

**SECTION 00 00 02**  
**PROCEDURES**

**PART 1 COMMUNICATION**

**1.01 ROLES:**

A. District Project Manager

1. Coordinate with the District's Departments and the Design Team in order to oversee the design and construction process and ensure the District's Standards are being met for the project.
2. Oversees the entire design and construction process.
3. Has the authority to administer decisions to the Design Team on behalf of the District.

B. Project Architect

1. The primary Design Team contact between the District Project Manager and the Design Team.
2. Oversees the entire design process.
3. Has the authority to administer instructions from DPS's Office of Planning, Design and Construction.
4. Continues as the Project Architect throughout the design and construction administration phases.
5. The Project Architect shall not be changed without the written approval of the District's Project Manager.

**1.02 LINE OF COMMUNICATION:**

- A. All communication between the design team and the District will be routed through the Project Architect to the District.
- B. All communication between the District's Departments and the design team will be routed through the the District to the Project Architect.
- C. All meetings shall be set up through the District.

**1.03 CORRESPONDENCE:**

- A. All communication should have the District's Parent Project Number, the School Name, and the Date noted on each correspondence.
- B. The Design Team will prepare written minutes for every meeting held during the design and construction process. This includes all meetings with the District, Design Reviews, all Building Department/Jurisdiction meetings, and all Construction Meetings.
  1. Send finalized minutes to the District.
  2. Send minutes to Building Department with signature block for the Building Department with "approved by" notation. Include statement similar to "If you are in agreement.... Please sign and return... ."
  3. Send copy of minutes with Building Department sign-off to DPS.
- C. During the course of the design process, the Design Team might need to coordinate aspects of the project with the following District Departments. All coordination must be made through the District.

**DISTRICT DEPARTMENT LIST:**

<b>Quality Assurance / Quality Control:</b>	
General, Administrative	QA/QC
Structural	QA/QC
ADA, Other	QA/QC
Electrical	QA/QC
Fire Alarm	Planning, Design & Construction
Protective Coatings	QA/QC
Plumbing, Fire Sprinklers	QA/QC
Grounds	QA/QC
HVAC	QA/QC
<b>Accessibility (ADA):</b>	
ADA Database	Facility Planning
ADA Technical Guidelines	Planning, Design and Construction
ADA Scoping – Students	Student Services
ADA Scoping - Staff	Human Resources
<b>Additional Work Requests, Additional Project Requests</b>	First Call Center (FCC)
<b>Art &amp; Music</b>	Art Department / Teaching + Learning
<b>Athletics</b>	Athletics
<b>Audio Visual</b>	Audio/ Visual
<b>Career &amp; Technical Ed (CTE)</b>	Career & Technical Ed
<b>Community Outreach, DAGs, PACs, School Naming</b>	(Manager of City Affairs)
<b>Early Childhood Education (ECE)</b>	Early Education
<b>Educational Programs</b>	Operations Support Services (OSS)
<b>Educational Specifications</b>	Facility Planning
<b>Educational Technology, Tech Labs, Interactive White Boards (Promethean Boards)</b>	DoTS
<b>Emergency Egress, Areas of Rescue Assistance, Fire Drills, Kilns, Cooking in Classrooms, Safe Routes to School, etc.</b>	Safety and Security - Emergency Preparedness (formerly with Risk Management)
<b>Environmental: Asbestos, Lead</b>	Planning, Design & Construction
<b>Environmental: Other</b>	Planning, Design & Construction
<b>Environmental: Wastewater (water quality)</b>	Planning, Design & Construction

