

Study Participants

Patricia O'Brien, Dean, College of Humanities, Arts, and Social Sciences (CHASS)
Chuck Beaty, City of Riverside Councilman
Richard Block, Academic Senate Physical Resources and Planning Committee
Nita Bullock, Capital and Physical Planning
Henry Coil, Tilden-Coil Constructors, Inc.
Liam Corley, President, Graduate Student Association, UCR
Renee Coulombe, Music
Frances Culver
John Divola, Studio Art
Sandi Evelyn-Veere, CHASS Space and Facilities
Jonathan Green, California Museum of Photography (CMP)
Walt Griffin, Physical Plant
Jerry Higgins, Physical Plant
Lisa Hjulberg, Real Estate
Tim Labor, Digital Media
Earl LeVoss, Physical Plant
Doug Lindberg, Communications
Marc Longlois, Theatre
Darius Maroufkhani, Design and Construction
Richard Orosco, Physical Plant
Lisa Peloquin, Capital and Physical Planning
Susan Rose, Dance
Nadine Sayegh, President, Associated Students of UCR
Leo Schouest, Computing and Communications
Amy Smith, CHASS Development
Tricia Thrasher, Design and Construction
Kathy Vincent, CHASS
Todd Wingate, Cultural Events
Cathy Walling, CMP
Paul Richardson, CHASS
Steve Thomas, CMP
Bill Wilkman, City of Riverside Planning Department

Design Team

Barton Phelps, FAIA, Barton Phelps & Associates, Architects and Planners
David Haggerty, Barton Phelps & Associates
Paul Duelo, Barton Phelps & Associates
Melvyn Green, Melvyn Green Associates, preservation technology
Jim Pearson, Saiful/Bouquet Inc. , structural engineering
Frank Stefan, M-E Engineers, mechanical engineering
George Lui, M-E Engineers, mechanical engineering
Sean Hira, M-E Engineers, electrical engineering
David Conant, McKay Conant Brook Inc, acoustics
Randy Willis, McKay Conant Brook Inc, audio-visual / media systems

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1. Introduction

This report results from a month-long study conducted in the summer of 2002. Its purpose was to confirm the most recent program intentions for the renovation of the historic Rouse Building and its conversion to new use as the Barbara and Art Culver Center of the Arts prior to the start of schematic design. From the standpoint of planning, this project is a joint undertaking of the University California, Riverside College of Humanities, Arts, and Social Sciences (CHASS) and the City of Riverside.

Initiated by the functional program envisioned by the departments of the College who will occupy the building, this investigation includes initial studies of design possibilities, cost implications, and phasing that grow from that program. These basic studies are intended primarily to test the capacity of the existing building to successfully accommodate program requirements and to determine the most appropriate use of available construction funding. They also recognize important issues of historic preservation and urban design that complement the actual program of new functions and begin to suggest appropriate design approaches.

The findings outlined in this report are based on five sources of information as follows:

- The Program Confirmation Workshop conducted at the CMP on August 5, 2002.
- Inspections of the Rouse Building by the design team.
- As-built drawings and structural test data provided by UCR Design and Construction.
- Plans of infrastructure and the Main Street mall provided by the Planning Department of the City of Riverside.
- Preliminary review of historic documentation of the Rouse Building.

2. Building Description

The Rouse Building is located in downtown Riverside on the east side of the Main Street mall between University Avenue and 9th Street. It adjoins the University of California, Riverside (UCR) California Museum of Photography (CMP) to the north and a one-story commercial building and open parking lot to the south. All of these properties are owned by UCR.

Developed over the past century as the major retail department store of Riverside, the building measures 98' by 158' and rises two stories (36 feet) above the mall. It is approximately 44,000 square feet in total (gross) area including a basement beneath most of the building.

The Rouse building is an historically composite structure that includes the Cunningham Building of 1895 and the Rouse's Men's Store addition to the south of 1907. The two structures were united by a common west façade in an extensive remodeling completed in 1925 and designed by the prominent Riverside architect, G. Stanley Wilson. During this renovation, a two-story open space, naturally illuminated by a roof monitor, was constructed in the center of the 1895 portion of the building.

The exterior walls are composed of unreinforced, brick masonry. The original framing is heavy timber columns and wood floor framing. The basement of the 1895 portion of the building was excavated and enlarged in 1956. It is constructed with new masonry walls and concrete footings that support the original exterior walls and steel columns and beams that support the floors above.

The building has undergone successive interior renovations since 1925. An extensive remodeling of the west front of the building in 1956 removed the arcade entry, glass front and free-standing display cases of the 1925 Wilson design and replaced them with the mid-century modernist front that the building presents today.

Main Street was converted to a pedestrian mall in 1963. The Rouse building ceased to function as a department store in 1964 and parts of it were used as retail and office space for a number of years. Since the mid 1980's a restaurant has occupied the ground level of the 1907 portion of the building. The 1895 portion of the building has remained unoccupied for approximately the last ten years.

The Rouse Building has been designated by the City of Riverside as Cultural Heritage Landmark No. 50 and is part of the Mission Inn Historic District.

3. Program Description

The program for the Culver Center is devoted to emerging graduate programs in the arts and related faculty research and performance space. The project will extend the current graduate program in Dance and help develop new interdisciplinary programs in Art, Art History, Theatre, Music, Creative Writing, and Theatre / Creative Writing. In addition the facility will provide space for related CHASS disciplines such as Film and Visual Culture, and the newly proposed joint Engineering / Humanities graduate program in New Media and Digital Arts.

Contemporary practice in all these arts disciplines has changed profoundly with the introduction of new enabling technologies. Recognizing this change, the Culver Center will provide an extraordinary high-tech facility for interdisciplinary initiatives based on technology, visuality, and performance.

The program for the Culver Center works with its downtown Riverside location to balance public access with private research and to create a community of resident artists with local, national, and international audiences. The current program is the result of an iterative process and has changed over time. Programming for existing structures differs from that for new construction in that existing conditions and dimensions play an influential role. Important factors influencing the current composition of the program include the following:

- Needs of CHASS faculty and graduate students in the arts.
- Proximity with the CMP and possibilities for shared facilities and administration.
- Possibilities for technological connectivity among various programs in the arts.
- Spatial and dimensional characteristics of the Rouse Building.
- Significant historic features of the Rouse Building, past and present.
- Shared interests of UCR and the City of Riverside in developing a lively day/night performance/activity venue with adjacent café/restaurant service.

Brief descriptions of program areas and area tabulations responding to these factors appear on the following pages. *More detailed discussions of technical requirements appear in the Appendices.*

Primary Spaces and Adjacencies

Program areas given in assignable square feet are results of the Program Confirmation Workshop Results of August 5, 2002.

- **Gallery / Performance Space**

The largest, most highly visible, most accessible, and most user-flexible space in the program. Ideas for it have developed around the characteristics of the existing, historic central atrium space. In this location it also operates as the biggest scaled and most memorable part of the program. Functions will include assembly and reception events, live performance, and exhibition in both high-tech and traditional. Desired capabilities include theatrical lighting and support systems, speaker system and projection capability, computer support and connectivity with other spaces, access for large objects, storage for seating, equipment, exhibition support. Relationship with CMP and Café/Restaurant operations to be clarified.

Adjacency: (Ground Floor) Main entrance, West Arcade service entrance/loading, storage, elevator, Arts/Museum Bookshop/Receptionist, Catering Prep., Screening Room, Café/Restaurant. Possible restricted access to this area.

(Upper Floor) Media Computer Studio. Restricted access to upper floor.

Program Area: 2,585 asf

- **Arts / Museum Bookshop / Receptionist**

A commercial display area that enlarges the current CMP bookshop operation to include a wider array of books and materials relating to the arts interests of the Culver Center. It functions importantly to activate the front of the building, promote programs, and attract people from the mall. Serving both the Culver Center and the CMP, it requires a large, securable connection between the two facilities. It is anticipated that the cashier will operate as the primary receptionist for both facilities and as a "box office" for special events. It requires clear sightlines, telecom connectivity to administration area and building systems, and limited mail reception.

Adjacency: Main entrances (CMP and Culver Center), West Arcade, storage. Open to the public.

Program Area: 940 asf

- **Administration Office**

A shared office suite for two (or two private offices) for the Associate Director and Facilities Manager of the Culver Center. Requires limited reception/seating capability.

Adjacency: CMP Administration or Main Entrance / Receptionist (Alternatively); faculty and student activity areas.

Program Area: 280 asf

- **Screening Room**

A multi-purpose, high-tech presentation space for projection, lecture, or performance; fixed seating for 90, stepped floor, accessible stage, vestibules, advanced rear-of-screen sound, video/digital projection (front projection with fixed rear cabinet but no projection room), portable slide projection, tele/com connectivity with other spaces, theater lighting. Open to the public with restricted access.

Adjacency: Gallery, main entrance, vertical circulation.

Program Area: 1,400 asf

- **Media Computer Studio (MCS) "Open Studio"**

A suite of specialized spaces linked to the "Open" Media Computer Studio. This area of the building should be designed to integrate the activities of all disciplines in the Culver Center and function as its technological and experimental centerpiece.

The "Open" Studio is a flexible area with 16 or more open workstations for informal graduate level teaching. Heavy tele/com connectivity with accessible cabling.

Adjacency: prominent location and primary circulation, Art, Theatre, and Music (Isolation Booth, Control Room, Machine room), Dance, Black Box, Tech. Closet, and Gallery. Restricted access.

Program Area: 825 asf

- **MCS Theatre**

Digital preparation area for live performance. Theater lighting capability. Heavy tele/com connectivity with accessible cabling.

*Adjacency: Black Box, Open Studio, Art, Music, and Dance.
Restricted access.*

Program Area: 300 asf

- **MCS Art**

This area accommodates professional drum scanning and large format printing equipment, display/review space, and multi-media projection (computer station, ceiling-mounted projector, projection screen and temporary seating area). Heavy tele/com connectivity with accessible cabling.

Adjacency: Black Box, Open Studio, Art Studios, Theatre, Music, and Dance. Restricted access.

Program Area: 300 asf

- **MCS Music**

Digital media studio connected to recording spaces and closely related to the Black Box and other disciplines. Recording requires a sound isolated room with live music capability, speaker system, and a control room with view panels to Black Box and to the sound-isolated room. Heavy tele/com connectivity with accessible cabling.

Adjacency: Gallery, Black Box, Open Studio, Art, Theatre, Music, and Dance. Restricted access.

Program Area: 686 asf

- **Black Box**

Multi-purpose research/performance space for shared use by all disciplines. High ceiling (16 to 20 feet requested), lighting grid, video/TV lighting, speaker system, motion-capture capability, and possibly Computer-Aided Virtual Environment capability. Related to Control Room and Theatre Digital Prep. Storage required. Heavy tele/com connectivity with accessible cabling.

Adjacency: Gallery, Open Studio, Art, Theatre, Music, and Dance. Restricted access.

Program Area: 930 asf

- **Faculty and MFA Art Studios**

Generalized studio spaces with usable wall areas and controlled lighting and ventilation. Service sinks and skylights possible but not required. Two large spaces for up to three faculty each. Four smaller spaces for individual MFA students. Heavy tele/com connectivity with accessible cabling. Art Storage required but not necessarily immediately adjacent.

Adjacency: Gallery, Open Studio, MCS Art, Black Box, Screening Room, Elevator, Art Storage, Fabrication Workshop. Restricted access.

Program Area: 2,750 asf

- **Faculty and MFA Dance Studios**

One large faculty dance studio and a smaller one for MFA students: high ceilings, sprung wood floors, theatrical lighting, sound systems, digital recording, and storage. Floor systems to be structurally separated from rest of the building floor.

Adjacency: Gallery, Black Box, Screening Room, MCS Suite. Restrooms (for changing clothes). Restricted access.

Program Area: 3,285 asf

- **Faculty / Graduate Student Research Offices**

This area has been envisioned as a suite possibly combining a Faculty Lounge, a soundproofed room for recording, studio spaces for visitors, and located adjacent to the administrative office area.

Adjacency: MCS Suite, Gallery, Screening Room, Administrative Offices

Program Area: 1,130 asf

- **Keystone Mast Collection**

Storage of the Keystone Mast Collection (Glass photographic negatives) requires industrial open space for research and archival storage. Freestanding storage cabinets with bolted connections or base isolators. Independent temperature and humidity controls. Floor drain /sump pump system. Provide new connection to CMP building. Power/telecom jacks in northern portion. Non-rated doors. Provide fluorescent lighting with UV filter shield on each lamp.

Adjacency: CMP, Conservation Room, CMP/ Culver Center Fabrication Workshop, Material Storage for Exhibition, Elevator.

Program Area: 7,600 asf

- **Conservation Room**

Workshop space for 3-4 persons working at tables. Acoustic ceilings, resilient flooring, heavy power/telecom. Interior glazing to Keystone Mast Collection (25%). Provide UV filter shield on all fluorescent lamps. The possibility of locating this space in existing CMP is to be clarified.

Adjacency: CMP, Keystone Mast Collection, CMP/Culver Center Fabrication Workshop, Material Storage for Exhibition, Elevator.

Program Area: 825 asf

- **CMP/Culver Center Fabrication Workshop**

This fully equipped wood / metal working shop with paint booth is to be shared with the CMP. It is envisioned as industrial space with sealed concrete floors, special acoustic ceiling, metal doors, heavy power demand, dust removal system. Doors 8 feet wide.

Adjacency: CMP, Keystone Mast Collection, Material Storage for Exhibition, Elevator, Art Storage, Art Studios, Gallery

Program Area: 1,950 asf

- **West Arcade / Display Cases**

A strategy for compliance with guidelines for the renovation of historic structures involves reconstruction of the arcaded display space at the front of the building. This space can be programmed to support and announce exhibitions, performances, and current research in the Culver Center. This contemporary recreation would provide possibilities for display of digital art, projection, etc. as well as for security and sun-control design and connection to the future theater facility to be constructed to the south.

Adjacency: (Ground Floor) Gallery, West Arcade, Mall.

Program Area: 1,380 asf

- **Restaurant / Café**

The restaurant / café is envisioned as a small, tenant-run facility that may operate both in close association with the Culver Center and independently from it. Service will be split between indoor dining and outdoor tables on the mall. The building program is to provide "shell" space and support system infrastructure only. Restaurant interiors, kitchen facilities, servicing, patron and staff restrooms, as required, are to be provided by the tenant. Servicing is through the Service / Loading Area and/or the Catering Prep. area of the Culver Center. Restaurant operations, relationship with Gallery and CMP operations, and access need to be clarified in the design phase. A securable, acoustically controlled, indoor connection to the Gallery may be required.

Adjacency: (Ground Floor) Gallery, West Arcade, Mall, loading / trash area at south east corner of building.

Program Area: 2,000 asf

- **Seminar Room**

An earlier program called for a seminar room with flexible seating for twenty. The current program proposes to accommodate this requirement in the Oculorium of the CMP. A connection at the upper floor may be required. Feasibility of this arrangement with CMP operations and security issues needs to be clarified in the design phase.

Program Area (if not accommodated in the Oculorium): 550 asf

Support Spaces and Adjacencies

- **Service / Loading Area**

Loading for large materials, exhibition/performance equipment, special events, trash collection. Maximum height and width for doors. Acoustical separations from outside (roll-up door outside only).

Adjacency: (Ground Floor) Gallery, elevator, storage, exterior loading / trash area at south east corner of building (not off the alley).

Program Area: 400 asf

- **Ground Floor Storage Area(s)**

Storage for large materials, exhibition/performance equipment, special events. Maximum height and width for doors.

Adjacency: Gallery, elevator, storage, exterior loading area at south east corner of building.

Program Area: included in Service /Loading Area (above).

- **Material Storage for Exhibition**

Industrial storage space. Doors 8 feet wide.

Adjacency: CMP, Keystone Mast Collection, Material Storage for Exhibition, Elevator, Gallery.

Program Area: 1,200 asf

- **Art Storage**

Industrial storage space for student and faculty work.

Adjacency: Elevator, Art Studios, Gallery

Program Area: 800 asf

- **M.E. P. Equipment Room**

Industrial space with ramp connection to main basement level.

Adjacency: Elevator, Vertical Chases and Ducts.

Program Area: Included in Support Spaces and Circulation

- **Elevator**

Service-type elevator hydraulic elevator that accommodates both occupant accessibility requirements and medium freight functions. Maximum size and height (8 feet wide if possible). Acoustical separations.

Adjacency: (Basement Level) Storage, Shop, and CMP functions. Mechanical Equipment Room, Elevator Equipment Room; (Ground Floor) Gallery, storage, exterior loading area at south east corner of building. (Upper Floor) Upper Gallery, Art Studios, Media Computer Studio/Black Box, Dance, and CMP.

- **Restrooms**

Institutional toilet/lavatory facilities with wall-hung fixtures on two levels, stacked above MEP Equipment Room.

Adjacency: Acoustically separate service area, vertical circulation.

- **Electrical and Data / Telecom Closets, Tech Closets, and Dimmer Racks**

The program for the Culver Center will require a large commitment of space for storage and operation of electrical and electronic equipment.

Adjacency: adjacent to served areas and stacked as necessary.

SPACE PROGRAM SUMMARY
 (IN ASSIGNABLE SQUARE FEET)

Space	1. Program Confirmation Workshop: Start	2. Program Confirmation Workshop: Finish	3. Test Scheme
Gallery/Performance Space	2,585	2,585	4,120
Arts / Museum Bookshop / Receptionist	940	940	733
Administration	420	280	280
Screening Room	1,400	1,400	1,400
Media Computer Studio "Open Studio"	800	825	845
MCS Theatre	300	300	300
MCS Art	300	300	320
MCS Music (w/ Recording/Iso Booth)	300	300	200
Machine Room/Tech Closet	0	140	154
Control Room	0	150	129
2 @ 48' asf	96	96	0
Black Box	750	930	835
Including Storage (85 asf)			
Faculty and MFA Art Studios	2,750	2,750	2,824
2 Faculty Studios, 4 MFA Studios			
Faculty and MFA Dance Studios	3,500	3,285	3,046
1 Faculty Studio, 1 MFA Studio			
Faculty / Graduate Student Research Offices	830	830	781
Visitor Spaces (2)	0	300	370
Keystone Mast Collection	7,600	7,600	6,503
Conservation Room	825	825	846
CMP/Culver Center Fabrication Workshop	1,950	1,950	1,947
Restaurant / Café	3,000	2,000	2,092
Catering Prep	250	250	244
Seminar Room	550	0	0
Service / Loading Area	400	400	291
Ground Floor Storage Area(s)	0	0	179
Material Storage for Exhibition	1,200	1,200	1,259
Art Storage	800	800	813
West Arcade/Display Cases	1,380	1,380	1,324
Total ASF	32,926	31,516	31,835
Support Spaces and Circulation	<u>11,229</u>	25% <u>12,639</u>	29% <u>12,320</u>
Total GSF	44,155	44,155	44,155

4. Historic Preservation

The use of the Rouse Building as the new Barbara and Art Culver Center of the Arts represents a remarkable intersection of contemporary ideas about academic design and design for the arts with urban planning and historic preservation. As might be expected, this hybrid, new/old combination requires special consideration in establishing an appropriate approach to historic preservation. While these issues cannot be fully explored until the beginning of design, the following commentary outlines our current understanding.

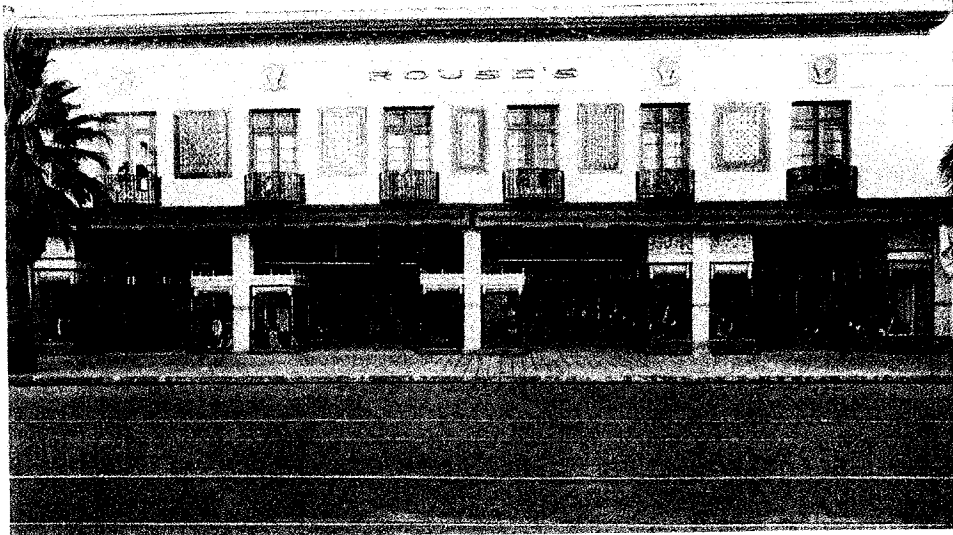
Program

The program for the Culver Center requires provision of a range of highly differentiated spaces for research, art production, performance, museum/exhibition support, and food service. These uses depart radically from the commercial functions for which the Rouse Building, in its current form, was designed. As described in the previous section and the appendices, the new program is a complex, composite one that relies for its basic performance on special design approaches and advanced technology in acoustics, media systems, telecommunications, computer technology, theatrical lighting and sound systems. If the Culver Center were to be designed as new building, it would logically develop a sophisticated, contemporary architectural form and expression and be built for maximum flexibility, efficient operation, and future change.

Building Systems

The requirement to provide structural strengthening and seismic resistance in an old, unreinforced masonry and wood frame structure adds to the complexity of the project and its impact upon the historic fabric of the Rouse Building. New building systems for electrical / electronic service, lighting, plumbing, heating, ventilating, and cooling, as well as fire alarm, fire suppression, and security systems add layers of linear elements and equipment that were non-existent or of minor importance in the building's earlier iterations. These elements all need to be accommodated in spaces that were formerly used for another purpose.

Barbara and Art Culver Center of the Arts
University of California, Riverside
Program Confirmation Study



Rouse Building, West Front, c. 1930



Rouse Building, West Front, 2002



Rouse Building, Atrium, c.1930

Approach

Our preliminary approach to historic preservation of the Rouse Building is based on the federal *Standards for Rehabilitation, The Secretary of the Interior's Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* as well as on generally accepted procedures for analysis and design that we have used successfully before on projects requiring approval by federal and State of California agencies.

Our initial approach includes the following steps:

- Determination of the Primary Interpretive Period.
- Identification of Character-defining Elements.
- Analysis and Recommendations for Preservation, Restoration, Rehabilitation, and Compatible New Construction.

Determination of the Primary Interpretive Period.

Photographs of the original Cunningham Building of 1895 and the Rouse's Men's Store addition of 1907 present a very different appearance from both the present west front and the renovated west front of 1925.

Characterized by strong brick detailing in an abbreviated Romanesque style, small second floor windows, and an exterior entry stair to second floor offices, the Rouse building originally exemplified the sturdy, late-Victorian commercial building type that could be found on Main Streets across the country around the turn of the 19th Century. Stressing permanence and solidity and with its formulaic admiration for larger brick structures in East Coast and Mid-western cities clearly on display, the original Rouse Building was a greater civic achievement than an architectural one.

A review of newspaper articles published after the opening of the renovated Rouse Building in 1925 suggests that a new architectural excitement was in the air by this time. This major remodeling, designed by the noted Riverside architect G. Stanley Wilson, unified the two building fronts in an elegant and highly original rendition of the Spanish Renaissance Revival that was taking southern California by storm. Wilson's take was boldly sculptural and modernist-influenced. Its dual horizontal composition contrasts a deeply shadowed and asymmetrically developed arcade composed of free-standing columns and glass and metal display cases with a taut upper story of tall French doors punched through glazed brick cladding in brilliant white.

On the interior, the two separated floor levels were connected spatially by the dramatic insertion of a large central atrium illuminated by a glazed ceiling with a roof monitor above. Boldly scaled neo-classical capitals on square columns dominate the space. Stairways are recessed into the walls to insure a simple, dignified reading of the Atrium and to maximize space for sales counters and display cases.

In 1956, as part of a program of modernization, the lower storefront of the 1925 remodel was removed entirely except for the structural columns and replaced with a mid-century modern storefront that re-established the differentiation between the 1895 and 1907 buildings. Designed by civil engineer Eric W. Entman it was accompanied by plans for enlarging the basement under the 1895 building.

In addition to numerous minor renovations that followed, a large staircase was constructed in the Atrium in 1970. The staircase and the restaurant that was constructed to the 1907 building in 1980 are present in the existing building.

Based on photo documentation of various stages in the history of the Rouse Building, the preponderance of written discussion about the 1925 remodeling, and the pre-eminence of G. Stanley Wilson's work in Riverside, it is generally agreed by researchers that the years between the 1925 and 1956 remodelings represent the most historically and architecturally significant period of the Rouse Building's existence. It is recommended that the second quarter of the Twentieth Century be taken to be its primary interpretive period.

- **Identification of Character-defining Elements.**

Exterior

With the removal of the Wurms building, the south wall of the 1907 building will be exposed. It and the east wall are of common brick construction with round-topped windows and relieving arches, and stepped brick parapets. Wood windows are in place in some openings. These exposed brick walls constitute secondary historic fabric.

The upper floor of the west front is a primary character-defining element. It is the only part of the building that can be restored to a museum quality condition. The lower front is, with the exception of the structural columns, not part of the primary interpretive period. The metal canopy and metal infill panel above it are not significant.

The roof monitor and clerestory windows and the light they give to the atrium are critically important to its appearance and its implications of classical outdoor space. As such they represent significant character-defining elements. The later mechanical equipment penthouse on the roof of the 1907 building is not significant.

