



# Request for Proposal

Design-Build Services for the  
High School Science Lab  
Denver Waldorf School  
940 Fillmore Street, Denver, CO 80206

Issue Date: February 7, 2011

## PURPOSE

The Denver Waldorf School (DWS), a not-for-profit independent school, seeks to evaluate and select a design-build team (Team) to provide design, planning, pre-construction services and construction services for the renovation of the existing high school science lab for dual laboratory and lecture classroom use.

## INTRODUCTON

DWS has embarked on a new vision for its future, which began with the completion of a Campus Master Plan (CMP) in April 2009 and a Historical Structure Assessment (HSA), summer 2010 (completed October 2010), for the existing building structures. The long-term vision is to implement the recommendations within these studies in phases to make the facilities fully support the Waldorf curriculum. In order to enact the true potential of the Waldorf Science Curriculum, we need to redesign our High School Science Lab.

## PROJECT DESCRIPTION

The DWSHS Science Laboratory will remain in its current location on the second floor of the main building. The current configuration provides awkward and immovable teaching and working spaces and must be redesigned to easily transition between comfortable and efficient laboratory and lecture based lessons. Safety and storage features appropriate to the uses of the lab must also be incorporated. The new space must be flexible, fluid and able to accomodate a variety of activities, including teaching, group work, and group and individual laboratory work. Specifically, we need a teaching area with blackboard/whiteboard space and lecture seating, a moveable demonstration lab table and hood, a large table for class work and moveable lab stations for small group or individual work. Respondents must understand that the School is 80 years old and has always served as a school. DWS understands that renovating this type of structure is never as easy or clear-cut as anticipated. *Prior experience in renovation of science lab – especially in older structures – is a plus.*

Some of the requirements for the new laboratory involve changes to the infrastructure (mechanical, electrical, and plumbing) and to the room itself; other

changes will be to accommodate equipment and materials to support the work of the lab. The supporting equipment and materials listed in the following pages are part of this work. Additional material and equipment to be accommodated for are listed in an exhibit to this RFP, are for design purpose only, and will be procured by DWS directly under a separate contract. The specific changes and additions mandated are as follows:

1. Consider removing the existing bathroom/storage area, including the existing partition walls.
2. Review current storage (our current equipment storage cabinets will remain in the lab) and make necessary changes to include: a **Storage for Physics Equipment**, expanding the **Chemical Storage Area with Ventilation System** and **Gas Tank Storage** system for 2 or 3 gas tanks, a **Tank and Cage System for Animals and Plants**, a **Display Cabinet** to contain a **Complete Skull Collection** and a **Display Cabinet** to contain **Samples of the Elements of the Periodic Table**.
3. Consider repositioning the sink area in accordance with the overall design of the laboratory and replace the sink set-up with at least two **Chemically Resistant Sinks**, an appropriate **Back Splash and Drain Counter**, a **Dishwasher** and a **Freezer/Fridge** (with ice maker).
4. Add a **Safety Station** consisting of a shower, eyewash station, and laboratory fire suppression equipment, including blanket and extinguisher.
5. Add a large moveable **Demonstration Lab Table** with two **Shields**, a **Fume Hood** and 2-3 **Mobile Lab Stations** (6 sided-with sinks in the middle or at one station).
6. Add flexible (movable) **Gas Lines, Water Lines, Electricity, and Appropriate Lighting** for these work stations. Consider the possibility of raising the floor or supplying from the ceiling to create a flexible infrastructure.
7. Consider the cost/benefit of moving the north wall to increase the lab size and remove the unused corner of the adjacent math room.
8. Provide **Blackout Curtains** and other blackout capability to the room openings so the room can be completely dark for optics lessons.
9. Provide adequate, flexible **Lighting** for the whole laboratory.
10. Install an **IT line** and a **Projection Screen or Smart Board**.
11. Incorporate a **Deionization System** into the existing water supply for the sinks; a table top system may be preferable to an in-line filter system.
12. Consider incorporating a **Stone Table** into the design space flow. This chemical resistant surface should have a flexible design that could be used as one big table or as two smaller tables depending on the requirements of a lesson.

The selected Team will be responsible to provide all material and labor necessary to perform and install the work, including means and methods, and to reflect the complete effort in the fee proposal.

A school restroom remodeling design-build effort will be occurring within the same time frame that does not include the existing science lab restroom. The selected Team will be responsible to coordinate with that restroom design-build team for all design and construction related coordination issues.

### **PROJECT SCHEDULE**

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The response to this RFP must include a detailed schedule for planning, pre-construction phase, and construction phase of this project. The schedule should align the AIA Draw Schedule.

