drainage patterns and approximate slopes before and after completion of construction will be located on the site at all times. Storm water is likely to discharge from the construction area into Short Fork Creek.

1.6 Receiving Water

The receiving stream is a tributary of Coldwater River, located in Desoto County, Mississippi.

2. EROSION AND SEDIMENT CONTROLS

2.1 Non-Structural Measures

2.1.1 General

Prior to the beginning of any construction, the Contracting Officer will identify all land resources to be preserved within the Contractor's work area. The Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms outside the construction limits without special permission. The Contractor shall provide effective protection for land, water and vegetation resources at all times. The Contractor shall construct or install temporary and/or permanent erosion and sedimentation control features as indicated herein to minimize pollutants entering streams, water bodies or wetlands.

2.1.2 Protection of Landscape

Trees, shrubs, vines, grasses, land forms and other landscape features indicated and defined on the contract drawings or as directed by the Contracting Officer to be preserved shall be clearly identified by marking, fencing, or wrapping with boards, or any other approved technique.

2.1.3 Reduction of Exposure of Unprotected Erodible Soils

All earthwork shall be planned and conducted to minimize the duration of exposure of unprotected soils. Vegetative ground cover shall not be destroyed, removed or disturbed more than 20 calendar days prior to grading or earth moving. To the extent feasible, riprap, side slopes, back slopes, and any other exposed surfaces shall be stabilized by turfing, temporary seeding, mulching, fabric mats or other approved stabilization methods, as soon as possible after work in a particular area is completed or within 7 days on areas that will remain unfinished more than 30 calendar days.

2.1.4 Establishment of Turf

Turf shall be established as a permanent erosion control measure on all areas designated to receive turfing as shown on the plans. Should construction be halted, for any reason, temporarily or permanently, for more than 30 days, in any portion of the site, temporary or permanent turfing measures, or other approved temporary stabilization of exposed areas, such as mulching, shall be initiated as soon as possible, but in no case shall stabilization measures begin more than 7 days after construction is halted. Turf shall be established in accordance with the Contract Technical Specifications.

2.1.5 Seeding

If used, seeding shall be as specified in the Technical Specifications. Temporary seeding shall consist of grasses or grains appropriate for the season in which they are sown. A satisfactory method of sowing shall be employed, using approved mechanical power-driven seeders, mechanical hand-seeders, broadcast-seeders, or other approved methods. When

conditions are such by reasons of drought, high winds, excessive moisture, or other factors that satisfactory results are not likely to be obtained, work shall be halted and resumed only when conditions are favorable or when approved alternative or corrective measures and procedures have been effected.

2.1.6 Mulching

If used, mulch shall be material that do not contain noxious grass or weed seed that might be detrimental to the turfing being established. Mulch shall be spread uniformly in a continuous blanket, using 2 tons per acre of straw mulch or 1,200 pounds per acre of wood cellulose fiber mulch.

2.1.7 Fertilizer

Fertilizer shall be distributed uniformly over the areas to be turfed at a rate, which will supply not less than 40 pounds of available nitrogen, 40 pounds of available phosphorous, and 40 pounds of potash per acre.

2.2 Structural Measures

2.2.1 General

Temporary erosion and sediment control measures such as silt fences, check dams, and sedimentation basins shall be constructed as necessary and maintained until the project is complete and final stabilization is in effect, after which they shall be removed. Erosion and sediment control measures must be in place and functional before earth moving operations begin, and must be constructed and maintained throughout the construction period. If necessary for construction, temporary measures may be removed at the beginning of the workday, but must be replaced at the end of the workday; however, at no time will silt-laden stormwater be allowed to discharge into adjacent streams, waterbodies or wetlands. All control measures shall be checked, and repaired as necessary, weekly in dry periods and within 24 hours after any rainfall of 0.5 inches within a 24-hour period. During prolonged rainfall, daily checking and repairing is necessary.

2.2.2 Silt Fences

If used, silt fences shall be constructed along the toe ends of each embankment and any other areas necessary to minimize the entry of erosive material into watercourses or wetlands. Fences shall be constructed of baled straw or other equivalent devices in accordance with Drawing C-14.

