

## JOHN BACKMAN PROJECTS

### NORTON MUSEUM OF ART West Palm Beach, Florida

John Backman: Project Director  
Foster+Partners, Design Architect  
CBT, Executive Architect

#### THE PROJECT

The New Norton is a \$106MM campaign funding the campus master planning and museum expansion/renovation. In February 2019, the Norton will re-open to the public with a new 58,000 SF wing and sculpture garden designed by Pritzker Prize-winning architect Lord Norman Foster. The new wing will transform the 6.3-acre campus, improving accessibility and openness, while restoring the logic and clarity of the original 1941 building. The wing will also create new social spaces for the community and enhance the experience of art by reinforcing the relationship between the building and the landscape.

#### MY ROLE

Working since 2014 as an employee of the Norton and reporting directly to the Director and the Building Committee, I oversee a lean, four-person management team. I have been instrumental in the selection and contract negotiation of nearly every consultant or vendor on the project (with the exception of Foster+Partners) and have authored nearly every protocol or procedure that governs the management of the job. I monitor and control schedule, cost and communications and devise procedures for value engineering that minimize erosion of the design vision. By maintaining structured communications with internal project stakeholders such as curatorial, facilities, education and development, I insure that the choices we make support without compromise the institution's mission.



**Top:** New west facing elevation as seen from Dixie Highway (in construction) and Entry Forecourt featuring the water feature and Claes Oldenburg's Typewriter Eraser, Scale X



*The Great Hall, regarded as the "Community's Living Room"*

**Below Left:**  
Sculpture Gallery and loggia overlooking the Great Lawn

**Below Right:**  
Gallery Space

Photos: Nigel Young, Foster+Partners



## JOHN BACKMAN PROJECTS

### MFA-BOSTON ART OF THE AMERICAS WING

John Backman: Senior Project Architect  
for CBT

Foster+Partners, Design Architect  
CBT, Executive Architect

#### THE PROJECT

The Art of the Americas Wing was the implementation of the first phase of a Foster+Partners-designed master plan that added 103,000 SF of new construction, housing 53 new galleries, classrooms, auditorium, a central Information Center and a monumental event space within the glass "jewel box." The Jewel Box infills an existing courtyard and is the main connection between the new galleries and the historic museum. The Foster plan restores the logic and clarity the original 1907 Beaux-Arts Plan by reorganizing the plan around the E-W and N-S axes.

#### MY ROLE

Working as the primary liaison with Foster+Partners, I understood and communicated the vision and expectations to the team of over 20 Boston-based architects responsible for producing permit and construction documents. I defined and sequenced the team's activities, established schedules and monitored and controlled the quality of the deliverables. I personally detailed or closely directed the detailing of several of the project's most complex and atypical assemblies. I organized and chaired multidisciplinary meetings between Foster and CBT architects, builders, consultants and fabricators, culminating in clear roadmaps for detailing and fabricating highly sophisticated installations.



**Top left:** Inside the glass "jewel box" infilling the east courtyard; **Top right:** east-facing circulation around the central building; **Above:** Restored Fenway-side entry with new steps and ramps; **Left:** New east façade; **Below:** Top level central gallery along the "Crystal Spine."



## JOHN BACKMAN PROJECTS



### BENEDICT MUSIC TENT Aspen, Colorado

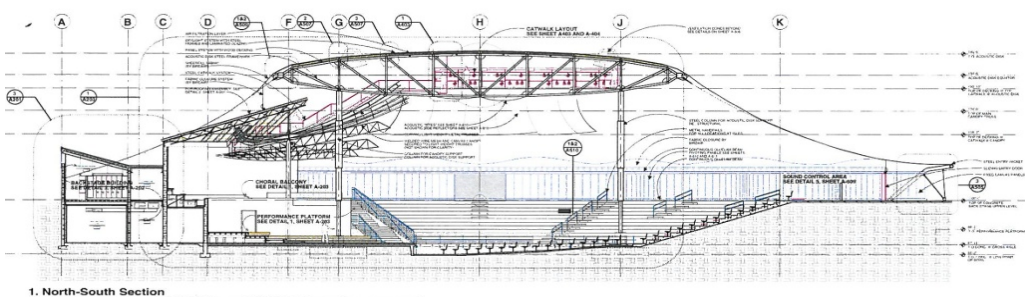
John Backman, Senior Project Architect/Project Manager  
Harry Teague Architects, Aspen CO