Interior

The two-story atrium is the most significant space on the interior of the building. The roof monitor daylighting system is a primary interpretive component as are the existing rows of columns on the ground floor and upper floor. The cast column capitals are original to the primary interpretive period but the gypsum wallboard casing around the wood structural columns is not.

Because of its recessed location to the south of the atrium, the stairway in this location is primary historic fabric. The elevator cab, at the ground level is secondary historic fabric. The new stair at the east end of the atrium represents a modern re-interpretation of the appearance and use of the space and is unrelated to the primary interpretive period. The metal railing at the upper level of the atrium is not from the primary interpretive period.

Existing store partitions, support spaces: hallways, exit stairs, storage rooms, and shafts are not character-defining elements.

• Analysis and Recommendations for Preservation, Restoration, Rehabilitation, and Compatible New Construction

Much of the primary historic fabric of the Rouse Building has been lost or altered and no museum quality spaces from the primary interpretive period still exist. The proposed functioning of the Culver Center as a cutting edge, high-tech, fully flexible and heavily used academic arts and performance facility does not conform closely with delicate plaster ornamental finishes of the 1925 commercial interior. Recreation of this aspect of the building is not appropriate. It does appear however, that preservation of existing historic fabric and replacement of certain components can be achieved in such a way as to enhance both the program of the Culver Center and to reinforce the major intentions and effects of the 1925 Wilson design. The following three-part approach to these issues is proposed:

1. Preserve and restore primary and selected secondary character-defining spaces and elements.
2. Remove non-historic elements that are unrelated to the primary interpretive period.
3. Where it is possible to rebuild primary historic elements for use in the current program, rebuild them using contemporary materials with similar properties to the original ones.

Specific recommendations are as follows:

Exterior:

1. **Roof:** Restore monitor and glazing, improve roof drainage, provide new roofing, flashing, and wall copings; remove mechanical penthouse and provide support for new rooftop HVAC units located away from parapets.
2. **South and East Walls:** clean and restore brickwork per consultants' recommendations; provide new windows where deteriorated and marked to remain. Window and door openings to be sealed can be filled with removable, insulated filler panels with metal covers. (attached to insure reversible process). New openings to be cut and reworked using salvaged brick from cuts.
3. **West Front:** Remove lower storefront, canopy, and pressed metal banding. Restore upper story per Green Associates recommendations, reattachment per test results. Recreate storefront and free-standing display cases layout to match original asymmetrical layout and transparency. Use contemporary materials (u-v resistant glass, concealed frame, butt-jointed with stainless steel panels; metal doors and frames). Provide new lighting, ventilation and digital connectivity in display cases and windows, replace existing paving, ceilings, etc. with compatible materials.

Interior

1. **Atrium:** remove non-historic central staircase, restore historic stair to south of atrium, preserve historic elevator cab in non-operating condition; restore glass ceiling at roof monitor, remove anemostat registers and replace with concealed air-bar system; restore column capitals, replace g.w.b. column cladding with gypsum plaster, remove non-historic railing and replace with historically compatible lighting bar/ railing. Provide new wood gallery flooring.
2. **Historic finishes:** Preserve all that can remain; reveal (gap) all joints between historic and new finishes; surface-mount new fixtures and raceways in reversible fashion, use concealed and indirect lighting where possible.

5. Test Scheme

The plans, sections, and elevation drawings on the following pages reflect a first attempt to relate requested program areas and space requirements to the existing Rouse Building. The exercise of overlaying an abstract program in a rudimentary way on a building that was designed for a different purpose helps us to ascertain the capacity of that building to accept new uses.

The process of clarifying the physical characteristics of the old structure and the limitations they pose suggests convenient possibilities for locating components of the new program. Unlike a schematic design based on an ideal organizational concept, the test scheme examined here attempts a kind of architectural neutrality, resisting as much as possible the introduction of specific organizational ideas and looking instead at what the existing building most readily allows.

This exercise has two functions. One is to uncover data and limiting factors that can inform later design discussion. These may result from a range of factors including building dimensions, the capacity of structural systems, locations of structural elements, floor levels, inside/outside relationships, entry, security, acoustics, code-compliance, historic preservation standards, constructability, etc. A second aim is to establish basic building cost parameters and test the ability of available funding to produce a usable project in even the simplest form.

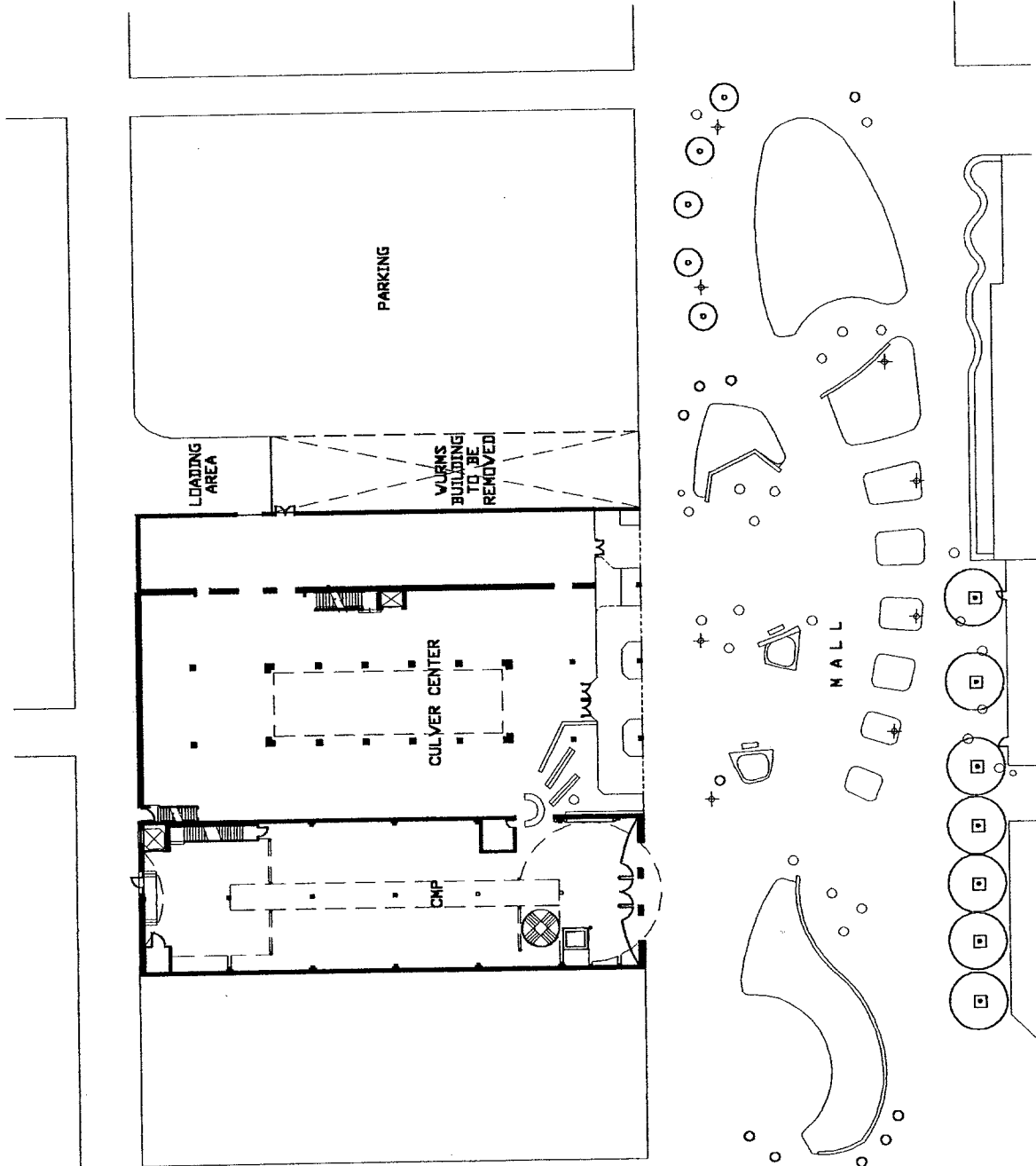
In the process certain factors may emerge as more important than others in shaping the development of the test scheme. We refer to them as *drivers*. Drivers can derive their importance either from existing conditions or from requirements of the new program. We track them through the design process to make sure that their relative importance has been properly gauged and interpreted as the design develops. The upcoming design process will work to overcome conflicts raised by these factors.

• Drivers

Important factors that have emerged in the process of planning the test scheme include those related to the following spaces and program areas:

1. **Atrium:** as both the largest and the most historically important space in the building, this space needs to be seen as the primary organizational area of the Culver Center and its most recognized symbol. In form, area, volume, and lighting it is well suited to use as an exhibition gallery, performance area, and special event space. The Atrium needs to remain as open and unified as possible. Its actual functional potential, pattern of use, and relation to other spaces needs to be confirmed in the design phase.

2. **Keystone Mast Collection:** the specific archival requirements of this unique collection combined with its controlled access and necessary proximity to the CMP basement argue strongly its use of most of the basement area of the Culver Center. Possible layouts need to be tested in relation to the design of the floor above to confirm optimal resolution of issues of basement functions, environmental control, and acoustics. For example, the need for an adequately sized and appropriately located mechanical and electrical room and the possibility of locating the Fabrication Workshop away from the ground floor Screening Room for reason of acoustic separation may have implications for the rest of the building.
3. **Dance Studios:** because the construction of the existing building transmits vibration and sound through the upper floor in a highly noticeable way, these rooms need to be isolated along a north-south line in the floor. For structural reasons this separation is best accommodated along lines of the new braced framed walls at the east and west ends of the atrium. Locating the dance studios above the west arcade and entry / bookshop area works best because these areas are already subject to ambient noise.
4. **Media Computer Studio / Black Box Ensemble:** this suite of eight spaces comprising approximately 2800 square feet is the technological, experimental, and interactive centerpiece of the project. For reasons of limited access and security it needs to be located on the upper floor. Dimensional requirements and the need for a prominent location adjacent to the gallery/performance area suggest a location on the south side of the building that includes spaces in both the 1895 and 1907 buildings. In this location, the existing roof above the Black Box will need to be raised to give a clear height of at least 16 feet.
5. **Restaurant / Cafe:** requirements for separate operations, rear servicing, food service on the mall, acoustic separations, and adjacency to the front of the Culver Center as well as to the atrium space support the use of the current restaurant location in the 1907 building. This location also works with the West Arcade to provide access to the future theater to the south. The actual functional potential of the restaurant, its pattern of use, and its relation to other spaces needs to be confirmed in the design phase.
6. **West Arcade:** recreation of this distinctive component of the 1925 remodel can be accomplished in a contemporary way that combines historical compatibility with high-tech display capability to produce an actively attractive front for the Culver Center. This part of the building is a key component of the recommended approach to historic preservation for this designated city landmark. The arcade also provides possibilities for security, sun control, and connection to the future theater facility to the south.

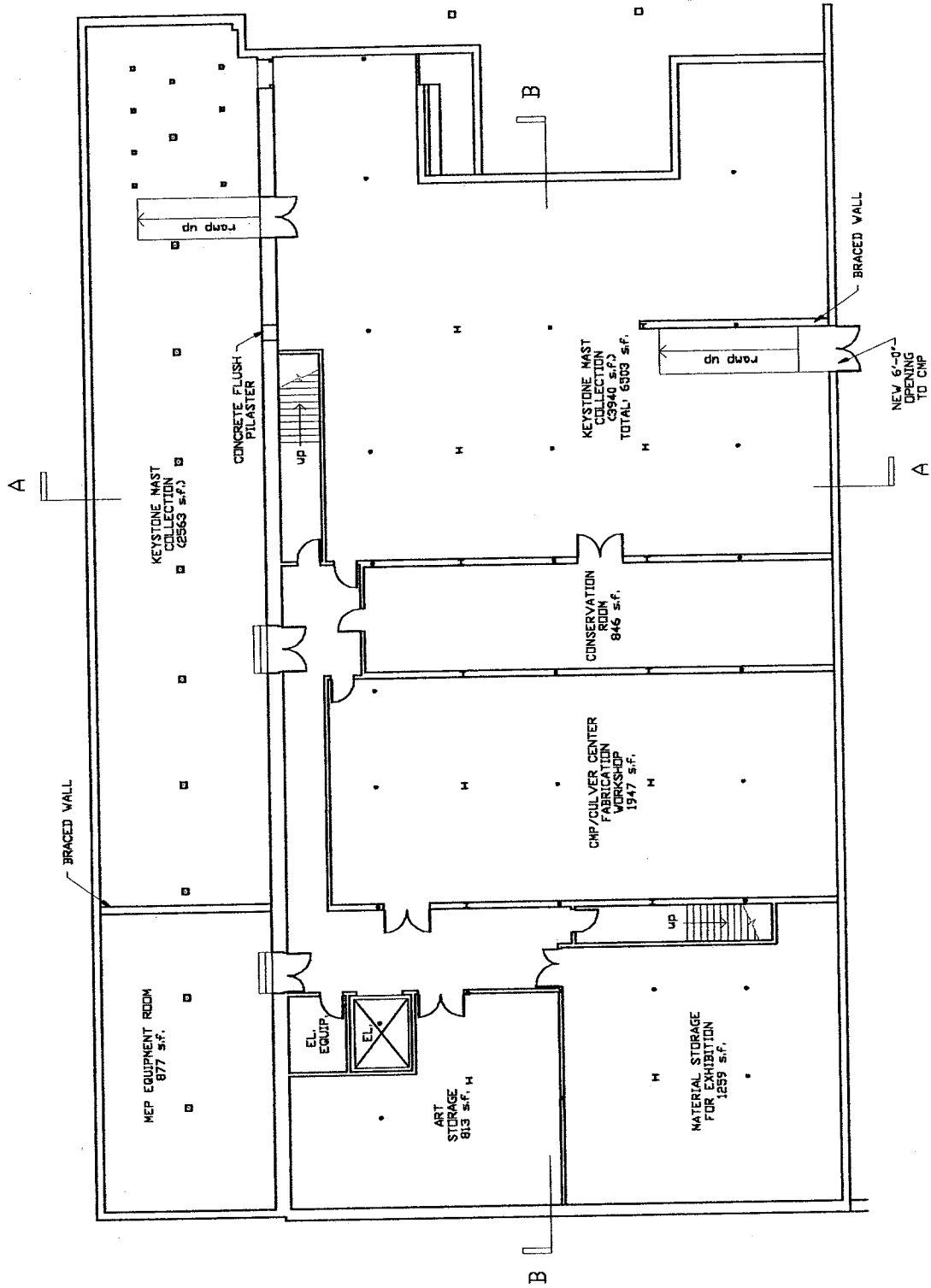


**Test Scheme
Site Plan 8.1.02**

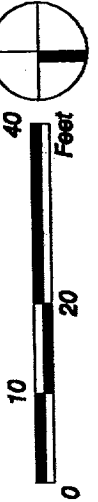


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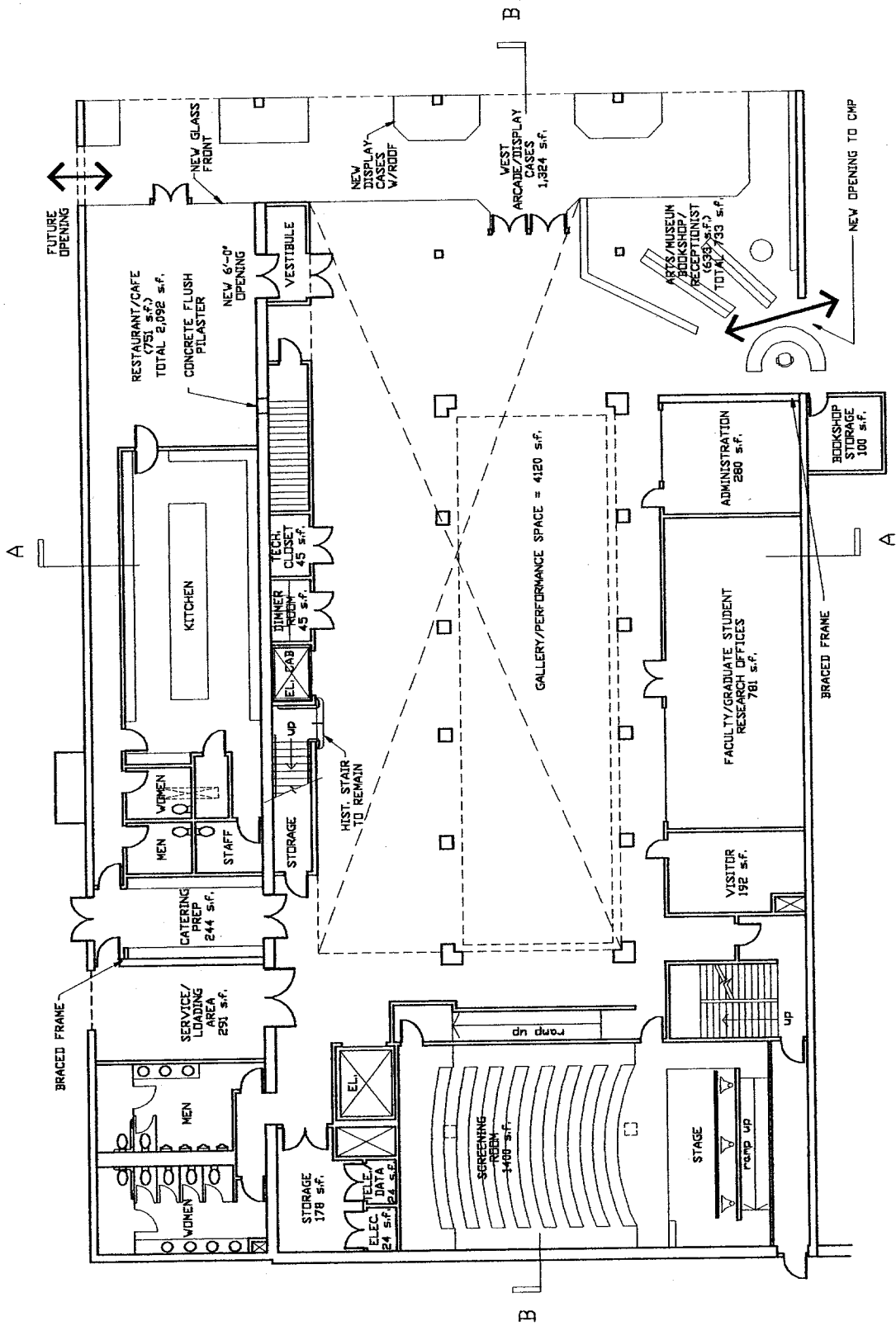


Test Scheme
Basement Floor Plan 9.1.02

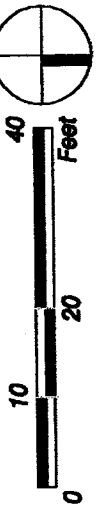


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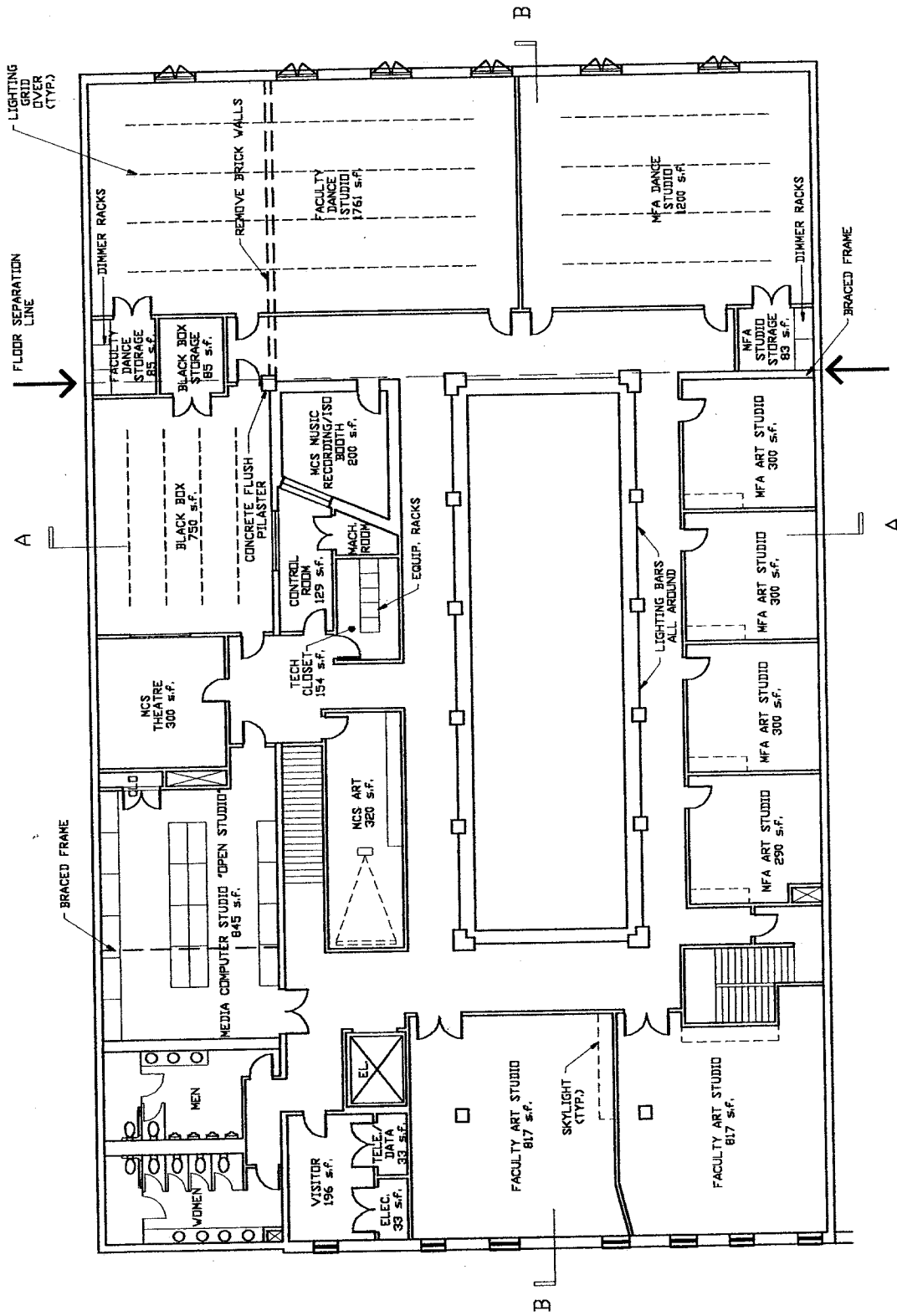


**Test Scheme
Ground Floor Plan 9.1.02**

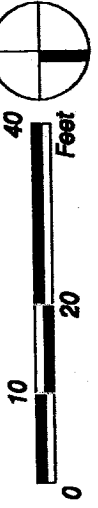


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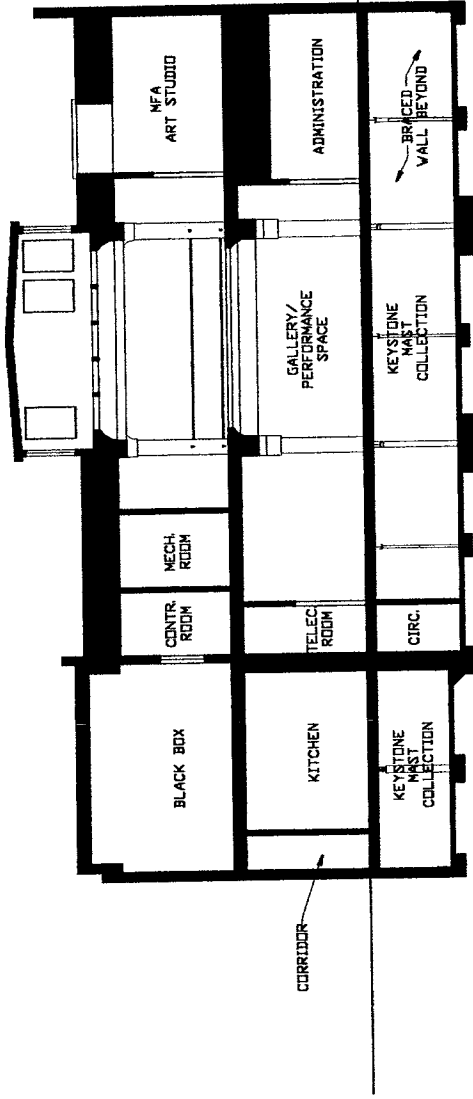