2.2.3 Check Dams

Check dams shall be constructed across ditches, drains and swales using baled straw or equivalent devices to minimize sediment transport away from the site and into watercourses or wetlands. Check dams shall be inspected for sediment accumulation after each significant

rainfall and sediment removed when it reaches one-half the height of the barrier. Sediment removal shall include removal and disposition in a location where it will not erode into construction areas, watercourses or wetlands. Dams shall be constructed in accordance with Drawing C-14.

2.2.4 Sediment Basins

Sediment from construction areas with 10 or more disturbed acres at one time, may be trapped in temporary or permanent basins. After each storm, the basins shall be allowed to settle for 24 to 48 hours after which the accumulated water may be removed. In order to maintain basin effectiveness, accumulated sediment shall be removed when the depth of sediment reaches one-third of the depth of structure in any part of the pool. Discharge shall be controlled by paved weir, by vertical overflow pipe draining from the surface, or by a spillway protected by baled straw filter barriers in the spillway and at the outlet toe of the spillway. If pumps are used, the discharge shall be such that there is no deposition or sediment in streams or wetlands. The collected sediment shall be reused for fill on the construction site, or placed in a suitable disposal area and stabilized. If used, the basins shall provide at least 3,600 cubic feet of storage for each acre drained. Where such basins are not used, other equivalent sediment control measures are required. Basins shall be constructed in accordance with Drawing C-14. Existing or newly excavated material borrow areas may be utilized as temporary or permanent sedimentation basins with discharge controlled as above.

2.2.5 Other Measures

Other temporary erosion and sediment control devices such as dikes, swales, and drains may be used as necessary or in lieu of the above mentioned measures provided they are consistent with Best Management Practices (BMPs) and approved by the Contracting Officer. These devices shall be maintained until permanent drainage and erosion control facilities are complete and operative. Earthen erosion control features shall be compacted and stabilized immediately with vegetation as specified in paragraphs 2.1.5 and 2.1.6.

2.2.6 Velocity Dissipation Devices

Should drains or swales be used, they shall be constructed with velocity dissipation devices (check drains). These devices shall be removed after the erosive areas have been stabilized. Check dams shall be utilized in any other areas where required.

2.3 Records

A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated and completed shall be kept by the Contracting Officer at the construction site at all times.

3. STORM WATER MANAGEMENT

In order to provide permanent storm water pollution protection, turf shall be established on all disturbed areas within the construction limits. Permanent turf shall be established in accordance with the Contract Technical Specifications. A specific individual shall be designated to be responsible for erosion and sediment controls.

4. OTHER CONTROLS

4.1 General

Construction activities shall be kept under surveillance, management and control to avoid pollution of surface and ground waters. Special management techniques shall be implemented to control water pollution.

4.2 Solid Wastes

Solid wastes (excluding clearing debris) shall be placed in containers, which are emptied on a regular schedule. All handling and disposal shall be conducted to prevent contamination. All solid wastes shall be transported off the work site and disposed of in compliance with Federal, State and local regulations.

4.3 Chemical Wastes

Chemical wastes shall be stored in corrosion resistant containers, removed from the work area, and disposed of in accordance with Federal, State and local regulations.

4.4 Off-Site Vehicle Tracking

Off-site vehicle tracking of sediments and the generation of dust shall be minimized.

4.5 Washing and Curing Water

Wastewaters directly derived from construction activities shall not be allowed to enter waterways. These wastewaters shall be collected and placed in retention ponds where suspended material can settle out or the water evaporates so that pollutants are separated from the water.

5. STATE AND LOCAL PLANS

There are no known State or local erosion and sediment control requirements applicable to this work other than those met by the requirements of this permit.

6. MAINTENANCE

All maintenance of the Wastewater Treatment Facility is the responsibility of Desoto County, Mississippi.

7. INSPECTIONS

7.1 General

Quality assurance representatives shall inspect disturbed areas of the construction site and areas used for storage of materials that are exposed to precipitation and have not been finally stabilized, structural control measures and locations where vehicles enter or exit the site every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater. Where sites have been stabilized, inspections shall be conducted at least once every month.

7.2 Disturbed Areas and Areas Used for Material Storage

Disturbed areas and areas used for material storage that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operated correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off-site sediment tracking.

