

THE ARCHITECTS COLLABORATIVE, INC.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEMORANDUM

TO: John Scott, Kurt Rogness
FROM: Ron Gall
DATE: 6 May 1971
SUBJECT: Exit Unit Requirements

FLOOR	OCCUPANCY	AREA	SF/PERSON	POPULATION	UNITS REQUIRED
B	Mechanical	15,000 SFG	-	-	1 Stair 1 Horiz.
1	Educational	14,100 SFN	50 SFN	282	2 Stair 2 Horiz.
2	Assembly Educational	- 2,625 SFN 7,200 SFN	20 SFN 50 SFN	300 131 144	2 Stair 5 Horiz.
3	Educational	10,125 SFN	50 SFN	203	3 Horiz.
4	Educational	10,899 SFN	50 SFN	218	2 Stair 2 Horiz.
5	Office	19,200 SFG	100 SFG	192	2 Stair 1 Horiz.
6	Office	22,087 SFG	100 SFG	222	2 Stair 2 Horiz.
7	Office	22,087 SFG	100 SFG	222	2 Stair 2 Horiz.
8	Office Mechanical	2,400 SFG 10,200 SFG	100 SFG -	24 -	1 Stair 1 Horiz.

THE ARCHITECTS COLLABORATIVE, INC.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEETING NOTES

SUBJECT: CODE REVIEW
PRESENT: GUS SCHEFFLER, KEITH JOHNSON, ART YOUNG, KURT ROGNESS
TAC JOB: 70048 - UNIT F
DATE: 9 NOVEMBER 1971
BY: KURT ROGNESS

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The bulk storage of volatile solvents was questioned by Mr. Scheffler. The requirements become so constrictive so as to dictate its removal to a remote shed outside the building. K. Johnson is to study implications from a management point of view.

Storage of up to 10 gallons can occur below the fume hoods with a modification utilized in Unit A. This modification locates a grille in the front of the cabinet and has a 1-1/2" pipe penetration into the hood space above.

The functional characteristics of Unit F were explained by the architects. Mr. Scheffler agreed that floors 1-4 are to be classified educational with floors 5-7 office occupancy.

The use of a convenience stair connecting floors 1-4 was discussed. The stairway relieves a great deal of elevator traffic connecting the undergraduate teaching floors. The stair and open well accompanying it are surrounded by 2 hour ratings on floors 1 and 4. A 2 hour rated enclosure isolates the lobby and drug information space on floor 3 from the lab functions also on this floor. In addition 2 means of egress will be provided without using the lobby space. So effectively floor 2 space extends into the lobby of floor 3 and into a rated enclosure on floor 4. Lobby doors on floor 3 are to be magnetically held open as can others on floors 2 and 5.

Mr. Scheffler questioned the use of 2 perchloric acid hoods in the Medicinal Chemistry undergraduate teaching space, floor 3. These hoods are of doubtful use for other experiments. He also cautioned against horizontal runs.

Mr. Scheffler voiced some concern over the exiting of the undergrad Pharmacognosy lab, although there are two clear and well separated means of escape. In case of a large scale blow-out in a fume hood he would like to see a door installed with panic hardware leading into the department head's office.

THE ARCHITECTS COLLABORATIVE, INC.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEETING NOTES

SUBJECT: CODE REVIEW

PRESENT: A. WOLD (CHIEF, MINNEAPOLIS FIRE DEPARTMENT),
K. SHERRICK (STATE FIRE MARSHAL'S OFFICE),
G. SCHEFFLER (HEALTH, SAFETY OFFICER, U. OF
MINNESOTA), K. JOHNSON (PLANNING COORDINATOR)
A YOUNG (HSAE), R. GALL & K. ROGNESS (TAC)

JOB NO. 70048 - UNIT F

DATE: 22 DECEMBER 1971

BY: K. ROGNESS

The functional characteristics of Unit F were explained by the architects. It was agreed that floors 1-4 are to be classified educational with floors 5-7 office occupancy. Floors 1 and 2 occur below grade without windows and therefore will be sprinklered.

The provision of a convenience stair connecting floors 1-4 was discussed. The stair and open well accompanying it are surrounded on floors 1, 3 and 4 by two-hour rated walls, thus creating effectively only an extension of floor 2 down one and up two levels. Both levels two and three exit onto grade.

Chief Wold indicated that the standpipe on Unit A should be cross-connected with that on Unit F.

It was explained by the architects that the cores will be divided vertically into two mechanical and fire zones by a rated barrier at floor 5. This division met with approval.