<b>Facility Operations (Custodial)</b>	Operations
<b>Gardens, Greenhouses, Urban Farms</b>	Sustainability
<b>Health Clinics</b>	Nursing Services
<b>Kitchens</b>	Food & Nutrition Services
<b>Libraries</b>	Educational Resource Services
<b>Physical Education</b>	Arts & Physical Education
<b>Risk Management: Insurance Claims</b>	Risk Management
<b>Risk Management: Playground Safety, Traverse &amp; Climbing Walls, General School Safety, etc.</b>	Risk Management
<b>Science</b>	Curriculum & Instruction
<b>Security Systems</b>	Safety & Security
<b>Special Education</b>	Student Services, Special Education
<b>Summer Use, Community Use</b>	Customer Communication Center (CCC)
<b>Sustainability</b>	Sustainability
<b>Telecom, IT</b>	DoTS
<b>Transportation</b>	Transportation
<b>Warehouse, Moving (DPS)</b>	Enterprise
<b>Warranties, D&amp;C Standards</b>	Maintenance

**PART 2 PROCESS**

**2.01 PROGRAMMING**

- A. Once awarded the project, the Project Architect will coordinate with the District to confirm the project’s expectations and overall Project Schedule. This includes Design Review expectations.
- B. The Project Architect will work with the District to determine what Authorities Having Jurisdictions (AHJ) need to be contacted for the projects. Jurisdictions may include:
  - 1. Colorado Division of Fire Prevention & Control
  - 2. Department of Regulatory Agencies
  - 3. City of Denver
  - 4. Denver Fire
  - 5. Denver Water
  - 6. Denver Health Department
- C. The Project Architect shall become familiar with all the District Standards, including:
  - 1. Education Specifications
  - 2. Design & Construction Standards
  - 3. Construction Safety Standards

- D. The Project Architect will coordinate a time to visit the Space Management Office with the District in order to obtain the appropriate existing documents for the project.
- E. Project Schedule:
  - 1. Prepare a detailed schedule for the entire project, which meets the project requirements. The schedule should include key milestones, including design and construction phases.
  - 2. The District will review the schedule.
  - 3. Schedule to be approved in writing by District.
  - 4. The Project Architect shall update the schedule monthly (or more frequently for short duration projects).
- F. Programming:
  - 1. Design Team to collect necessary information from building users while also following the District's Education Specifications.
  - 2. Program parameters to be documented by the Project Architect and accepted by the District.
- G. Owner Provided Data (see A/E Agreement):
  - 1. Survey
    - a) Existing survey may be used for additions.
    - b) If the existing survey is not adequate, the Design Team to identify survey information required.
  - 2. Soils Investigation
    - a) The Design Team will to provide dimensioned test hole locations on site plan.
    - b) Owner will provide 3 copies to the Project Architect upon completion.

## **2.02 DESIGN REVIEWS**

- A. Provide (1) full size hard copy and (1) half size hard copy and composite pdf electronic file of every drawing set submitted for review.
- B. Provide (1) bound copies of every manual/narrative book and pdf electronic file for every drawing set provided.
- C. Schematic Design Review Deliverables:
  - 1. Provide the following drawings as appropriate for the project. Refer to Drawing Standards section for drawing format and room numbering.
    - a) Site Plan.
    - b) Floor Plans that indicate the layout, room numbers, and square feet.
    - c) Code plan with occupancy groups, construction types, allowable and actual floor areas, important requirements and/or restrictions, water control analysis, zoning requirements (parking, setbacks, etc.), and utility analysis.
  - 2. Systems Descriptions that include:
    - a) Building shell finish materials (include samples of unique materials)
    - b) Wall types and construction
    - c) Roofing System including typical flashing and termination
    - d) HVAC system(s)
    - e) Fire Alarm
    - f) Clock & Bell

- g) Primary Electrical (for remodel or additions with primary electrical changes)
- 3. Probable Bid Cost Estimate that reflects the level of development of the plans. Minimally provide:
  - a) Building cost
  - b) Site development cost
  - c) Utility service cost
- 4. Updated Design & Construction Schedule