7.3 Modification of Pollution Plan

Based on the results of the inspection in paragraph 7.2, the site description identified in paragraph 1 and 2 of this plan shall be revised as appropriate, but in no case more than 7 calendar days following the inspection. Such modifications shall provide for timely implementation of any changes to the plan within 7 calendar days following the inspection.

7.4 Reports

A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the Storm Water Pollution Prevention Plan (SWPPP), and actions taken shall be recorded and retained as part of the SWPPP for at least three (3) years from the date the site is finally stabilized.

8. DEFINITIONS

8.1 Best Management Practices (BMPs)

Schedules of activities, prohibitions of practices, maintenance procedures, and other management practice to prevent or reduce the pollution of waters of the State. BMPs also

include treatment requirements, operation procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

8.2 Commencement of Construction

The initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.

8.3 Drainage Swale

A drainage way with a lining of grass, riprap, asphalt, or other material installed to convey runoff without causing erosion.

8.4 Check Dam

Small temporary dams constructed across a swale or drainage ditch to reduce the velocity of runoff flows.

8.5 Final Stabilization

All soil-disturbing activities at the site have been completed, and a uniform perennial vegetative cover with a density of 85% of the cover for the area has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed.

9. CERTIFICATION

“I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.”

Dennis J. Kamper, P.E., Chief, Engineering Division 901-544-3227
Name and Official Title Phone No.

Signature Date Signed

Name and Official Title of Contractor Phone No.

Signature Date Signed

Name and Official Title of Subcontractor Phone No.

Signature Date Signed

Name and Official Title of Subcontractor Phone No.

Signature Date Signed

DIVISION 9- FINISHES

SECTION 09260

GYPSUM BOARD ASSEMBLIES

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SECTION 09260

GYPSUM BOARD ASSEMBLIES

PART 1 - GENERAL

1-01 SECTION INCLUDES

- A. Metal stud wall framing.
- B. Metal channel ceiling framing.
- C. Gypsum sheathing.
- D. Cementitious backer board.
- E. Gypsum wallboard.
- F. Joint treatment and accessories.

1-02 REFERENCES

- A. ASTM C 36/C 36M - Standard Specification for Gypsum Wallboard; 1999.
- B. ASTM C 79/C 79M - Standard Specification for Treated Core and Nontreated Core Gypsum Sheathing Board; 2000.
- C. ASTM C 475 - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board; 1994.
- D. ASTM C 514 - Standard Specification for Nails for the Application of Gypsum Board; 1996.
- E. ASTM C 630/C 630M - Standard Specification for Water-Resistant Gypsum Backing Board; 2000.
- F. ASTM C 645 - Standard Specification for Nonstructural Steel Framing Members; 2000.
- G. ASTM C 754 - Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products; 2000.
- H. ASTM C 840 - Standard Specification for Application and Finishing of Gypsum Board; 1999a.
- I. ASTM C 1002 - Standard Specification for Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs; 2000.
- J. GA-216 - Application and Finishing of Gypsum Board; Gypsum Association; 2000.

1-03 SUBMITTALS

- A. See Section 00800, for submittal procedures.

- B. Product Data: Provide data on metal framing, gypsum board, accessories, and joint finishing system.

PART 2 - PRODUCTS

2-01 METAL FRAMING MATERIALS

- A. 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.
1. Studs: C shaped with knurled faces.
 2. Runners: U shaped, sized to match studs.
 3. Ceiling Channels: C shaped.
 4. Furring: Hat-shaped sections, minimum depth of $7/8$ inch.
- B. Loadbearing Studs for Application of Gypsum Board: As specified in Section 05400.
- C. Ceiling Hangers: Type and size as specified in ASTM C 754 for spacing required.
- D. Partition Head To Structure Connections: Provide track fastened to structure with legs of sufficient length to accommodate deflection, for friction fit of studs cut short and screwed to secondary deflection channel set inside but unattached to top track.