The fire alarm system was discussed at some length. The zoning of the system is to be resolved by HSAE electrical engineers and Mr. Scheffler.

Mr. Wold requested that an additional standpipe and fire equipment cabinet station be placed at the east face of the elevator shaft.

It was re-affirmed that Unit F will comply with the NFPA Life Safety Code as have other units in the complex.

The following issues were raised as each floor was reviewed:

FLOOR 1 - This floor is to be sprinklered. All corridors are to be 1 hour rated (smoke enclosures). Electrical connections in milling areas are to be dust tight.

FLOOR 2 - The additional standpipe and hose station alleviated fire fighting question marks in the auditoria and classroom areas.

A 1 hour rated wall was added between the auditoria. Mr. Sherrick suggested a door be added near the front of the auditoria to connect the two and provide more remote exits. Another door will be added at the rear of Auditoria A. Entire floor will be sprinklered and corridors will be one-hour rated.

FLOOR 3 - A two-hour rated enclosure on this floor divides laboratory functions from the lobby and drug information center. A second means of egress was provided out of the large labs without using the lobby space.

FLOOR 4 - A two-hour rated enclosure separates the stair lobby space from the elevator lobby. A proposal by the architects to use a one-hour glass screen was discouraged.

A 1-hour enclosure was requested around the stock room by Mr. Sherrick.

FLOOR 5 - The architects explained their intent concerning the trash chute. It is to be contained in its own two hour rated enclosure. The hopper will be located behind a 2 hour rated door but space will not be provided to accommodate a worker between the door and hopper at Mr. Scheffler's insistence. Mr. Sherrick then suggested that a one hour rated enclosure be provided around the receiving rooms to contain smoke in case of fire in the chute.

FLOOR 6 - The solvent storage space is to be surrounded by a 2 hour rated enclosure. A CO2 system is to be provided.

The hydrogenation lab is to be surrounded by a 2-hour rated enclosure. Fixtures and outlets are to be explosion-proof.

It was suggested that the Chromatography Lab be surrounded by a 1 hour rated enclosure.

FLOOR 7 - It was suggested that dust tight outlets be used in the milling space off the drying and milling lab.

It was decided by the client that explosive gases will not be used in the animal suite.

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Code Review
11 January 1972
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FLOOR 8 - Space on this floor is basicly for mechanical equipment except for the greenhouse. Access to the roof was discussed and approved.

In addition to these meeting notes we are forwarding reduced sets of the drawings. Please review and report to us any further problems or discrepancies. We are beginning contract document preparation and will consider code compliance at this point resolved if we do not hear from you.

KR/bb

CC: A. Wold
K. Sherrick
G. Scheffler
K. Johnson
P. Maupin

THE ARCHITECTS COLLABORATIVE Inc.

MEETING NOTES

DATE: 22 October 1975

LOCATION: Powell Hall

PRESENT: Dean Ramey, Paul Sodergren, Paul Maupin, Gary Jaworski, Kurt Rogness, John Scott, and Don Mawha

PROJECT: Unit F Redesign

SUBJECT: Nursing Program Review

1. The student admissions and records functions involve heavy student traffic, particularly during registration. These areas need not be adjacent to the other administrative areas and could be located on a lower level, possibly on Floor 1. The students' actual records will be kept in the Dean's area for security, but an abbreviated computer printout of student performance will be kept in the admissions area. A computer terminal and keypunch will be required, which could be shared with Pharmacy.
2. The Dean's suite and related areas might very well be located on Floor 5 together with faculty lounge and conference areas. This would facilitate communication between nursing and pharmacy administrations and would allow for some sharing of facilities such as nursing's lounge and conference areas and pharmacy's autotutorial and educational prep areas. Xerox facilities might also be shared. Research support and continuing education would not necessarily have to be located within the Dean's suite.
3. The main faculty office floor should also house a secretarial pool (10 desks) and an additional projects support area, plus duplicating and supply rooms.
4. The nursing skills floor (Floor 4) will require a reception and waiting area near the elevators. Patients (or interviewees) will number up to 20 - 30 at a time. The receptionist will coordinate scheduling of interview and exam rooms and will direct incoming patients to the proper areas.
5. The helping relationships areas will include a large conference room divisible into two smaller areas and a combination of small group and individual interview rooms of various sizes. The individual rooms will double as student study and autotutorial rooms. Fixed and moveable cameras and sound recording equipment will be used extensively for recording and subsequent playback of student/patient interaction. A control room for multichannel videotaping should be centrally located in this area. Audiovisual materials will be issued to students from this room. An audiovisual work area is also required.

