



Design Advisory Team Guidelines

Revised 2015

Introduction

Boulder Valley School District (BVSD) has chosen to use the Design Advisory Team (DAT) process in designing the projects of the Bond Program to ensure decision-making is community based and that projects meet the needs of individual schools. The purpose of this handbook is to provide members of the DAT with an overview of the Bond Program, the typical design and construction process, and the role and responsibilities of the DAT.

History

In November 2014, Boulder Valley School District voters approved a \$576.5M Bond Program for capital improvements to all buildings in the district as described in the Educational Facilities Master Plan (EFMP or master plan). The master plan summarizes the work and presents the findings of a 24-month process in which the district's Capital Improvement Planning Committee (CIPC) and district staff assessed and prioritized capital improvement needs for every building in the district. Included in the master plan are improvements to critical building systems and infrastructure and enhancing learning environments, as well as reconstruction of three schools, construction of a new school campus in Erie and renovation of the district's central support campus. Approved by the Board of Education, the master plan is a road map and a promise for the work that will be completed at each school through the Bond Program.

The Design Advisory Team (DAT)

What is a D.A.T.?

The Design Advisory Team (DAT) is a group of representatives from the school community which will work with other design team members to clarify and refine the specific scope of work based on the general scope outlined by the Educational Facilities Master Plan. The DAT assists the architect to meet the District's educational goals and the community's expectations for the facility.

The design team usually consists of:

- School DAT participants
- District project manager
- Project architect
- Architect's consultants

DAT Membership

The school principal will work with the Bond Team to select members to serve on the DAT. The Chief Facilities Officer will provide final approval of all DAT membership. The membership should represent the interests of the school community and have enough members to present sufficient viewpoints. In some cases it may be prudent to include authorities on a particular subject, for example, if the building is considered to have historical significance. Recommended membership is:

- Principal
- 3-4 classroom teachers (possibly including teachers interested in educational innovation)
- 2-3 specialists
- 4-5 parents/community members
- 1-2 students (optional depending on age)

Membership should range between 11-15 members, although group size may vary with the size of the project scope of work.

Streamlined DAT Membership

Projects which consist primarily of infrastructure improvements (e.g. roof replacement, heating/air conditioning installation and restroom renovation) and have minimal educational programming requirements, have the option of using a streamlined DAT process. The Chief Facilities Officer will provide final determination of which projects will follow the Streamlined DAT process. Recommended membership is:

- Principal,
- 2-3 classroom teachers and
- 1-2 parents/community members.

Membership should range between 4-6 members, although group size may vary with the size of the project scope of work.

DAT Responsibilities and Participation in the Design Process

The DAT's role is advisory in nature. The DAT is not the client or the owner's representative. As the primary users of the building, the DAT members have the most knowledgeable perspective on how the building needs to function. The DAT helps the project architect understand the users' needs to enable the architect to design a building to support those needs. The architect and the project management team (PMT) will be responsible for all final design decisions. The project management team is ultimately responsible for delivering the scope of work in the EFMP and includes the Project Manager, Executive Director of Bond and Chief Facilities Officer. BVSD's energy consultant and a representative from the contractor for CM/GC projects also will participate in the process. The input provided by the DAT will inform those decisions.

The DAT begins its work with the basic scope of work outlined in the Educational Facilities Master Plan. To develop the scope of work, the CIPC and district staff worked with principals to assess each facility's needs and identify the priority projects. In addition, the project architect will likely bring preliminary ideas of possible solutions to fulfill the project scope. The DAT will work with the architect and district staff to further develop these preliminary ideas. The DAT may also will develop ideas for using the innovation funds each school is eligible for.

Specific DAT responsibilities include:

- Assists the project architect to develop a schematic design which stays within the established budget. It is crucial that each school stay within its budget to avoid compromising funding resources for the overall program.
- Ensures the Design Development documents fulfill the scope of work in the Educational Facilities Master Plan.
- Provides critical input to the project architect during the programming phase. (Project phases are described in the next section.)
- Works with the project architect to complete the programming and schematic design phases on time.
- Represents the school community during meetings with the design team.

- Serves as an informational liaison within the school and the community by sharing information and communicating progress. The DAT will also bring the perspectives of their stakeholder groups to the design team, mindful of the need to advocate for the best interest of the school as a whole.
- The role of the DAT ends after design development documents are complete.
- The DAT does NOT participate in detailed design work such as selection of materials or value engineering that is performed to bring a project into budget. Any significant changes made by the architect and project manager during later design phases, including value engineering will be communicated to the DAT by the project manager.
- All decisions will adhere to the district's technical and educational specifications and will not waiver from the priorities listed in the Educational Facilities Master Plan.