2-02 GYPSUM BOARD MATERIALS

- A. Standard Gypsum Wallboard: ASTM C 36/C 36M; sizes to minimize joints in place; ends square cut.
1. Thickness: As indicated.
 2. Edges: Tapered.
- B. Water-Resistant Gypsum Backing Board: ASTM C 630/C 630M; ends square cut.
1. Thickness: $5/8$ inch.
 2. Edges: Tapered.
- C. Gypsum Sheathing Board: Dens Glass Gold by USG, ASTM C 79/C 79M; moisture resistant type; sizes to minimize joints in place; water repellent paper faces; ends square cut.
1. Thickness: $5/8$ inch.
 2. Edges: Square.
- D. Cementitious Backer Board: High density, glass fiber reinforced, $1/2$ inch thick.
1. Tape: 2 inch wide, coated glass fiber tape for joints and corners.
- E. High Abuse Wallboard: Modified ASTM D 1037 and Modified ASTM D 2394

1. Thickness: 5/8"
2. Edges: Tapered

2-03 ACCESSORIES

- A. Corner Beads: Galvanized steel.
- B. Edge Trim: Bead type(s) as detailed.
- C. Joint Materials: ASTM C 475 and as recommended by gypsum board manufacturer for project conditions.
 1. Ready-mixed vinyl-based joint compound.
- D. Screws: ASTM C 1002; self-piercing tapping type; cadmium-plated for exterior locations.
- E. Nails: ASTM C 514.
- F. Staples: ASTM C 840.
- G. Anchorage to Substrate: Tie wire, nails, screws, and other metal supports, of type and size to suit application; to rigidly secure materials in place.

PART 3 - EXECUTION

3-01 EXAMINATION

- A. Verify that project conditions are appropriate for work of this section to commence.

3-02 FRAMING INSTALLATION

- A. Metal Framing: Comply with ASTM C 754 and manufacturer's instructions.
- B. Suspended Ceilings and Soffits: Space framing and furring members as indicated.
 1. Level ceiling system to a tolerance of 1/1200.
 2. Laterally brace entire suspension system.
- C. Studs: Space studs as permitted by standard.
 1. Extend partition framing to structure where indicated and to ceiling in other locations.
 2. Partitions Terminating at Ceiling: Attach ceiling runner securely to ceiling track in accordance with manufacturer's instructions.
 3. Partitions Terminating at Structure: Attach extended leg top runner to structure, maintain clearance between top of studs and structure, and brace both flanges of studs with continuous bridging.
- D. Openings: Reinforce openings as required for weight of doors or operable panels, using not less than double studs at jambs.

- E. Blocking: Install blocking for support of plumbing fixtures. Bolt or screw steel channels to studs.

3-03 GYPSUM BOARD INSTALLATION

- A. Comply with ASTM C 840 and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.
- B. Single-Layer Non-Rated: Install gypsum board in most economical direction, with ends and edges occurring over firm bearing.
- C. Gypsum Sheathing: Install horizontally, with edges butted tight and ends occurring over firm bearing.
- D. Gypsum Soffit Board: Install perpendicular to supports, with staggered end joints over supports.
- E. Cementitious Backing Board: Install over metal studs, in accordance with manufacturer's instructions.
- F. Installation on Metal Framing: Use screws for attachment of all gypsum board except face layer of non-rated double-layer assemblies, which may be installed by means of adhesive lamination.
- G. Moisture Protection: Treat cut edges and holes in moisture resistant gypsum board with sealant.

3-04 INSTALLATION OF TRIM AND ACCESSORIES

- A. Control Joints: Place control joints consistent with lines of building spaces and as indicated.
 - 1. Not more than 30 feet apart on walls and ceilings over 50 feet long.
 - 2. At exterior soffits, not more than 30 feet apart in both directions.
- B. Corner Beads: Install at external corners, using longest practical lengths.
- C. Edge Trim: Install at locations where gypsum board abuts dissimilar materials and as indicated.

3-05 JOINT TREATMENT

- A. Finish gypsum board in scheduled areas in accordance with levels defined in ASTM C 840 and as scheduled below.
- B. Fill and finish joints and corners of cementitious backing board.

3-06 TOLERANCES

- A. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet in any direction.

3-07 FINISH LEVEL SCHEDULE

- A. Level 1: Above finished ceilings concealed from view.
- B. Level 2: Utility areas and areas behind cabinetry.
- C. Level 3: Walls scheduled to receive textured wall finish.
- D. Level 4: Walls and ceilings scheduled to receive flat or eggshell paint finish.
- E. Level 5: Walls and ceilings scheduled to receive semi-gloss or gloss paint finish.