Test Scheme
Upper Floor Plan 9.1.02



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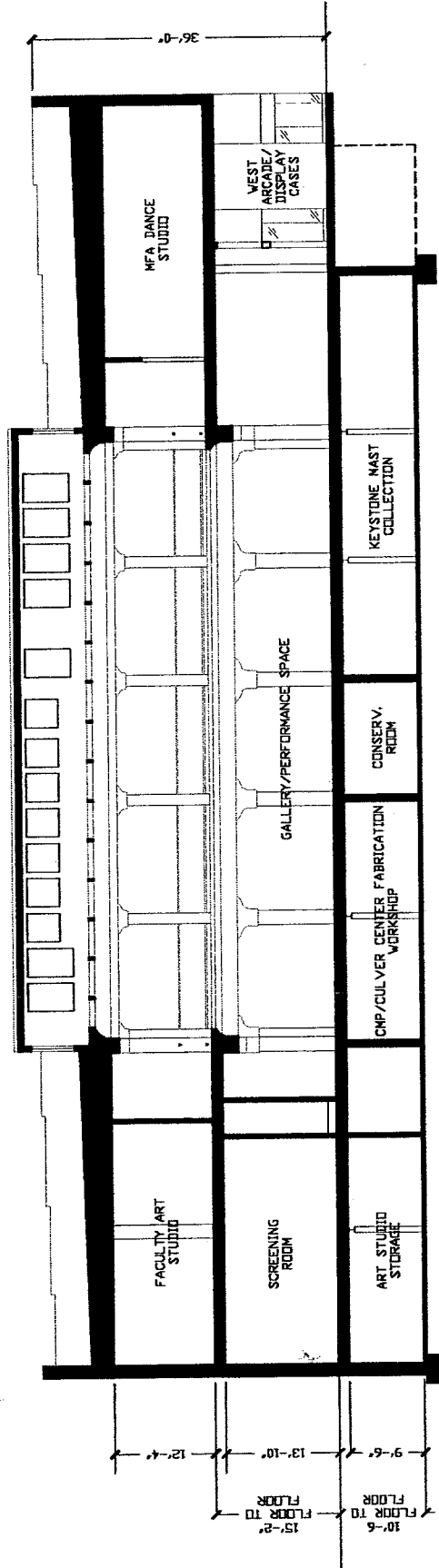


**Test Scheme
Section A/Looking West 9.1.02**

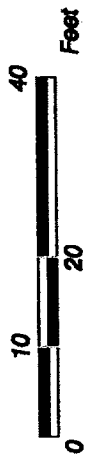


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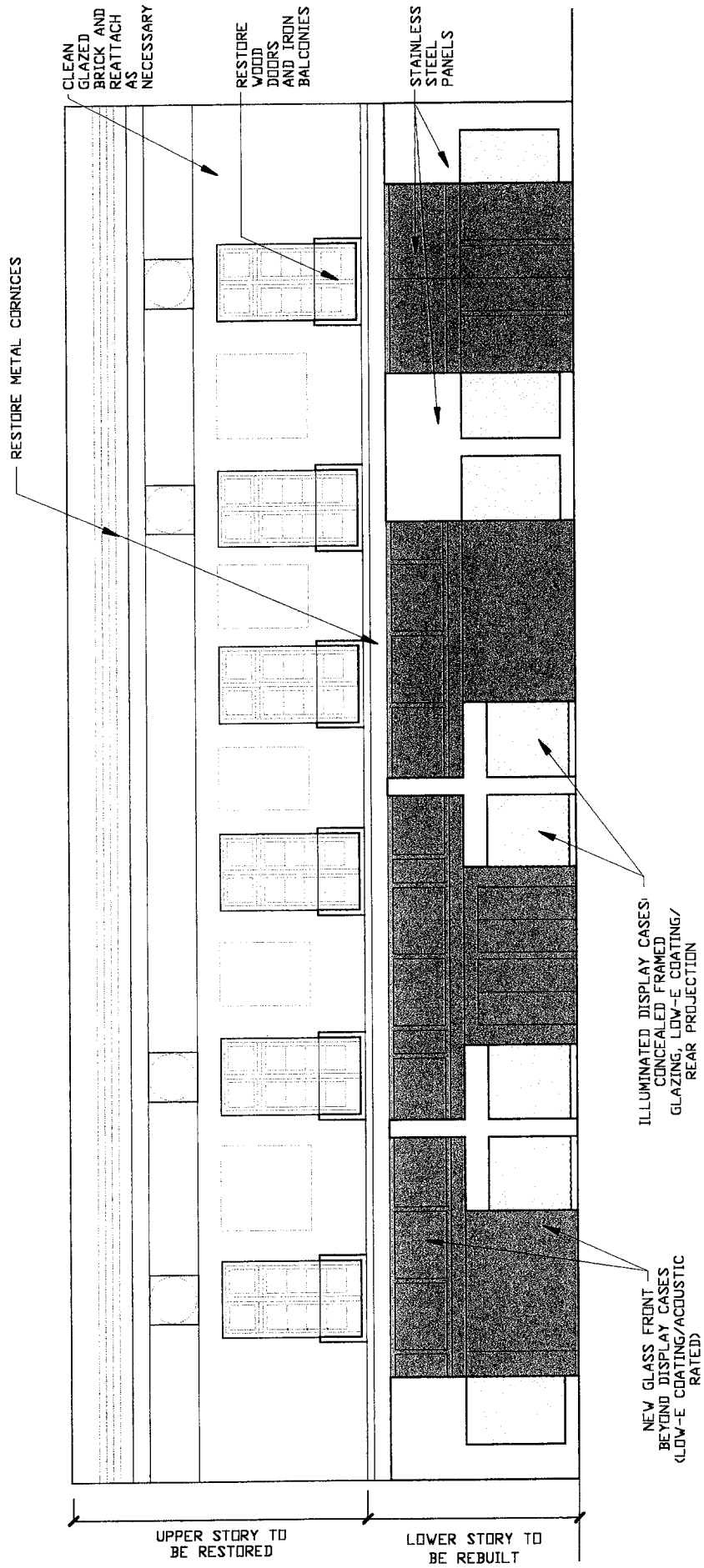


Test Scheme
Section B/Looking South 9.1.02



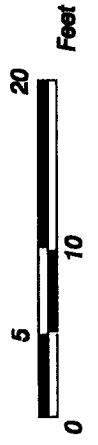
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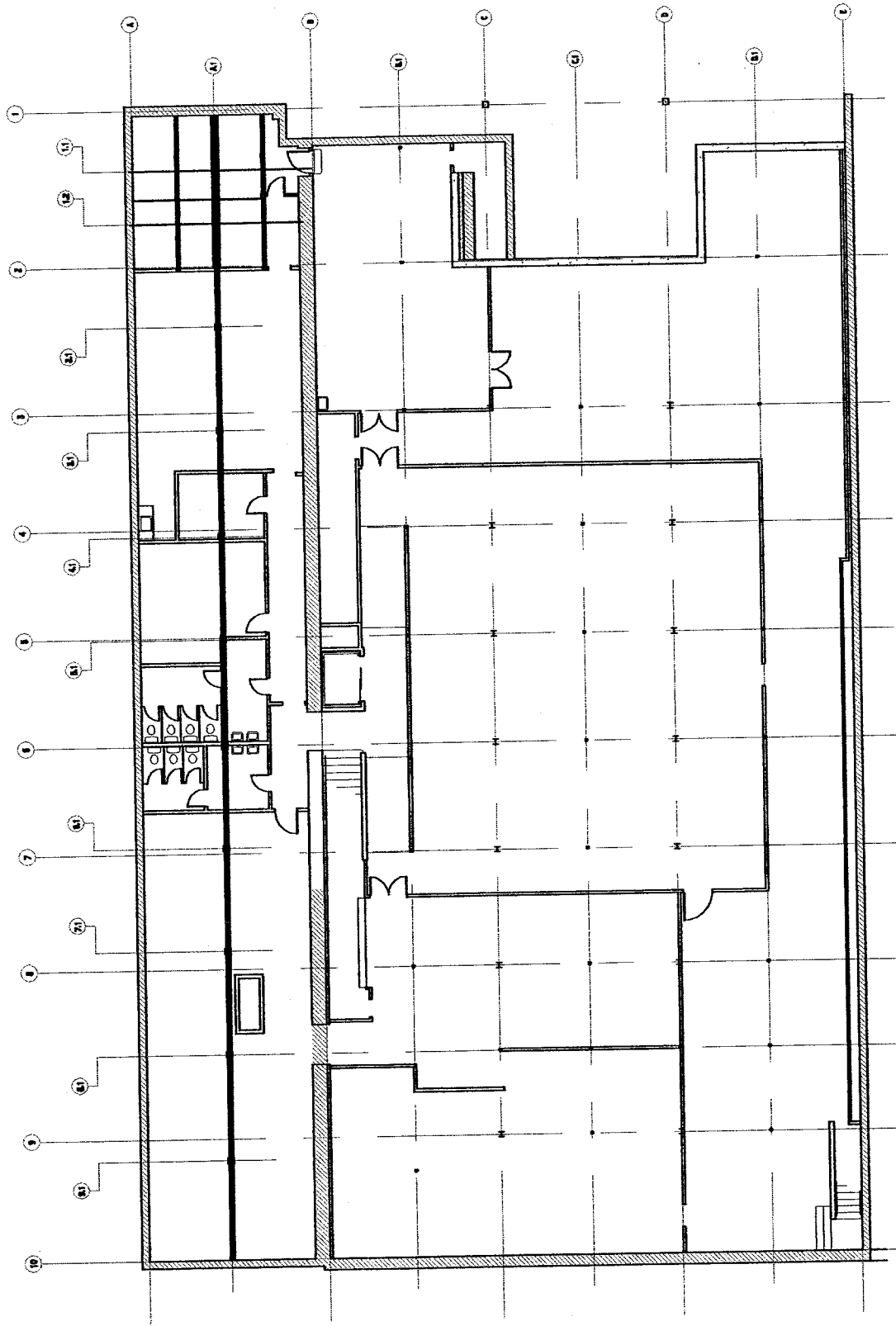


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**Test Scheme
West Front Elevation 9.1.02**



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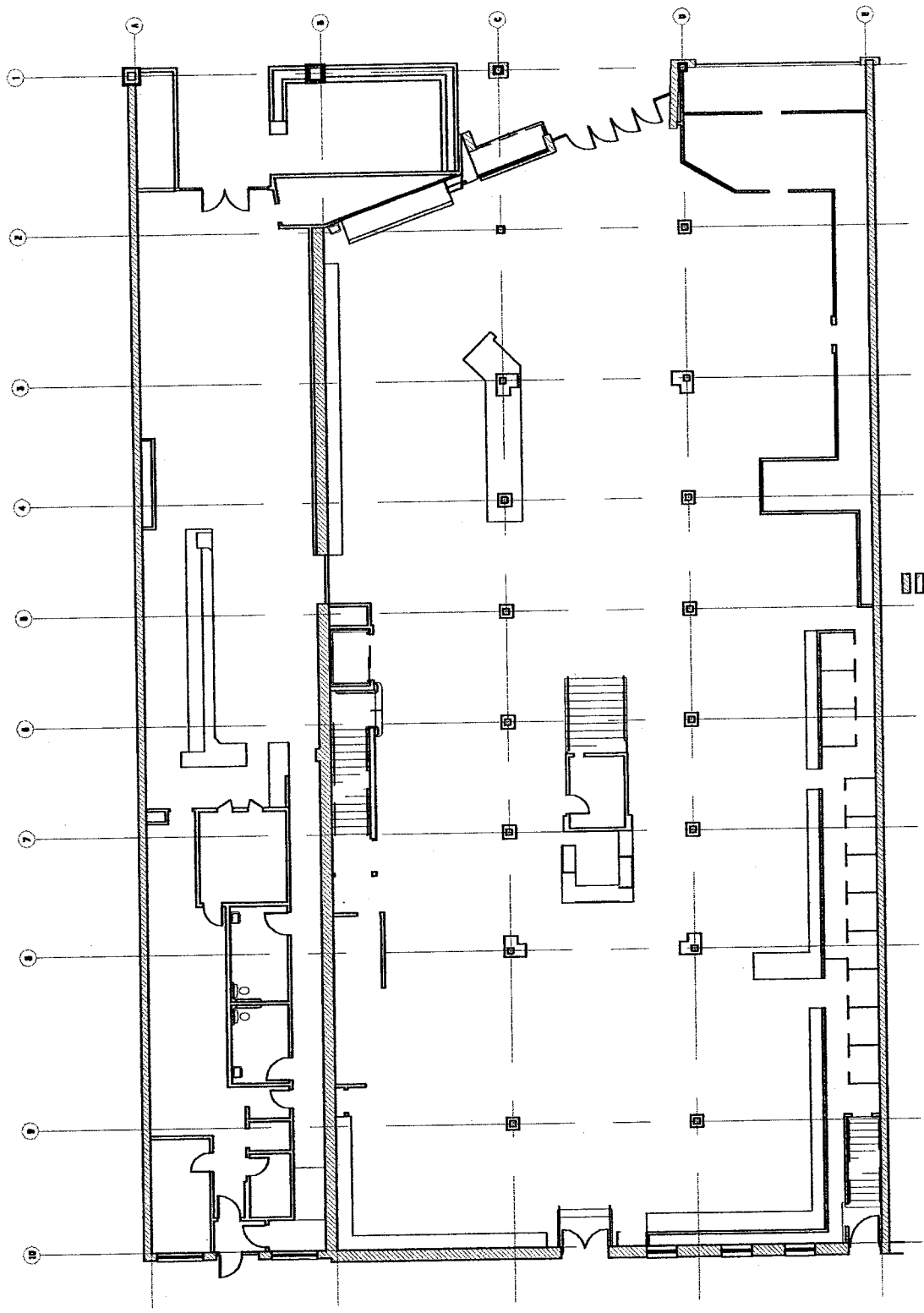


**As Built/Rouse Building
Basement Floor Plan**

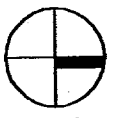


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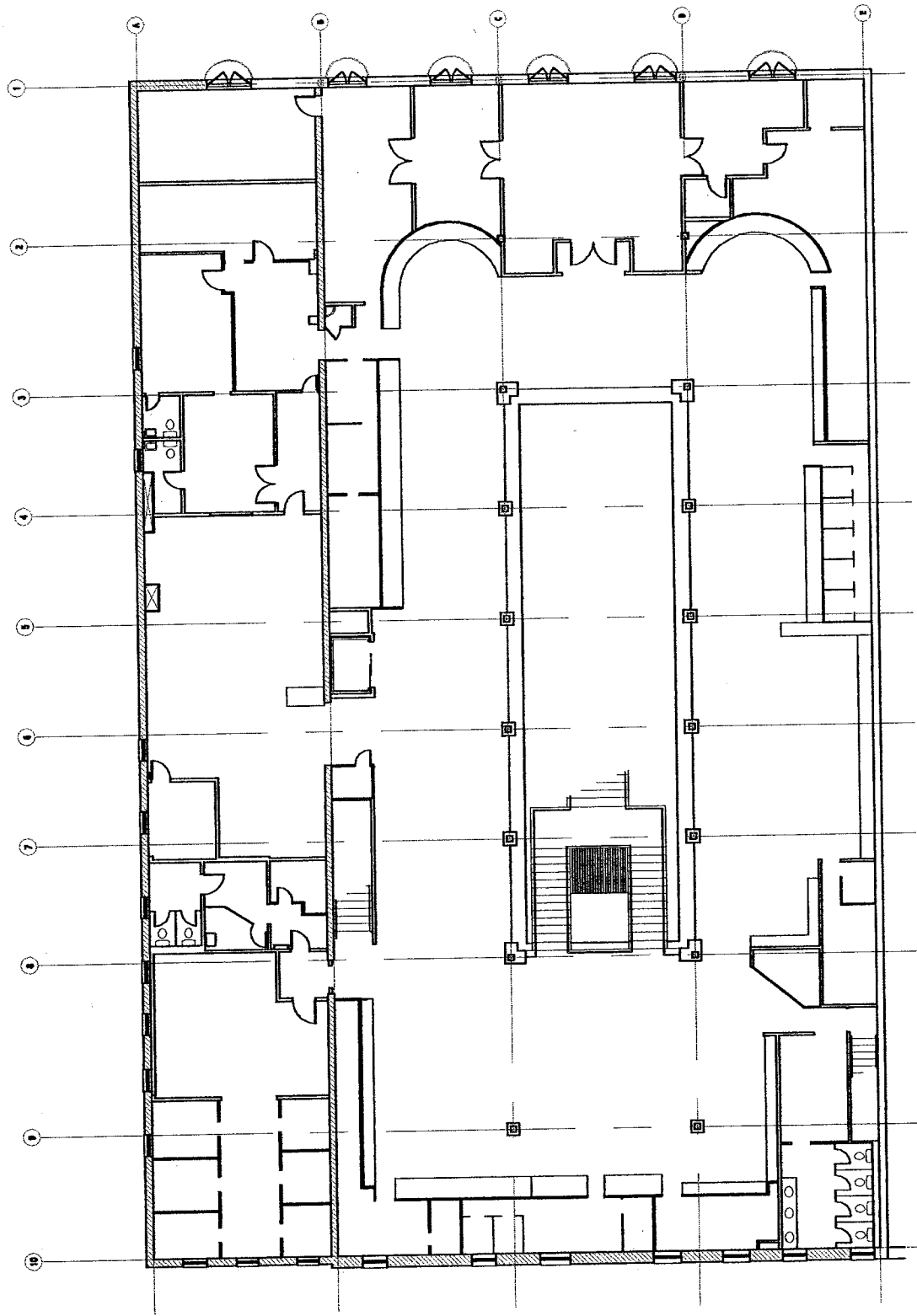


**As Built/Rouse Building
Ground Floor Plan**



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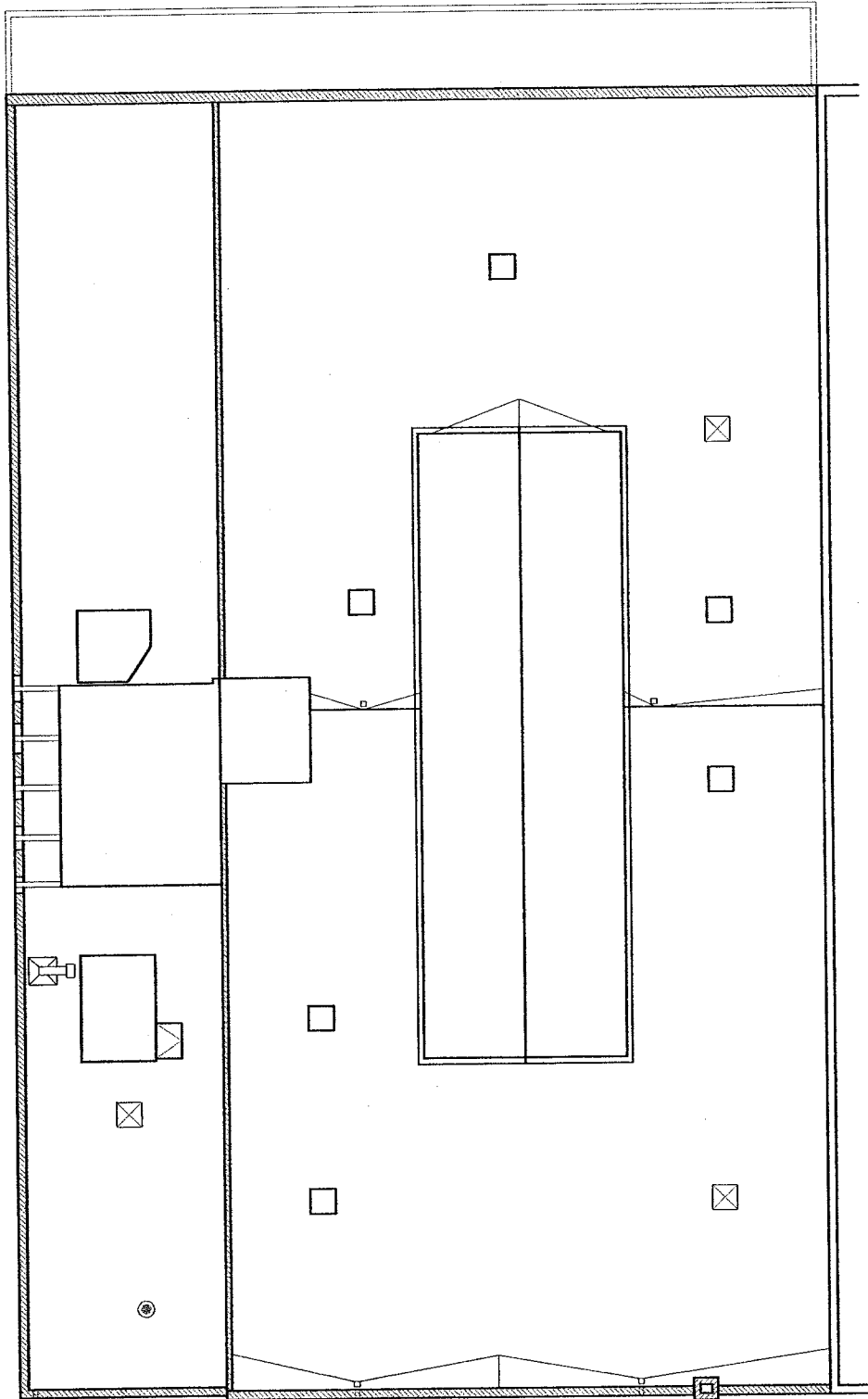


**As Built/Rouse Building
Upper Floor Plan**



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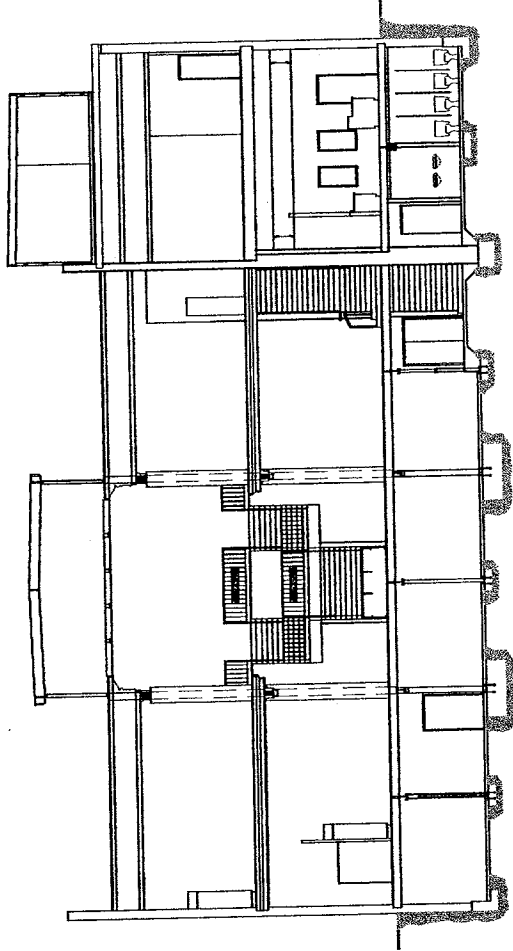


**As Built/Rouse Building
Roof Plan**



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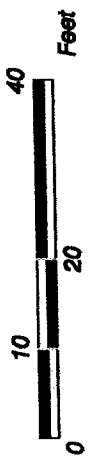
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As Built/Rouse Building
Section A



2. Compliance

Historic Designation:	The Rouse Building has been designated by the City of Riverside as Cultural Heritage Landmark No. 50 and is part of the Mission Inn Historic District. As a qualified historical building, The State Historic Building Code is the prevailing code.
Existing Construction Type:	Type III, non-rated with fire sprinklers.
Proposed Construction Type:	Type III, 1-Hour with fire sprinklers
Previous Occupancies:	B, M
Proposed Occupancies:	A2.1, A-3, B, M
Dates of Construction:	Cunningham Building (north) c. 1895 Rouse's Men's Store (south) 1907 West Front and Atrium 1925 Ground Floor Storefront and Cunningham Basement 1956
Building Dimensions:	98 feet by 158 feet by 36 feet high
Number of Stories:	Two floors, plus full basement
Floor Areas (Test Scheme gross):	Basement: 14,712 s.f. Ground Floor: 15,443 s.f. Upper Floor: <u>14,000 s.f.</u>
Total Area (gross):	44,155 s.f. (Enclosed)
Area of Upper Floor Opening:	1443 s.f.
Ceiling Heights:	South Basement: 8'-5" (floor is 1'-4" higher than North) North Basement: 9'-6" Ground Floor: 13'-10" Upper Floor: 12'-4"

Compliance Issues (Test Scheme)

- **One-Hour Construction:** sprinklers proposed to be used as a substitution for fire-resistive construction per CBC Section 508. (requires approval by compliance officer because allowable floor area exceeds maximum of 13,500 s.f).
- **Means of Egress:** distance between new enclosed stair and open historic stair may be closer together than one half the maximum diagonal.
- **Exit Pathway Widths:** need to confirm occupancy numbers in some areas in order to confirm required exit widths.
- **Gallery and Upper Gallery Mezzanine:** considered a 1-hour exit area.
- **Existing Stair (Historic Fabric):** length of run exceeds CBC standard. Use CHBC, if possible.

7. Programming Stage Cost Plan (Davis Langdon Adamson)

PROGRAMMING STAGE COST PLAN

for

**Barbara and Art Culver Center of the Arts
University of California, Riverside
Riverside, California**

Barton Phelps & Associates
5514 Wilshire Blvd.
Los Angeles, CA 90036

Tel: (323) 934-8615
Fax: (323) 934-3289

October 4, 2002

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Main Building Component Summary	8
Main Building Component Budget	9-17
Sitework Component Summary	18
Sitework Component Budget	19

BASIS OF COST PLAN

<u>Cost Plan Prepared From</u>	Dated	Received
Drawings issued for		
Site plan	08/19/02	08/19/02
Sections		08/19/02
Basement floor		08/19/02
Ground floor		08/19/02
Upper floor		08/19/02
Roof Plan		08/19/02
Existing CMP		08/19/02
Outline architectural, structural, plumbing, mechanical, electrical and acoustic narratives		08/19/02
TRC Asbestos and Limited Lead Paint Survey Report		12/20/02
McKay Conant Brook Inc Audio Visual budget		08/20/02
Discussions with the Project Architect and Engineers		

Conditions of Construction

The pricing is based on the following general conditions of construction

A start date of August 2003

A construction period of 18 months

The general contract will be awarded to Tilden Coil Constructors on the basis of a CM at Risk Contract. Subcontract work will be competitively bid.

