CONSTRUCTION PROGRAM MANAGEMENT SERVICES



Brookwood Group
ATLANTA / LOS ANGELES / SAN FRANCISCO

"The most important tasks in managing a construction program, on behalf of the Owner, whether it be new construction, renovation or addition, are (1) the pre-design programming, planning, budgeting, scheduling and putting the architects and engineers under contract with the Owner, (2) managing the design phases, and (3) managing the construction procurement phase(s).

"If all of these phases have been managed well and are based on the project delivery method that is best for the Owner and the project, the Owner is in good shape and has an excellent chance of the right facility being completed as expected in budget and on schedule. Management of the construction on behalf of the Owner is not an un-important PM service. However, the essential capabilities of the Program Manager must include expertise in managing the pre-design and design phases with good knowledge of all project delivery methods and the management of construction contract(s) procurement."

George T. Heery FAIA RIBA FCMAA, Chairman of Brookwood Group, is one of a handful of pioneers* who originally developed the profession of Construction Program Management ("Program Management")

Brookwood Group provides several different program management services including:

Program Management

The management on behalf of the Owner (or User) of the pre-design planning, budgeting and scheduling, the several design phases, construction procurement, construction and construction contracts' close-out of a design and construction program. Usually includes on-site services during construction or renovation.

Development Management

The management, on behalf of the Owner, of the real estate and development aspects of a development program added to full Program Management services as summarized at left. Several of Brookwood's senior principals and staff members have extensive experience in real estate development and finance.

Details about the projects shown on the cover



AFLAC Japan Headquarters, Tokyo. This \$400 Million headquarters building, fully occupied by Aflac, is located in the Chofu district of Tokyo convenient to urban rail transportation. After receiving a tentative proposal from Mitsubishi Real Estate to provide a "build-to-suit" new facility to meet Aflac's growing space needs in Tokyo, the Aflac Board of Directors in Columbus, Georgia, called on Brookwood to advise it as to the suitability of the location and facility proposed by Mitsubishi. After approval of the basic approach, Aflac engaged Brookwood to assist it with final review of the drawings, specifications, and lease/purchase agreement and then follow through with an on-site team as Aflac's representative and to also manage the interior design, fit-out, and furnishings program.



Georgia State University Student Recreation Center, Atlanta. Brookwood served as GSU's Program Manager on this large, high design project with full PM services from before architect selection and assistance in putting the architects under contract on through design, construction procurement, construction (with on-site services) and close out of architectural and construction contracts. Brookwood was also responsible for total project budget and total project Schedule, and development of project budget control for which Brookwood employed its highly successful Multi-Track/Reconciliation costing method.



Animal Nutrition Center, Cal Poly College of Agriculture. Brookwood provided Program Management services to the California Polytechnic State University College of Agriculture for the engineering, manufacture and installation of the pictured Modular Feed Mill which was procured as a pre-assembled package of process equipment that was custom designed to meet Cal Poly's specific needs.



Rapid Conversion of Banking Facilities for Banks going through mergers or acquisitions. Brookwood provided full Program Management services for several different major banks in the Northeastern, Western, Southeastern and Midwestern United States going through mergers or acquisitions. These programs consisted of highly accelerated and coordinated extensive changes in banking facilities, voice and data systems, interior banking room layouts and graphics, ATMs, telecommunications systems, and exterior signage. Branch banks typically closed on a Friday afternoon as one bank and opened the following Monday morning in its new form.

^{* &}quot;The History of Construction Management and Construction Program Management" is available in the Publications section of www.brookwoodgroup.com

Typical Program Management Phases and Services

Pre-Design Phase

The Program Manager ("PM") in close coordination with the client, including project users, develops or determines that the following documents exist and are fully compatible with one another:

- · Total Design and Construction Cost Budget
- Complete Design and Construction Schedule
- · Program of Requirements that has been approved by all stakeholders.
- > Expertise required: Pre-design costing and budgeting, all project delivery methods, all forms of construction procurements, design and construction scheduling, facility Requirements Programming.