DIVISION 9 – FINISHES

SECTION 09511

SUSPENDED ACOUSTICAL CEILINGS

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SECTION 09511

SUSPENDED ACOUSTICAL CEILINGS

PART 1 - GENERAL

1-01 SECTION INCLUDES

- A. Suspended metal grid ceiling system.
- B. Acoustical units.

1-02 REFERENCES

- A. ASTM C 635 - Standard Specification for the Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings; 2000.
- B. ASTM C 636 - Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels; 1996.
- C. ASTM E 580 - Standard Practice for Application of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Requiring Seismic Restraint; 2000.
- D. ASTM E 1264 - Standard Classification for Acoustical Ceiling Products; 1998.

1-03 SUBMITTALS

- A. See Section 00800, for submittal procedures.
- B. Product Data: Provide data on suspension system components.
- C. Samples: Submit two samples 6x6 inch in size illustrating material and finish of acoustical units.

1-04 QUALITY ASSURANCE

- A. Suspension System Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- B. Acoustical Unit Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

1-05 ENVIRONMENTAL REQUIREMENTS

- A. Maintain uniform temperature of minimum 60 degrees F, and maximum humidity of 40 percent prior to, during, and after acoustical unit installation.

1-06 PROJECT CONDITIONS

- A. Sequence work to ensure acoustical ceilings are not installed until building is enclosed, sufficient heat is provided, dust generating activities have terminated, and overhead work is completed, tested, and approved.
- B. Install acoustical units after interior wet work is dry.

PART 2 - PRODUCTS

2-01 ACOUSTICAL UNITS

- A. Acoustical Units - General: ASTM E 1264, Class A.
- B. Acoustical Panels: ASTM E 1264 Type III, Painted mineral fiber, conforming to the following;
 - 1. Size: 24 x 48 inches.
 - 2. Thickness: 5/8 inches.
 - 3. Composition: Wet felted.
 - 4. Density: 0.60 lb/cu ft.
 - 5. NRC Range: 0.55
 - 6. Panel Edge: Tegular.
 - 7. Surface Pattern: Perforated.
 - 8. Surface Color: White.
 - 9. Product: Fine Fissured by Armstrong.
 - 10. Suspension System: Exposed grid.

2-02 SUSPENSION SYSTEM(S)

- A. Suspension Systems - General: ASTM C 635; die cut and interlocking components, with stabilizer bars, clips, and splices as required.
- B. Exposed Steel Suspension System: Formed steel, commercial quality cold rolled; intermediate-duty.
 - 1. Profile: Tee; 15/16 inch wide face.
 - 2. Construction: Double web.
 - 3. Finish: White painted.

2-03 ACCESSORIES

- A. Support Channels and Hangers: Galvanized steel; size and type to suit application, seismic requirements, and ceiling system flatness requirement specified.
- B. Touch-up Paint: Type and color to match acoustical and grid units.

PART 3 - EXECUTION

3-01 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify that layout of hangers will not interfere with other work.

3-02 INSTALLATION - SUSPENSION SYSTEM

- A. Install suspension system in accordance with ASTM C 636, ASTM E 580, and manufacturer's instructions and as supplemented in this section.
- B. Rigidly secure system, including integral mechanical and electrical components, for maximum deflection of 1:360.

- C. Locate system on room axis according to reflected plan.
- D. Install after major above-ceiling work is complete. Coordinate the location of hangers with other work.
- E. Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.
- F. Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.
- G. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability.
- H. Support fixture loads using supplementary hangers located within 6 inches of each corner, or support components independently.
- I. Do not eccentrically load system or induce rotation of runners.

3-03 INSTALLATION - ACOUSTICAL UNITS

- A. Install acoustical units in accordance with manufacturer's instructions.
- B. Fit acoustical units in place, free from damaged edges or other defects detrimental to appearance and function.
- C. Fit border trim neatly against abutting surfaces.
- D. Install units after above-ceiling work is complete.
- E. Install acoustical units level, in uniform plane, and free from twist, warp, and dents.
- F. Cutting Acoustical Units:
 - 1. Make field cut edges of same profile as factory edges.
 - 2. Double cut and field paint exposed reveal edges.

3-04 ERECTION TOLERANCES

- A. Maximum Variation from Flat and Level Surface: 1/8 inch in 10 feet.
- B. Maximum Variation from Plumb of Grid Members Caused by Eccentric Loads: 2 degrees.