There will not be small business set aside requirements

The contractor will be required to pay prevailing wages

There are no phasing requirements

The general contractor will have full access to the site during normal working hours

INCLUSIONS

The project consists of the remodel of the old Rouse Department Store now registered as an historic building. The gross floor area of the newly remodeled building is 43,940 sf.

Foundations include new wall and pad footings, grade beams, elevator and sump pits. All works are carried out within the confines of the existing building and mainly in the basement area. An allowance is included for miscellaneous foundation works.

Vertical structure includes new reinforced concrete pilasters and structural steel columns. There are two new 12" thick reinforced concrete walls located in the basement with the east wall at all levels receiving a 4" thick shotcrete wall. Structural steel tube cross bracing is located on the ground and upper floors at four locations. Allowances are included for miscellaneous steel and fireproofing.

The existing slab on grade is patch repaired as required. Existing timber suspended floors and roofs are strengthened with structural steel members and repaired as required.

The existing exterior facade is cleaned and repaired, the interior face of all exterior walls are furred and lined with painted gypsum board. The west elevation at ground level is reconfigured with a new concealed framed storefront glazing system. The upper level windows on the east elevation are replaced with new wood framed units with the lightwell windows being replaced with steel framed units. There are new wood French doors, glazed doors, steel doors and overhead coiling doors. The arcade soffit is finished with plaster.

Roofing, waterproofing and skylights includes allowances for waterproofing slabs, elevator pits and sealer to exterior walls. The existing roof covering is replaced with a new built up roofing system and flashings. There are six new skylights.

Interior partitions comprise metal stud framing, gypsum board lining and batt insulation. Several areas receive additional layers of gypsum board to meet acoustical requirements. There is a steel guardrail around the upper floor opening with a further allowance for handrails at ramps. The horizontal glazing at the lightwell is replaced with allowances for interior glazing and acoustic rated glazing. Interior doors include allowances for acoustic rating and fire rating.

Floor finishes include the preparation of the existing slabs for new finishes. Floor finishes include wood sprung floors in the MFA and blackbox areas, quarry tile in the kitchen, ceramic tile in the restrooms with carpet/sheet vinyl/sealed concrete to all other areas. Walls finishes include a variety of acoustic finishes with ceramic tile to restrooms and an allowances for unidentified wall finishes to other areas.

INCLUSIONS

Ceiling finishes include a number of acoustic treatments, suspended gypsum board and acoustic lay in tile.

Function and equipment includes allowances for protective guards and bumpers, toilet partitions and accessories, shelving and millwork, cabinets, code signage, projection screens, mirrors, mechoshades, exterior glass display cabinets, fixed audience seating and a raised platform.

Stairs and vertical transportation includes two new stairs and repairs to one existing, an allowance for ladders, a new 3-stop hydraulic elevator and repairs to the existing elevator.

Plumbing systems include sanitary fixtures, sanitary waste, domestic hot and cold piping, electric hot water heater, natural gas supply, grease interceptor, rooftop gas fired heater and a 150 gallon storage tank.

HVAC systems include hot water space heating system, VAV air handling units with local hot water reheat, small capacity split system Dx unit at elevator machine room, air distribution systems, general exhaust system, condensate drain piping, vibration isolation, DDC system, smoke detection and testing and balancing.

Electrical systems include main power and distribution, emergency power, machine and equipment power, user convenience power, lighting, lighting and power specialties, telephone/data conduit and cable, A/V conduit only, fire alarm conduit and cable and security system including card readers.

Fire protection systems include an automatic wet sprinkler system.

Siteworks include the demolition of the existing 2,740 sf (footprint only) single story Wurm's building. The demolition of all interiors and equipment from the existing building including forming new floor and wall openings.

Allowances for hazardous material abatement is included within the sections for internal demolition (main building) and building demolition (Wurms building).

Allowances are also included for repaving, site drainage, site lighting and connections to existing main utility lines.

INCLUSIONS

BIDDING PROCESS - MARKET CONDITIONS

This document is based on the measurement and pricing of quantities wherever information is provided and/or reasonable assumptions for other work not covered in the drawings or specifications, as stated within this document. Unit rates have been obtained from historical records and/or discussion with contractors. The unit rates reflect current bid costs in the area. All unit rates relevant to subcontractor work include the subcontractors overhead and profit unless otherwise stated. The mark-ups cover the costs of field overhead, home office overhead and profit and range from 15% to 25% of the cost for a particular item of work.

Pricing reflects probable construction costs obtainable in the project locality on the date of this statement of probable costs. This estimate is a determination of fair market value for the construction of this project. It is not a prediction of low bid. Pricing assumes competitive bidding for every portion of the construction work for all subcontractors and general contractors, with a minimum of 4 bidders for all items of subcontracted work and 6-7 general contractor bids. Experience indicates that a fewer number of bidders may result in higher bids, conversely an increased number of bidders may result in more competitive bids.

Since Davis Langdon Adamson has no control over the cost of labor, material, equipment, or over the contractor's method of determining prices, or over the competitive bidding or market conditions at the time of bid, the statement of probable construction cost is based on industry practice, professional experience and qualifications, and represents Davis Langdon Adamson's best judgement as professional construction consultant familiar with the construction industry. However, Davis Langdon Adamson cannot and does not guarantee that the proposals, bids, or the construction cost will not vary from opinions of probable cost prepared by them.

EXCLUSIONS

- Owner supplied and installed furniture, fixtures and equipment
- Loose furniture and equipment except as specifically identified
- Audio visual equipment (Included as a below the line item)
- Compression of schedule, premium or shift work, and restrictions on the contractor's working hours
- Design, testing, inspection or construction management fees
- Architectural and design fees
- Scope change and post contract contingencies
- Assessments, taxes, finance, legal and development charges
- Environmental impact mitigation
- Builder's risk, project wrap-up and other owner provided insurance program
- Land and easement acquisition
- Cost escalation beyond the midpoint of construction May 2004
- CATV cabling
- Major utility relocation and or removal
- Work to adjacent building beyond points of connection

Programming Stage Cost Plan

OVERALL SUMMARY

	Gross Floor Area	\$ / SF	\$x1,000
Main Building	43,633 SF	198.81	8,674
Sitework and Building Demolition	19,112 SF	12.60	241
<i>TOTAL Building & Sitework to Midpoint of Construction May 2004</i>			8,915

Not Included in Construction Budget

Kitchen and restaurant fit-out	1,525 SF	227.89	348
Audio visual equipment	43,633 SF	48.34	2,109
Theatrical lighting	43,633 SF	11.95	521
			<u>2,978</u>

Please refer to the Inclusions and Exclusions sections of this report

MAIN BUILDING AREAS & CONTROL QUANTITIES

Areas	SF	SF	SF
Enclosed Areas			
Basement	14,712		
Ground floor	14,159		
Upper floor	14,100		
		42,971	
SUBTOTAL, Enclosed Area			
Covered area	1,324		
		662	
SUBTOTAL, Covered Area @ ½ Value			
TOTAL GROSS FLOOR AREA			43,633

Control Quantities

			Ratio to Gross Area
Number of stories (x1,000)	3	EA	0.069
Gross Area	43,633	SF	1.000
Enclosed Area	42,971	SF	0.985
Covered Area	1,324	SF	0.030
Footprint Area	14,712	SF	0.337
Gross Wall Area	15,152	SF	0.347
Windows or Glazing Area	14.44% 2,188	SF	0.050
Roof Area - Flat	13,490	SF	0.309
Roof Area - Sloping	1,840	SF	0.042
Roof Area - Total	15,330	SF	0.351
Roof Glazing Area	84	SF	0.002
Finished Area	42,108	SF	0.965
Interior Partition Length	2,631	LF	0.060
Elevators (x10,000)	2	EA	0.458

Programming Stage Cost Plan

MAIN BUILDING COMPONENT SUMMARY

Gross Area: 43,633 SF

		\$/SF	\$x1,000
1. Foundations		1.09	48
2. Vertical Structure		5.08	222
3. Floor & Roof Structures		8.63	377
4. Exterior Cladding		10.56	461
5. Roofing & Waterproofing		3.77	164
Shell (1-5)		29.14	1,272
6. Interior Partitions, Doors & Glazing		11.50	502
7. Floor, Wall & Ceiling Finishes		18.31	799
Interiors (6-7)		29.81	1,301
8. Function Equipment & Specialties		6.53	285
9. Stairs & Vertical Transportation		4.45	194
Equipment & Vertical Transportation (8-9)		10.97	479
10. Plumbing Systems		5.86	256
11. Heating, Ventilating & Air Conditioning		29.30	1,278
12. Electric Lighting, Power & Communications		27.37	1,194
13. Fire Protection Systems		3.00	131
Mechanical & Electrical (10-13)		65.53	2,859
Total Building Construction (1-13)		135.46	5,911
14. Internal Building Demolition		8.50	371
15. Site Paving, Structures & Landscaping		0.00	0
16. Utilities on Site		0.00	0
Total Site Construction (14-16)		8.50	371
TOTAL BUILDING & SITE (1-16)		143.96	6,281
General Conditions	10.00%	14.39	628
Contractor's Overhead & Profit or Fee	3.00%	4.74	207
PLANNED CONSTRUCTION COST		October 2002	163.10
Contingency for Design Development	15.00%	24.45	1,067
Allowance for Rising Costs @ 3.5% P.A.	6.00%	11.25	491
RECOMMENDED BUDGET to MIDPOINT OF CONST. MAY 2004		198.81	8,674

COMPONENT BUDGET

	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
<u>1. Foundations</u>				
Reinforced concrete including excavations				
Wall footing				
Break up existing concrete slab and remove debris off site	368	SF	3.00	1,104
Excavate and remove	41	CY	45.00	1,845
Backfill with imported earth	21	CY	16.00	336
Formwork	232	SF	4.00	928
Reinforcement, 150lbs/cy	3,000	LB	0.60	1,800
Concrete	20	CY	130.00	2,600
Pad footing				
Break up existing concrete slab and remove debris off site	144	SF	3.00	432
Excavate and remove	11	CY	45.00	495
Backfill with imported earth	5	CY	16.00	80
Formwork	120	SF	4.00	480
Reinforcement, 150lbs/cy	900	LB	0.60	540
Concrete	6	CY	130.00	780
Grade beam				
Break up existing concrete slab and remove debris off site	256	SF	2.25	576
Excavate and remove	47	CY	15.00	705
Backfill with imported earth	28	CY	12.00	336
Formwork	528	SF	4.00	2,112
Reinforcement, 150lbs/cy	2,850	LB	0.60	1,710
Concrete	19	CY	115.00	2,185
Miscellaneous foundation works	14,712	SF	1.00	14,712
Elevator pits	1	EA	10,000.00	10,000
Sump pit	1	EA	4,000.00	4,000
				47,756

2. Vertical Structure

Columns and pilasters				
Reinforced concrete pilasters	6	CY	850.00	5,100
Structural steel columns	13	T	4,000.00	52,000

COMPONENT BUDGET

	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Loadbearing walls				
Reinforced concrete wall, 12" thick				
Formwork	840	SF	8.00	6,720
Reinforcement	2,099	LB	0.60	1,259
Concrete	16	CY	130.00	2,080
Epoxy dowel to existing	30	LF	50.00	1,500
New shotcrete wall, 4" thick	2,592	SF	40.00	103,680
Shear bracing				
Structural steel tube or pipe cross bracing	5	T	5,000.00	25,000
Miscellaneous steel				
Miscellaneous steel framing and metal	1	LS	20,000.00	20,000
Fireproofing				
Sprayed fireproofing on steel	18	T	250.00	4,500
				221,839

3. Floor and Roof Structure

Floor at lowest level				
Reinforced concrete slab on grade, patch repairs to existing	1,000	SF	8.00	8,000
Remodel existing floor to form new ramps	264	SF	15.00	3,960
Suspended floors				
Structural steel beams	28	T	4,000.00	112,000
Miscellaneous repairs to existing timber framed suspended slabs including wall anchors at perimeter, continuity ties and strengthening around openings	28,259	SF	4.00	113,036
Roofs				
Structural steel beams	15	T	4,000.00	60,000
New plywood deck lining	15,330	SF	1.20	18,396
Miscellaneous repairs to existing timber framed suspended slabs	15,330	SF	4.00	61,320
				376,712

COMPONENT BUDGET

	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
4. Exterior Cladding				
Existing façade				
Carry out remedial repairs to existing façade	15,152	SF	10.00	151,520
Interior finish to exterior walls				
Steel furring, batt insulation and painted gypsum board lining to inside face of exterior walls	9,579	SF	4.50	43,106
Painted gypsum board lining, to inside face of exterior lightwell walls	1,451	SF	2.00	2,902
Windows, glazing and louvers				
New concealed frame glass front including low-e coating, acoustic rated	1,390	SF	90.00	125,100
New wood windows with insulated glazing	125	SF	75.00	9,375
New metal windows at roof monitor	673	SF	40.00	26,920
Exterior doors, frames and hardware				
New wood French doors, double	6	EA	4,000.00	24,000
New glazed exterior doors, double	3	EA	6,000.00	18,000
New steel exterior doors				
single	1	EA	1,400.00	1,400
Double	1	EA	2,600.00	2,600
Overhead coiling door, motorized, 8' x 12'	1	EA	7,000.00	7,000
Fascias, bands, screens and trim, etc.				
Loading dock canopy	32	SF	55.00	1,760
Soffits				
Cement plaster, including lath and lining	1,324	SF	15.00	19,860
Balustrades, parapets and roof screens				
Cement plaster finish to parapets	2,732	SF	10.00	27,320
				460,863

<i>COMPONENT BUDGET</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
<u>5. Roofing, Waterproofing & Skylights</u>				
Waterproofing				
Miscellaneous waterproofing to slabs	1	LS	5,000.00	5,000
Miscellaneous waterproofing to elevator pits	1	LS	2,000.00	2,000
Miscellaneous waterproofing/sealer to exterior walls	1	LS	15,000.00	15,000
Insulation				
Tapered rigid insulation to roof	13,490	SF	3.00	40,470
Rigid insulation to sloping roof	1,840	SF	2.50	4,600
Roofing				
Built up roofing system	15,330	SF	3.00	45,990
Roof or deck traffic surfaces				
Allowance for roof walkways	1	LS	5,000.00	5,000
Roofing upstands and sheetmetal				
Cant strips and cover flashings	764	LF	10.00	7,640
Parapet caps	514	LF	15.00	7,710
Miscellaneous flashings	1	LS	3,000.00	3,000
Roof lights				
Skylights, 13' x 2'	2	SF	2,500.00	5,000
Skylights, 8' x 2'	4	SF	2,000.00	8,000
Roof access and ventilation				
Miscellaneous allowance	1	LS	5,000.00	5,000
Caulking and sealants				
Miscellaneous caulking and sealants	1	LS	10,000.00	10,000
				164,410

COMPONENT BUDGET

6. Interior Partitions, Doors & Glazing

	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Partition framing and cores				
Metal stud framing, 3-1/2" light gauge	31,000	SF	2.00	62,000
Furring channels to existing masonry walls	5,798	SF	1.25	7,248
Plywood backing - allowance	5,000	SF	1.05	5,250
Gypsum board underlayment	21,828	SF	1.10	24,011
Gypsum board, 5/8" lining taped and sanded	60,058	SF	1.35	81,078
Paint gypsum board	60,058	SF	0.60	36,035
Sound insulation				
Batt insulation	36,798	SF	0.60	22,079
Caulking sound partitions	312	LF	5.00	1,560
Balustrades and rails				
Guardrail/lighting bars at upper floor opening	170	LF	225.00	38,250
Miscellaneous handrails	1	LS	4,000.00	4,000
Window walls and borrowed lights				
Replace existing wood framed glazing at lightwell	1,280	SF	50.00	64,000
Wood framed interior glazing	150	SF	35.00	5,250
Dual glazed acoustic windows	96	SF	45.00	4,320
Interior doors, frames and hardware				
Interior doors				
Single	43	EA	1,300.00	55,900
Double	28	EA	2,400.00	67,200
Premium for acoustic rating	15	EA	250.00	3,750
Won doors/fire rated doors	1	LS	18,000.00	18,000
Access panels	1	LS	2,000.00	2,000
				501,930

<i>COMPONENT BUDGET</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
<u>7. Floor, Wall & Ceiling Finishes</u>				
Floors				
Preparation of existing floors to receive new	42,971	SF	0.60	25,783
Hardboard flooring including plywood underlay				
and sleepers, MFA dance	2,961	SF	12.50	37,013
Double tempered hardboard, black finish				
including plywood underlay and subfloor,				
sleepers and isolation plates, black box	750	SF	14.00	10,500
Wood/travertine at gallery	4,120	SF	25.00	103,000
Quarry tiles at kitchen	774	SF	12.00	9,288
Ceramic tiles to restrooms	1,337	SF	10.00	13,370
General allowance for carpet, sealed concrete,				
resilient, etc.	31,504	SF	3.75	118,140
Bases				
Wood, ceramic tile, rubber, etc.	1	LS	8,000.00	8,000
Walls				
Sound absorbing wall finish in gallery	1,000	SF	25.00	25,000
Fabric wrapped glass fiber acoustic panels	2,275	SF	10.00	22,750
Ceramic tiles to restrooms	3,330	SF	10.00	33,300
Miscellaneous wall finishes	1,000	SF	8.00	8,000
Column furring and finish				
Column furring, gypsum board and plaster/sound				
absorbent material finish	3,328	SF	16.00	53,248
Ceilings				
Sound absorbent ceilings, acoustic lay-in ceiling				
tile, suspended gypsum board, etc	41,446	SF	8.00	331,568
				798,959

<i>COMPONENT BUDGET</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
<u>8. Function Equipment & Specialties</u>				
Protective guards, barriers and bumpers Allowance	1	LS	3,000.00	3,000
Prefabricated compartments and accessories				
Toilet partitions	14	EA	1,200.00	16,800
Urinal screens	6	EA	350.00	2,100
Toilet accessories	1	LS	12,000.00	12,000
Shelving and millwork Allowance	1	LS	10,000.00	10,000
Cabinets and countertops Allowance for vanity countertops, kitchenette,	1	LS	50,000.00	50,000
Chalkboards, insignia and graphics, etc. Code signage	1	LS	25,000.00	25,000
Light control and vision equipment Allowance for retractable screens, projection screens, markerboards, dance mirrors, mecho shades, etc.	1	LS	20,000.00	20,000
Amenities and convenience items Fire extinguisher cabinets, etc.	1	LS	6,000.00	6,000
Special use equipment				
Exterior glazed display cabinets with architectural concrete bases	1,534	SF	65.00	99,710
Fixed audience seating	90	EA	350.00	31,500
Raised platform	216	SF	40.00	8,640
				284,750

COMPONENT BUDGET

Quantity Unit Rate Total

9. Stairs & Vertical Transportation

Staircase flights				
Single flight stair	1	FLT	15,000.00	15,000
Double flight stair	2	FLTS	35,000.00	70,000
Repairs to existing stair	1	EA	12,000.00	12,000
Ladders and fire escapes				
Allowance for ladders	1	LS	2,000.00	2,000
Elevators				
Repairs and upgrades to existing elevator	1	EA	10,000.00	10,000
New 3-stop hydraulic elevator	1	EA	85,000.00	85,000
				194,000

10. Plumbing Systems

General system				
Sanitary fixtures, sanitary waste, domestic hot and cold piping, electric hot water heater, natural gas supply	42,108	SF	6.00	252,648
Shelled Area (Kitchen & Restaurant)				
General allowance	1,525	SF	2.00	3,050
				255,698

11. Heating, Ventilation & Air Conditioning

General system				
Hot water space heating system, VAV air handling units (DX type) with local hot water reheat, small capacity split system Dx unit at elevator machine room, air distribution systems, general exhaust system, condensate drain piping, vibration isolation, DDC system, smoke detection	42,108	SF	30.00	1,263,240
Shelled Area (Kitchen & Restaurant)				
General allowance	1,525	SF	10.00	15,250
				1,278,490

<i>COMPONENT BUDGET</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
<u>12. Electrical Lighting, Power & Communication</u>				
General system				
Main power and distribution, emergency power, machine and equipment power, user convenience power, lighting, lighting and power specialties, telephone/data conduit and cable, A/V conduit only, fire alarm conduit and cable and security system including card readers	42,108	SF	28.00	1,179,024
Shelled Area (Kitchen & Restaurant)				
General allowance	1,525	SF	10.00	15,250
				1,194,274
<u>13. Fire Protection Systems</u>				
Automatic wet sprinkler system - complete	43,633	SF	3.00	130,899
				130,899
<u>14. Internal Demolition</u>				
Selective demolition and removal				
Take down and remove all interior construction in existing building including forming new openings in wall floor and roof structure	43,633	SF	6.00	261,798
Hazardous material abatement	43,633	SF	2.50	109,083
				370,881

Programming Stage Cost Plan

SITWORK COMPONENT SUMMARY

	Gross Area:	19,112 SF	
		\$/SF	\$x1,000
1. Foundations		0.00	0
2. Vertical Structure		0.00	0
3. Floor & Roof Structures		0.00	0
4. Exterior Cladding		0.00	0
5. Roofing & Waterproofing		0.00	0
Shell (1-5)		0.00	0
6. Interior Partitions, Doors & Glazing		0.00	0
7. Floor, Wall & Ceiling Finishes		0.00	0
Interiors (6-7)		0.00	0
8. Function Equipment & Specialties		0.00	0
9. Stairs & Vertical Transportation		0.00	0
Equipment & Vertical Transportation (8-9)		0.00	0
10. Plumbing Systems		0.00	0
11. Heating, Ventilating & Air Conditioning		0.00	0
12. Electric Lighting, Power & Communications		0.00	0
13. Fire Protection Systems		0.00	0
Mechanical & Electrical (10-13)		0.00	0
Total Building Construction (1-13)		0.00	0
14. Site Preparation & Demolition		3.22	62
15. Site Paving, Structures & Landscaping		1.95	37
16. Utilities on Site		3.92	75
Total Site Construction (14-16)		9.10	174
TOTAL BUILDING & SITE (1-16)		9.10	174
General Conditions	10.00%	0.89	17
Contractor's Overhead & Profit or Fee	3.00%	0.31	6
PLANNED CONSTRUCTION COST		October 2002	10.30
Contingency for Design Development	15.00%	1.57	30
Allowance for Rising Costs @ 3.5% P.A.	6.00%	0.73	14
RECOMMENDED BUDGET to MIDPOINT OF CONST. MAY 2004		12.60	241

COMPONENT BUDGET

Quantity Unit Rate Total

14. Site Preparation & Building Demolition

Demolition of building and structures				
Demolish existing Wurm's building (single story, no basement)	2,740	SF	15.00	41,100
Hazardous material abatement	2,740	SF	7.47	20,468
				61,568

15. Site Paving, Structures & Landscaping

Pedestrian paving				
New concrete paving at arcade, sealed and New asphalt paving over footprint area of previously demolished Wurm's	1,324	SF	8.00	10,592
Miscellaneous repairs to adjacent paving	2,740	SF	5.00	13,700
	1	LS	8,000.00	8,000
Miscellaneous				
Allowance for drainage, lighting, etc.	1	LS	5,000.00	5,000
				37,292

16. Utilities on Site

General system				
Domestic water, sewage, gas distribution and electrical connection and utilization of existing main lines	1	LS	75,000	75,000
				75,000

A. Program Workshop Minutes

MEETING MINUTES: **PROGRAM CONFIRMATION WORKSHOP**
DATE: **AUGUST 05, 2002; 8:30 AM – 5:00 PM**
PROJECT: **BARBARA AND ART CULVER CENTER OF THE ARTS
UNIVERSITY OF CALIFORNIA, RIVERSIDE**
LOCATION: **CALIFORNIA MUSEUM OF PHOTOGRAPHY (CMP)
3834 MAIN STREET, RIVERSIDE, CA**
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PARTICIPANTS

Patricia O'Brien, Dean, College of Humanities, Arts, and Social Sciences (CHASS)
John Divola, Studio Art
Jonathan Green, California Museum of Photography (CMP)
Marc Longlois, Theatre
Renee Coulombe, Music
Susan Rose, Dance
Frances Culver
Henry Coil
Tim Labor, Digital Media
Sandi Evelyn-Veere, CHASS Space and Facilities
Lisa Hjulberg, Real Estate
Darius Maroufkhani, Design and Construction
Lisa Peloquin, Capital and Physical Planning
Amy Smith, CHASS Development
Earl LeVoss, Physical Plant
Richard Orosco, Physical Plant
Doug Lindberg, Communications
Leo Schouest, Computing and Communications
Kathy Vincent, CHASS
Cathy Walling, CMP
Nita Bullock, Capital and Physical Planning
Paul Richardson, CHASS
Steve Thomas, CMP
Bill Wilkman, City of Riverside Planning Department

DESIGN STUDY TEAM

Barton Phelps, FAIA, Barton Phelps & Associates (BPA)
Paul Duelo, Barton Phelps & Associates (BPA)
Frank Stefan, M-E Engineers
George Lui, M-E Engineers
Sean Hira, M-E Engineers
David Conant, Mckay Conant Brook
Randy Willis, Mckay Conant Brook

MEETING MINUTES: PROGRAM CONFIRMATION WORKSHOP

DATE: August 5, 2002

PROJECT: Barbara and Art Culver Center of the Arts
University of California, Riverside

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The following notes represent substantive issues discussed at the PROGRAM CONFIRMATION WORKSHOP for the Barbara and Art Culver Center of The Arts. They are titled per the meeting agenda prepared by BPA.

1. Introductions 8:30-9:30

Building Committee, Design Study Team, Consultants

2. Introduction to Barbara and Art Culver Center of The Arts

Dean O'Brien: Introduced the project and explained that its implementation has been a dream of Tony Culver and Frances Culver. It is significant in that it brings technology to the arts; the arts faculty are very invested in the project; the start of programming and design is a momentous occasion.