D. Design Development Design Review Deliverables:

- 1. Provide the following drawings as appropriate for the project. Refer to Drawing Standards section for drawing format and room numbering.
  - a) Code Plan
  - b) Plans
    - i) Site Development Plan showing the building location, property lines, walks, drives, parking, landscaping, hard surface play areas, play apparatus areas, signage locations, trash enclosures, fences, retain walls, loading docks, steps, accessible routes, utility routing (including existing and required new easements), and the preliminary drainage characteristics including the calculations.
    - ii) Overall Floor Plans that show the room numbers, general space layout, general furniture layout (ie cafeteria tables, auditorium seating, library, kitchen layout, offices, and bleachers), general finishes as well as fire walls, door locations, drinking fountains, fire extinguishers, roof hatches, lockers, shelving, windows, wall types, elevation changes, ramps, elevators.
  - c) Major Building Elevations that show roof top mechanical equipment screens, gutters, conductor heads, downspouts, signage, sun screens, mechanical grilles, louvers, other openings, expansion joint locations.
  - d) Major Building Sections that show the relationships to floor, ceiling, roof, and parapets. Target elevation to be 100'-0".
  - e) Reflected Ceiling Plans
  - f) Large Scale Plans:
    - Typical Classroom that shows all of the casework, coat racks, visual display boards, and furniture layout.
    - Toilet Rooms
    - Administrative Offices
    - Fire Control Rooms
    - Library
    - Gymnasium
    - Stage/Platform
    - Vocational Shops
    - Computer Labs
    - Science Labs
  - g) Major Details
  - h) Casework Elevations (typical classrooms)
  - i) Stair sections that show number of risers and treads, handrails, and stair heights. Stairs should be dimensioned from the wall and meet the code requirements for headroom and landing widths.
  - j) Structural Plans that show the basic system that show the primary beam lines and building grid lines as well as span directions, dimensioned column locations, and expansion joints.
  - k) Electrical Plans that show the room numbers, grid lines, panel locations, device layouts and telephone boards.
  - l) Electrical Reflected Ceiling Plan with the lighting layout.

- m) Mechanical Plans that show the room numbers, grid lines, equipment locations, duct and shaft locations, fire alarm, clocks, and bells.
2. Provide a Narrative describing the following intent:
    - a) Reconstruction and repair required as a result of asbestos abatement or other work preceding General Construction.
    - b) Systems Descriptions for:
      - i) Building shell finish materials (include samples of unique materials)
      - ii) Wall types and construction
      - iii) Roof systems including typical flashing and termination
      - iv) HVAC System(s)
      - v) Fire Alarm
      - vi) Clock & Bell
      - vii) Primary Electrical (for remodel or additions with primary electrical changes)
  3. Outline Specification
    - a) Include Table of Contents (all sections to be included in final specification).
    - b) Each outline spec section should list all materials and manufacturers as well as the general areas of product use and the areas of product applications.
  4. Provide a finishes board for review by the District (if applicable).
  5. Probable Bid Cost Estimate that reflects the level of development of the plans. Minimally provide:
    - a) Quantity survey with unit price type estimate.
    - b) Organize estimate by the CSI format.
    - c) Discuss any potential allowances, unit prices, or alternates.
  6. Updated Design & Construction Schedule. Discussion should also start to evaluate:
    - a) Asbestos Abatement
    - b) Telecom Installation
    - c) Furniture Move-in
    - d) Long Lead Time Items
- E. Preliminary Construction Documents Design Review Deliverables:
1. Provide the following drawings as appropriate for the project. Refer to Drawing Standards section for drawing format and room numbering.
    - a) Code Analysis
    - b) Site Plan
    - c) Landscape Plan
    - d) Demolition plans (should be separate from construction plans)
    - e) Overall floor plan w/ primary dimensions.
    - f) Roof plan

