

Next Steps

The following are the next steps that will have to be taken in order to insure that the Baker House renovation/restoration can proceed smoothly:

1. Consultant Team to submit a proposal for the next phase of work (Schematic Design), with criteria outlined through construction administration for the entire design fee.
2. MIT to issue a Proceed Order for the Schematic Design phase of the work.
3. MIT to review and approve the overall project scope of work and budget.
4. MIT Client Committee to convene immediately to monitor process.
5. Debrief students and other project participants as to the status and direction of the project.
6. MIT/Design Team to develop strategy and meet with all appropriate building and code officials to discuss code/zoning/ADA impacts on the work. Specifically this will deal with the bathrooms (plumbing fixture counts), elevator upgrades (ADA and possibly zoning, if the penthouse must be raised), and the extent to which the student rooms throughout the building will need to be made accessible to people with disabilities. If variances will need to be obtained, this process should begin promptly.
7. An initial meeting of a communications committee has been held to begin to formulate strategies as to how best to present this project to the MIT community, including the Alumni, and to the international architectural and preservation communities.
8. Design Team to begin the Schematic Design Process.
9. The proposed scope of work matrix and construction schedule and phasing options (as outlined by Kennedy & Rossi) follow.

Project Scope Matrix

Project Scope Matrix

This matrix was developed by the project team to itemize the proposed scope of the work. Each item is described and then placed into one or more issue categories based upon the reasons for performing that particular piece of the project.

The issues are as follows:

- Aesthetics: Work necessary to improve or enhance present cosmetically deteriorated or unsightly conditions.
- Condition: Work necessary to upgrade systems or structural deficiencies.
- Functionality: Work necessary to improve present functional deficiencies.
- Code/ADA: Work necessary to comply with present building codes and the Americans with Disabilities Act.
- Original Intent: Work necessary to restore Aalto's original design intent.

mit11w72.wk4

ITEM	DESCRIPTION	ISSUE					
	126,000 sf	Aesthetics	Condition	Functionality	Performance	Code / A.D.A	Original Intent
1 HEATING & VENTILATING							
•	Remove and replace existing steam heating with runtal radiation hot water baseboard heating system. Provide new air handling units for ventilation of common space.		•	•	•		
•	Replace north stair duct with new heavy gauge exposed duct.	•	•		•		
•	New DDC building control system.		•	•	•		
2 AIR CONDITIONING							
•	Provide air conditioning for the entry lobby, manager's, master's suite, office, main lounge, lounge #1 and the dining room with DX system.			•	•		
•	Provide air conditioning for the tutor suites at the west wing.			•	•		
•	Provide air conditioning at all student rooms with two pipe horizontal fancoil unit systems in room soffits from new chiller.		•				
•	Provide air conditioning at all student rooms with two pipe horizontal fancoil unit systems in room soffits from main plant.		•				
•	Provide vertical cooling units at student room exterior wall.		•				
3 FIRE PROTECTION							
•	Install standpipes					•	
•	Upgrade mains and Replace branch piping.	•				•	
4 PLUMBING GENERAL SYSTEM							
•	Provide new plumbing replacing all above ground waste & vent, all hot & cold water piping, including steam fired hot water heater, as recommended in Engineer's report.	•	•	•	•		
5 ELECTRICAL & WIRING							
•	Upgrade electrical branch distribution and power system.			•	•	•	
6 LIGHTING							
•	Refurbish and augment lighting at entry and dining pavilion. Replace all lighting in student rooms, toilet rooms, corridors, lounges and other public areas.	•	•	•	•	•	•
•		•	•				•
7 SPECIAL WIRING SYSTEMS							
•	Upgrade security, tele/data and fire alarm systems.			•		•	
•	Upgrade bell call system and add visual units to meet ADA.		•	•		•	