Phelps: Summarized approach, intentions, and important aspects of the Rouse Building that affect the project and proposed that the group consider five levels of interpretation for this initial study:

Habitability and Safety: Structure and Support Systems
New Uses: Program and Experience
Technology
Historic Preservation: A New / Old Hybrid
Urban Design: UCR / Riverside Shared Goals

Phelps listed the objectives of the workshop and study as follows:

Review Overall Intentions
Review User Group Intentions
Begin Program / Design Analysis
 Identify Limitations: space, Design, and Cost
 Identify Drivers, Conflicts, and Redundancies
 Conflicts: policy, design, other issues
 Set priorities
 Looking for Clues: ideas and possibilities that suggest design responses.
 Establish Basis for Test Scheme and Budget Plan

Phelps made the following initial observations on the Rouse Building:

Duality: 1925 Façade is only unifying factor, 1907 addition about 10,500 sf (one quarter)
Separated Space, different character, implications of openings through wall.
1895 (Cunningham/Wilson): classical space unified by *Atrium* (outdoor simulation), Vertical circulation suppressed to keep space open, dignity emphasis. Unified space good for view, daylight, shared experience; bad for simultaneous activities requiring acoustic separation. Light framing.
West Front: 1925 deep arcade. Intermediate space, transparency and asymmetry.
Possible connection to future development on south.
Historic Preservation: primary interpretive period 1925, atrium space, light, west front interior: new/old hybrid overlay.
Structural Strengthening: use 1907 to stabilize 1895.

MEETING MINUTES: PROGRAM CONFIRMATION WORKSHOP

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A. Site Planning

Phelps: Showed an early site sketch that emphasized connectivity of CMP, Culver Center, the proposed 250-seat theater, and a possible outdoor/garden theater. He asked the group to identify the "drivers" of the project. O'Brien: Noted that the public façade will signify the new use of the building and its presence in the community. Green: Noted that the façade should project "out", explaining the activities of the building. Schouest: Drivers of space are 1) event driven / daily use, and 2) performed vs. pedagogical space; the project combines performance and active pedagogical uses. Phelps: suggested that "timing" i.e. cycles of use - daily, weekly, seasonal and special events - may be what people identify with in a public facility. Green: Determine Public vs. Private elements, where public encourages engagement of audience. Hjulberg: Wants to capture accessibility of the space, permeability.

O'Brien: New building to be visually stimulating, synergistic, engaging. Not isolated from courtyard. Provide another reason to visit downtown. Its presence needs to be made clear to the rest of campus. Attract notice, provide high visibility, "sparkle". Develop a national reputation and audience based on programming and promotion. Green: Rouse building is currently invisible due to recessed entry. The interior space has remained unseen. The atrium is unexpected.

Maroufkhani: With the addition of the future theater, the building has the potential to be much larger, more impressive. Phelps: Idea of "Dualism" (interior / exterior and new / old) has the capability of becoming a strong idea. Walling: 12 years ago site/courtyard was a dead area. Now a change of activity level has taken place with different users during the week and weekend. Hjulberg: Available parking is important. New parking garage at 9th and Orange. The city expects the Culver Center to add retail presence; food service is important to the project

B. Function of Building / Programs /Expression

Peloquin: Need to balance research needs of faculty and students with the arts performance requirements, public access with private research. Divola: Wants to create community amongst resident artists. Art making and research are the primary focus. Phelps: The Restaurant is a permanent space. How do we differentiate it from academic space? Green: Restaurant can be a more open, "Bohemian" public space. Walling: We are trying to get access to a lot of different people; capture the casual passerby; attract with a less formal café vs. formal restaurant. O'Brien: The goal is to attract a national and international audience; want production of art, visiting artists, community involvement. Walling: Emphasized restaurant / ("slash") café. Also need for catering kitchen service to both CMP and Culver Center.

Green: Part of the importance of project lies in its "Duality." Maroufkhani: Program of academics is a priority. Peloquin: Focus on levels of permeability; do not commercialize the program /space. Hjulberg: Noted two important factors of permeability: 1) Daily workforce around the site / area is important: draw in pedestrian traffic 2) Gallery at Atrium space can act as advertisement. Phelps: Is there an institutional presence? Example: an Embassy operates differently from a house on an architectural/symbolic level. The expression of the character of building / program is important. Phelps: Policy of use; how do we promote the Atrium? Green: Would like Atrium to have a public feeling.

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4. User Group Discussion #1: Restaurant, 9:30-10:00, Lisa Hjulberg

A. Location

Hjulberg: Noted that the proposed tenant-operated restaurant should be part of the gallery space and prefers the restaurant to be in the front of building. An initial program is for a capacity of 100 with outdoor patio dining. The Riverside Redevelopment Agency is keenly interested in increasing activity on the mall especially at night and is helping to support the project. They will support an encroachment permit for seating on the mall. They can't provide financial support for tenant improvements due to assistance provided to relocate the Tamale Factory. The restaurant should have an indoor / outdoor capability and relate to performances in the Culver Center. There is also a need for a catering kitchen probably linked to the restaurant.

Phelps: Noted that the restaurant takes a lot of usable space on the ground level and will need to be separable from other functions for reasons of security and control; we could look at locating it in the gallery space on the ground level. He showed a location for the simpler café option and noted the need for rear loading. It was pointed out that loading is difficult in the alley and should probably be from the south. He identified concerns related to the interaction of the Culver Center activities and the restaurant, 1) acoustics: can use absorptive ceiling material in the atrium, 2) ambiance/balance (commercial vs. institutional), and 3) food smells throughout atrium. Divola expressed concern about commercializing an arts research facility.

Conant: Used Borders Bookstore as an example of a performance /café program. He noted that the design needs to be realistic and won't be easy. Also, administrative control is key, and suggested that the restaurant is a flexible space, expands and contracts. Noted that we could use double operable partitions. Also noted that multiple uses of the restaurant can create a marvelous link of activity.

Maroufkhani: In order to have the restaurant in front of the building, we could link rear loading with a service corridor. Also noted that the seating area is a concern, and to possibly use flexible seating. It could be a thought of as a "Bistro."

B. Function / Impacts on Infrastructure / Building Cost

Hjulberg: Noted that interested restaurant operators have asked for as much as 5,000 s.f. and 3,000 s.f. minimum. Service probably includes lunch and dinner. Food service facilities operated by UCR on campus serve beer and wine and this would too. Restaurant operators also wanted storage (estimate 200 s.f.) and to share restrooms.

Phelps: Noted that a café requires only a small cold-service kitchen, whereas the full cooking kitchen required by a restaurant has a big impact on building infrastructure for air handling/exhaust, plumbing and drain lines, electric power, and fire suppression. It probably needs a fire separation from other spaces (unlike a café kitchen).

Lui: Noted that a full kitchen requires special equipment of various types. For example a grease exhaust that is dedicated to a piece of cooking equipment requires a separate shaft though the upper floors of the building to the exterior. Also need to control airflow between restaurant and the rest of the Culver Center to control and minimize food smells. Another example is the exterior grease trap needed with full kitchen. These features need to be incorporated in the design, will affect program layout, need to be coordinated in the design, and are not part of tenant

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improvement work. Hira: Noted that a 30-watt load increase is required for full kitchen at around 60 Watts per square foot. 40-50% increase likely in electrical cost for a full kitchen.

Phelps: BPA will look at restaurant options and impacts. (Options for outdoor service and reduced indoor space were included in later discussion.) O'Brien: Requested that all costs associated with kitchen/restaurant be delineated in cost estimate.

5. User Group Discussion #2: California Museum of Photography, 10:00-10:30, Jonathan Green

A. Entry Control Point

Green: Noted that a single point of entry between CMP and Rouse Building is favorable. Would need one receptionist at exchange point, possibly two. Security is an issue, and they currently have video monitors for security that will need to be implemented. The position functions both as a receptionist workstation and as a cashier for the bookstore. Furniture is movable and will need to be relocated. Museum bookstore could remain in CMP, but still need receptionist for Culver Building. Phelps: Suggested that exchange (between CMP and Arts bldg.) can be designed as an operable opening that can both closed off or opened but this might require two work stations.

B. CMP Functions in the Culver Center

Green: Keystone Mast Collection transfers important glass material to new, seismic resistant storage (bolted or base-isolated) in a carefully controlled environment in Rouse Building, probably on the basement level. Temperature is to be kept at 60 to 65 degrees F and UV filters are needed on lights in some areas. Green/Phelps: Asked if Keystone Mast Collection needs special HVAC equipment? Lui: Yes. Separate system. Peloquin: Isolators and HVAC system not in budget, but have been requested as part of an NEA grant. CMP expects to hear about grant status by September 2002. (Bolting less expensive). Green noted that emergency water evacuation / floor drains are also required because of possible water line breaks. (Sump pump system). Maroufkhani: Is an emergency generator really needed? Green: Yes and a grant has been requested for it. Lui: A direct digital control system is desirable in this area. Stefan: Fire suppression is an issue. Alternatives to wet systems can be investigated. Green: re security: Environmental controls are not connected with campus, and communication is not connected with campus police. Phelps: Concern over placement of conservation areas in basement under restaurant. Green: Material Storage for Exhibition can be open, undeveloped space. Humidity control required for Material Storage estimated at 20-30%, but not above 30%. Storage for the Arts/Museum Bookshop is required. CMP / Culver Center Fabrication Workshop functions include movement of items in Fabrication Workshop to upper levels, woodworking shop, and storage; noise issues. Noted the need to exhaust sawdust to exterior of building, or could use portable filter equipment if not heavy use.

Phelps: Explained how spaces under the 1907 building may be cut up by seismic cross walls and asked if they could still be used for storage. Green: Yes.

Green: The existing media/digital computer studio in the CMP will be retained within CMP Building for public access. The proposed media computer studio in the Culver Center will have controlled access for faculty and graduate students.

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6. User Group Discussion #3: Theatre, 10:30-11:00, Marc Longlois, Paul Richardson, Leo Schouest

A. Black Box Location

Longlois: Would prefer the Black Box located on the first floor. Noted that the Black Box should be located adjacent to the Media Computer Studio and the theatre digital prep room as well.

O'Brien: The Media Computer Studio will be UCR's "Digital Centerpiece." Peloquin: Public access restrictions (to upper floors) not yet determined. Phelps: ceiling height is limited on both floors. Even 13 feet, 11 inches on the lower floor may not be high enough to accommodate a lighting grid. To get 16 to 20 feet we will need to break through a level. The structural engineer suggests that this is best accomplished at the upper level, through the roof.

B. Black Box: Operations and Issues

Longlois: Noted that the Black Box is not intended as a typical black box theater for performance but as an experimental space. May be most used internally by the artists themselves. Motion capture equipment should be provided in the Black Box. It should have permanent a-v infrastructure and a control niche to serve both the media computer studio and the Black Box.

Schouest: Identified Computer Aided Virtual Environment capability as highly desirable. Hira: Computer Aided Virtual Environment would require networking equipment. Schouest: Noted that they would need to upgrade the existing T-1 Internet connection for virtual environment capabilities. Hira: All sound systems need to be hardwired.

Longlois: Suggested the Atrium space can be used as Informal Performance space. Possibly use existing stair location as bleacher / seating area. Need theater rigging (verify), lighting capability around the atrium. Want complete a-v, lighting, and digital capabilities in the atrium. Phelps: Noted that code compliance issues are greatly simplified if the building has no fixed stage.

Longlois: Need ability to block light from light box above. Conant: Ability to control ambient light is important. Phelps: Noted that daylight will be discussed as a character-defining element in determining the historic preservation program and approach to design. It is possible to control light in simple ways like installing shutters on the outside of the roof monitor to block daylight from performance area. Sliding fabric canopy above the ceiling coffers is also a possibility.

C. Equipment

Longlois: Noted that standard theatre lighting to be used for Black Box. Richardson: Black Box requires infrastructure above for lighting. Lighting can be accessed with a ladder from below. Can the lighting be movable? (Yes). Peloquin: No movable equipment is in the budget, hence no moveable lighting is in the budget.

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7. User Group Discussion #4: Music, 11:00-11:30 Renee Coulombe, Tim Labor, Leo Schouest

A. Adjacency and Space Requirements

Coulombe: Noted that the music studio should have a connection with the Black Box. Collaboration between spaces (music, dance, etc.) is an important idea; "Neighborliness." Space arranged for gathering, discussion, and primary research. Also noted that the connection could be loosely defined. Noted that visual communication between adjacent areas is important as well. Pelouquin: Suggested that the Faculty Lounge could be flexible in order to add square footage to the program requirements, particularly the additional spaces identified by Tim Labor.

B. Function

Labor: Need to investigate if music will serve both programmatically as performance / production and research. Coulombe: Addressed the issue of main performance space (atrium) and how music will utilize it (performance, recording, etc.). Need space for speakers (surround system), live music acoustics, etc. The digital media studio (for music) could be the primary locus of interaction with the other programs, and Labor's primary research facility. Noted that the Screening Room could serve as a musical performance space. Acoustic properties of Dance Studios. Coulombe: Noted combination of sound and visual art.

Labor: Suggested idea of an ensemble space for sound / music. Components would include a recording space (permanent) with machine room and small isolation booth for voice-over. Also wanted space to record large ensembles; wondered if we could record ensembles/orchestras in atrium. Coulombe: Suggested hybrid performances with the Black Box. Needs capability for motion capture and a control room. It's a matter of how many different functions can music utilize in concert with other program areas. Willis: Suggested a control room that overlaps the Black box and the Music Space. Conant: Suggested that multiple uses are possible depending on budget. Stated that we need to clearly understand our boundaries. With a large open space control over sound is important. Labor: Suggested the use of overhead speakers in the Atrium. A Walk through sound environment is an idea. Schouest: Could we use flat panel acoustics? Labor: Yes, possibly.

Conant: With the desired functions of the space, efficiency will most likely be less than 25%. Efficiency is typically 30-35%.

C. Equipment

Labor: Duplication of video, multi-media is important. Currently use Mac and PC's for production using various applications. Coulombe: How many channels for recording? Speakers? Labor: 16 channels, 32 speakers. Currently have outdoor equipment including speakers and portable keyboards.

Stefan: Stefan: Suggested raising the floors at the recording studio, control room. Interference between power cables is a problem.

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8. User Group Discussion #5: Dance, 11:30-12:00, Susan Rose

A. Dance Studios

Rose: Stated that space is needed for 30 Ph.D. students and 12 MFA students; both faculty and students use dance studios. Need two sprung floor studios, need sound, cameras. Dance studios are used primarily for research not performance. There are 1-10 dancers in the studios at a time, and need space for 2-5 technological dancers. O'Brien: Suggested to use movable partitions to create studio space, asked about acoustics. Maroufkhani: Noted that in the past movable partitions did not effectively block noise transmission. O'Brien: Asked if windows would be considered if studios were located in the back of the building. Phelps: Yes. Rose: Mirrors are needed in dance studios.

Rose: Noted that noise can be problematic for adjacent areas if not controlled, however outside noise does not affect dancers. Vibration is a problem. Conant: It is difficult to isolate activities with respect to sound in the existing building. Phelps: Seismic design approach limits ceiling height and may change location of dance studios. Rose: Dance needs to be 12-14 feet in height. Phelps: Asked about need for anterooms to take shoes off or lockers for storage. Rose: Not required. Maroufkhani: Asked about changing rooms. Rose: Restrooms are adequate. No additional space required for changing. O'Brien: Is storage important? Rose: Yes, both studios need storage.

Rose: Outdoor performance space would be desirable.

B. Requirements:

Rose: Noted that sprung floors are desirable, prefer exposed hardwood to Harlequin-type covering. Need temperature controls, lighting grid. Phelps: Structural design will probably sheet the flooring with plywood, which could provide the function of a sprung floor. Rose: Hardwood floors are best for dance applications. Conant: Noted that the feeling of sprung wood floors differ from building to building, depending on construction. (Note: floors in the Rouse Building are very light and vibrate noticeably on impact.)

Rose: Cameras from above are desired for use in dance studios. Black Box should have the capability for cameras and sound. "Motion Capture" is the future. Maroufkhani: Believes that we cannot go through ceiling / roof; it is too expensive. Longlois: Low angle camera locations can be implemented so as to not require ceiling or roof penetrations.

Lui: Noted that localized mechanical systems could be used.

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9. User Group Discussion #6: Administration, 1:00 - 1:30 Kathy Vincent, Cathy Walling, Paul Richardson

A. Location

Vincent: Began discussion on location of administration. O'Brien: Two administration offices (for associate director, and facilities manager) and one reception workstation are required at 140 s.f. each. Receptionist area would also function as "box office." Phelps: Is this space distinguished in some way or does it fit in with the rest of the floor? Green: Stated that the CMP has its core administration upstairs. Workstations are also upstairs. Phelps: Do you prefer an administrative suite? O'Brien: No, it would separate the staff and would facilitate anti-community space. Green: Suggested that administration space could be on the ground floor. O'Brien: Noted that a benefit of locating administration on the upper floor would be a possible connection between CMP administration and the Rouse Building. O'Brien: Stated that there is no mail distribution needed for students or faculty. Only mail for the Center would come to building reception.

B. Operations

Richardson: Building will require access 24 hours a day. Green: Hours of normal operation are currently 8 am – 6 pm. Maroufkhani: Campus security system is separate from CMP/Rouse Building security. Police service is City of Riverside. Phone system is UCR as is mail.

O'Brien: Accessibility with security is desired. Will there be access to administration from Rouse Building and CMP? Phelps: Noted that there may be a conflict with security and entrance on ground floor. Possibility of limited access to store but not rest of building. Need to secure Culver Center from CMP. Can we use pass cards for after hours access? Peloquin: Access could have two stages: 1) keys to building and 2) access cards into private use space. Divola: Art studios and computer lab will need access all hours. O'Brien: Can we get rid of catwalk in alley to increase security? Maroufkhani: Possibly.

(Later discussion focused on a flexible administrative suite with space for two persons near receptionist, possibly located on the first floor near entrance.)

Stefan: Smoke detection overall is needed. Defined boundaries are needed for program areas.

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10. User Group Discussion #7: Art, 1:30-2:00 John Divola

A. Required Spaces

Divola: Noted that "dynamism and interaction" between disciplines is important, as well as flexibility. Digital technology is critically important. Suggested faculty studios be located on upper floor. Green: We need to investigate the distribution of production items from studios to other areas. The movement of art and food service need to be separated.

Divola: There will be twelve MFA students and six faculty. Peloquin: We can only accommodate six studios in the program. Divola: Up to 3 faculty members will share a large studio space (2). Grad. Students will have smaller, individual studios (4). Artwork may be exhibited in the Atrium, and the screening room can be used for video projection space.

Divola: Program will require space for imaging, photography, digital production / printing, and possibly painting. Generic space for tacking up work will be needed. Art studio storage will be needed by faculty and graduate students to accommodate large objects. Immediate access to storage is not necessary, and can be away from studios. 800 SF should be enough space for storage for 12 students. A large opening in the rear of the building is important for moving equipment, sets, and other large art items into the building. Hallways and elevator similar for movement of large objects in building. 7 foot-high doors are not adequate. One paint booth is required as a shared facility in the CMP Fabrication Workshop. (Ventilated).

Phelps: Would a skylit space be appropriate? Divola: Skylights are not essential for all studio spaces but they would be great as long as they can be blocked out. Divola: Noise control is necessary, as art students tend to have radios in the studio. Conant: Noted that STC (sound) ratings have not been investigated as of yet. Divola: Plotting could be placed in the media computer studio, and would require 300 sf. O'Brien: Can Facilities staff act as security monitors? Green: Only if they are always there. Divola: The digital lab. will need to be secure from unauthorized entry but will not require a monitor as all users are faculty or graduate students, Card access that keeps a record of who comes and goes is all the security that is required. Some staffing will, however, be required to keep the equipment running and address technical problems. This could be someone who comes from campus once a week.

B. Equipment

Divola: Noted that digital projection is desired over film projection for the screening room; no celluloid film use in screening room, no projection room. Willis: What type of use will be desired? Divola: Use of video / digital projection could be varied. A slide projector will be needed, and is portable, whereas the video projection equipment will be fixed. Willis: Noted cost is important for video / projection equipment, and can vary greatly depending on model type.

Conant: How high will the spaces need to be for projection? Divola: Regardless of projection nine feet is the absolute minimum height for studio spaces. However making the walls as high as possible is preferable

O'Brien: Stated that by the year 2010 the campus of UC Riverside will double in size, and thus the Arts building should not be obsolete by the time it is erected.

Divola: The seminar room should have movable seating, whereas in the screening room fixed seats are desired. The screening room should be cool and dry. Maroufkhani: Stepped floor and stage would require a ramp or a lift for ADA accessibility compliance.

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11. Building Committee Discussion, 4:00-5:00

Phelps: Introduced the process of translating ideal ideas into real conditions, both in terms of program priorities and the available building budget. Issues of multiple objectives need to be resolved in a unified, buildable project. He asked the technical consultants to report on their observations of the earlier discussions and tour of the Rouse Building.

Conant: Acoustics: Commented on the challenges that different disciplines create if they are to coexist in the building. Vibration isolation and movement on the upper floor is a big concern and needs further investigation. Two areas of concern with respect to acoustics are: 1) Floor system of dance: can the floor be constructed so that movement on second floor is minimized, and 2) HVAC noise control: equipment would preferably be located on the roof to minimize noise if feasible. He noted potential conflict between the desire for sound isolation and the budget: and asks: 1) Are these goals possible irrespective of budget? 2) Are these goals possible within the budget? This needs to be investigated.

Stefan: MEP Noted that from a mechanical engineering standpoint the project goals / ideas can be made to work: Observations: 1) Confirm load requirements for equipment, 2) All ducting systems need to be new as the existing arteries are obsolete, 3) More space in building is probably needed for equipment, 4) cost limitation is a big issue. The intention is to locate the HVAC equipment on the alley portion of the roof, and probably remove the existing mechanical suite. HVAC will need to be on the roof due to headroom issues and floor space usage. Requested that the interior of the building be cleared and exposed to allow evaluation of the existing condition. Maroufkhani: Noted that demolition could be performed during the abatement period, and requested to know what to remove.

Hira: Electrical: Service and wiring from basement switchgear is old and needs replacing. Fuses and electrical panels need replacing, however paths for the wiring can be reused.

Willis: Media Systems: Discussed three phases of media systems implementation: 1) Installing conduit and raceways for flexible use and future installation, 2) Implementation of copper wiring and / or fiber optics, and 3) Technology / equipment. Noted that the opportunity exists to tap into the existing site sound system for outdoor performances.

Phelps: Noted that drivers have shifted somewhat during the day: 1) the importance of the atrium/performance gallery space is clearer: how does this large program allow for the demands of technology? 2) the significance of technology (in all art forms) for the project is clearer, 3) the importance of the restaurant as part of the program and its relationship with the City of Riverside is clearer: how can we control its impact on the surrounding academic space? Suggest that the design approach may be *collage*, overlaying different program elements on one space and overlaying exposed technology capability on the most important historic features of the building.

Phelps noted that they would get reports from consultants, and produce a revised program of areas and sketch plan to serve as the basis for preparing a construction budget and a "wish list" of costs. He noted that he is advised by cost consultants Davis Langdon Adamson that recent bids for academic building renovations involving seismic upgrade have ranged from \$190 to \$215 per s.f. The current budget for the Culver Center is approximately \$113 s.f. This suggests that only portions of the project can be completed in its first phase.

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Conant: Asked if the Wurms building could be used for the restaurant. O'Brien: Noted that an agreement had been made with the city to include retail towards the front of the Rouse Building. Noted that some of its area could be located outside on the mall.

Phelps: Noted that the structural engineer is optimistic about seismic renovation using the 1907 portion of the building as the primary strengthening element. But this needs to be confirmed by structural testing that is currently underway Maroufkhani: Noted that the seismic strengthening portion of the project can possibly be less expensive than the numbers that Adamson suggests.

Phelps thanked the participants and asked that they e-mail their thoughts and suggestions to him via Lisa Peloquin. The tentative schedule is to present the final report in approximately four weeks.

MINUTE CORRECTIONS: The above minutes represent our understanding of the events of this meeting and are assumed correct unless notified otherwise. Corrections are to be submitted to Barton Phelps & Associates in writing. Proposed corrections will be attached to the following meeting minutes.

B. Space Descriptions: Architectural / Electrical Notes
(BPA with M.E Engineers)

SPACE DESCRIPTIONS: Architectural Notes.

Basement Level

Note: Ceiling height/floor level varies on this level. South portion, 8'-5", north portion, 9'-9".

General notes: Existing columns to remain. Remodel concrete floors for ramps to south portion. Level and seal floors. New gypsum wallboard ceilings and partitions (see Acoustical Narrative as noted). New ceiling mounted lighting. Sprinkler throughout. Door and wall assemblies vary. Exposed cable raceways and air ducts.