#### THE PROJECT

A highly sophisticated enclosure, the "tent" is the primary venue for the Aspen Music Festival and School's summer program. It has been hailed by music directors as having the acoustic characteristics of a world-class hall. The structural and acoustic performance rely upon fabric supported by a disk-shaped steel frame, elliptical in section, located 48ft above the audience. The top surface of the disk is clad in wood and glass panels, providing the desired sound reflectivity for the audience, while allowing for light infiltration. The cable-supported fabric in conjunction with the steel disk is engineered to remain in place year round and support Aspen's extreme snow and wind loads.

#### MY ROLE

Upon completing the programming document and the team selection, I managed a fast-paced and highly iterative process with structural engineers, fabric, cable and steel fabricators, theater, acoustic and cost management consultants. This "discovery stage" yielded the data needed by Harry Teague to establish the fundamental design choices. Thereafter I directed a small team of four architects that produced architectural deliverables hand-in-hand with fabrication drawings. Resorting to hardware targeted more to sailors than to builders, I personally worked with multiple fabricators to detail many of the custom installations not typically seen in buildings. I oversaw construction, having planned for it to start and end within the nine-month period between seasons.



## JOHN BACKMAN PROJECTS

### SUNDERNAGRI IN-SITU REDEVELOPMENT New Delhi, India

John Backman: Sr. Team Lead and  
Project Designer

Design, modeling and graphics shown  
on this and the following page are the  
direct work product of John Backman.

#### THE PROJECT

mHS CITY LAB is a think-tank and implementing organization with a human centered design approach. It designs and pilots innovative scalable solutions to foster the development of resilient and inclusive cities. We were engaged by an NGO to propose a redevelopment for two slum clusters in East Delhi. Each slum cluster informally housed 400 households. Defying the historical trend of rehousing the occupants in high-rises to clear the site for more lucrative development, the brief called for an in-situ redevelopment that preserved the community fabric and social networks.

#### MY ROLE

After working with a multidisciplinary group of professionals to complete socio-economic and GIS surveys and after participating in more than a dozen community focus groups, I drafted and obtained approval of a Project Charter. Guided by the Charter, I managed an in-house team of architects, planners, analysts, governmental liaisons and policy advocates, collaborating with civil engineers, Housing Authority officials and quantity surveyors. I took the lead on the design of a phased, redevelopment proposal. The proposed scheme demonstrated that a low-rise, street-centric scheme would preserve the beneficial social networks and could be phased and implemented more cost-effectively than the default high-rise scheme favored by the Municipal Corporation.



**Top :** Bird's eye view showing proposed new community with existing resettlement colony beyond.

**Right :** comparing the proposed street proportion with those in Mangolpuri (an established resettlement colony where well proportioned streets are wide enough for people, bikes and three-wheelers but too narrow for cars.)

**Bottom :** view of street entry and perimeter commercial program.



**Below:** Standard scheme implemented by Municipal Corporation Delhi: 512 units at an estimated cost of Rs 5.51 lakhs/Unit (+/-US\$ 12,400.) By contrast, the mHS scheme offers 502 units at an estimated cost of Rs 4.56 lakhs/Unit (+/-US\$ 10,300.)