- g) Reflected Ceiling Plan
  - h) Enlarged Plans
  - i) Exterior Elevations
  - j) Primary Building Sections
  - k) Primary Wall Sections
  - l) Interior elevations
  - m) Detail Plans for the Kitchen, Library, a Typical Classroom, and the Administration Area
  - n) Schedules—Athletic Equipment, Door Schedule, Finish Schedule, and Kitchen Equipment Schedule.
  - o) Coordinated consultant plans
  - p) Structural Plans
  - q) Mechanical Plans
    - i) Large scale layouts of mechanical rooms.
    - ii) Mechanical Equipment Schedules
    - iii) Plumbing Fixture Schedules
    - iv) Mechanical Calculations: (two (2) complete sets)
      - Water service size (if applicable)
      - Sewer service size (if applicable)
      - Fixture unit calculations. (two (2) complete sets)
      - Gas consumption calculations. (two (2) complete sets)
  - r) Electrical Plans
    - i) Large scale electrical equipment room
    - ii) Light fixture schedules
    - iii) See electrical STANDARDS for additional requirements
    - iv) Electrical Calculations: (two (2) complete sets)
  - s) Kitchen Consultant Plans
2. Specifications, including a Hardware specification with a Hardware Schedule.
  3. Probable Bid Cost Estimate
    - a) Organize estimate by the CSI format.
    - b) Confirm all allowances, unit prices, and alternates.
    - c) Confirm all AHJ Submission Fees with DPS.
  4. Updated Design & Construction Schedule. Discussion should also determine:
    - a) Asbestos Abatement
    - b) Telecom Installation
    - c) Furniture Move-in

- d) Long Lead Time Items
- e) Bidding Dates

### **2.03 CONSTRUCTION DOCUMENTS / AHJ PERMIT SUBMISSION:**

- A. Project Architect makes final corrections and submits final documents to the District.
- B. Project Architect submits final documents for permitting through the appropriate jurisdictions. Some reviews are coordinated through the State of Colorado, and some are through the Denver Building Department. A copy of each application must be submitted to the District for their records.
- C. The Project Architect will submit to the District a receipt for submission fee payment for straight pass-through reimbursement on the next Pay Application.
- D. DPS reviews schedule and plan status and determines a “document release date”, “pre-bid site visitation date” and “bid opening date”. Note: coordinate dates with other DPS projects and (if possible) with other school district’s bidding plans.
- E. DPS requests “advertisement for bids” be prepared.
  - 1. This document should be included in the bid sets issued by the architect.
  - 2. All of the dates, including the pre-bid site visitation” should be included in the advertisement.
  - 3. Deadline for submittal of requests for substitutions must be included in advertisement.

### **PART 3 BID PHASE**

#### **3.01 TYPICAL PROJECT BID PROCESS:**

- A. Project Architect must upload electronic/PDF version of Contract Documents to a location contractors can download when provided a User Name and password. This information is provided to the District several days prior to the pre-bid meeting with the General Contractors.
- B. Pre-Bid Site Walk (must be conducted for all additions and renovations).
  - 1. Project Architect to take notes and include items of discussion and list of attendees in the forthcoming addendum.
- C. Request for Substitutions can only be made before Bid Opening Day, per terms listed in DPS procurement documents.
- D. Release of Addenda
  - 1. The Project Architect prepares addenda and submits to the District for issuance.
  - 2. Addenda to be issued for all clarification and/or change items during bid period. Include any information requested by individual Contractors over the phone. Advise Contractors to look in addenda for interpretations. Avoid answer of significant questions by phone, etc.
  - 3. Number all addenda items (i.e. Addenda 1, Item 1 or Addenda item 1.01).
  - 4. Cloud any revision and place the correct delta number next to the cloud on specifications or drawings.
  - 5. Place the delta number, date, revision description in the title block of the drawings.

#### **3.02 BID OPENING AND CONTRACT AWARD PROCESS:**

- A. The Bid Opening will be conducted by DPS at the place and time designated in the Advertisement for Bids.
- B. The District and the Project Architect will evaluate bid proposals and make a recommendation to the District’s Board of Education or other approval authority.