1. Keystone Mast Collection (Glass photographic negatives): Two areas. Open space for research and archival storage. Freestanding storage cabinets with bolted connections or base isolators. Independent temperature and humidity controls. Floor drain / sump pump system. Provide new connection to CMP building. Power/telecom jacks in northern portion. Non-rated doors. Provide fluorescent lighting with UV filter shield on each lamp.
2. Conservation Room: Workshop space for 3-4 persons working at tables. Acoustic ceilings, resilient flooring, heavy power/telecom. Interior glazing to Keystone Mast Collection (25%). Provide UV filter shield on all fluorescent lamps. See Acoustical.
3. CMP/Culver Center Fabrication Workshop: fully equipped wood / metal working shop with paint both. Industrial space with sealed concrete floors, special acoustic ceiling, metal doors, heavy power demand, dust removal system. See Acoustical.
4. Material Storage for Exhibition: industrial storage space.
5. Art Storage: industrial storage space.
6. M.E. P. Equipment room: industrial space. Electrical: Provide approximately 1600 amp service at 480/277V, 3ph, 4w. Main utility vault, meter board will be located in this space. It will have large (2) 225 KVA transformers to serve A/V loads. Feeder will run from basement to roof for HVAC and Restaurant kitchen loads. Main telecom room will be established with full plywood backboard and air conditioning. See Acoustical.
7. Elevator: three-stop, hydraulic, industrial type freight/service elevator; also provides accessibility compliance. Opens to west only. Cab 7' x 10' x 8'+ tall. Metal interior and flooring. Stainless steel doors.
8. Elevator Machine Room: See Acoustical.

Ground Floor

1. Gallery / Lobby: two-story, multi-purpose space with historic elements to be preserved and restored (including columns: replace gypsum wallboard furring with plaster, restore south stairway to second floor, elevator doors and cab, wood coffer frames at roof monitor, replace obscured glass / Cal-wal lights at ceiling, new metal windows at clerestory walls, new wood or linoleum flooring.). Power/telecom in floor boxes. Tech storage space on south wall. Performance uses can require movable seating, demountable stage, digital projection, theatrical lighting and sound systems. See Acoustical Narrative and Upper Floor.

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Program Confirmation Study

2. Arts / Museum Bookshop / Receptionist: part of Gallery / Lobby space above, differentiated by display shelf placement. Include workstation / desk for receptionist /cashier. New opening to CMP with fire rated doorway closure, 8' x 12'-0" high. Movable book cases, counters with shelves below, pendant light fixtures, patron seating.
3. Administration Office Suite: open office areas for three with ¾ height partitions, built-in closets and storage, copy room, interior glazing to Gallery/Lobby, carpet, acoustic ceilings, pendant fixtures furnished waiting area.
4. Faculty Lounge: furnished lounge space with kitchenette, tables, chairs, occasional seating, task lighting, marker boards, digital projection capability, interior glazing to Gallery / Lobby (10%), carpet, acoustic ceiling.
5. Screening Room: tiered seating with upholstered, fixed seats for 90, raised stage, podium ,accessible ramps at stage and entry. Digital projection only (no film, no projection booth). Retractable screen 8' x 20', back-of-screen speaker system. Control closet, light dimming, limited theatrical lighting. See Acoustical.
6. Storage Space: for temporary seating, performance equipment, stored exhibit materials, Industrial interior with built-in shelving, 6' x 12' high double doors to Gallery / Lobby, resilient flooring.
7. Restrooms: wall hung fixtures with central plumbing chase, suspended gypsum wallboard ceilings, recessed light fixtures, ceramic tile walls and floors, composition tops with integral sinks, institutional quality fixtures, steel partitions.
8. Loading Area: 8 x 12 overhead rolling door with exterior metal canopy, 8 x 12 double doors to Gallery /Lobby, plywood siding and ceiling over gypsum wallboard, industrial resilient flooring, loading dock, protective bollards. See Acoustical.
9. Catering Prep Area: 6 x 7 metal double doors both sides, built-in serving counters with plastic laminate tops, two stainless steel sinks and faucets, one full size refrigerator/ freezer, warming drawers, overhead cupboards and shelving, under counter shelving, coved base resilient flooring, floor drains (2). See Acoustical.
10. Restaurant: In the base project this is an undeveloped "shell" space to receive improvements by tenant. Drywall partitions and rough-out plumbing, electrical, and HVAC. No ceilings or flooring. New floor-to-ceiling frameless glass front and new opening to Gallery /Lobby. See Acoustical

For estimating tenant improvement costs only, assume build out by others as medium quality decorative space with hallway, patrons' rest rooms and kitchen facility. Allow for exterior seating for 50 with tables, umbrellas, and movable serving station. See Acoustical

11. Restaurant Kitchen: Shell space to receive tenant improvements (see 10 above). See Acoustical

For estimating tenant improvement costs only, assume build out by others as full service commercial kitchen with walk-in refrigerator, exhaust hoods, floor sinks, and staff restroom.

12. Arcade / Entrance: New concealed-frame glass front floor to ceiling along Gallery / Lobby space. Enclosed display cases (formed bases of stained architectural concrete) with concealed-frame glass and stainless steel enclosures, access panels, concealed lighting, and ventilation systems. Floor paving: stained and sealed concrete. Cement plaster ceiling with recessed lighting
13. Electrical / telecom / data Rooms: provide electrical room with 277 volt and 120 volt panels for local branch wiring. Provide riser space for feeders to Upper Floor and Roof. (Restaurant electrical panels to be located in the Restaurant). Provide tele/data room for collecting local tele/data outlets, punchdown equipment for the floor. Provide riser space for lines to Upper Floor.

Upper Floor

1. Faculty Dance Studio: sprung wood floors with hardwood surface, 7-foot high mirror on one wall, lighting grid (1" steel pipe at 8' o.c., four rails the length of the room, 15" from ceiling. Note floor diaphragm breaks at east edge of corridor outside room. Black-out Mecho-shades at windows. Speakers and built-in audio control cabinet / tech closet. Storage and dimmer bank. Theatrical lighting will be controlled by dimming rack system located in adjacent room. See Acoustical.
2. MFA Student Dance Studio: same as Faculty Dance Studio.
3. MFA Student Art Studios: Plywood siding over gypsum wallboard at 3 walls, gypsum wallboard ceilings, skylights and roof shafts, incandescent lighting, power / telecom floor boxes, resilient flooring. Storage closets and stainless steel sinks. Ventilation important. See Acoustical.
4. Faculty Art Studios: Same as MFA Art Studios.
5. Visitor Studios: Same as MFA Art Studios.
6. Rest Rooms: Same as Ground Floor
7. Media Computer Studio "Open Space": open workstations (16) for digital media production, power / telecom jacks in floors, variable illumination in room, acoustical ceiling and upper walls, 6'-high gwb lower wall. Sound isolation at walls. See Acoustical.
8. Theatre Lab.: Digital Prep: same as Media Computer Studio, Lighting grid (Similar to Faculty Dance Studio). See Acoustical.
9. Black Box: Remove existing roof framing and raise roof and side walls to provide 16'-0" clear (minimum). Lighting grid. Storage and dimmer bank. Theatrical/ Video/ TV lighting will be controlled by a full dimming system. See Acoustical.
10. Control Room: glass panels to Black Box and Music Lab., built in control console with connection to machine room in Tech closet. See Acoustical.
11. Music Lab.: See Acoustical.
12. Tech Closet:
13. Art: work areas for drum scanning and large format printing, pin-up boards, computer based projection equipment and screen, doubles as seminar room.
14. Electrical / telecom / data Rooms: Similar to Ground Floor

Exterior:

1. Roof: remove existing mechanical penthouse. Provide structural strengthening for new rooftop HVAC equipment, new structural diaphragm, new roof drainage, new built-up roofing with cap sheet, Provide new metal windows at roof monitor.

Electrical: Provide feeders from Basement to Roof to serve HVAC and Kitchen hood equipment. Provide weatherproof motor control enter and power panel boards on the roof.

2. East and South walls: Existing Wurms Building at south wall to be removed.
3. Fill existing window and door openings to be closed with removable insulated panels with stainless steel exterior, repair masonry joints, attach masonry as required and seal.
4. West façade: Upper floor: Attach masonry and sheet metal elements as required. Clean glazed tile surfaces. Restore existing wood French doors or replace with identical new. Paint cornice, metal trim, and railings.
5. West Façade: Lower: Remove existing storefront. Replace with glass arcade as shown in plans and called out in interior Ground Floor section.

General Notes

Electrical:

1. Emergency system to be provided with emergency battery packs with 90-minute capacity throughout.
2. Provide fully addressable, ADA-compliant fire alarm system throughout.
3. Provide security system throughout the facility. Card access to upper floor.

C. Seismic Retrofit Narrative by
Saiful / Bouquet Consulting Structural Engineers Inc.

Building Description

The Proposed UCR Culver Center building is located at 3824 Main Street in Riverside. It is the old Rouse Department Store and is a registered historic building. The building was designed and built circa 1895 with a major addition circa 1907. Other major renovations (primarily nonstructural) have occurred since then. There are existing buildings that abut the building on two sides. The three-story UCR CMP building is located on the north side while another existing one story building is on the south side. The floor levels of these existing buildings do not appear to align with the floors of the Rouse building especially at the roof level.

The Building has two levels above grade and one basement level. It is rectangular in plan approximately 96 x 155 feet in the north-south and east-west direction, respectively. The second floor accommodates a large opening (approximately 25 x 75 feet) for the existing light well. The building has approximately 43,000 square feet of gross area. We were told that the building does not have any hollow clay tile partition walls.

The first floor appears to be constructed of diagonal wood sheathing over 2" x 8" floor joists spaced at 16 inch on center. The wood joists span between steel beams, which in turn are supported by wide flange and pipe columns in the interior of the building and unreinforced masonry (URM) walls typically located along the perimeter. Above the first floor the steel columns are replaced with 10" x 10" wood columns. The second floor is believed to be constructed of diagonal wood sheathing supported on wood joists, wood beams, wood columns at the interior and URM walls along the perimeter and along one interior line. Finally the roof is believed to be constructed similar to the second floor except that straight board sheathing was used instead of diagonal wood sheathing.

Seismic Concerns

The existing building is expected to be severely damaged in the event of a major regional earthquake. It poses serious life safety hazard in its existing configuration. The building is a classic unreinforced masonry (URM) brick wall building which have a history of poor performance in prior earthquakes.

In addition to the typical seismic concerns associated with such URM building, this building also has the following additional concerns that requires mitigation:

1. Presence of weak/soft story condition at the first floor level along the East End (main entrance).
2. Presence of a large opening in the existing second floor diaphragm.

Recommended Seismic Structural Work

Based on our preliminary evaluation findings we propose the following seismic work as a minimum to mitigate potential life safety concerns in the building. We should emphasize that while the proposed work will substantially mitigate the life safety concerns; it would not eliminate damage. Because of the nature of construction (i.e., URM), moderate amount of localized damage can and should be expected even after the proposed retrofit is implemented.

The following structural seismic work is proposed:

1. Install new 2 bay steel moment frame at storefront elevation first floor to roof to mitigate soft story concern. The frames can be located immediately inside of the existing wall piers. Note that the basement wall steps back approximately 8 to 10 feet along this elevation, which will locate the new frame outside of basement foundations. This will eliminate concern of surcharging existing foundations. Micropiles may need to be used to reduce the vibration and noise and to allow for new frame foundations to stay clear of existing foundations.
2. Install new steel braced frames to align with east and west sides of the existing atrium opening. These frames shall be located in the transverse direction (north/south) and will have steel drag beams extending across the building. Based on the proposed architectural layout, the west frame can be at the north side and the east frame at the south side. These frames will rest on concrete shear walls (approximately 12" thick) in the basement over new footings.
3. Install approximately 4" shotcrete on the rear (east wall) of the original 1895 building. Due to the number of existing openings in the rear wall, we propose applying shotcrete to the wall from the basement to the roof.
4. Replace existing straight wood floor and roof sheathing with new plywood sheathing and nailing. Existing floor and roof framing (wood beams, steel girders, etc.) to remain.
5. Install new URM wall anchors to existing roof and second floor framing at all perimeter walls. Hardware to be Simpson holdowns (or equiv.) with drill and epoxy threaded rods at 22.5° into URM walls. At existing framing parallel to walls install hardware to new blocking with steel straps. At roof framing, anchors to walls may be installed between existing framing and new plywood sheathing as an alternate. If longitudinal interior URM wall is to remain, this wall will need to be braced with wall anchors as well to the respective floor and roof framing.
6. Install new roof and floor continuity ties, as required. Ties to consist of Simpson holdowns with threaded rod connections.
7. Strengthen existing framing around existing second floor diaphragm opening. Install hardware consisting of straps and/or holdowns with threaded rod connections.
8. Provide steel angle kickers from parapets to roof. Where the height of the parapet exceeds approximately 18" for 13" thick walls or 24" for 17" walls, kickers must be provided at approximately 6'-0" on center.
9. Install veneer tie anchors for glazed brick at second floor of front (west) façade. Small diameter (~ 3/16") rods shall be drilled into the brick mortar joints at approximately 24" on center and epoxied to existing brick substrate.
10. Remedial repair of brick mortar. Re-point approximately 25% of existing brick mortar joints.

In addition to the above, the following strengthening may also be required depending on the thickness of the URM walls. Based on our past experience, we expect the URM walls to be 13 or 17 inches thick. The height-to-thickness ratios of the wall at the upper floor must be less than 9. At 13" this is a height of 9'-9", at 17" the height may be 12'-9". If the wall height exceeds this, additional bracing at the top for out-of-plane forces. One of the following schemes may be used to mitigate that concern:

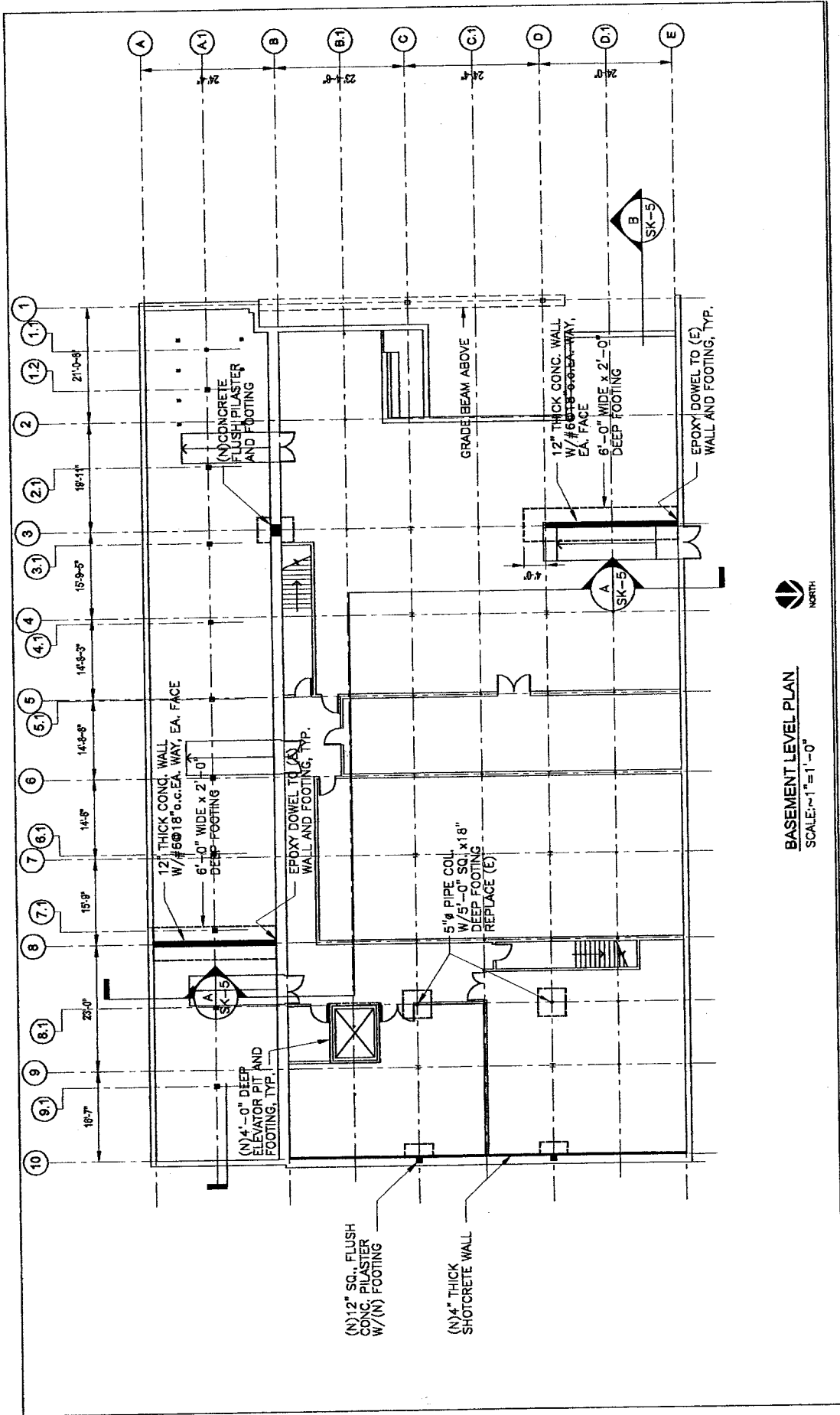
1. Install horizontal steel ledger that decreases height of wall and brace the ledger to underside of existing floor/roof framing.

2. Install reinforcing at centers of walls with center core drilling.

Other Structural Work

Based on the proposed architectural drawings, additional structural work is required as follows:

1. Remove second floor columns and brick wall at east end of building to provide open dance studios. Provide transfer beams, columns and footings as required.
2. Remove first floor columns at screening room. Provide transfer beams, columns and footings as required.
3. Add new elevator in southeast quadrant of 1895 building. Reframe floors and roof around new opening and provide new elevator pit and footing.
4. Add new stair at northeast quadrant of 1895 building. Reframe floors and roof around new opening as required.
5. Steel header and jamb supports at new doors/openings in existing brick walls (between 1895 and 1907 Bldgs. and CCA to CMP Bldgs.)
6. Structural support for new mechanical units as required.



BASEMENT LEVEL PLAN
SCALE: 1/4" = 1'-0"

CONCEPTUAL RETROFIT SCHEME

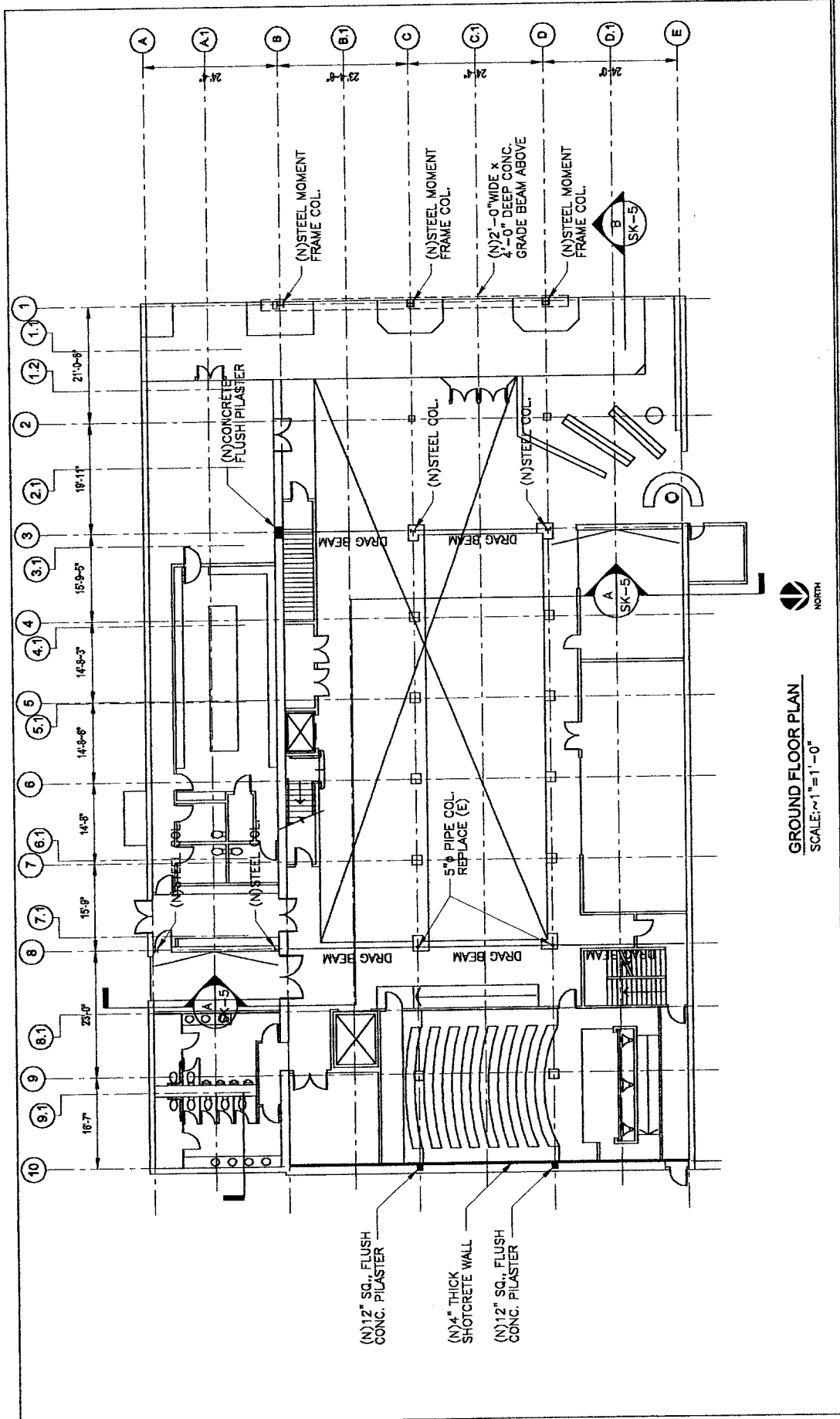
UCR CULVER CENTER



150 East Colorado Blvd., Suite 350
Pasadena, California 91105
Phone: (626) 304-2818 Fax: (626) 304-2878

BARTON PHELPS & ASSOCIATES ARCHITECTS AND PLANNERS
5514 Wilshire Boulevard, 10th Floor, Los Angeles, California 90048-3629
Tel. 323 994-8615 Fax 323 994-3389 e-mail bphai@aol.com

SK-1

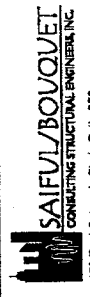


GROUND FLOOR PLAN
SCALE: 1/4" = 1'-0"



CONCEPTUAL RETROFIT SCHEME

UCR CULVER CENTER

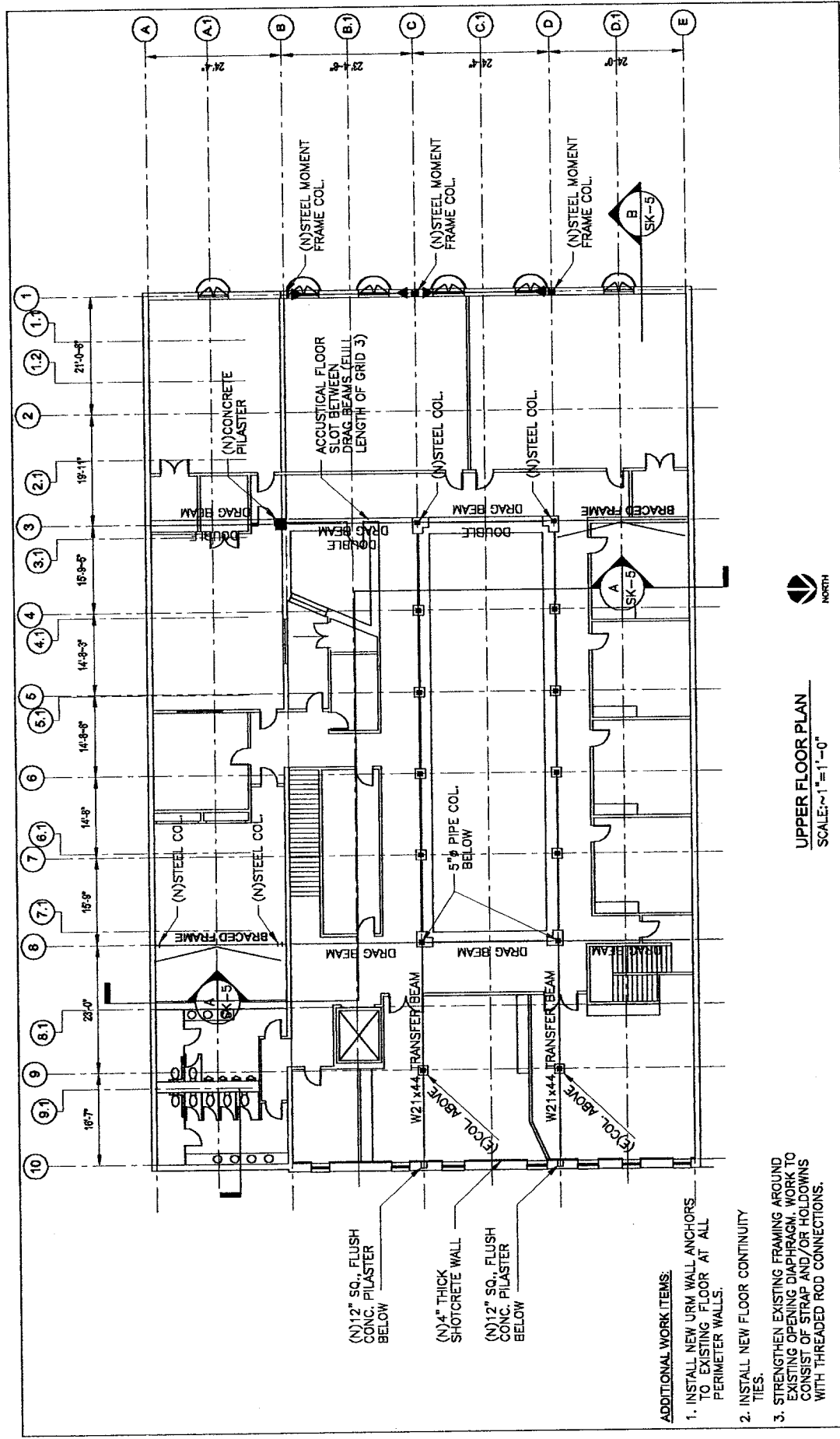


SAIFU/BOUQUET
CONSULTING STRUCTURAL ENGINEERS, INC.
180 East Colorado Blvd., Suite 360
Pasadena, California 91105
Phone: (626) 304-2816 Fax: (626) 304-2876

BARTON PHELPS
& ASSOCIATES
ARCHITECTS AND PLANNERS
5514 Wilshire Boulevard, 10th Floor, Los Angeles, California 90048-3829
Tel: 323 394-8615 Fax: 323 394-8288 Email: bphillips@barton.com

SBI W.O. No. 02607-10
Date: August 22, 2002

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ADDITIONAL WORK ITEMS:

1. INSTALL NEW URM WALL ANCHORS TO EXISTING FLOOR AT ALL PERIMETER WALLS.
2. INSTALL NEW FLOOR CONTINUITY TIES.
3. STRENGTHEN EXISTING FRAMING AROUND EXISTING OPENING DIAPHRAGM. WORK TO CONSIST OF STRAP AND/OR HOLD-DOWNS WITH THREADED ROD CONNECTIONS.