Streamlined DAT

The roles and responsibilities of the Streamlined DAT are essentially the same as the DAT. However, with minimal educational programming required, the number of DAT meetings will be a minimum of the following three meetings:

- Pre-Design Activities
- Schematic Design
- Design Development

Should an additional meeting be required and requested by the Streamlined DAT membership, one additional meeting may be called.

Group norms and expectations

To enable all members to have a positive, rewarding and valuable experience, DAT members are asked to abide by the following group norms and expectations. In addition, the group may develop its own norms and expectations:

- It is expected that all DAT members will attend all DAT meetings to the extent possible. The group's body of knowledge grows as the team moves through the design process. It is important for all members to stay in step with how the design has evolved and why and how decisions have been made.
- It is expected that all DAT members will listen politely to input from other members. The process works well when approached with a collective spirit and ideas are shared and received openly.
- Multiple points of view are important to the work of the team and the architect. Members are asked to bring to the discussion their perspectives as representatives of various stakeholder interests. In addition, members are also asked to set aside personal agendas and participate in a collaborative way with the group.
- All input provided by DAT members will be given respectful consideration by the architect.
- The DAT should establish norms for reaching consensus.
- Individual DAT members will support decisions made by the DAT.
- All media inquiries are to be handled by the Bond Communications Specialist.

DAT Meetings

The architect will facilitate the DAT meetings. If needed, interpreters for non-English speaking parents will be provided by BVSD. The architect will provide an agenda for meetings and will take minutes. At the first meeting the team will determine the best day of the week to meet and the frequency of meetings. More frequent meetings (every two weeks) are helpful. The DAT meetings should be held to a maximum of 1½ to 2 hours and be held after or prior to normal school functions. It is important to pick a time and day that works for school employees as well as parents and community members on the team.

Focus group meetings are helpful in gaining a deeper understanding of specific user group needs. The architect may elect to conduct these meetings in addition to regular DAT meetings.

Suggested handouts for the first DAT meeting:

- Educational Facilities Master Plan school data detail
- Detailed project description
- Floor plan of school (8 ½" X 11") from BVSD Planning, Engineering and Construction
- Budget

Public involvement and communications

Boulder Valley School District (BVSD) has chosen to use the DAT process in designing the projects of the Bond Program to ensure decision-making is community based and that projects meet the needs of individual schools.

Members of the public are invited to attend and observe DAT meetings. Similar to board of education meetings, there is an opportunity for public comment at the start of each meeting. Meeting dates and minutes will be posted on the Bond Program website at bond.bvsd.org. When each DAT begins its work, a letter will be sent to neighbors adjacent to the school to inform them of the process and how to get information.

The progress of the design will be shared with the community at significant project milestones such as upon the completion of schematic design or design development. The DAT will communicate with other stakeholders, soliciting input and communicating decisions. A final presentation of all decisions will be made by the architect to the DAT and all interested stakeholders prior to proceeding with preparation of bid documents.

Issues Resolution

By design, the DAT is intended to represent the various school stakeholder groups and bring the interests of those groups to the design forum. In addition to providing input to the design, DAT members are expected to act as liaisons, sharing the work of the team with their peers and bringing the perspectives of their stakeholder groups to the design team. It is intended through this interaction that concerns and interests will be brought to the design team. In addition, as mentioned in the previous section, members of the public have various options for communicating with the design team.

The Boulder Valley Board of Education has endorsed the DAT process as a way to fulfill its pledge to involve the community in the implementation of the Bond Program. In so doing, it has empowered the DATs to represent stakeholder interests and weigh and consider concerns of the community.

With this inclusive participation and open access, it is intended that building design and site issues can be resolved in the DAT forum and assure access for members of the public to express their thoughts to the DAT and the architect.

If an impasse is reached by the DAT as to needs of the school, a written request will be made to the Chief Facilities Officer, who will submit the change to the Citizens' Bond Oversight Committee (CBOC). CBOC is a committee of community members and BVSD staff that provides oversight and monitoring of the Bond Program and considers requests for significant changes in project scopes or budgets. In addition, community members with concerns that have not been satisfactorily resolved through the DAT process may bring their concerns to the Project Manager or Executive Director of Bond. The PMT will investigate the concern and respond with its findings.

Project phases and sequence

As each project (or package of projects) is initiated, it generally will progress through the typical sequence of design and construction activities outlined below.