- C. The Project Architect will deliver to the District:
  - 1. (1) electronic copy of the consolidated document set (inclusive of all changes during Bidding).
  - 2. (1) full size and (2) half size hard copies of the consolidated document set that are stamped.
  - 3. (2) hard copies of the consolidated Project Manuals.
- D. When authorized by the Senior Director of Facility Modernization, and after the DPS Legal review, the DPS Office of Design and Construction will issue the GC Agreement for Contractor signature.
  - 1. The agreement must list all contract documents including addenda.
  - 2. Include the issue dates of all documents.
- E. The Contractor will then return (3) original copies of the Agreement, Bond, and Insurance to the DPS Office of Design and Construction.
- F. The District will:
  - 1. Review Bonds and Insurance and verify that amounts are in conformance with the General Conditions.
  - 2. If the Bond, Insurance, and signed/sealed Agreements appear to be in order, the documents will be routed to Office Support for creation of a “Red Folder” package that includes an Executive Summary (if contract requires Director of Facility Management or above approval), legal review e-mail, and Senior Director of Facility Modernization approval.
  - 3. Upon approval by DPS Legal, the District will cause the Notice to Proceed to be prepared and this will be forwarded to the Contractor for signature and return.

**PART 4 CONTRACT ADMINISTRATION**

**4.01 PRE-CONSTRUCTION CONFERENCE (GENERAL)**

- A. Attendees:
  - 1. Contractor
  - 2. Architect & engineers
  - 3. DPS
  - 4. DPS Safety Department
  - 5. Facility manager and/or principal (optional)
- B. Documentation:
  - 1. The project architect to keep minutes of meeting and distribute to contractor and DPS.
  - 2. Document attendees, general discussion items and procedures review.
- C. Points to be discussed (minimum):
  - 1. Remodeling and addition projects:
    - a) Review construction sequence and building disruptions.
    - b) Scheduling of disruptions of utilities.
    - c) Review of construction fencing, barricades, dust-proof partitions, etc.
    - d) Review of contractor access and staging.

2. All projects:
  - a) Construction fencing locations
  - b) Project safety
  - c) Contractor's office facilities.
  - d) General scheduling.
3. DPSs to review pre-construction checklist for additional items.

#### **4.02 PRE-PHASE CONFERENCES (START OF NEW PORTION OR TRADE ON SITE)**

- A. The purpose of this meeting is to review the project requirements with each major trade prior to their beginning work on the project site and to verify their understanding of the specifications and drawings.
- B. Contractor to schedule conferences.
- C. Attendees:
  1. DPS
  2. Architect
  3. Engineers and sub-consultants as appropriate
  4. Contractor
  5. Trade contractor
  6. DPS Quality Control/Quality Assurance
- D. Architect to keep minutes and distribute.

#### **4.03 ARCHITECT SITE VISITATIONS:**

- A. Frequency:
  1. As required by A/E agreement.
  2. As required to resolve construction issues.
- B. Critical required observations shall be conducted as defined the A/E agreement.
- C. Consultant observations:
  1. Consultants will observe work when a particular trade or portion of the work is starting (to determine if initial work complies with contract requirements).
  2. Periodic observations shall be conducted (to verify contract compliance and monitor workmanship).
  3. As required to resolve construction issues.
- D. Site visit protocol:
  1. Schedule visits when work is in progress.
  2. Contact project superintendent upon arrival (if not present, notify trade contractor superintendent or forman).
  3. Document:
    - a) Status (progress of each phase of the work)
    - b) Deficiencies

- c) Corrections required:
  - i) Clearly specify expected corrective action.
  - ii) Specify who is responsible for action (i.e. Architect to provide PR, or contractor to replace...”).
- d) Weather
- e) Visitation date
- 4. Advise general contractor of problems and corrections required before leaving site.
- 5. Send site observation report to DPS and contractor within two days of site visitation (consultants to submit to A/E).

**4.04 PAY REQUESTS TO BE PROCESSED BY ARCHITECT PRIOR TO SUBMISSION TO DPS.**

- A. Architect to review amounts requested with DPS and contractor at project meeting immediately preceding pay request submission.
- B. Architect to review and sign contractor’s pay application and forward to DPS for processing.
- C. DPS will REVIEW THE PAYMENT APPLICATION PER THE Payment Verification Matrix and forward to Office Support for processing.
  - 1. Any changes in contract completion dates corresponds to change orders extending contract completion.
  - 2. No change orders are to be included in pay applications which have not been completely processed.