6. The health assessment area will have a series of medical exam rooms and an observation room from which a group of 10 or 15 students and staff can observe at least 2 of the exam rooms.
7. The nursing skills laboratory is seen as a facility with approximately 20 typical bed stations plus 3 critical or intensive care stations. Typical bed stations will be used to learn basic nursing skills such as bed bathing, taking temperature and blood pressure, etc. Students will work either with patients or with each other. Lab periods of 2 hours will be scheduled for groups of 20 - 40 students at a time. Intensive care areas will be equipped for teaching techniques in renal analysis, cardiac monitoring, etc. The nursing skills lab should be divisible into at least two areas. Beds will sometimes be moved out of one area to provide room for special demonstrations. There will be considerable movement of students, staff, and patients between the nursing skills lab and the other facilities on Floor 4.
8. The Child Care Facility shown in the Grant Application is no longer included as a separate area on Floor 4.
9. The addition of reception and waiting space, public toilets, and discrete corridors between exitways will reduce the assignable area on Floor 4. TAC has requested that the nursing staff prepare a complete quarterly schedule for the undergraduate curriculum as a means of evaluating the actual minimum space requirements for the various teaching programs. This will make it possible to analyze the utilization levels of all teaching areas so that available teaching space may be organized for maximum efficiency of use. If possible this schedule should be completed prior to the next meetings, beginning on Wednesday, November 5th.

D. B. Mawha

MEETING NOTES

DATE: 22 October 1975

LOCATION: Powell Hall

PRESENT: Dean Weaver, Dean Ramey, Andy Johnson, Paul Sodergren,
Paul Maupin, Gary Jaworski, Kurt Rogness, Duane Blanchard,
John Scott, Don Mawha

PROJECT: Unit F Redesign

SUBJECT: General Review of Redesign Effort and Procedures

1. John Scott reviewed the overall schedule for redesign of Unit F to incorporate the nursing school program in addition to pharmacy. This calls for completion of design development by February 1976 and completion of contract documents to permit bidding of the general contract in the fall of 1976, with early contracts for excavation and structural steel being bid several months earlier.
2. TAC and HSAE are proceeding on the following assumptions:
 - a. The project budget is limited to the amounts stated in the 1975 Grant Applications. This budget has not been evaluated by TAC/HSAE. If the proposed building volume cannot be achieved within the budget, That volume may have to be adjusted.
 - b. Since construction prior to 1 January 1975 is not contemplated, the new State Energy Conservation Code will apply to Unit F. TAC and HSAE are in the process of investigating the effects of the Code on Unit F redesign.
 - c. There will be early contracts for excavation and structural steel. The award of early contracts prior to July 1976 will satisfy the University's commitment to ROFEC to commence construction within one year of funding.
 - d. The site and the funds will be available for commencement of early contracts.
3. Early planning decisions for the University were discussed, including verification of programmed areas for nursing and pharmacy, verification of the budget in terms of new code requirements, expansion of programmed area and escalation of building costs. Also needed is an identification of the scope of redesign including agreement on general building configuration and floor assignment and an identification of areas requiring extensive design or redesign input. Progress in preparation of ECS documents is contingent on these decisions.

4. There followed a discussion of the overall project time schedule, identification of activities and time schedule for the design development phase, and the list of drawings, equipment layouts and other items which will be included in the design development package (see attached sheets.)
5. Procedures for communication between the architects and the University were next discussed. Kurt Rogness will act as the architects primary contact with the University and will coordinate the transfer of information between TAC and HSAE and the University. Gary Jaworski will act as his counterpart for the University. All requests for meetings, requests for information and the dissemination of meeting notes and other information will be channeled through these two people. Keith Johnson will work with TAC in Cambridge and will consult directly with pharmacy and nursing when appropriate. TAC will keep notes on meetings with Keith which will be forwarded to the University through the planning office.
6. The following are some initial findings based on the continuing evaluation of Unit F redesign by TAC/HSAE.
 - a. Unit A structure was designed to permit Unit F to extend to Floor 9 plus a mechanical penthouse.
 - b. Complete structural redesign is required because of the increase in building volume and the more stringent live load requirements of the uniform building code.
 - c. Compliance with the uniform building code will require sprinklers throughout the building and the possible addition of another stairway.
 - d. Compliance with the State Energy Code will not affect design of the building exterior but will require some redesign of mechanical and electrical systems, resulting in some increases in cost.