Pre-Design Activities

The district selects a project architect, who meets with the project manager, principal, DAT and district staff to review scope, schedule and budget for the assigned projects and to establish the DAT's role during the programming and schematic design phase and its continuing role through project completion.

Programming

The project architect works with the DAT during the programming phase to clarify the line items comprising the project as described in the Educational Facilities Master Plan. The DAT explains its expectations for the project within the defined scope, describing the function and uses of specific facilities to be added or remodeled, and the architect identifies the code requirements, district standards, existing conditions and other factors important to an understanding of the design criteria and the development of a schematic design within the budget. Any budget limitations should be discussed with the DAT in this phase.

Schematic Design

After the needs of the building have been identified through programming, the project architect develops concepts and alternatives for the DAT's consideration. Discussions with the DAT result in preliminary agreement as to basic design and essential elements of the work. The architect prepares preliminary design drawings known as schematic design drawings (SD's) which show the scale and relationship of the project's components, and then serves as liaison to the district, obtaining concurrence with the proposed design and initial estimate at the district level.

Design Development

The project architect prepares design development documents (DD's) describing the size and character of the project with greater detail as to architectural, structural, civil, mechanical, electrical, materials and other such essential elements as may be appropriate. These documents are submitted to the district for approval before the architect begins final construction documents.

Simultaneously, the architect's Statement of Probable Construction Cost is reviewed by the district to ensure that the project remains within budget. For major projects affecting the basic character or appearance of a facility, the Board of Education may review designs at this stage.

The DAT's role is essentially complete at the conclusion of this phase. A final presentation of all decisions will be made by the architect to the DAT and all interested stakeholders prior to proceeding with preparation of bid documents.

Construction Documents

The project architect then prepares working drawings and specifications, usually referred to as "CD's" (construction documents). Finally, the project architect submits completed documents with necessary bidding information for approval by the district.

The project architect's detailed, pre-bid estimate of construction cost is reviewed by the PMT to ensure the project remains within budget before documents are issued for construction bids.

The DAT does not participate in this phase. Any significant revisions to the design in this phase will be communicated to the DAT by the project manager.

Bid & Award

The district then will solicit bids, or proposals, for construction of the project. Contractors pre-qualified by the district for the type of work involved will pick up bid documents, review them, and request any clarifications before preparing estimates and submitting bids (on several or all of the buildings within a package.)

At the designated date and time, bids are opened and evaluated for contractor responsiveness to bid documents, seeking the lowest bid price acceptable to the district. Often, bids will identify "alternates" – optional features to be included if base bids are under the project budget.

After verifying that the proposal and any bonds, insurance certificates and other documents required of the contractor are correct, the district executes an agreement with the construction contractor and issues a "Notice to Proceed" to start the work.

The DAT does not participate in this phase.

Construction

The contractor furnishes all labor, equipment, and materials necessary to perform the specified work within the prescribed time for the amount stated in the bid. Prior to construction, the architect and the PMT review the contractor's detailed work schedule to confirm its completeness and "constructability" and to assure compliance with district requirements for coordinating work with the building staff and the academic calendar.

The DAT does not participate in this phase.

Move-In & Occupancy

The architect and project manager monitor progress to ensure that the contractor completes the work and final clean-up as scheduled. The principal works with the project manager, contractor and district

staff to schedule and coordinate the ordering, delivery and set-up of furnishings, moveable equipment and supplies in time for classes to begin.

The DAT does not participate in this phase.

Close-Out

Close-out is the final phase. The contractor has completed the scope of work and corrected any deficiencies identified. The project architect certifies the work has been completed satisfactorily, and the district verifies all contract requirements and final documents are complete. The district makes final payment to the contractor and closes all accounts associated with the project.

The DAT does not participate in this phase.

Bond Program Guidelines

Three critical constraints on any project

The success of a project will be measured by how well it meets or exceeds its “customers” expectations for quality within three critical constraints: the budget, the scope of work and the schedule.

Budget

Total budget includes non-construction and construction costs. Non-construction budget includes: architect’s fees, permits, furniture and equipment, surveys, soils studies, materials testing and allowance for inflation or contingency. Construction budget is the estimated cost to do the actual construction identified in the scope of work. It is crucial that each school stay within its budget to avoid compromising funding resources for the overall program. The Project Manager, Executive Director of Bond and Chief Facilities Officer are responsible for keeping the Bond Program on schedule and within budget. However, all DATs and their architects must work together to keep their projects on track. If all items identified by the DAT are completed within the allotted budget, all remaining monies will be returned to the Bond Fund.