PRINT: 20-Nov-96		ESTIMATE: 21-Oct-96		ISSUE					
ITEM	DESCRIPTION	Aesthetics	Condition	Functionality	Performance	Code / A.D.A	Original Intent		
8 ENTRANCE									
•	Install new handicapped ramp, extend entry platform and steps and make associated changes to front entrance, repair & replaster entry portico soffit outside as described in PDR&P sketches.	•		•	•	•			
•	Provide new counter at entry, new mailboxes and replace wood handrails at indicated locations at main entry, repair & replaster front entry ceiling and upgrade to meet ADA.	•	•	•	•	•	•		
9 LOADING DOCK									
•	Extend loading dock and loading dock roof 4'-0" out into driveway. Raise new portion of roof 2'-0".			•					
•	Add gate system at loading dock.	•						•	
•	Refurbish loading dock, remove existing door to Memorial Drive and provide new door in new position, provide new dock elevator.	•		•					
10 SITE IMPROVEMENTS									
•	Remove south terrace deck paving and waterproofing, repair slab, new waterproofing & reset pavers.		•		•				
•	Provide a bluestone patio at lower level south of dining pavilion.	•		•	•				
•	Upgrade northwest plaza deck.			•					
•	Create roofed in bicycle storage area at building entrance area.		•		•				
•	Add site lighting around building exterior.		•	•		•			
11 LANDSCAPING									
•	Add landscaping at bermed wall at South terrace and area to south of loading dock.	•	•						
•	Allowance for Amherst Alley landscaping.	•							
12 ROOFTOP GARDEN & TRELLIS									
•	Provide aluminum trellises at main roof, between elevator and main stair penthouse, and at the northwest raised terrace adjacent to the loading area. Provide additional railings on roof deck.	•						•	
•	Provide aluminum trellis at curves portions of south wall.	•			•			•	
•	Provide concrete pavers on roof deck to meet ADA, with walkway pads to stairs 1 & 4.		•		•				

mt11w72.wk4

ITEM	DESCRIPTION	ISSUE					
	125,000 sf	Aesthetics	Condition	Functionality	Performance	Code / A D A	Original Intent
13	LIMESTONE FACADE						
	- Rebuild parapet walls in kind at south terrace / dining pavilion. - Reset moved limestone veneer at the dining pavilion; clean, repoint and recaulk all limestone. - Clean & refurbish limestone at south pavilion.						
14	BRICK FACADE RESTORATION						
	- Select cut and point of exterior brick masonry. - Repoint all brick masonry around the building's exterior.						
15	NORTH STAIR FACADE						
	- Remove stucco and reclad the north stair tower in unglazed terra-cotta tile. - Repair and recoat north wall stucco. - Remove existing stucco and replace with three coat system.						
16	PENTHOUSE FACADE						
	- Refurbish and refinish all stucco surfaces on all roof penthouses. - Reclad roof penthouses in copper.						
17	SECURITY GRILLES @ Grd. Fl.						
	- Remove existing ground floor security grilles, and replace with new steel security grills. - Refurbish existing grilles at ground floor.						
18	WINDOWS						
	- Remove existing windows (except lounge #1) and replace with wood windows w/ integral storm sash and screens. - Remove existing windows (except lounge #1) and replace with wood thermopane windows and a screen. - Remove existing windows (except lounge #1) and replace with aluminum windows w/ integral storm sash and screens. - Remove existing windows (except lounge #1) and replace with aluminum thermopane windows and a screen.						

PRINT: 20-Nov-96		ESTIMATE: 21-Oct-96						
ITEM	DESCRIPTION	ISSUE	Aesthetics	Condition	Functionality	Performance	Code / A D A	Original Intent
19	FIXED GLAZING							
	- Restore Lounge #1 windows, reglaze with integral storm panel. - Restore Lounge #1 windows, reglaze w/1" IGU.							
20	ROOFING & FLASHING							
	- Re-roof (strip and replace) entry roof. - Refurbish slate at entry roof. Provide a new LCC cap along the parapet flashing. - Re-roof (strip and replace) all roofs except penthouse roofs including flashings.							
21	DOORS / A D A UPGRADES							
	- Expand all student room and bathroom door openings to 36" to accommodate ADA access, provide new doors and hardware. - Restore or replace in kind exterior oak and birch doors. - Replace corridor wood and hollow metal doors requiring ADA. - Replace balance corridor wood and hollow metal doors.							
22	LOBBY & COMMON SPACES 12,440 SF							
	- Clean and repair interior structural glazed tile & brick throughout building. - Remove brick from east chase wall at west area lounges (floors 1-6) and replace with structural tile to match original. - Add original design millwork screens at existing lounges. - Upgrade Public corridors and common space with new finishes including: T.V. room, music, lounges, Athena, library, fitness and studies. Refurbish balance of all original millwork within the building, including lounge radiator benches, paneling in corridors and trim.							
23	RESIDENTIAL COMMON SPACES 24,620 SF							
	Upgrade all corridors and common space with new finishes including: Refurbish balance of all original millwork within the building, including paneling in corridors and trim.							
24	DELETE 1962 ROOMS 1,180 SF							
	- Remove rooms #s 7 & 8 on floors 4-6 between elevator and bathroom stack & restore as lounges. - Add original design millwork screens at existing lounges.							