## JOHN BACKMAN PROJECTS

### Studies for "The Point" Boston, MA

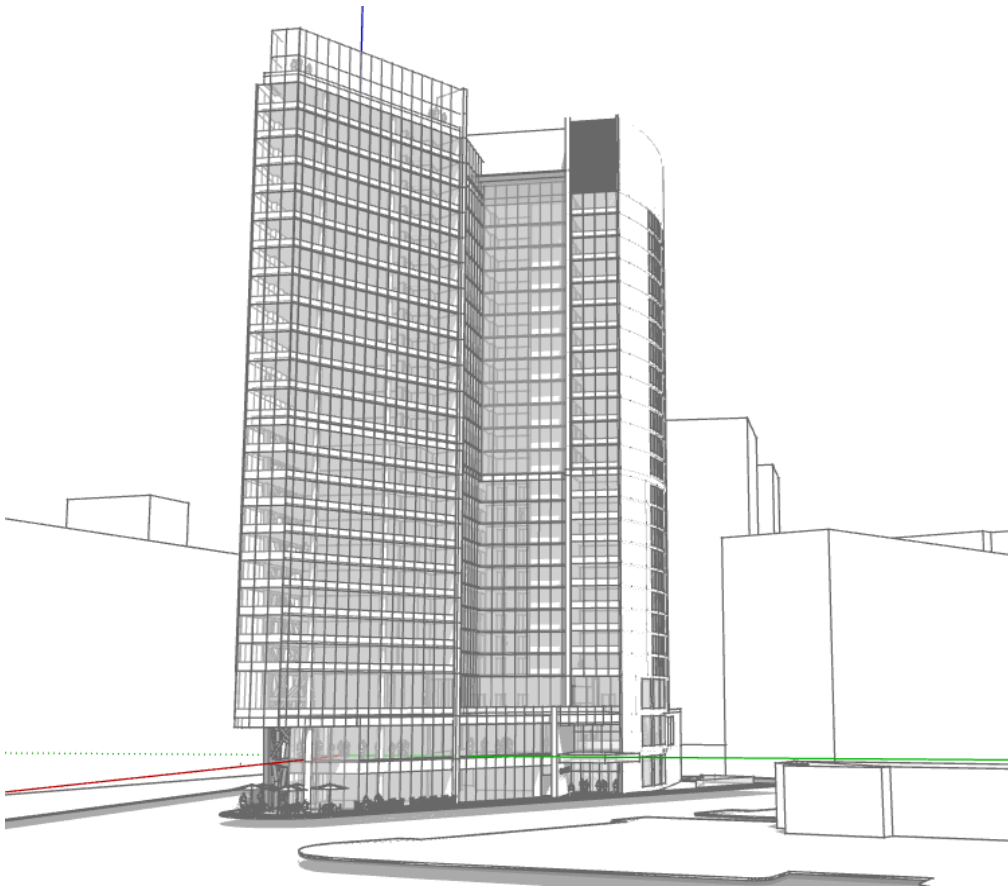
John Backman: Senior Project Architect  
for CBT, Boston.

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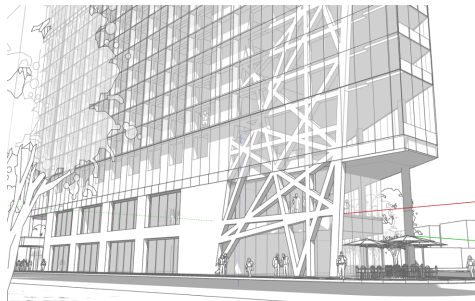
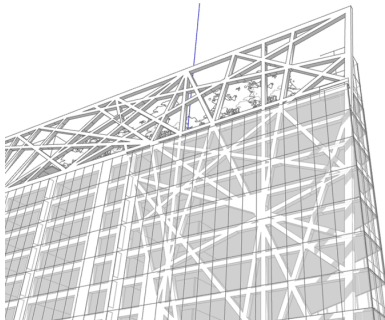
The Point is a development proposal  
for a triangular parcel located in  
Boston's Fenway District. The program  
calls for a mix of high-end rental units  
and a four-star, boutique hotel.

These images represent a conceptual  
design for the project I proposed on  
behalf of CBT in the Summer of 2008.

The eccentric footprint of the site  
naturally grants any design proposal a  
measure of visual drama but this  
design celebrates the site's irregularity  
by suggesting a slender, partially single-  
loaded tower that embraces a south-  
facing garden terrace. The single-  
loaded circulation allows for the more  
refined interior walls, rather than the  
glass, to become the most visible  
expression of the facade. The interior  
wall would be thoughtfully illuminated  
at night so as to presents itself to the  
city as the welcoming and hospitable  
face of the building. Similarly, by  
setting west-facing guest rooms  
behind the concrete sheer wall, the  
architect has control over the finishes  
and the lighting that become the face  
of the west facade. The sheer wall is  
thermally protected by a minimalist all-  
glass skin. The glass skin is sufficiently  
detached from the concrete wall to act  
as a thermally active cavity while  
providing the guest rooms with a  
balcony space.