D.B. Mawha

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

DESIGN DEVELOPMENT ACTIVITIES FOR REDESIGN OF UNIT F

1. University assign planning representatives for nursing and pharmacy - 1 coordinator and departmental reps for each.
Function: Define physical requirements in terms of rooms, area, occupancy, activities, services, equipment, other physical requirements, review plans and equipment layouts, approve same.
2. TAC and HSAE evaluate planning constraints - budget, structural capacity Unit A foundations, mechanical systems limitations vs. increased building volume, new code requirements, circulation limitations vs. increased occupancy, design implications of increased building volume vs. Unit A massing, retention of church, schedule constraints such as access to the site and Unit B/C construction.
3. Initial meetings TAC/HSAE with University planning representatives. With the 1975 grant applications as a starting point:
 - a) Determine to what extent the space tabulations and floor plans in the grant application reflect the true requirements of nursing and pharmacy. i.e. Will spaces in the building actually be assigned and used as the grant applications imply?
 - b) Determine (for pharmacy) which areas can be retained as is or with minor revision.
 - c) Determine which are "hard" and "soft" areas if planning constraints require modification of program.
 - d) Clarify functional requirements of specific areas in terms of numbers of people and types of activities to be accommodated, frequency of utilization, and possibilities for increased utilization through changes in scheduling or assignment.
 - e) Investigate possible alternative arrangements of major program elements, and possible shared use of some areas.
 - f) Identify areas which will require detailed planning and/or equipment layouts.
4. TAC/HSAE evaluate program requirements vs. planning constraints and make recommendations to the University to resolve problem areas.
5. TAC prepare floor plans based on evaluation and recommendations for initial review with the University.

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	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP
PRELIM													
DESIGN													
CONTRACT DOCUMENTS													
U/M USER													
U/M B.P.													
PROFEC													
BOX													
ECS													
GEN. CONST													

PRELIM
DESIGN

ECS

CONTRACT DOCUMENTS

U/M
USER

U/M
B.P.

PROFEC

BOX

ECS

GEN.
CONST

GEN

GEN

S

S

FOOTINGS

PROUREMENT

FABRICATION

BID

GENERAL CONST TO ERECT

ERECTION



PRELIMINARY SCHEDULE

UNIT F

THE ARCHITECTS COLLABORATIVE, INC. / HEALTH SCIENCES ARCHITECTS & ENGINEERS
 2000 ST. JAMES ST. 1975

6. University representatives prepare or update lists of fixed and movable equipment for all areas.
7. TAC prepares or updates equipment layouts for all rooms which contain substantial amounts of fixed and movable equipment. Equipment layouts will not be required for areas such as offices, classrooms, conference rooms, etc. Where equipment is primarily non-technical, special requirements for such areas should, however, be identified by the University.
8. Concurrently TAC will revise floor plans to reflect initial review comments and input generated by equipment layout studies.
9. Second round meetings with University representatives to review revised floor plans and equipment layouts.
10. Follow up meetings will be arranged as required to complete the planning process and obtain user approvals of floor plans and equipment layouts.
11. Cost Control Activities
 - a) TAC/HSAE evaluate grant application cost estimate.
 - b) Prepare periodic estimates relating to specific systems or code requirements
 - c) Prepare cost estimate at the conclusion of the design development phase.
 - d) Prepare a list of possible deductive alternates.

UNIT 7 SCHEDULE	OCT	NOV	DEC	JAN 1976	FEB
PROGRAM SELECTION & UPDATE - SPACE					
PROGRAM SELECTION & UPDATE - EQUIP					
REVIEW EQUIP PLANS					
REVIEW EQUIP LAYOUTS					
APPROVE FLOOR PLANS					
APPROVE EQUIP LAYOUTS					
FINAL DESIGN					
DC					
CODE REVIEW					
STUDY DESIGN IMPLICATIONS					
PREPARE FLOOR PLANS					
PREPARE EQUIP LAYOUTS					
PRESENT FLOOR PLANS					
PRESENT EQUIP LAYOUTS					
PREPARE FLOOR PLANS					
REVIEW EQUIP LAYOUTS					
SECURE PLAN APPROVAL					
SECURE EQUIP APPROVAL					
FULL OAD REVIEW					
SAFE					
CODE REVIEW					
STUDY DESIGN IMPLICATIONS NEEDED FOR					
PARTICIPATE IN INFO GATHERING					
PARTICIPATE IN DESIGN					
PARTICIPATE IN REVIEW PROCESS					
CONTRIBUTANTS					

DEFINITION OF DESIGN DEVELOPMENT PHASE - UNIT F REDESIGN

The following is a list of the documents which will be prepared by the University and the Architects during the Design Development phase. Since this is a redesign, the planning effort should concentrate on retaining and updating existing work wherever possible, and on identifying and resolving those planning considerations which represent changes from the original design. The list of documents will consequently be somewhat abbreviated in comparison with the original Design Development package.