UPPER FLOOR PLAN
SCALE: 1/4" = 1'-0"



CONCEPTUAL RETROFIT SCHEME

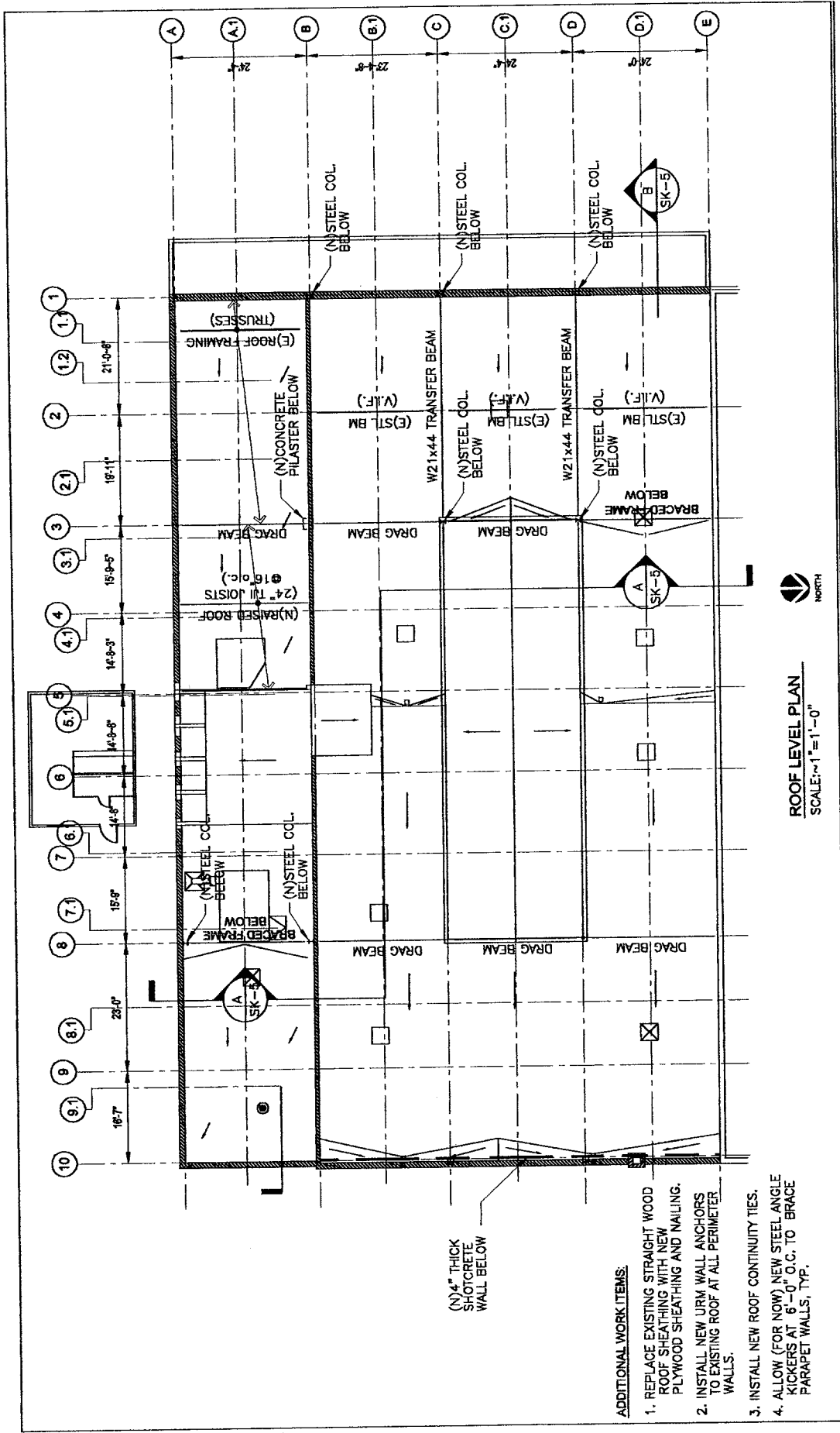
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SAIFUL/BOUQUET
CONSULTING STRUCTURAL ENGINEERING
150 East Colorado Blvd., Suite 350
Pasadena, California 91105
Phone: (818) 304-2818 Fax: (818) 304-2878

BARTON PHELPS & ASSOCIATES ARCHITECTS AND PLANNERS
5514 Wilshire Boulevard, 10th Floor, Los Angeles, California 90056-5829
Tel: 323 594-8613 Fax: 323 594-3289 e-mail: bpa@aol.com

SBI W.O. No. 02807-10
Date: August 22, 2002

SK-3



ROOF LEVEL PLAN
SCALE: 1/4" = 1'-0"

ADDITIONAL WORK ITEMS:

1. REPLACE EXISTING STRAIGHT WOOD ROOF SHEATHING WITH NEW PLYWOOD SHEATHING AND NAILING.
2. INSTALL NEW UPRM WALL ANCHORS TO EXISTING ROOF AT ALL PERIMETER WALLS.
3. INSTALL NEW ROOF CONTINUITY TIES.
4. ALLOW (FOR NOW) NEW STEEL ANGLE KICKERS AT 6'-0" O.C. TO BRACE PARAPET WALLS, TYP.

CONCEPTUAL RETROFIT SCHEME

UCR CULVER CENTER

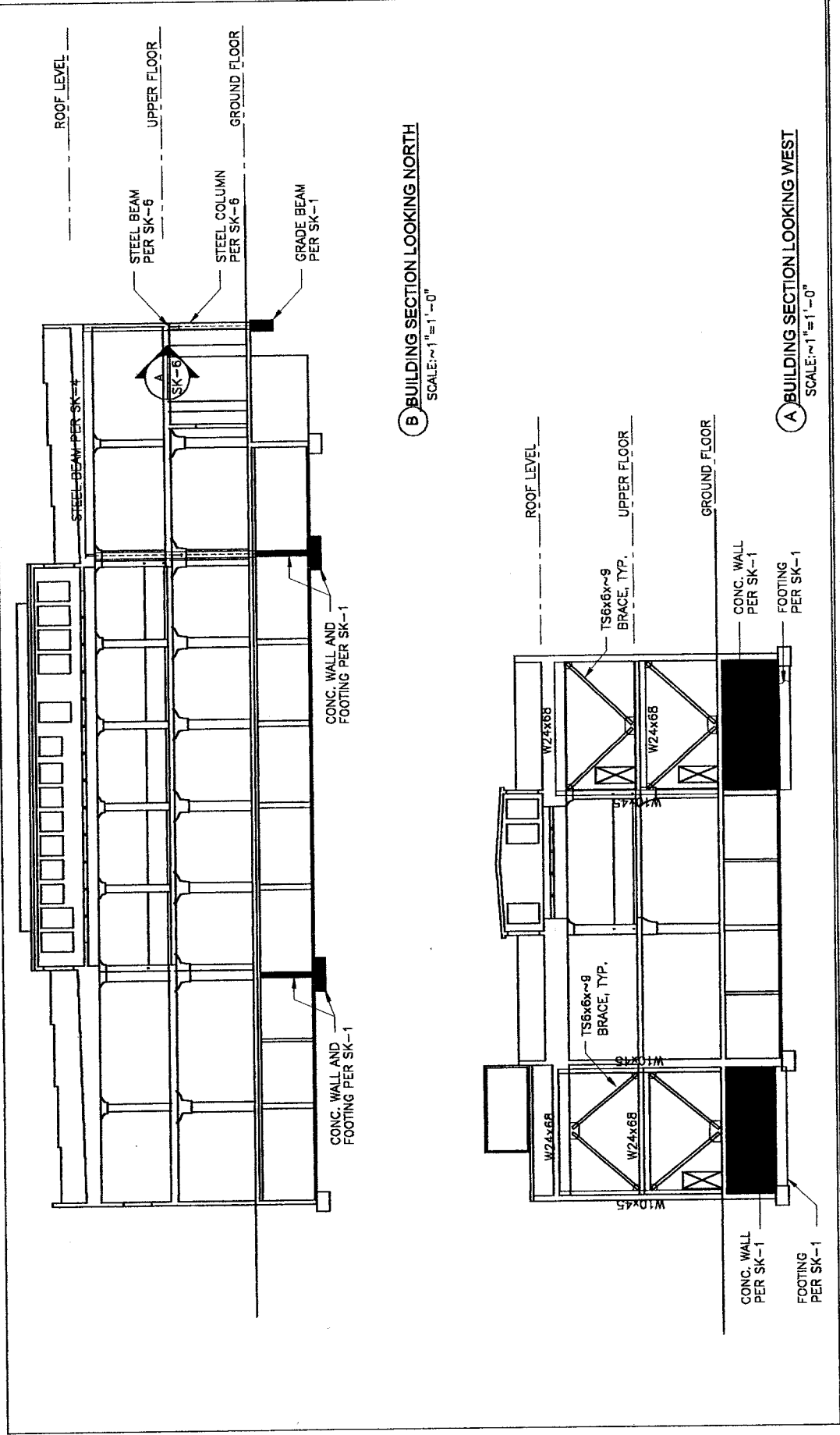


SAIFU/BOUQUEI
CONSULTING STRUCTURAL ENGINEERS, INC.
150 East Colorado Blvd., Suite 350
Pasadena, California 91105
Phone: (818) 304-2816 Fax: (818) 304-2876

BARTON PHELPS & ASSOCIATES ARCHITECTS AND PLANNERS
5514 Wilshire Boulevard, 10th Floor, Los Angeles, California 90066-3529
Tel: 323 954-8615 Fax: 323 954-3238 e-mail: bphang@aup.com

SBI W.O. No. 02807-10
Date: August 22, 2002

SK-4



B BUILDING SECTION LOOKING NORTH
SCALE: 1/4" = 1'-0"

A BUILDING SECTION LOOKING WEST
SCALE: 1/4" = 1'-0"

CONCEPTUAL RETROFIT SCHEME

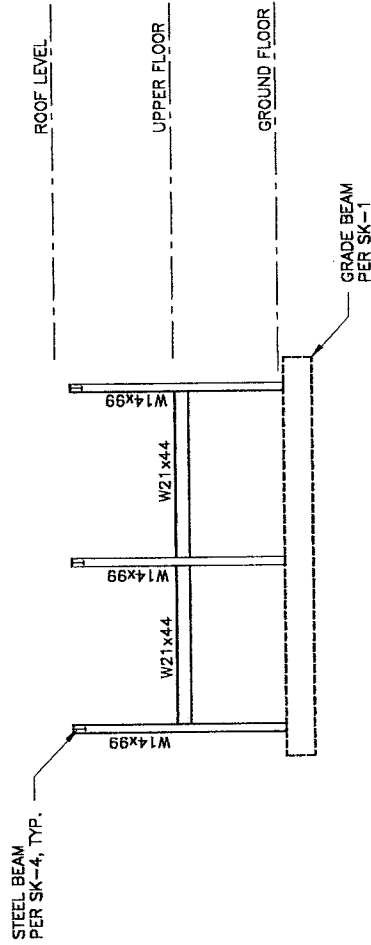
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SAIFUL/BOUQUET
CONSULTING STRUCTURAL ENGINEERING, INC.
150 East Colorado Blvd., Suite 350
Pasadena, California 91105
Phone: (626) 304-2816 Fax: (626) 304-2876

BARTON PHELPS & ASSOCIATES
ARCHITECTS AND PLANNERS
5514 Wilshire Boulevard, 10th Floor, Los Angeles, California 90066-3829
Tel: 323-994-8615 Fax: 323-994-3289 Email: info@bartonphelps.com

SBI W.O. No. C2807-10
Date: August 22, 2002

SK-5



(A) MOMENT FRAME ELEVATION AT LINE 1
SCALE: 1" = 1'-0"

CONCEPTUAL RETROFIT SCHEME

UCR CULVER CENTER



SAIFUL BOUQVET
CONSULTING STRUCTURAL ENGINEERS, INC.
150 East Colorado Blvd., Suite 350
Pasadena, California 91105
Phone: (626) 304-2816 Fax: (626) 304-2876

SBI W.O. No. 02607-10
Date: August 22, 2002

BARTON PHELPS
& ASSOCIATES
ARCHITECTS AND PLANNERS
5514 Wilshire Boulevard, 10th Floor, Los Angeles, California 90048-3129
Tel: 323-354-8113 Fax: 323-354-3289 e-mail: bph@barton.com

SK-6

**D. Preservation Recommendation by
Melvyn Green and Associates Inc.**

Preservation Report

The following are our preservation recommendations for the alterations to the Barbara and Art Culver Center of the Arts. The recommendations provide for preservation of the existing primary historic fabric while permitting the new work to create its own statement in the context of the historic fabric.

Preservation Approach

The Rouse Building consists of two structures, one constructed in 1895 and the other in 1907. A remodel in 1925 by G. Stanley Wilson produced the structure still definable as the Rouse Building today. It is this form that represents the primary interpretive period of the structure. The significant character defining elements of that structure remain in large part; those are the front façade and the interior atrium.

Like many historic stores, the Rouse Building has been renovated repeatedly, most recently on the commercial-front lower story. Above the canopy line, the obvious changes are removal of brackets and other ornamentation at the cornice line and loss of the trim immediately above the new canopy.

The canopy itself is not a feature of the historic building, nor is most of the finish material below it.

One approach to reuse would be restoration to the building's original appearance. Several factors make this a less-than-practical option. The building's new use will be as an experimental university arts center rather than a themed, commercial facility. Significant changes in function, services, and plan are required by the program. In addition, the cost of a pure restoration might be excessive.

The building's present mid-line division between historic and modern is not good design. The line is too stark, and the unfortunate historic antecedents of this kind of "Main Street remuddling" would be hard to suppress, even if the lower floor design were improved immeasurably.

A more interesting approach would be a threefold design strategy as follows:

Regard all existing original fabric (including the original fabric of the addition) as primary historic fabric and preserve it:

Regard renovated fabric as subject to redesign, using the palette, proportions and rhythms of the original building interpreted in contemporary materials;

Integrate the two by restoration of some aspects of the original first floor design. For example, redesign the entire façade as described above, but restore the small display kiosks to their original form.

The interior is a two story atrium with classical details on the columns. This feature and the details are primary historic fabric and should be preserved. The current stairway in the atrium is a recent addition and should be removed if practical.

Preservation Recommendations

All of the following are considered primary historic fabric:

Exterior

All of the front elevation second floor elements including brick, tile, metal balconies, windows and sash, medallions and the cornice.

At the first floor the kiosks, and hopefully their art deco elements, roof and trim if still in place behind the current finishes. If no longer remaining ignore this suggestion.

The current storefront is unrelated to the interpretive period and may be removed or revised.

The canopy is an intrusive element as are the stone and metal bars on the storefront. Shade was provided in the original design by the setback of the storefront and probably retractable awnings.

Interior

The atrium and support structure are primary elements. They, and the clerestory above the atrium, should be preserved.

The “main” stairway is a recent and intrusive. It should be removed if possible.

Materials

The following is recommended when design moves forward.

Façade Tile and Brick – the glazed brick on the façade should be cleaned with water and a mild detergent. No abrasive cleaners should be used on the façade. If the test results indicate that there are no veneer ties, a system of stainless pins should be installed. The pins should be installed at the mortar joints of the brick courses and attached with epoxy to the brick and the substrate.

Metals – The iron balcony should be cleaned and painted. Any rust should be cleaned with a mild abrasive sandblast or wire brush. The anchorage of the balcony to the brick wall should be checked for safety.

Brick repointing, on all elevations, should be done with a mortar mix that matches the original in strength and composition. A small amount of cement may be added to the mix to improve durability. Tests of the mortar should be undertaken when a more detailed inspection of the walls is undertaken.

Windows – Where windows are to be removed the opening may be infilled with brick or other material that meets the fire rating requirements. The infill should have a reveal to indicate that there was an opening at the location.

**E. Mechanical Narrative by
M.E Engineers**

**HEATING, VENTILATING AND AIR CONDITIONING
SYSTEMS DESCRIPTION**

A. SCOPE

1. All required labor, materials, equipment, permit and inspection fees and Contractor's services necessary for complete installation of heating, ventilating and air conditioning work in full conformity with requirements of all authorities having jurisdiction, and as herein specified, including, in general, the following principal items:
 - a. Remove all existing HVAC equipment, ductwork, piping, diffusers, grilles and all associated controls that are no longer required as part of the new HVAC system.
 - b. Hot water space heating system consisting of new gas-fired, hydronic boiler complete with pumps, piping, air separator, expansion tank and accessories.
 - c. Cooling only, variable air volume (VAV) air handling units with local hot water reheat at VAV boxes to serve all.
 - d. Small capacity split system Dx unit for elevator machine room.
 - e. Air distribution systems with medium pressure supply main duct for Variable Air Volume (VAV) systems and low pressure supply air ductwork downstream of air terminal units.
 - f. All HVAC equipment for the Restaurant space consisting of dedicated AC unit, make-up and exhaust air fans.
 - g. Air and water side acoustic treatments consisting of sound traps, fiberglass duct lining, acoustic sleeves, spring vibration isolators, flexible pipe connectors and acoustically lined transfer air sound boots. Sound boots in return air transfer ducts in acoustically sensitive critical areas enclosed with full height walls.
 - h. General exhaust air systems.
 - i. Condensate drain piping, including insulation.
 - j. Duct and pipe insulation.
 - k. Vibration isolation and seismic restraint systems for all equipment, piping and ductwork.

- l. A complete Direct Digital Control (DDC) system for equipment control and monitoring with electric/electric control and sensing devices and all necessary low voltage control system conduit and wiring. System check-out, start-up and operator training.
- m. Duct mounted smoke detectors on supply main ducts at individual air handling units tied to life safety system for alarm and unit shutdown per Code.
- n. Access doors and covers, piping and equipment identification, miscellaneous structural supports for equipment, devices, piping and ductwork.
- o. Air and water test and balance, by an independent AABC certified company including pressure testing of ductwork and piping. Equipment and system start-up including written reports. NEBB certified companies are prohibited.
- p. Shop drawings, equipment and product data, control diagrams, record drawings including CAD diskettes, operation and maintenance manuals and videotaped owner training sessions.
- q. Spare parts, special tools and touch-up paints for equipment.

B. SYSTEMS DESCRIPTION

- 1. Cooling Systems:
 - a. All systems to be air cooled DX type, either packaged or split system as indicated herein. Similar to Carrier.
 - b. System to be single duct VAV with hot water reheat at individual zones.
 - c. A single rooftop packaged VAV unit will serve the entire upper floor. Estimated capacity is 45 tons.
 - d. A single rooftop packaged VAV unit will serve the Ground and Basement Levels.
 - e. In addition to air supply from the rooftop packaged systems, the basement level Keystone Mount collection spaces will be equipped with dedicated AC units to maintain more stringent temperature and humidity control. It is anticipated that three (3) units at 10-tons and one (1) unit at 5-tons will be required. Units will likely be floor mounted with humidifier sections and rooftop condensing units similar to Liebert or Data-Aire.

2. Heating Systems:

- a. Heating source to be hot water via a rooftop packaged, gas fired hydronic heater similar to RayPak.
- b. Hot water piping will be distributed to air terminal units for individual zone control.

3. Air Distribution

- a. Main supply ducts will be extended from the main air handling units to the functional area and branch ductwork extended from air terminal unit to room outlets with thermostatic control.
- b. Flexible duct will be used to connect branch ducts to ceiling outlets in the areas with dropped ceiling.
- c. Groups of small rooms with similar exposure and having the same type of occupancy and function will be zoned together.
- d. Space above ceilings is anticipated to be used as a return air plenum, which will require gypsum board be installed at the underside of the floor wood joists.
- e. Approximate quantity of VAV terminal air units is as follows:

5 terminals	at	Basement
9 terminals	at	Ground Floor
15 terminals	at	Upper Floor

4. Exhaust Systems:

- a. Mechanical exhaust will be provided for new toilet rooms at the rate of 12 air changes per hour.
- b. Dedicated exhaust will be provided for the Basement Workshop.
- c. It is expected that a standalone dust collection system will be needed within the Basement Workshop.

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5. HVAC Control System:
 - a. The system will be a direct digital control (DDC) central building automation system and will be used to monitor and control all mechanical equipment and systems.
 - b. All actuators will be electric/electronic.

6. Restaurant Tenant:
 - a. Seating area to be served by a single rooftop packaged unit ducted to the Ground Floor ceiling space. Approximate capacity is 7½ tons.
 - b. Kitchen area to be served by a rooftop packaged 100% outside air unit at approximately 7½ tons.
 - c. It is anticipated that the kitchen will require a single grease exhaust duct, general hood exhaust system, dishwash hood exhaust system and make-up air unit with evaporative cooling and gas heating section.

END OF SECTION

**F. Electrical Narrative by
M.E Engineers**

ELECTRICAL SYSTEMS DESCRIPTION AND OUTLINE SPECIFICATIONS

I. GENERAL

- A. This narrative is intended to describe the basic electrical lighting, power and special systems for the Programming phase.
- B. The electrical systems will be designed in accordance with the following requirements.
 - 1. California Energy Conservation Code, Title 24 CCR.
 - 2. California Building Code.
 - 3. California Electrical Code.
 - 4. Local Utility Company Rules and Regulations.
 - 5. Riverside County Fire Authority.
 - 6. Adopted and Applicable Standards of:
 - a. National Fire Protection Association.
 - b. Underwriters' Laboratories, Inc. (UL).
 - c. American National Standards Institute (ANSI).
 - d. Certified Ballast Manufacturers.
 - e. Institute of Electrical and Electronics Engineers (IEEE).
 - f. National Electrical Manufacturers Association (NEMA).
 - g. National Uniform Seismic Installation Guidelines (NUSIG).
 - h. Americans with Disabilities Act (ADA).
- C. Basic Criteria:
 - 1. The work of Division 16 will accommodate architectural, structural, and mechanical requirements and all documents referred to therein.

2. Materials, equipment and installation will comply with listed codes, and generally accepted good practice.

II. PRINCIPAL WORK IN THIS SECTION

A. All required labor, materials, equipment, permit and inspection fees and Contractor's services necessary for complete installation of electrical work in full conformity with requirement of all authorities having jurisdiction, including, the following:

1. Power systems.
2. Distribution equipment.
3. Emergency power.
4. Voltages.
5. Branch circuit and wiring.
6. Wiring devices.
7. Grounding.
8. Fire alarm system.
9. General lighting.
10. Lighting control.
11. Telecommunication systems.

III. SYSTEMS DESCRIPTION

A. Power Systems:

1. The building will receive power from the local utility company service feeder in the back alley. There will be a utility company transformer vault and main service meterboard in the basement.
2. The main service switchboard, rated 1600 Amp, 480Y/277V, 3 phase, 4 wire, which will supply all lighting, power and motor loads. The switchboard will be located in the main electrical room in the basement.

3. A metering will be provided per the utility company requirement in the main service switchboard.
4. Separate sub-metering will be installed for different panelboards serving the restaurant area.

B. Distribution Equipment:

1. 480Y/277V and 208Y/120V distribution switchboards will be provided in the main electric room (basement).
2. Distribution at 480Y/277V and 208Y/120V to panelboards, motor control centers, and packaged mechanical equipment will be by means of cable feeders from distribution switchboards.
3. Dry type transformers 480V-208Y/120V, 3 phase, 4 wire will be located in the main electrical room to serve 120 and 208 volt loads. Non-linear load type transformers will not be provided unless specifically requested. Approximately two 225kVA transformer will serve 120V loads and dimming system. Approximately 75kVA isolated ground transformer will be provided to serve audio/visual load.
4. Branch circuit panelboards (208Y/120V and 480Y/277V) will be installed in the electrical rooms and close to the loads they serve wherever practical.
5. Feeders from the basement to the roof will serve HVAC and Kitchen roof equipment. Weatherproof motor control centers will be located on the roof.
6. Restaurant electrical panelboard will be located in the Restaurant area.
7. Circuit breaker types and interrupting capacities will be selected based on the results of a short circuit study. Circuit breakers, panelboards, transformers and feeders will be selected based on completion of the design and appropriate load calculations as well as a coordination study.
8. Switchboards and panelboards will include space for future additional circuit breakers and switches.
9. To withstand lateral and vertical forces that result from earthquake all electrical equipment will be fastened and seismically restrained in accordance with NUSIG guidelines.

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10. Individual starters and power wiring will be provided for all Division 15 equipment. Outlets will be provided for controls in each mechanical room and access space. Control system will be provided under Division 15.