mit11w72.wk4

ITEM	DESCRIPTION	ISSUE					
		Aesthetics	Condition	Functionality	Performance	Code / A D A	Original Intent
	126,000 \$F						
25 UTILITY SPACES	10,790 \$F						
	- Cut, patch and clean-up existing back-of-house space after systems replacement and renovation. - Complete renovation of back-of-house spaces						
26 DINING, LOUNGE & MOON GARDEN	6,830 \$F						
	- Replace painted slatted soffits at Main Lounge; upgrade and extend to enclose sprinkler piping. - Refurbish existing railings, spandrel and parapet wall in dining room. - Reconfigure the dining room parapet wall as a solid, with acoustical treatment on the facias, and a new top rail to Aalto design. - Relocate sprinkler piping into clg. replace plaster ceiling in upper level dining rm. with wood slat ceiling. - Relocate sprinkler piping into ceiling, patch, repair and skim coat upper level dining plaster ceiling. - Upgrade finishes: acoustical tile ceiling at lower level of dining room in kind, restore associated millwork. Replace both level dining pavilion floors with solid vinyl floors and repair vents at dining pavilion. Provide trellis woodwork for fan columns in dining rm. - Upgrade lounge and moon garden.						
27 KITCHEN AREAS	3,570 \$F						
	- Provide allowance for the reworking of the kitchen, Country kitchen and snack bar; assume new kitchen @2,800 gsf. - Kitchen equipment, stainless steel counter and casework. - New kitchen M. E. P. upgrade						
28 STAIR TOWERS	4,600 \$F						
	Upgrade Stair 1 & 4 to meet current codes. Clean & refurbish stairwells.						
29 BATHROOMS	7,070 \$F						
	- Reconfigure toilet rms. per PDR&P sketches, to meet code provide all new plumbing fixtures in bathrooms and student rms. - Rework existing toilet rooms with new fixtures and add unisex HPWC only.						

PRINT 20-Nov-96

ESTIMATE 21-Oct-96

ITEM	DESCRIPTION	ISSUE					
		Aesthetics	Condition	Functionality	Performance	Code / A D A	Original Intent
30 STUDENT ROOMS UPGRADES	50,020 \$F						
	- Clean up and renovate student rooms. - Clean and repair interior structural glazed tile & brick at student rooms. - Remove & replace student room sinks. - Install tack strips (3/4"x3/4") in mortar joints at all student rooms. Price assumes maximum 8 strips per room. - Provide soffit at window wall in student rooms accommodate grouped MEP (heating, elec.) runs. - Provide soffit above entry in student rooms to accommodate grouped MEP runs.						
31 TUTOR SUITES	3,690 \$F						
	Tutors suite, bathroom and kitchen upgrades.						
32 MASTERS SUITE	1,790 \$F						
	Masters suite, bathroom and kitchen upgrades.						
33 ELEVATORS							
	- Provide handicapped lift at main entrance lobby. - Reconfigure elevator to open at main entry level & extend to roof.						

Baker House - Schedule

The restoration/renovation of Baker House includes architectural elements, infrastructure upgrades, building envelope upgrades, and abatement of hazardous materials. These activities must be coordinated to be executed over the summer months. In addition, and prior to the actual execution of the restoration/renovations, the schedule must develop time frames for the design development, mock-ups of particular restoration elements, and procurement of materials and equipment that have a long-lead time.

This study investigated the four (4) schedule options summarized on this page. Each option was studied with respect to the significance of the restoration, the logic of the design and work flow, and the time frames required to effect the most economical and successful schedule. Each option has a study sheet enclosed in this section.