I. ARCHITECTURAL

A. Drawings

1. Site plans. (1" = 40"). Half size reproductions of existing conditions and site development drawings from the original contract documents will be revised to show new conditions such as the retention of the Lutheran Church and its incorporation into the plaza design.
2. Floor plans. (1/16" = 1'-0"). Half size drawings derived from the original contract documents will be used. New floors and areas of major redesign will require new drawings. Reproductions of existing drawings will be used where revisions are minor.
3. Equipment layouts. Plans will be provided for spaces housing significant fixed or movable equipment. New drawings will be on half size sheets at a scale of 1/4" = 1'-0". Where changes to existing equipments layouts are minor, reproductions of the existing floor plans will be used and revised as necessary.
4. Elevations and sections (1/8" = 1'-0") elevations and sections on half size sheets will show exterior materials, the general exterior and interior configuration of the building, and its relationship to adjacent buildings.
5. Coded sets of floor plans (1/16" = 1'-0"). Reduced sets of floor plans will indicate the following information:
 - a. fire zones
 - b. occupancy classifications
 - c. sprinklered areas
 - d. floor finishes
 - e. partition types
 - f. ceiling types
 - g. special environmental conditions
 - h. key to equipment plans

The primary purpose of these drawings will be to identify new code requirements as they affect the redesign.

6. Systems drawings. Drawings of building systems will be limited to showing modifications required because of changes in the program or the building codes.

B. Outline Specifications

1. Outline specifications will be prepared to identify modifications required because of changes in the program or the building codes.

C. Fixed and Movable Equipment Lists

1. Fixed and Movable Equipment Lists are to be prepared or updated by University representatives for all spaces.

II. STRUCTURAL

A. Drawings

1. Structural drawings will be prepared to indicate revisions in the structural design required to accommodate changes in program and building codes.

B. Outline Specifications

1. Same as above.

III. MECHANICAL

A. Drawings

1. Mechanical systems drawings will indicate redesign to accommodate changes in program and building codes.

B. Outline Specifications

1. Same as above.

IV. ELECTRICAL

A. Drawings

1. Electrical systems drawings will indicate redesign to accommodate changes in program and building codes.

B. Outline Specifications

1. Same as above.

A list of specific structural, mechanical and electrical drawings to be included in the Design Development package will be developed in consultation with the engineers.

V. COST ESTIMATE

- A. A Design Development cost estimate will be provided at the completion of that phase.

MEETING NOTES

DATE: 28 October 1975

PLACE: TAC, Cambridge

PRESENT: Keith Johnson, John Scott, Herman Zinter and Don Mawha

PROJECT: U/Minn Unit F Redesign

SUBJECT: Review of Pharmacy Areas

Keith was briefed on the meetings which took place in Minneapolis the previous week. It was suggested that Keith review the scheduling of the teaching labs and classrooms since Pharmacy has reduced the number of labs from five to three.

Unit F was reviewed on a floor-by-floor basis with the following comments noted:

Basement: It is possible that previously unexcavated spaces next to the auditorium can be made available for use but the space may be required for additional mechanical equipment because of the increase in building size.

Floor 1: No major changes in the Grant Application Plan are foreseen. Corridors will be required in the area assigned to nursing, education and research. They should be located so as to provide access to the front of the auditoriums through the prep and storage areas. The Mechanical Shop should have a corridor location.

Floor 2: Grant Application layout is generally ok except that the Pharmacy lab and supporting areas could be as shown in the original plans with 72 lab stations instead of 48. In addition to lab-lecture courses, this lab would be used by students on a free time basis. The parenteral lab could be relocated at this level in its original grid location with little or no change in layout.

Floor 3: Keith sees both of the labs on this floor with 48 stations, using a layout similar to the former Pharmacognosy teaching lab on Floor 4. The former dispensing lab would become a Pharmacokinetics lab which might also be used for the Pharmacy Doctoral Program. Support areas and the drug information center could be combined in a location close to the service elevator.