DWS has already obtained financing from a grant to support this project.

Detailed construction drawings will be developed between April and May 2011. During this timeframe, the necessary construction drawings will be developed with consultation from engineering sub-consultants (architectural, mechanical, electrical, plumbing, and structural) as needed. The firm will also work with the city to acquire necessary approval and permits to begin construction.

Construction can begin at any time once given the proper authorization. Summer school students will be occupying the building during summer vacation; however, the science lab will not be in use. Construction is anticipated to take 2 months. The project is to be delivered to DWS by August 10, 2011.

### **SUBMITTAL SCHEDULE**

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The tentative RFP schedule is as follows:

- Notice of RFP ..... February 7, 2011
- Mandatory On-Site Walk Through..... February 14, 2011  
Walk Through to start @ 10:00 am at:  
    Denver Waldorf School, Administrative Office  
    940 Fillmore Street  
    Denver, CO 80206
- Receipt of written questions and clarification due (4:00PM)February 16, 2011
- Responses by DWS to all documented questions (4:00PM)February 18, 2011
- RFP responses due (4:00PM) ..... February 28, 2011  
Responses to be delivered to:  
    Denver Waldorf School

ATTN: Judy Lucas, Administrative Director  
940 Fillmore Street  
Denver, CO 80206  
[admin@denverwaldorf.org](mailto:admin@denverwaldorf.org) , 303-777-0531, x108

- Selection announcement of short-listed Teams ..... March 4, 2011
- Interviews with short-listed Teams..... March 7, 2011
- Final Selection announcement ..... March 11, 2011
- Anticipated Notice to Proceed ..... April 4, 2011

### **SCOPE of SERVICES**

DWS anticipates a two-phase process. The scope of services includes, but may not be limited to, the following items:

#### **PHASE 1 - DESIGN (Pre-Construction)**

1. Space Needs & Standards;
2. Functional Space Programming;
3. Mechanical/Electrical/Plumbing/Structural Design;
4. Lighting and Photometric Plan;
5. 50% & 95% progress review plans with Contract Administrator;
6. Securing approval and permit from City and County of Denver Building Department;
7. 100% Construction Document;

#### **PHASE 2 - CONSTRUCTION**

1. Coordinate all sub-contractors and City Inspectors;
2. Coordinate all RFI, Change Orders, and payment invoice, etc. with DWS' Owner's Representative;
3. Project Close-Out, and final punch list
4. Obtaining Certificate of Occupancy from City
5. Warranty review at agreed upon time interval after acceptance of the project by DWS.

### **SUBMITTAL REQUIREMENTS**

Selected Team shall present a comprehensive proposal that shows a clear understanding for delivering the request scope, to meet the project goals, within the required timeframe. The winning proposal will be selected to ensure that DWS receives the Best Value. The RFP response shall be organized and evaluated by the following information:

1. Cover Letter
2. Table of Contents
3. Firm Overview & Qualification (10%)

Concise firm description to include information describing office location(s), size, services you provide, credentials, qualifications and expertise, consistent with the DWS' needs identified in this RFP.

**4. Construction and Project Approach (30%)**

Provide a detailed narrative and proposed schedule describing your specific approach as well as your ability to meet the needs of this project. Outline your understanding of the project and identify critical issues based on your firm's experience. Include your methodology regarding design services, cost control, schedule control and value engineering.

**5. Relevant Experience (20%)**

Specific examples of relevant science lab design, including projects of similar scope and complexity the firm has completed in the last five (5) years. Include description of the specific role and services your firm played within each project with client references for each project submitted.

**6. Warranty (10%)**

Describe in detail the proposed warranty schedule for the different components.

**7. Fee Proposal (30%)**

Provide a price break-down of the different projects components that include all material and labor necessary to execute the work. A general payment schedule shall also be included to be refined/finalized during Final Design phase. Also provide evidence of bond approval.

Proposals are limited to **ten (10)** single-sided, 8 ½" x 11" pages, bounded. Covers, Table of Contents and tabbed dividers are excluded from the page limitation, but if tabs contain proposal content other than the name of the tabbed section, the tabs will be counted against the page limit.

Three (3) bound copies shall be submitted in a sealed envelope, clearly marked – **High School Science Lab RFP**, and one (1) electronic PDF copy shall be emailed to [admin@denverwaldorf.org](mailto:admin@denverwaldorf.org). Proposals must be received by the due date and time under the Submittal Schedule section. Any proposals received after due date and time will be deemed none responsive and returned unopened to the bidder. No exceptions will be made.