The Feasibility Study Team recommends that Option C be used. This project, with design starting in early 1997 and restoration taking place in the summers of 1998 and 1999, achieves the following:

- It allows proper time frames for MIT decision making, the design of the project, the early procurement of material and equipment, and financing.
- It allows the proper time frames to perform in-place mock-ups of the critical elements of the restoration design.
- It allows the infrastructure upgrades to be performed over one summer and the architectural elements be executed over the subsequent summer.

As stated, the following sheets outline the logic associated with each schedule option.

Schedule Options

Option	Description	1996	1997	1998	1999
A	One Summer (1998)	Feasibility/Determination	Design	Procurement Restoration/Renovation Abatement	
B	Two Summers (1997/1998)	Feasibility/Determination	Design Mock-ups Procurement Ph I Abatement	Ph II	
C	Two Summers (1998/1999)	Feasibility/Determination	Design Mock-ups	Procurement Ph I Abatement	Ph II
D	Three Summers (1997/1998/1999)	Feasibility/Determination	Design Mock-ups Abatement	Procurement Ph I	Ph II

Baker House/MIT Schedule

Option A

Description: Construction activity during one summer (1998). Some building envelope work done outside the summer time frame. Design activities commence upon MIT decision making.

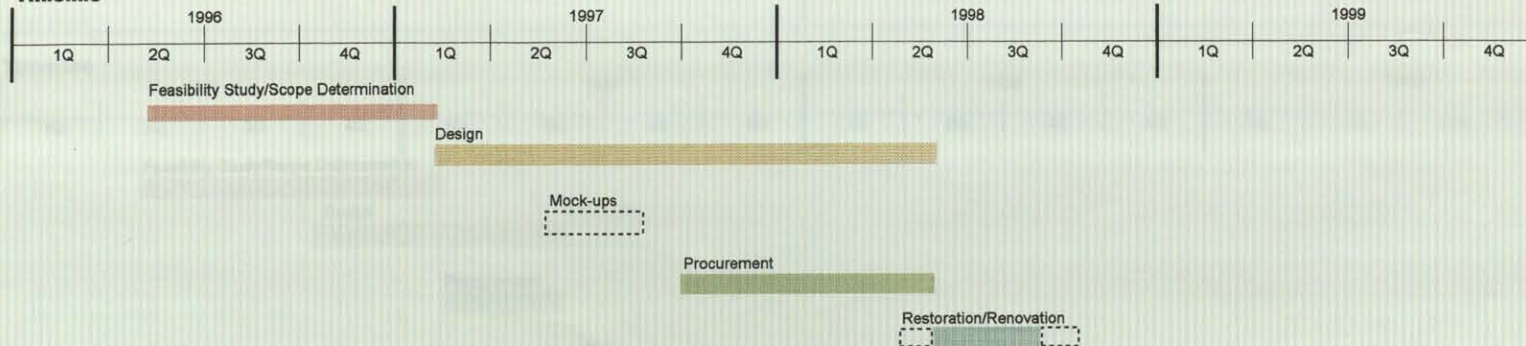
Advantages

- Completed in one disruption to the building.
- 1998 summer allows sufficient decision, design, financing, and procurement time.

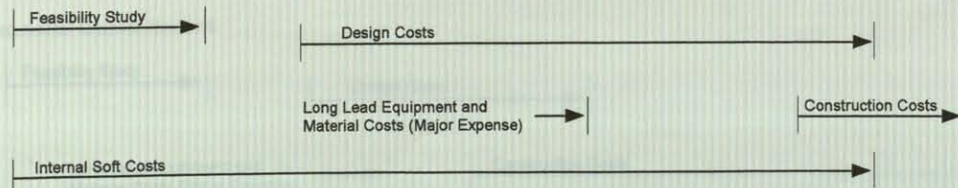
Disadvantages

- Not consistent with project goals of significant architectural restoration.
- Difficult coordination of abatement procedures with construction activity.
- Restoration activities require more efficient use of time.

Timeline



MIT Financial Commitment



RECOMMENDATION: Not recommended unless there is a compelling MIT requirement. Level of finish and details of restoration not consistent with the time frames allowed.