Floor 5: Pharmacy administration and educational resources areas could remain essentially unchanged. If nursing administration is located on this level, the pharmacy administration teaching and graduate facilities will be relocated on what is now Floor 8, the two functions being virtually equal in area.

The Architects Collaborative Inc.
Meeting Notes
Review of Pharmacy Areas
28 October 1975

Floor 6: The entire block of lab support areas previously located on Floor 4 could be relocated on Floor 6 in the block of interior space east of the elevators with the single exception of the Pharmacognosy prep room. Except for the counting room, lab support facilities previously shown in this block of space could be omitted. There would still be 2 or 3 standard laboratory modules in this block. The support areas behind the elevators should remain essentially unchanged. Functions relocated from Floor 4 should be arranged so as to retain the basic flow of glassware and other materials from the receiving and storage areas through media preparation, transplanting, and fermentation areas, and back to the service elevator.

Floor 7: The entire floor could remain unchanged except for the addition in the drying and extraction labs of some of the manufacturing equipment previously located on Floor 1. The faculty lounge might be converted to additional laboratory space, particularly if pharmacy and nursing have a shared lounge facility elsewhere in the building.

Alternative ways of stacking the top 4 floors were discussed. Keith sees advantages to both pharmacy and nursing if the sixth and seventh floors are switched with the eighth and ninth floors respectively. TAC plans to discuss this and other options with pharmacy and nursing at our next meeting.

D. B. Mawha

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UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

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UNIV. OF MINN.
HEALTH SCIENCE
PLANNING OFFICE

MEETING NOTES

DATE: 5 November 1975

TAC JOB: 75036, Unit F Redesign

SUBJECT: Nursing Skills Program

PLACE: Powell Hall

NOTES BY: Herman Zinter and Don Mawha

PRESENT: Dean Ramey, Paul Sodergren, Sheila Corcoran, Helen Hansen, Marie Albrecht, Linda Grummer, Ken Burns, Gary Zaworski (U/M) Don Mawha, Kurt Rogness, Herman Zinter (TAC/HSAE)

The purpose of the meeting was to define program requirements for the teaching spaces in Health Assessment, Helping Relationships, and Nursing Arts Laboratories. The following items were discussed:

ITEM

ACTION REQUIRED

1. Functional spaces in the nursing skills facilities are for instructive rather than for clinical purposes. Both students and volunteer patient-clients are employed as subjects on a simulation basis.
2. Level 4 is presently assigned to Nursing Skills. The small interview and conference spaces programmed for Helping Relationships should be convenient to both Health Assessment and the Nursing Arts Laboratories. Storage and preparation rooms should be adjacent to nursing arts and the service elevator. Central reception functions should be adjacent to the passenger elevators.

ITEM

ACTION REQUIRED

3. TAC presented plan studies for the single and triple exam rooms in Health Assessment. It was agreed that the single exam room should have an arrangement similar to the typical exam spaces in Health Science Units A and B/C, and include a handwashing sink. These rooms would be occupied by a student, client and instructor. It was noted that student stations in the triple exam rooms would not be identical to the single spaces in the arrangement of sinks and equipment, the access to corridors, and the conditions for acoustic and visual privacy. It was then suggested that space for one of the triple exam rooms be reallocated as three single rooms.

Exam room equipment will include exam light, sink, exam table with storage drawers or compartments, small write-up desk with side chair and sphygmomanometer nearby. Cubicle curtains are not required in single exam rooms. More single rooms would be preferable.

4. The observation room in Health Assessment is to be adjacent to one or more of the single and triple exam rooms for viewing through one-way mirrors. It would also serve as a conference room for 10-15 adults and as a playroom for children with direct observation from one of the adjacent exam rooms. Equipment would include an audio-visual screen and a portable x-ray view panel. Storage for toys, chairs and tables is required.

5. TAC presented several plan studies for typical acute care, intensive care and post anesthesia recovery bed stations. Twenty (20) bed stations have been programmed for the Nursing Arts Laboratory in addition to three (3) simulated intensive care stations. Present teaching facilities include ten (10) bed stations and are considered to be overutilized in that stations are not sufficiently available to students for

The utilization of the triple exam rooms will be reevaluated by Nursing as to the number of spaces required, the arrangement of equipment, (particularly fixed items such as sinks) and the flexibility of use as conference and observation rooms.

The dual utilization of this room for both group and observation functions will be reviewed by Nursing in conjunction with the flexible use of a triple exam room as a playroom for children.