Submit all questions in writing via email to Judy Lucas, the Administrative Director at [admin@denverwaldorf.org](mailto:admin@denverwaldorf.org). Only written questions will receive official response. Only when absolutely necessary, call 303-777-0531x108 to reach the Administrative Director.

DWS reserves the right to reject any and all proposals, to waive any informalities or irregularities therein, and to accept the proposal that, in the opinion of DWS, is in the best interest of the school.

## **PROJECT DESIGN & CONSTRUCTION STANDARDS**

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### **PROFESSIONAL SERVICES**

The Team shall obtain and designate a registered Professional Engineer and / or Architect as the Designer of Record who will be responsible for the integration and approval of the complete design package. The Designer of Record must sign and stamp/seal all construction documents. As mandated by applicable jurisdiction, the Designer of Record will designate representatives as sign-off authority for individual disciplines required for the completion of the Design. Those individuals must be registered engineers and/or architects and have significant influence over the development of the Design. Sign-off from the Designer of Record and designated representatives will be on all applicable design documents, specifications and shop drawings before construction can begin.

### **DESIGN DELIVERABLES FORMATS**

The Team shall:

- Provide 2D drawings source files in an industry acceptable CAD format that shall be defined within the proposal
- Provide all related source and configuration files
- Provide each monochrome 2D construction drawing in PDF. Version 6.0 or higher, set to scale, with layer structure inherited from the source CAD file and 300 to 400 dpi resolution
- Provide all text and presentation document source files in Microsoft Office Professional format, and in a PDF format, which is book marked and fully text retrievable
- Provide all electronic data deliverables on labeled compact disk (CD). CD label and transmittal shall contain key contract information
- Provide three (3) sets of printed, to scale drawings.

### **DESIGN DOCUMENTS**

- 1) **Within 21 days of award**, Design-Build Team shall develop and submit a 50% design that includes the following:
  - Basis of Design describing the systems, components, conditions, and methods chosen to meet the project intent
  - Final Proposed Room Layout and improvements
  - Applicable drawing sheets necessary to describe pertinent project features - including, but not limited to architectural, structural, mechanical, electrical, life safety, plumbing, HVAC, etc.
  - Applicable specifications with catalog cut sheet

- 2) The Team shall not complete construction drawings until all these major elements of the 50% Design submission are established and accepted by DWS and its representatives. The goal is to provide an environment in which all stakeholders participate freely in the design process through program validation, design development sessions, on-board reviews and design document reviews. Additionally, the Team should evaluate the impact of design decisions on contract budget and schedule and conduct "value engineering" during the design process.
- 3) Within 21 days of receipt of 50% design review comments from DWS and its representatives, the Design Build Team shall deliver the Final Design Package for DWS Approval. Final Design shall be packaged as such to allow applicable Building Code Officials & Permit Approvals.
- 4) **As-built Submission** - Upon construction completion, the Team shall submit as-built drawings and documents. The Team shall revise all engineering plans and specifications throughout the duration of the project. All engineering changes occurring by the "supplied by others" components shall also be reflected in the plans and specifications developed by the Team. The Team shall maintain up-to-date red line drawings onsite during construction.
- 5) **Operation and Maintenance Manual** - Upon construction completion, the Team shall submit a complete set of Operation and Maintenance Manuals for DWS which include product specification, warranty information and operation for all new fixtures and equipment.

#### DESIGN APPROVAL

- 1) Design documents shall be of quality and details commensurate with Best Industry Practices.
- 2) All design documents shall be reviewed and approved by DWS and its representatives.
- 3) The Team shall anticipate a turn-around of 10 working days for all design review comments by DWS.
- 4) The Team is, without additional expense, responsible for obtaining all necessary permits and design approvals from all applicable State, local and Federal Government agencies before commencing construction.

#### CONSTRUCTION APPROVALS

The Team shall ensure that all applicable municipal inspections and permit requirements are successfully met/approved - including Final Occupancy Approval.

An Asbestos Environmental assessment study has been made to the property. The Team will remove, control, or encapsulate any hazards that may surface as a result of construction in accordance with applicable laws and environmental regulations. It is our understanding that the existing wall constructions do not contain asbestos; however, the wiring and plumbing is uncertain.

#### **WEEKLY MEETINGS**

The Team shall conduct weekly Project Progress meetings throughout the duration of construction. The first progress meeting will be scheduled the first week after the start of construction.