Scope of Work

The scope of work is a description of the construction to be performed at a school for a specific project or package. The CIPC and district staff worked with principals to assess each facility’s needs and identify the priority projects, which constitute the basic scope of work to be accomplished. As such the DAT is beginning its work with a basic outline of what the project will entail. In addition, the project architect will likely bring preliminary ideas of possible solutions to fulfill the project scope. A more detailed scope will be developed by the DAT at each site, working with the architect and other project-specific design professionals.

Schedule

The schedule is the established sequence and duration of design and construction activities for a project. Each project will have a specific position within the master program schedule. Therefore, it is essential that design and construction for the project be completed on time, not only for the earliest possible use of new facilities by students but also to ensure the overall success of the program. When several schools are grouped within a single design package, it is critical that every school remain on schedule throughout the design phases. Otherwise, a delay at one school can delay the start of construction for all schools in the package.

Design Parameters

- The scope of work outlined in the Educational Facilities Master Plan (EFMP) will be accomplished to the greatest extent possible within the budget identified in the EFMP.
- The work will be accomplished according to the schedule outlined in the master project schedule.
- District design standards/guidelines such as Technical Specifications will be followed. Individual preferences and interests that are in conflict with these standards and guidelines will not be considered.

Scope, Budget, Schedule Changes

In the event situations arise which strongly suggest the scope, budget or schedule outlined in EFMP or master schedule is not valid, the following process is provided for changes to be considered:

- The DAT/design team outlines the recommended change with rationale to support the change.
- The Project Manager submits in writing the recommended change to the Chief Facilities Officer.
- Chief Facilities Officer submits the change to the Citizens' Bond Oversight Committee for review.
- The committee will recommend approval, delay or reject for further information. For major changes or modification the committee will recommend the Board of Education makes any final decision.

Integrity of Projects

The line items of work scheduled for each building have been researched with on-site staff, evaluated and prioritized by CIPC and district staff, revised and approved by the Board of Education and endorsed as a total program by the voters of the school district. The program management team subsequently organized these line items into discrete packages within individual schools or district-wide and assigned a project manager and an architect or other professional consultant to have primary responsibility for completion of each package, consulting with the DATs as appropriate during critical phases of the work.

Project Guidelines

To assure all line items are accomplished consistent with the intent of scope descriptions and resources provided under the approved bond program, certain guidelines have been established for all DATs, architects, engineers, project managers, and the Citizens' Bond Oversight Committee to follow:

1. No project item will be added to or deleted from the Educational Facilities Master Plan without prior written justification from the DAT, recommendation of CBOC and approval by the Superintendent and Board of Education.
2. Scope of work for any project in the Educational Facilities Master Plan will not be significantly reduced or expanded without prior written justification from the DAT, recommendation of CBOC and approval by the Superintendent and Board of Education.
3. Line item projects for a given building may be shifted from one design package to another, as the program management team determines will best expedite the work or improve cost effectiveness.

4. Line item budget substitutions within a package at an individual school – e.g., from “Non-Construction Contingency” to “Furnishing & Equipment” – must be authorized by the program management team.
5. Costs to abate hazardous material in the path of new construction or remodeling must be accommodated within the overall construction budget for a given package at a building, except where such materials have not been previously identified in the district’s abatement plans.
6. Projected cost variances for individual line items will be managed within a specific package, balancing overruns and underruns in the construction budget at each building, up to the time bids are received.
7. Cost estimates will be the responsibility of the project architect and the CM/GC, who shall work with the DAT and the program management team to reconcile bids with budget allowances by one (or more) of the following means:
 - Identifying unnecessarily costly requirements in the preliminary bid documents;
 - Undertaking redesign of the work as necessary, without additional design fees and without serious reductions in the original scope of work and/or
 - Submitting to the CBOC a written request for supplemental funding (from within available bond program resources) to cover remaining overruns, where such overruns are the result of clearly inadequate budgeting or other unforeseeable factors (e.g. previously-undetected asbestos.) The CBOC will make a recommendation to the Superintendent and Board of Education.
8. Initial construction contract commitments will preserve a minimum ten percent (10%) contingency within the total budget to cover conflicts, changed conditions and design revisions during construction.
9. Uncommitted funds will be retained for each building until work under a given package is substantially complete and final costs are identified, at which time any savings will revert to the bond program reserve.
10. Pooled funds, whether accumulated through project savings or increased bond interest earnings, will first be allocated by the CBOC as necessary to complete authorized bond projects. Alternatively, with Board of Education approval, such pooled funds may be allocated to additional facility improvement from the priority lists recommended by the EFMP and district staff or to meet other identified facility needs.