ITEM

ACTION REQUIRED

practice on a non-scheduled basis. An arrangement in which bed stations are aligned back to back along two interior service walls is considered acceptable. The ratio of instructor to students is 1:10. During class sessions, half of the students assume the role of patients. It was suggested that lockers for clothing, handwashing sinks and storage for small items of equipment could be incorporated into a thickened service wall near individual bed stations. Curtains at bed stations are required. Folding partitions would allow the center 10 bed space to be used for a scheduled class while the 5 bed spaces on either side were being used for unscheduled practice. Some beds should have air and suction at the bedhead.

6. Additional teaching facilities within the Nursing Arts Laboratory should include stations for medicine preparation, charting, nurse-call communication, patient toilet with bedpan washer, and bathroom with patient-lifting apparatus. Equipment will include beds, traction frame, bedside and overbed tables, respirators, crash cart, monitoring equipment, suction equipment, cribs and bassinets, portable tape recorders. Storage for large infrequently used items could be at a lower level of the building.
7. TAC presented plan studies for interview, intermediate and group rooms in Helping Relationships. Rooms would be furnished for conference, informal seating and children's play functions at various times. Sections of 12-14 undergraduate students meet in group rooms at the beginning and end of sessions and are otherwise divided among three or four intermediate rooms. Fixed or portable cameras would be incorporated into each room, including the interview rooms, to record facial expressions and hand motions. A central control and work room is required for audio-visual recording equipment, cassette storage, and media preparation.

TAC/HSAE

Meeting Notes, 5 November 1975

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ITEM

ACTION REQUIRED

Equipment will include folding tables and chairs, projection screens, fixed TV monitors. Carpeting would be highly desirable. Access to a one-way mirror setup will also be required for observing children and staff interaction.

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HEALTH SCIENCES EXPANSION

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HEALTH SCIENCE
PLANNING OFFICE

MEETING NOTES

DATE: 6 November 1975

TAC JOB: 75036, Unit F Redesign

SUBJECT: Nursing Research Space

PLACE: Powell Hall

NOTES BY: Herman Zinter and Don Mawha

PRESENT: Dean Ramey, Paul Sodergren, Ida Martinson, Karen Brand, Gary Zaworski (U/M)
Don Mawha, Kurt Rogness, Herman Zinter (TAC/HSAE)

The purpose of the meeting was to define functions and program requirements for space allocated to Nursing Research. The following items were discussed:

ITEM

ACTION REQUIRED

- | | |
|---|---|
| 1. Reference was made to memoranda from Ida Martinson, dated 9 and 15 October 1975, regarding proposed research programs, room characteristics and equipment requirements for spaces assigned to Nursing Research at Level 1 in Unit F. A plan diagram of the controlled-environment room was presented for discussion. | TAC/HSAE will arrange a future meeting to discuss the program requirements for Nursing educational development space on Level 1 and laboratory space nearby the animal quarters on Level 9. |
| 2. A distinction was made between physiological research involving controlled environments and other psychological-social-behavioral research. The projected program will include both categories. | |
| 3. Research support spaces are preferably located near faculty offices on Levels 6 and 7. Support facilities include 5 staff desk stations, a secretarial-reception space, a work rooms, a reading room or resource center, a memory-typewriter and | |

ITEM

ACTION REQUIRED

and a computer terminal. This terminal will be for research use and not for school admissions and records.

4. The controlled-environment laboratory, 18' x 24' is organized in three zones, including a 10' x 10' isolation room, a larger multipurpose test space, and a support zone for control, observation, entrance vestibule, storage, toilet and dressing rooms. Doors between corridors and test spaces need to be approximately 4'-0" wide to accommodate beds. The isolation room is to be an equivalent of the 400-A Series of Industrial Acoustics Co. and provide for acoustic, radio-frequency and electro-magnetic isolation. Experiments are expected to be conducted during a full day, but not over night. Equipment will include two patient bed stations with air, suction, and oxygen outlets a portable treadmill, EKG and EEG, portable AV and TV equipment, fixed monitors for CCTV and patient viewing of program TV.

The Planning Office (U/M) will investigate the utilization of environmental laboratory facilities in Physiological Hygiene, Health Science Unit A, to determine the possibilities for joint use by Nursing Research.