**Top:** View of the point from the south.  
**Top right and middle:** West façade studies showing  
"erosion" of concrete shear wall as it approaches the  
narrower south side;  
**Bottom right:** Study of hotel entry on east;  
**Bottom:** Bird's eye view showing siting



## JOHN BACKMAN PROJECTS

### TRANS NATIONAL PLACE Boston, Massachusetts

John Backman, Senior Project Manager  
CBT Architects, Boston, Massachusetts  
James Carpenter Design Associates,  
New York, Associate Architect

#### THE PROJECT

Trans National Place, an 84-story landmark office tower is designed to be the most environmentally advanced of its kind in New England. In addition to 2.7 million square feet of class A office space, the design for the project included two destination public spaces: the "Town Green" at Street level and "Lookout Garden" at roof level. The design is the result of a collaboration between CBT, responsible for satisfying most of the project brief requirements and James Carpenter Design Associates, responsible for the design and detailing of the façade and glazing systems.

#### MY ROLE

My client-facing responsibilities to the project included the coordination of the internal and external design team, organizing, leading and recording of the various weekly project meetings and managing the land-use permitting and approval process. Working as the primary liaison with the Owner, the facade architect and key consultants, I communicated the vision and expectations to the CBT team, which included five Senior Project Architects focused on the primary programmatic elements of the project: below grade (pilings, slurry walls, parking structure,) "Town Green" at street level, core, leasable program and "Lookout Garden" at roof level. The project was canceled in early 2009 due to unfavorable economic conditions.



*In addition to 2.7m s.f. of class A office space, Trans National Place offered two destination public spaces: the "Town Green" at Street level (rendering above and plan below) and "Lookout Garden" at roof level (top.) James Carpenter Design Associates focused on the buildings numerous specialty glazing systems such as the glass canopy above the Town Green, the minimalist glass screen at the Lookout Garden and the tower's cladding system.*

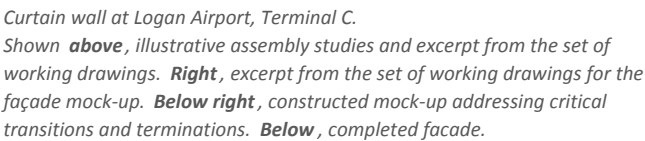


**AIRSIDE FAÇADE-TERMINAL C**  
**LOGAN AIRPORT, Boston, MA**

Modeling and graphics shown on this page are the direct work product of John Backman.

Successful projects of a certain complexity rely heavily on the construction of physical mock-ups. The importance of establishing which conditions are to be mocked, the objective of each mock-up, the timing for building it and the review and approval protocol is often overlooked. A highly disciplined plan for mock-up fabrication established early in the planning of the project insures that cost, constructability, performance and aesthetics are clearly understood in time to inform critical choices.

The completed documentation package facilitated the job being awarded to a qualified bidder, minimal RFI's and a successful, on-budget, on schedule delivery.



## JOHN BACKMAN PROJECTS

### PEABODY ESSEX MUSEUM Salem, MA

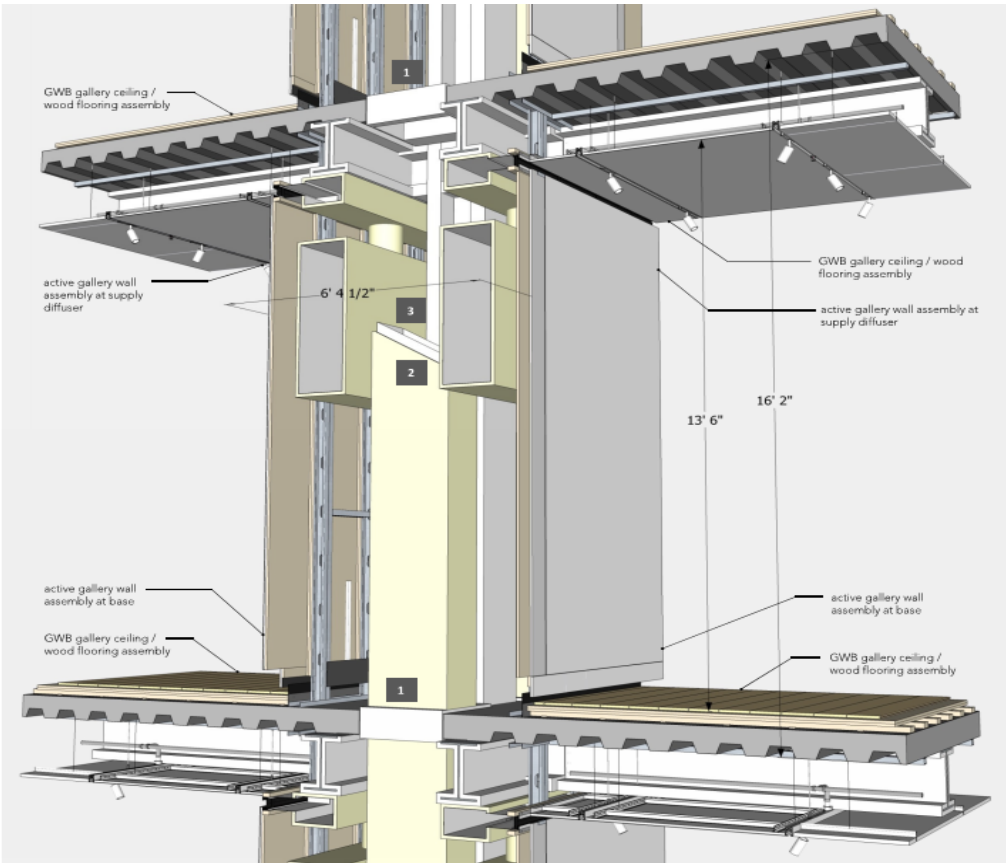
John Backman: Sr. Project Architect  
Rick Mather Architects (UK),  
Design Architect  
CBT, Executive Architect