**4.05 CHANGES**

- A. Use AIA standard format (or similar) for change request documentation.
  - 1. Proposal request (PR)
    - a) To be approved by DPS prior to issue. Copy DPS at time of issue.
    - b) Preferred method of initiating construction change.
    - c) To be used when there is sufficient time to review costs and approve change without delaying progress of the work.
    - d) To be used when the change is not essential.
    - e) To be used when various solutions may be available to remedy a construction problem.
  - 2. Construction change directive (CCD)
    - a) To be issued only after approval by DPS.
    - b) To be issued only when:
      - i) Construction delays would result from issue of a PR.
      - ii) There are no options other than to make the change to construction.
  - 3. Architect’s Supplemental Instructions (ASI)
    - a) To be issued only after approval by DPS.
    - b) To be issued for no time/cost impact clarifications.
- B. Architect is to document all changes (whether initiated by architect or by others).
  - 1. Do not combine unrelated items on a single change request (PR or ccd).

2. Include all components of a change on one change request (i.e. If change involves various trades and disciplines, all items required to complete the anticipated change are to be included in a single change request (PR or ccd).
  3. If not initiated by architect, review with DPS as to type of change document to be used (PR or ccd).
  4. All changes shall be complete including appropriate details, standards of performance and references to project specifications.
  5. Change item referencing:
    - a) Architect to sequentially number all change documents. (PR 01, PR 02, etc.)
    - b) Architect to cross reference all preceding documents relating to change, such as “request for information”, “supplemental instructions”, etc.
    - c) Architect to document with PR or CCD all change items not initiated by the Architect. Change items which started as request for Supplemental Information, Architects Supplemental Instruction, or as a Contractor’s Change Request are to be converted to PR format when they become a cost or time issue.
- C. Architect to prepare change cost & time estimate at the time of change initiation and forward to DPS.
- D. DPS shall track change items in budgets as soon as a change issue is known.
- E. Change order (preparation and processing):
1. The contractor will determine when change items have reached a sufficient number to justify processing a change order.
  2. Change order is prepared by the DPS after review from the Architect and contractor about items to be included in the change order.
  3. Use DPS change order form (electronic copy is available).
  4. Consolidate several “change items” in a single change order.
  5. Architect shall number each item in the change order and cross reference it to the initiating pr (ccd). Example: item co-4.01: (description of work) as identified in PR-17. This would refer to the first item in change order #4.
  6. Contractor signs change order and sends to Architect for signatures.
  7. Contractor sends signed change order to DPS for processing.
  8. DPS to verify that notification is sent to the contractor when change order processing is complete (p.o. Modification returned from purchasing) so that he may invoice for the change items.

**PART 5 PROJECT CLOSEOUT**

- A. Architect to submit to the District (1) thumb drive or CD that includes electronic AutoCAD and PDF files of the record drawings as well as the Operation and Maintenance Manuals (PDF or Word Format). Follow the District’s Drawing and Specification Standards (00 00 03).
- B. Submit (1) complete set of Operation and Maintenance Manuals in a 3-ring binder and deliver to the project’s school building. If multiple buildings are within a project; provide individual manuals for each building. All manuals (electronic and printed) should include the following:
  1. Product Warranty for not less than 24 months.
  2. Manufacturer’s complete maintenance instructions including routine and preventive maintenance schedule for each component.
  3. Wiring diagrams and schematics where applicable.

4. Manufacturer's printed operating instructions.
5. Signed Asbestos Certification Letter for New Installed Building Materials

**PART 6 POST CONSTRUCTION**

- A. 11-month inspection to be conducted by the Project Architect, Contractor and District.
  1. Architect to prepare list of items requiring correction.
  2. Contractor to make corrections under warranty.
  3. DPS & Architect to verify corrections have been made.
- B. 23-month inspection to be conducted by architect, contractor and DPS.
  1. Architect to prepare list of items requiring correction.
  2. Contractor to make corrections under warranty.
  3. DPS & architect to verify corrections have been made.

**END OF SECTION 00 00 02**