#### **CONSTRUCTION QUALITY ASSURANCE**

- 1) As may be mandated by the contract terms, Quality Assurance (QA) will be identified and scheduled with the Team during the Final Design Package.
- 2) DWS and its Owner's Representative reserve the right to perform QA inspections at any time during the construction, and without prior advanced notification to the Team.
- 3) The Team shall notify DWS prior to any inspection/approval conducted by City/State Building Code Officials/Inspectors. As necessary, the Team may need to schedule such inspections to accommodate the presence of DWS' Owner's Representative.

#### **CONSTRUCTION PAYMENT DRAW SCHEDULE**

By providing a general payment schedule contained within the response, a final construction payment schedule will be agreed upon during the Final Design Package. This payment schedule will parallel the construction QA to ensure prompt payment upon qualified construction deliveries.

#### **WARRANTY**

All labor and material shall be warranted as per acceptable industry practice. The Team shall provide a warranty schedule within their proposal.

#### **LICENSING, INSURANCE AND BONDING REQUIREMENTS**

All General Contractor and Sub-Contractors shall be licensed with the City and County of Denver. All design professional services shall be under the supervision of an active Colorado licensed

The Team shall secure and maintain insurance and bonding coverage over the life of the project as follows:

<u>Coverage</u>	<u>Liability Limits</u>
Professional Liability	\$1,000,000 per claim/aggregate
Commercial General Liability	\$1,000,000 per occurrence

Performance bond is required, and evidence of bond approval shall be included with the RFP Response.

### **ADDITIONAL DOCUMENTATION**

The following documents will be provided to the Team awarded with the project to help with the design and remodel of the science lab:

- Historic Structure Assessment, Draft. Compiled by SlaterPaul Architects Summer 2010. This includes a site survey of visibly accessible elements including but not limited to: fixtures, partitions, doors, electrical outlets, millwork, flooring, lighting, and notation on the general condition of the space.
- Building Floor Plans indicating location of the Science Laboratory
- Asbestos Report, September 2008 and March 2010
- Water Analysis, December 2010

### **EXHIBITS**

Additional material and equipment to be accommodated for by the Team are listed in the following Exhibit 1. It is for information and coordination only and not part of the work.

# EXHIBIT 1

## DWSHS Science Lab Equipment List

In addition to the equipment listed in connection with the infrastructure/design changes in the RFP, the science lab design will need to accommodate the following equipment with designated storage space. This list is preliminary, and final coordination is needed during design phase with DWS.

### 1. Scales:

- Triple beam and weight set
- Electronic, 1mg-500mg and 500mg-5kg

### 2. Microscopes,

- 10, Olympus teaching Binocular Microscopes 100x-1000x
- 1 microscope with movie camera attachment, for teaching demonstrations.

### 3. Glassware:

- Erlenmeyer flasks - 25ml -2500ml, 5-6 of each
- Florence flasks
- Beakers, 50ml-1000ml, 5-6 of each
- Volumetric flasks, 50,100,250,500 ml
- Filter flasks
- Graduated cylinders, 10ml-1000ml, plastic
- Test tubes, 250, and racks, 20
- Stoppers for test tubes and flasks, 200
- Stirring rods, 40
- Watch glasses, 40
- Evaporating dish
- Bell jar, 1 or 2
- Vacuum plate
- Vacuum grease

### Stands and clamps:

- Ring stands, 20
- Utility clamps, 60
- Support rings, 20
- Tubing, ~200 feet

### 4. General Equipment:

- Lab Coats and Aprons, 21
- Safety Glasses, 25
- Nitrile Gloves, small, medium and large
- Cleaners

- Distillation apparatus
- Bunsen burners and new tubing
- Crucible and cover, 20
- Clay triangles, 20
- Crucible tongs, 20
- Desiccator, 3 or 4
- Funnels (filter), and regulator
- Mortar and Pestle, 10
- Chemical spoons and spatulas
- Wash bottles, 20
- Slides, covers, prep kits
- Test strips, several boxes
- Filter papers, differing porosity, several boxes
- Droppers
- Sample tubes
- Test tube & beaker cleaning brushes, 20
- Dissecting supplies: scalpels, tweezers, etc.
- Magnetic stirrers, 10
- Petri dishes
- Sterile swabs, case
- Immersion oils
- Tubing
- Thermometers, non-Hg; 40
- Incubator
- Dry Chemicals: Suite of the basics
- Prisms, 20
- Telescopes, 4
- Light Tables
- Shaking Rack
- Table top centrifuge (for DNA sample etc)
- 1-2 votexers
- 3-4 sets of pipetors
- Pipets, glass or plastic, 1 ml, 5ml, 10ml
- Pipet filler
- 4 mini gel electrophoresis set ups with power supplies
- Complete skull collection (for Zoology)
- Samples the elements of the periodic table