Baker House/MIT Schedule

Option B

Description: Construction activity over two summers (1997 and 1998). Feasibility Study, MIT project determination and design activities completed by May 1997. Phase I consists of Level 1 renovation including MEP upgrades, elevator upgrade, roofing and roof treatment. Abatement work will be done in summer 1997. Kitchen done summer 1998. Phase II will consist of the architectural renovation and restoration throughout including window replacement.

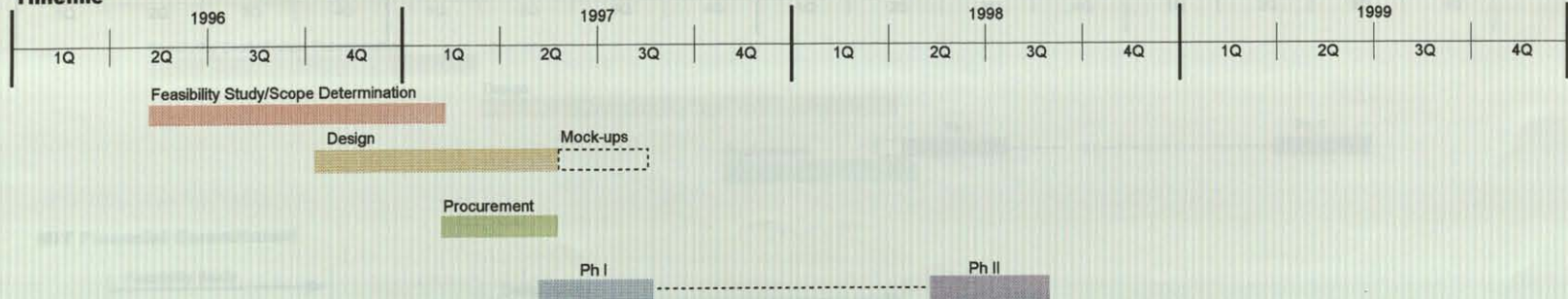
Advantages

- Two (2) summer approach provides best logic with infrastructure activities first then architectural activities.
- Maintains project momentum.

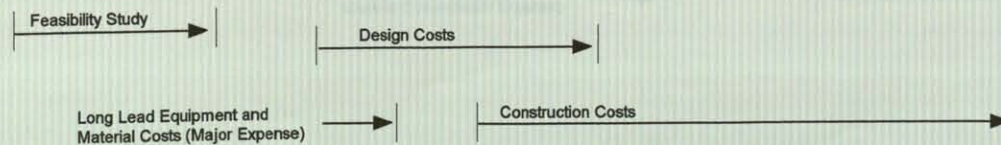
Disadvantages

- 1997 start puts pressure on the MIT decision time frame, the design time frame, and the financing time frame.
- Pressure on the schedule limits ability to procure material and equipment in accordance with 1997 schedule (heating equipment, elevator).
- Pressure on MIT to study the hazardous materials and develop abatement plan.

Timeline



MIT Financial Commitment



RECOMMENDATION: Two summer approach is most logical but this schedule may put too much pressure on the initial scope decision making and on the restoration studies and design.

Baker House/MIT Schedule

Option C

Description: Construction activity over two summers (1998 and 1999). Feasibility Study complete October 1996, MIT scope determination by 1Q 1997, design 2Q 1997 - 2Q 1998. Phase I consists of level 1 renovation including MEP upgrades, elevator, roofing and roof treatment, and windows. Phase II will involve all architectural renovation and restoration. Abatement is done as part of Phase I.

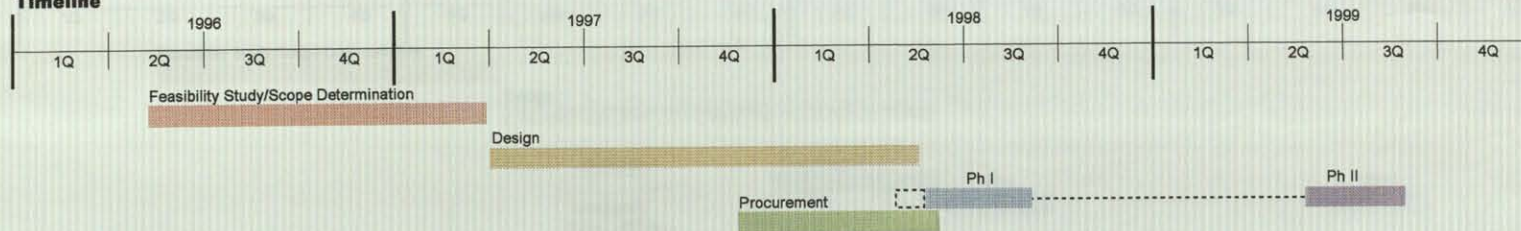
Advantages

- Two (2) summer approach provides best logic for the project design and execution.
- Start in 1998 provides sufficient time to properly design and fund the project.
- Most efficient use of project resources throughout.