Also, in this phase, Brookwood assists the Owner in the selection of and contracting with the Design team(s). Typically, Brookwood prepares the Agreement between the Owner and the Design firm in advance. Owner/Designer contract requirements usually include the Designer being required to have its own cost estimator in addition to the PM's cost estimator (on some projects there will be a third separate cost estimator). Short listed firms agree to the Owner/Designer Agreement in advance of final interview, including fee.

Design Phases

This usually consists of three major phases for most project delivery methods, and two major phases in the case of the Bridging project delivery method. The PM, as the Owner's representative, is the main coordinator of all of the "moving parts" on behalf of the Owner and carries out a continuous detailed costing and scheduling program throughout the design phases. In these critical phases, Brookwood typically employs its highly successful Multi-Track/Reconciliation Costing Method.

> Expertise required: Essentially the same as above.

Construction Procurement Phase

Brookwood as PM will start market stimulation in the earlier phase and will assist the Owner in obtaining competitive bids or negotiation. Even after bidding, there will often be some further negotiations. A well-managed award process is critical to project success.

> Expertise required: Experience, skills, experience, skills, experience and skills.

Construction Phase

Among the many duties and activities of the PM, basic services include the coordination of inspections by the architects & engineers and the management of progress and final payments to the Contractor(s).

> Expertise required: On-site experience and contract administration.

Contracts Close-out Phase

Properly closing out design/construction contracts on behalf of the Owner

Expertise required: Contracts management and organization of documents, and the selected method(s) of filing.



Federal Office Building for GSA, Atlanta. Brookwood provided full Program Management services (referred to as "CM-as-Agent" by GSA) for this complex expansion of court administrative offices and facilities which included historic restoration and up-grade to Federal blast resistant exterior walls of this late 19th Century brick and timber structure, all new interior, and a tunnel beneath the dividing street for secure access.

Program Management Projects by Brookwood

Brookwood's portfolio of program management projects includes corporate clients (domestic and international), government agencies, residential clients (private and institutional), higher education facilities, K-12 programs and sports facilities (domestic and international). Brookwood's primary goal is overall control of all aspects of a construction program on behalf of the Owner, including the pre-design planning, programming of requirements, pre-design budgeting, design, construction, equipping, furnishing, commissioning, occupancy and close-out of the project.



Spelman College 342 bed Residence and Dining Hall, with apartments for visiting Faculty and Trustees and a 100-car parking garage on basement level. Brookwood provided advisory services on approach to procurement and Program Management services.



The Wakefield, a high-end multi-family high-rise located in Atlanta. Brookwood was Designer and Development Manager and also arranged site selection/purchase, marketing, CM, and the financing plan.



Brookwood provided pre-project Strategic Advisory Services and full Program Management services to Cal Poly for this 2672 bed Poly Canyon Village student housing project that included a 35-acre campus expansion, a student village, two 950-car parking decks and recreation facilities.



Milliken and Co. Carpet Tile and Marketing Center, Yonezawa, Japan. Brookwood acted as Program Manager and design consultant to Milliken for this Bridging type design-build contract including onsite services during construction.



Brookwood is providing Program Management services to several K-12 school systems, each for multiple projects, including the Atlanta Public Schools, the Monongalia Cty (Morgantown, WV) Board of Education, and the Cobb County (GA) School System.



Electronics Manufacturing Plant, Juarez, Mexico, Brookwood provided Development Management including site procurement, design services (Owner's Design Consultant) and project management for Scientific Atlanta (now part of Cisco Systems).



Clark Atlanta University Student Housing, restoration and modernization of three 1940s-era dorms. Brookwood provided full Program Management Services. Project delivery method: Modified Bridging Design-Build.



Remodeling and Conversion of the historic Biltmore Hotel into loft type Office Space and Conference/Ballrooms Center, Atlanta. Brookwood provided Construction Management services to the Developer.



Georgia State University loft style apartments for graduate and married students. Brookwood assisted in developing plans for non-profit bond financing and procurement of the site, and then provided full Program Management services.



1996 World Cup Stadium, St. Denis, France. Brookwood was the consultant to the French government in analyzing the seven finalists' submissions for this design-build-finance-operate 80,000 seat football (soccer) stadium in suburban Paris