Modeling and graphics on this page are the work product of the team working under the direct supervision of John Backman

A tension between the program requirements and the zoning restrictions resulted in a design in which the floor to ceiling dimension had to be minimized. To achieve this, air distribution is primarily vertical. Central to the design was the concept of the “fat” service wall, which separated gallery spaces and housed ductwork serving five levels. Integrated within the finishes of the service wall was supply air via a slot directly beneath the ceiling and return air via a slot directly above the floor.

These conditions occur extensively throughout the project. They are atypical, technically complex and a major driver of cost. A “fear factor” will exacerbate these costs. The studies shown on this page reflect my team’s effort to understand and coordinate the multidisciplinary engineering and aesthetic requirements and describe the expectations of each individual trade with clarity and in a manner that is as demystifying as possible.

This approach with its focus on system transitions and terminations is an effective cost management tool and is particularly important for each instance where details are uncommon and unique to the project, fundamental to the design concept and highly repetitive.

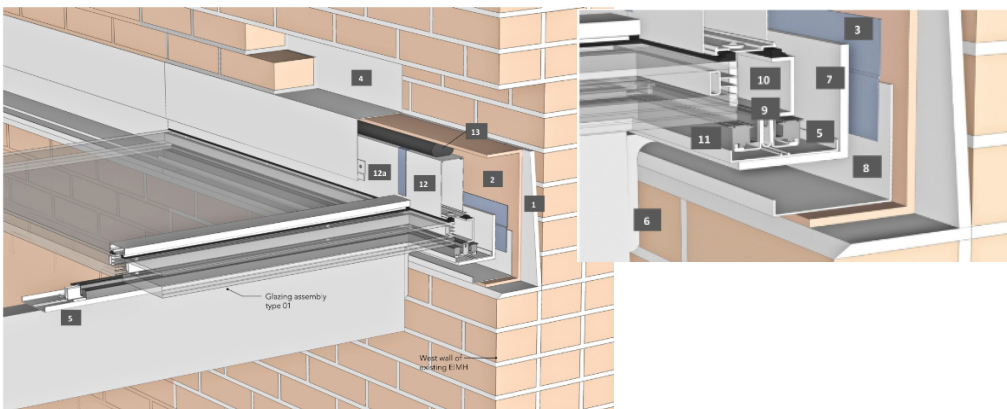
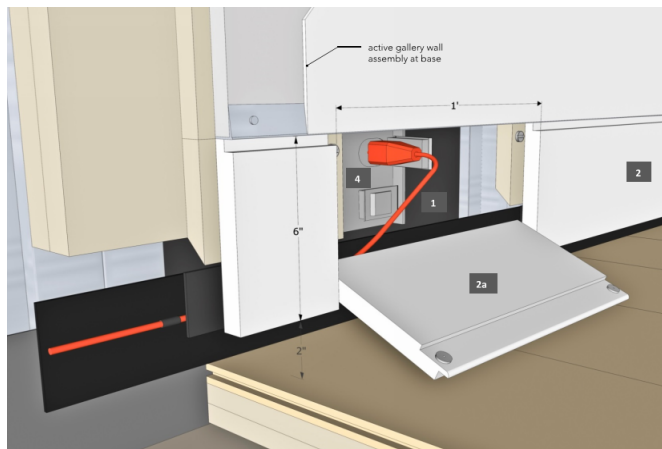