C. Emergency Power

1. Emergency power will be provided for at least 90 minutes via an individual battery system for egress and exit light fixtures and fire alarm system.
2. The communication and security systems will not be on the emergency power system.

D. Voltages

Utilization Voltages will be as follows:

1. Fluorescent and HID Lighting: 277V, 1 phase.
2. Incandescent Lighting: 120V, 1 phase.
3. Exterior HID Lighting: 277V, 1 phase.
4. Motors Less than ½ HP: 120V, 1 phase.
5. Motor Greater than ½ HP: 480V, 3 phase.
6. General Use receptacles: 120V, 1 phase.

E. Branch Circuits and Wiring:

1. All equipment supplied will be provided with the appropriate electrical power connections.
2. All wiring will be copper and installed in conduit raceways.
3. Conduit raceways above and below grade, within the building footprint will be metallic.
4. Underground conduit raceways beyond the building footprint will be concrete encased PVC.
5. Twenty ampere branch circuits will have No. 10 awg neutral for multi-wire 208/120V circuits.

F. Wiring Devices:

1. The standard duplex receptacle will be rated 20 ampere, 125V, for straight blades and U shaped ground pin.
2. Special receptacles will be installed at locations designated to feed specific equipment loads.
3. Ground fault interrupter receptacles will be installed where required by Code.
4. Provide specification grade switches and occupancy sensors.

G. Grounding: A grounding system will be provided for all the transformers, switchboards, metallic conduits, and raceways. A main ground box with ground bus bar will be provided in each electrical room. A ground loop will be provided in the main electrical room. A ground conductor will be provided in each telephone and data room from the adjacent ground box.

H. Fire Alarm System:

1. An addressable-point fire alarm system will be designed for standard low rise building operation conforming to all state and local codes. The system will include a graphic annunciator panel located at the first floor. The system will report to a remote annunciator in the main telephone switchboard room. Terminal cabinets will be located in the electrical rooms to serve various devices. The system will include the following:
 - a. Manual pull stations.
 - b. Waterflow alarms.
 - c. Sprinkler valve tamper supervision.
 - d. Smoke detection in elevator lobbies and air handling intake ducts.
 - e. ADA strobes.
 - f. Horns.

I. General Lighting:

1. In general, illumination levels will conform to the illuminance category recommendations of the current edition of the IES Lighting Handbook as a guide, and as mandated in the State of California "Nonresidential Building Standards."
2. Lighting in interior offices and Staff Room will be commercial type recessed fluorescent fixtures.

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3. Lighting in mechanical/electrical equipment rooms will be industrial type fluorescent fixtures.
4. For detailed information theatrical/stage and audio/visual lighting, refer to Architectural and Audio/Visual section.
5. Lighting in Keystone Mast Collection and Conservation Room will be fluorescent with UV filter shield on each lamp.
6. Lighting of the building exterior and site area lighting will be HID or fluorescent fixtures.
7. Corridor and lobby lighting will be a combination of normal and emergency lighting with approximately two-thirds of the lighting on normal service and one-third on emergency service. Provisions will be made for control of the normal lighting.
8. Lighting in stairs and exit signs will remain illuminated on a 24 hour basis and will be served from the emergency system.
9. Recessed fixtures shall be suitable for installation in the proper ceiling construction and shall be furnished complete with all mounting hardware, attachment devices and junction boxes where required.
10. Ballasts for fluorescent lamps shall high power factor, electronic type, rapid start less than 10% THD.
11. Lenses and diffusers shall be 100% virgin acrylic.
12. Ballasts for H.I.D. lamps shall be high-power factor, constant wattage type of the quietest sound rating available and shall be mounted in W.P. enclosures where required.
13. Fluorescent lamps shall be T-8, rapid start type, 3000°K.
14. Compact fluorescent lamps shall be T-4/T-5, 2700°K.
15. Metal halide lamps shall be equal to Sylvania Metalarc Phosphor coated.

J. Lighting Control:

1. Lighting for all areas shall be controlled via local wall switches and relay controls. Lighting control system to meet Title 24 requirements.

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2. The lighting control system shall be microprocessor based with processors in each relay cabinet. Multiplexed data bus shall be routed between processors. Provide PC based software package for system programming and control.
3. Occupancy sensors (manual on, automatic off) will be provided in interior spaces including offices, conference and storage rooms.
4. Exterior lighting will be controlled by the lighting control relay system with photocell control options.
5. Programmable dimmer control system for theatrical lighting for Faculty Dance Studios, Theatre and Black Box Rooms.

K. Telecommunication

1. Three (3) 4" conduits will be extended from the back alley area utility company manhole to the main communication room.
2. A main communications room will be provided in the Basement to house the MDF (Main Distribution Frame) for incoming voice and data services. A secondary Communications Room will be provided on each floor to house an IDF (Intermediate Distribution Frame). Four (4) 4" c.o. will be run between the main and secondary communications room.
3. Provide plywood backboards on each wall of tele/comm. rooms.

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**G. Plumbing Narrative by
M.E. Engineers**

PLUMBING AND FIRE PROTECTION SYSTEM DESCRIPTION

A. SCOPE

1. Sanitary waste: The building has an existing sanitary sewer service from the alley, which will be reused.
2. Domestic cold water and existing piping supply is fed into the Basement level from the Plaza area and will be revised. The existing system will remain and be extended as needed to supply fixtures in the new building
3. Domestic Hot Water Supply: A 20 gallon electric hot water heater will provide water to the toilet cores and other sinks as needed..
4. Natural Gas Supply: Building's gas supply will be revised.
5. Roof Drainage: The existing roof and overflow drains will be removed for reroofing and replaced with new drain bodies. Piping serving new drains will also be new.
6. Fire Protection: The existing building is sprinklered at the Basement level only, with fire service entering at the basement level. This system will be expanded to cover the entire building. It is anticipated that the entire basement level will utilize a pre-action type system.
7. Restaurant Space:
 - a. Gas and water are to be metered separately for this tenant.
 - b. A new 1,500 grease interceptor will be required. Attentively, it may be possible to use a point of use type at the pot sink drain which would be considerably less costly.
 - c. A dedicated hot water system will be required consisting of a single rooftop gas fired heater (500 MBH) and 150 gallon storage tank.

END OF SECTION

**H. Acoustical Narrative by
McKay Conant Brook Inc.**

H. Acoustical Narrative by McKay Conant Brook Inc

Note: This narrative is not intended to represent a comprehensive treatment, but rather should be viewed as a "planning and budgeting guide" with some planning implications for HVAC, structural and architectural design to come later. Construction assemblies not addressed, however, can be generally assumed for the present purposes to be of conventional design and construction.

BASEMENT LEVEL

- **Conservation Room**

Conventional acoustical lay-in ceiling. No special sound isolation requirements except for acoustical isolation from activities in Fabrication Workshop, if adjacent. Wall construction for this adjacency could be as follows: double stud wall of 3.5", lightgauge steel studs on separate tracks spaced 2" apart, cavity includes 2 batts R-11 insulation. Apply 2 layers 5/8" gypsum board one side, 3 layers other side. Provide no cross-bracing between rows of studs. Caulk airtight both sides. Further, ductwork serving these spaces should not span through this wall, but be routed out to corridor and internally lined. Alternatively, the ductwork must be lined and wrapped in 2 layers of gypsum board and there must be no less than 2 elbows and 20ft of ductwork length between S.A. and R.A. registers serving both spaces. Design HVAC-generated background noise for noise criterion of NC25-35.

- **Fabrication Workshop**

Presuming that this space is simply under the atrium area (and not the screening room), then conventional acoustical lay-in ceiling below resiliently-suspended gypsum board ceiling at 10" min. below floor construction above. Lay-in ceiling controls reverberance and noise-buildup in shop while gypsum board controls noise penetration to spaces above. HVAC design for this space should not employ R.A. plenum, but ducted runs only. Ductwork to not penetrate plaster ceiling. S.A. and R.A. ductwork serving room should be acoustically lined steel duct for minimum 20ft. Gypsum board ceiling of 2 layers suspended on spring or neoprene hangars sized and spaced for min. 0.25" static deflection. R-30 batt insulation in 10" (min.) cavity. Plan for mitigation of noise propagation out of shop to above via careful duct layout planning and location of doors near elevator shafts. Doors serving this space that must be near elevator shafts should be via vestibules or acoustical lab-rated at STC50, minimum (expect \$150/sf, installed). See narrative of Conservation Room for

description of common wall between these two spaces. Use slip-track construction for all wall connections to floor above around this room to reduce acoustical driving floor above. Use same or similar wall construction to any other adjacent space that has a potential acoustical "link" to noise-sensitive spaces such as the Screening Room above. Design for HVAC-contributed noise criterion of NC35-40. No bench or power tools should be structurally connected to wall common to a noise-sensitive space such as the Conservation Room. We urge and recommend that this space not be directly below the Screening Room. However, if this workshop must be below the Screening Room and if administrative control of concurrent use is not guaranteed, then substitute 1" plaster for the gypsum board and provide 1.5" (min.) thick lightweight concrete topping uniformly on the floor of the screening room with 2.5" thickness in the floor region that would not have a raked (raised) floor. In this case, also, all created floor cavities must have R-19 batt insulation.

- **M.E.P.**

Plan for acoustical lab-rated door to this room if it is within 15ft of elevator shaft. Select STC50, minimum (expect \$150/sf, installed).

- **Elevator Machine Room**

For noise propagation control to elevator shaft from activities in the Fabrication Workshop, plan for dedicated S.A. and exhaust for this room. No door louvres or undercut. Fully gasketed, solid core steel door.

GROUND FLOOR

- **Gallery / Lobby**

For general reverberation control and noise build-up, and recognition that the floors will be hard-finished (sound reflective) apply highly efficient sound absorptive treatment to all available ceiling surfaces. Suitable finish material on gypsum board is 1-3/4" thick "BASWaphon" (by RPG) directly applied monolithic, smooth-finished material (expect \$25/sf installed). Alternatively, 2" thick 4'x10' "New Dimensions" panels by Wall Technology (or similar "Claro" by Decoustics) direct-applied (expect \$17/sf). To optimally accommodate the requirements of some audio-heavy shows in the gallery, the upper 5ft of all available wall surfaces should be treated in the same manner as described for the gallery ceiling, above. For control of noise and vibration from the dance studios above, the gallery (and restaurant and bookstore) ceiling within 8ft of the dance studio footprints should have a minimum of 2 layers of gypsum board supported via structure spanning between walls only or between walls and floor structure to the east of the floor membrane separation in the corridor. This gypsum board should not be suspended resiliently or

otherwise from the dance floors above. The intervening cavity should receive minimum R-30 glass fiber batt insulation. The portion of the gallery ceiling below the control room/music lab/tech machine room above (as any portion of the black box footprint within the gallery) should be as described for the gallery ceiling below the dance studios except that it may be supported via resilient connection to the floor structure (eg. neoprene or spring isolation hangers) instead of spanning across structural elements. HVAC noise control design for the gallery should be NC25.

- **Screening Room**

To control noise emission to studios above, construct a plaster ceiling as described for the Fabrication Workshop in the Basement. While it is recommended and anticipated that non- noise generating space will be below the screening room, if the Fabrication Workshop must be below it, refer to description of that space for discussion of the floor/ceiling noise control measures. Reverberation control for film audio purposes is achieved at the ceiling by direct application of 1.5" thick fabric-wrapped 4'x4' glass fiber sound absorptive panels spaced apart to achieve approximately 80% coverage over the audience ceiling. Side walls also require sound absorptive treatment over about 70% of the available surface. Consider 1" thick, 7-10pcf glass fiber covering the wall surface above about 2ft. A.F.F. This may be uniformly covered with shirred or stretched fabric. Carpeted floor. Enclosed loudspeaker cavity behind projection screen to be uniformly treated with direct-applied, 2" thick glass fiber duct liner board. Any wall of this room exposed to loudspeaker sound that is continuous to another occupied space at the same or adjacent level (above or below) should have furred-out gypsum board wall to keep screening room sound field from exciting that continuous wall. Best to provide sound-lock vestibules to public spaces. At the least, heavy sound-isolating doors with a sound-absorptive finished vestibule light-lock screen (if not fully enclosed vestibule) should be provided. HVAC noise control design goal should be NC20-25. Projection will be via video so proprietary criteria such as THX are not deemed a requirement at this time.

- **Restaurant**

Sound isolation between this and the adjacent gallery space should be maintained when desired. This would require a vestibule or similar sound-lock. arrangement. To control excessive noise build-up in the dining area, the ceiling should have direct-applied sound absorptive panels or finish yielding and in-place performance of NRC65 as a minimum. Consider any of the sound absorptive materials described above for budgeting purposes. Refer to the discussion of the gallery ceiling construction. HVAC noise control criterion should be NC25-35.

- **Kitchen / cater / loading**

In the kitchen, apply continuous, floor-to-underside of structure, furred-out gypsum board wall on kitchen side along common wall with the gallery. The in this entire area should be of 2 layers gyp. Board resiliently suspended from structure above. Provide a minimum 20" cavity to the floor construction above and provide R-30 batt insulation within this.

UPPER FLOOR

Note: The ceiling constructions in one or more of the spaces described for this level may require more mass than conventional ceilings and may require isolation from roof structure depending on the ultimate design and layout of HVAC systems to serve the building. Expect that S.A. and R.A. ductwork will be acoustically lined and that very few areas, if any, can acoustically accommodate R.A. plena. Where reference is made on this floor to double stud construction but a solid concrete wall of 10" thickness or greater already exists, simply apply a 2.5" (min.) steel stud wall with one layer of gypsum board spaced 1" from the concrete and caulk the full perimeter on the gypsum board side.

- **Faculty and MFA Dance Studio**

The common walls to corridor and dance studios should be double stud construction similar to that described for the Conservation Room in the basement except that the steel stud gage will have to be lower. Walls must extend from structural floor to roof construction. Provide no cross-bracing between rows of studs. To reduce floor vibration to spaces other than the adjacent faculty dance studio, provide a clear break in the floor membrane running continuously N-S along the east side of the adjacent corridor. A conceptual detail of this has been provided to the design team. The structural ceilings should be separated from (ie. not continuous with) both the corridor and the adjacent studio. Their gypsum board should be supported via resilient channel or wire-hung. The ceiling finishes of these rooms should be acoustically treated to control reverberance. Suitable finish is acoustical lay-in ceiling tiles or direct-applied, 1.5" thick fabric (or similar) finish glass fiber sound absorptive panels either in a monolithic or spaced-apart treatment covering at least 85% of the available ceiling. No special wall finishes are anticipated but the floors must be sprung wood floors on sleepers on neoprene pads. Expect that the minimum thickness of this type of dance floor assembly is 2-3/4". For budgeting purposes consider "Bio-cushion (sleeper)" by Robbins Flooring. Doors to the adjacent corridor should ideally have sound-lock vestibules, or at the least be proprietary acoustical lab-rated doors of STC50, minimum. Design HVAC system for NC25.

- **Studios for MFA Art / Faculty Art and Visitors**

These spaces, while not immune to intruding noise from the gallery should get a reasonable degree of isolation from potentially high sound levels there. The demising walls to the gallery should be 6" deep, batt-insulation-filled studs with 1 layer gypsum board (min.) on one side and two layers on the other. Plywood may be substituted for one of these two layers where required. No unique floor or wall surface finishes are anticipated, but for general reverberation control in these otherwise hard-finished spaces, consider acoustical lay-in ceiling tile, at least for budgeting purposes at this time.

- **Media Computer Studio**

Expect an "open plan", very flexible space requiring a reasonable degree of sound isolation from adjacent noise-generating spaces and a quite HVAC system. Expect a triple-wall assembly to any adjacent toilet and a double wall assembly to the (now shown) adjacent Theater Studio as described for the basement Conservation Room. Wall to the corridor should be as described for the Faculty Studios. Ceiling of conventional acoustical lay-in ceiling type, but selected with an NRC rating of 80 or higher. Doors should be an acoustical lab-rated variety selected for and STC50 minimum requirement. Budget for 1" thick fabric-wrapped glass fiber panels along approximately 50% of all wall surfaces interior to this room. Design for HVAC noise contribution of NC20-25.

- **Theater Lab**

Wall and door assemblies should be as described for the Media Computer Studio, with double stud construction for both adjacencies with the Black Box and the Media Computer Studio. The ceiling assembly should have at least one layer of gypsum board resiliently suspended from above and below this should be an acoustical lay-in ceiling with dedicated S.A. and R.A. ducts penetrating only the wall to the corridor. Budget for 1" thick fabric-wrapped glass fiber panels along approximately 50% of all wall surfaces interior to this room. Design for HVAC noise contribution of NC20-25.

- **Black Box**

Wall and door assemblies should be as described for the Media Computer Studio, with double stud construction for adjacencies with the Theater Lab, Control Room and Music Studio. The ceiling assembly should have at least one layer of gypsum board resiliently suspended from above and below this should be an acoustical lay-in ceiling with dedicated S.A. and R.A. ducts penetrating only the wall to the corridor. Budget for 1" thick fabric-wrapped glass fiber panels along approximately 50% of all wall surfaces interior to this room. Budget for a proprietary double-glazed, fixed window to the Control

room of STC55 construction. Design for HVAC noise contribution of NC20-25.

- **Control Room**

Wall and door assemblies should be as described for the Media Computer Studio with double stud construction for adjacencies with the Black Box and Music Studio. The ceiling assembly should have at least one layer of gypsum board resiliently suspended from above and below this should be an acoustical lay-in ceiling with dedicated S.A. and R.A. ducts penetrating only the wall to the corridor or Tech Closet. Budget for 1" thick fabric-wrapped glass fiber panels along approximately 30% of all wall surfaces interior to this room. Budget for a proprietary double-glazed, fixed window to the Black Box and Music Lab of STC55 construction. Design for HVAC noise contribution of NC20.

- **Music Lab**

Wall assemblies should be as described for the Media Computer Studio with double stud construction for adjacencies with the Control Room, Black Box and Corridor. The ceiling assembly should have at least one layer of gypsum board resiliently suspended from above and below this should be a 2'x2' pattern acoustical lay-in ceiling grid with gypsum board "tiles" substituting for one-half of the acoustical tiles. Budget for 1" thick fabric-wrapped glass fiber panels along approximately 30% of 3 wall surfaces interior to this room. One wall should have two sets of 100 sf of heavy theatrical velour on a hanging track for deploying (or not) depending on the acoustical needs at the time. Budget for a proprietary double-glazed, fixed window to the Control Room of STC55 construction. If there must be a door leading directly to a fairly public space, it should be a proprietary, acoustical laboratory-rated STC55 door as a minimum. Preferably, it would be a tandem STC45 door opening out to the corridor and a solid core, carefully gasketed door in a heavy frame swinging "in" to the Lab. Provide S.A. and R.A. ducts above the lay-in ceiling penetrating only the wall to the corridor or Tech Closet. Design for HVAC noise contribution of NC15-20.

- **Tech Closets**

No special acoustical requirements for this space.

**I. Audio-Visual Technology Requirements by
McKay Conant Brook Inc.**

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McKay Conant Brook Inc.**

BASEMENT LEVEL

- **Fabrication Lab:**

There is a need to perform digitization within this space. Tie lines installed between the Lab and the Technical Closet. Technical power should be supplied to this space.

GROUND FLOOR

- **Gallery / Atrium**

Performances might include both pre-planned and impromptu displays of ongoing research and development projects and/or artists work including elements of audio, video, theatrical, dance, interactive and performance art. Technical power and audio, video, data and fiber optic tie lines from several locations around the Gallery and Atrium spaces to the Technical Closet. Additional tie lines between performance area and an upper floor control position. Technology kiosks, connectable at several locations throughout the Gallery/Atrium area, would allow public viewing and possibly interaction with ongoing arts & media research and development projects. Technical power should be available throughout the space.

- **Outside/Entry**

Display cases require tie lines to the Technical Closet and technical power to support public viewing of ongoing arts & media research and development projects. Additionally, infrastructure from the Technical Closet to upper level balconies and to outdoor planters and light standards will allow performances and interactive displays of art & technology to be carried outdoors to the public.

- **Screening Room**

Utilized for showing analog and digital projection of video, computer and art. Traditional celluloid film will not be supported. A multi-channel surround sound system will support audio for video presentations. Main loudspeaker channels will be installed behind a perforated projection screen. The micro-perforated front projection screen will be 8'-0"x16'-0" and may incorporate a masking system to support multiple aspect ratios. A high-quality high-brightness and high-resolution digital projector utilizing DLP or D-ILA technology

will be provided. Surround loudspeaker infrastructure throughout the room's side and rear walls and ceiling to support expanding surround formats. A speech reinforcement system to support presentations and lectures. Ability to playback audiocassette, CD, DVD, S-VHS, and other analog and digital formats. Any requirement to display traditional slides will be fulfilled by portable equipment. Tie lines installed between the Screening room and both the Technical Closet and directly to the digital media studio. Technical power should be supplied to this space.

- **CAFÉ**

The café being a space for interaction amongst artists might include tie lines from the Technical Closet to allow digital art and media to be displayed on wall mounted flat screen plasma monitors or performed on a small scale. Additionally, "cyber" connections (wired or wireless) would allow patrons to gain access to e-mail and the Internet.

UPPER LEVEL

- **Faculty/MFA Dance Studios**

High-level multi-channel audio playback. Stereo program tracks plus "click" track as a minimum. Audio playback sources to include CD and cassette. Portable camera and VCR and monitor for record/playback. Tie lines installed between Dance Studio and Technical Closet. No formal performance use anticipated. Ceiling grid for lighting and camera placement flexibility. Supplied with clean Technical power.

- **Digital Design Studio (Theater)**

Small experimental area. Productions created in this studio will be ported to the Blackbox for formal presentation. Control shared with Blackbox. Tie lines to Technical Closet. Supplied with clean Technical power.

- **Blackbox Theater**

More formalized performance space. Will be used for limited music recording and performance. Heavy infrastructure to studios and technical closet. Multiple camera (up to 8) motion capture system for Dance. Infrastructure for CAVE- (computer aided virtual environment). No anticipated need for ties to outside media or remote truck locations. Supplied with clean Technical power.

- **Digital Media Studio (Music)**

Multi-channel sound recording, production and playback. Ethernet ties to addressable loudspeakers. Up to 32-channel/64-track digital audio workstation with control surface. Full MIDI control capabilities. Some media duplication. Minimum 16 channel (24 ideal) digital audio console. Possible VRAS/LCS or LARES electronic reverberation enhancement system. Separate Machine Room for isolating fan and other equipment noise from the Control Room. Separate Isolation Booth/Room large enough to record a small ensemble. Supplied with clean Technical power.

- **Art Studio**

Digital photo and video image acquisition, manipulation and production. Works with digital photos up to 4'x8'. Requires large format professional drum scanners and pigment printers/plotters. Requires color corrected daylight and tungsten lighting for display viewing. Projection of video and computer/web based animations and multi-media projects. Ceiling mounted projector and electric screen. Digital tie lines to Technical Closet and CMP Fabrication Lab. Supplied with clean Technical power.

- **Media Computer Studio**

Flexible space. Multiple discipline project collaboration. Multiple computer workstations. Direct ties to Theater, Music and Art Studios and to Technical Closet. Supplied with clean Technical power.

- **Faculty/MFA Art Studios**

Flexible space, no fixed technology. Requires tie lines to Technical Closet.

- **Technical Closet**

Main patching point configuration closet for analog and digital signal distribution throughout the Center. Multiple equipment racks and Technical power. Spare conduit and pathways for expansion. Twisted pair, digital coaxial, Ethernet and fiber optic tie lines. May include both passive and active switching components. Will NOT serve as the Center's MDF (main distribution frame) closet but will tie to it.

CULVER CENTER

19-Aug-02

Opinion of Cost Summary Sheet - **GROUP II EQUIPMENT ONLY**

BLACK BOX	\$ 230,000
Audio, video, control, intercom, 8-camera motion capture, cabling	
SCREENING ROOM	\$ 265,000
Multi-channel, digital projection, lecture/multi-media support, cabling	
GALLERY/ATRIUM	\$ 155,000
Technology kiosks, 50" & 60" plasma displays, cabling	
OUTSIDE-ENTRY	\$ 76,000
50" Plasma displays, cabling	
CAFÉ	\$ 42,000
42" Plasma displays, simple audio support, cabling	
FACULTY/MFA DANCE STUDIOS (2 total)	\$ 60,000
Audio playback, camera record/playback, cabling	
DIGITAL DESIGN STUDIO	\$ 65,000
Audio playback, video projection, 2-workstations, cabling	
DIGITAL MEDIA STUDIO	\$ 216,000
High-end Digital Audio Workstation + control surface, 50" plasma display, cabling, no VRAS/LARES	
ART STUDIO	\$ 175,000
Basic audio playback, video projection, drum scanner, large printer, 2-workstations, cabling	
MEDIA COMPUTER STUDIO	\$ 90,000
Audio playback, video projection, 4-workstations, cabling	
FACULTY/MFA ART STUDIOS (7 total)	\$ 25,000
Cabling only	
TECHNICAL CLOSET	\$ 105,000
Cabling, switching, routing, patching, racks	
CMP FABRICATION LAB	\$ 3,500
Cabling only	
GRAND TOTAL	\$ 1,507,500

The opinion of installed cost for each of the anticipated audio-visual systems outlined above are calculated in today's dollars and anticipate the installed cost of each system by a qualified professional subcontractor but do not include ancillary costs such as AC power, conduit, general contractor's mark-ups, escalation, contingencies or any other related costs. In order to account for A/V infrastructure (power and conduit) costs it is essential that the Electrical Engineer / cost estimator provide an estimate for this work.