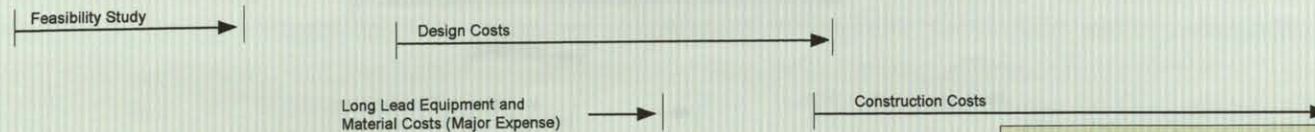
Disadvantages

- Project momentum lost with long design time.

Timeline



MIT Financial Commitment



RECOMMENDATION: This scheme is recommended. It allows the best use of all team resources and provides for the most efficient design and execution process.

Baker House/MIT Schedule

Option D

Description: Construction activity over two summers (1998 and 1999) but the hazardous material abatement is broken out to be done in the summer of 1997. Mock-ups will also be done in the summer of 1997.

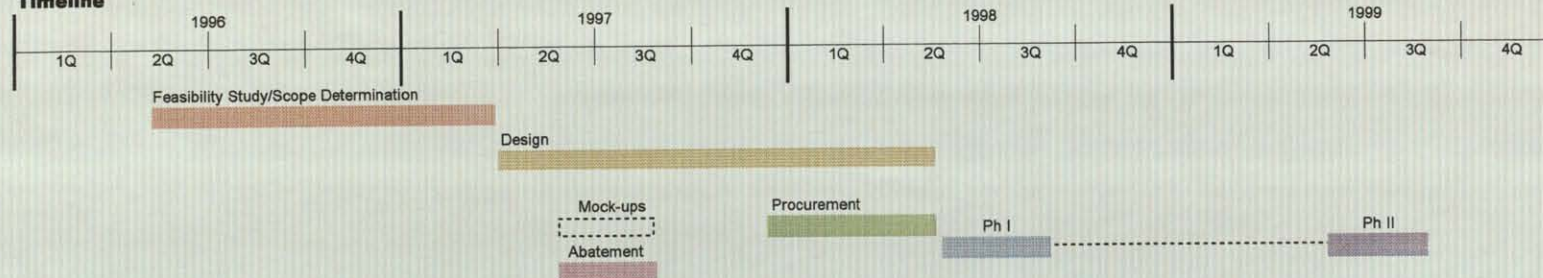
Advantages

- Maintains the two summer construction activity while breaking out the major coordination issue (abatement) to the earlier summer.

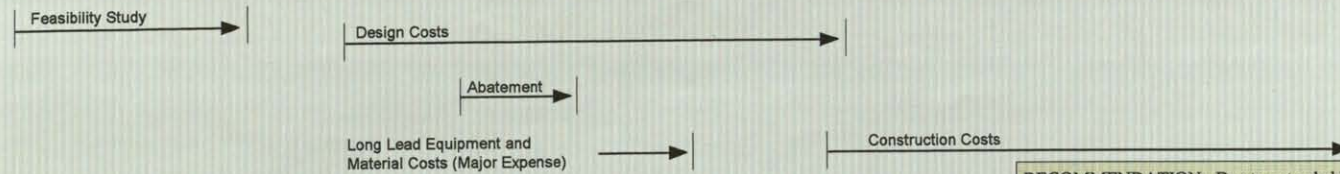
Disadvantages

- Early abatement requires architectural solution or temporary measures which will be removed during Phase I and Phase II.
- Soft costs are spread out over three summers.

Timeline



MIT Financial Commitment



RECOMMENDATION: Due to extended length of the schedule, and the added expense to provide temporary architectural solutions to the abatement out of sequence, this option is not recommended.