*Excerpts from the Peabody Essex Museum Assemblies Report.*

*Above: overall view of “fat” service wall.*

*Right: Detail at power receptacle located above return air slot.*

*Bottom: study of interface of new glass connector with historic East India Marine Hall.*



## JOHN BACKMAN PROJECTS

### MANAGEMENT AND COMMUNICATION TOOLS

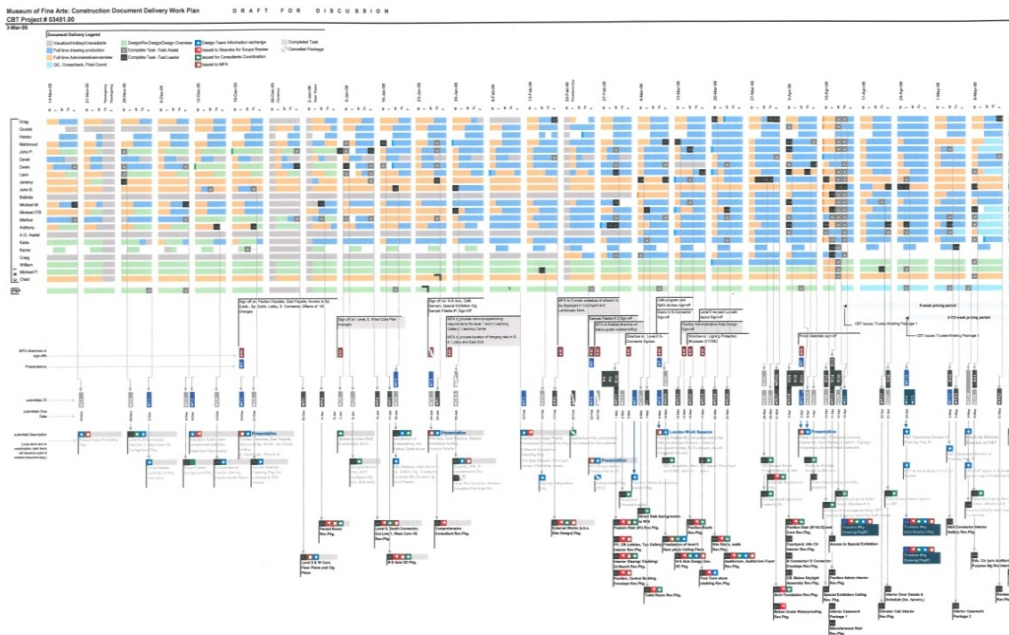
Graphics shown on this page are the direct work product of John Backman while employed by CBT Architects, Boston.

Just as important as a thoughtful and responsive design is the process that paves the way for it to become a reality.

The particular mechanics by which unique and complex projects are delivered are not arrived at with immediacy. An effort must be made to acquire awareness of the cultural nuances of a particular job. There is no software or formula with which to do this and rarely do two projects share matching formats.

Because a Work Plan becomes the vehicle by which different stakeholders arrive at a shared understanding of the process, being able to communicate the idea is of importance. Special attention is placed on graphic clarity and readability. The flow of the project should in fact be graphically apparent without having to read the written data. The thought and detail invested in this effort allows potential hidden conflicts to surface and be corrected before resources are over-taxed, schedules are compromised or conflicting expectations collide.

This page shows examples for two different cultural projects in which success relied on the successful working relationship between a design architect and an architect of record.



*Above:* Partial view of the Work Plan for the construction document phase of the Boston MFA-Art of the Americas Wing. The document successfully served as the roadmap shared by the Boston-based production team (CBT,) the London-based design team (Foster+Partners,) the consultant team, client and construction manager.

*Below:* Another instance in which the success of a project was dependent upon the effective collaboration between two architectural practices. The graphic proposes an approach for collaboration between CBT Architects and Los Angeles-based Daly Genik Architects for work on the Harvard University Art Museums.