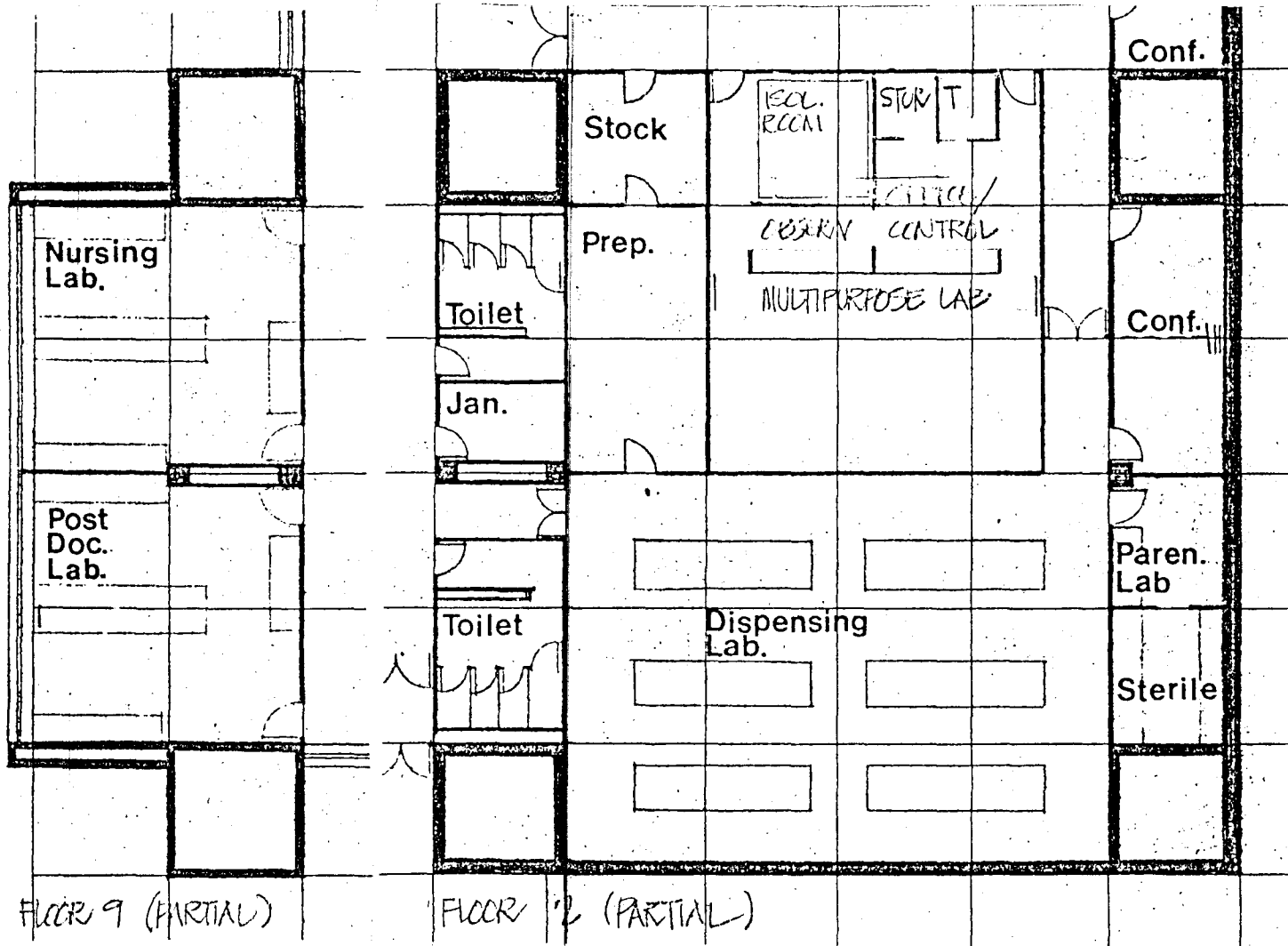
5. The behavioral studies laboratory, 18'x24', will consist of temporary test spaces which simulate hospital rooms or home situations. Only nominal environmental control is required. These spaces are similar to those in Nursing Skills, but undergraduate class scheduling, duration of testing and type of monitoring equipment prevents sharing of facilities. The support zone includes space for a technicians office, storage, control, observation, compact kitchen appliances and sink. The support spaces for both laboratories can be shared to the extent that control and observation operations do not interfere with simultaneous test procedures. This lab will also require fixed TV monitors.

TAC/HSAE will arrange a future meeting to discuss specific equipment and environmental criteria for both laboratories.

UNIT F REDESIGN /
DETAILED PROGRAMMING

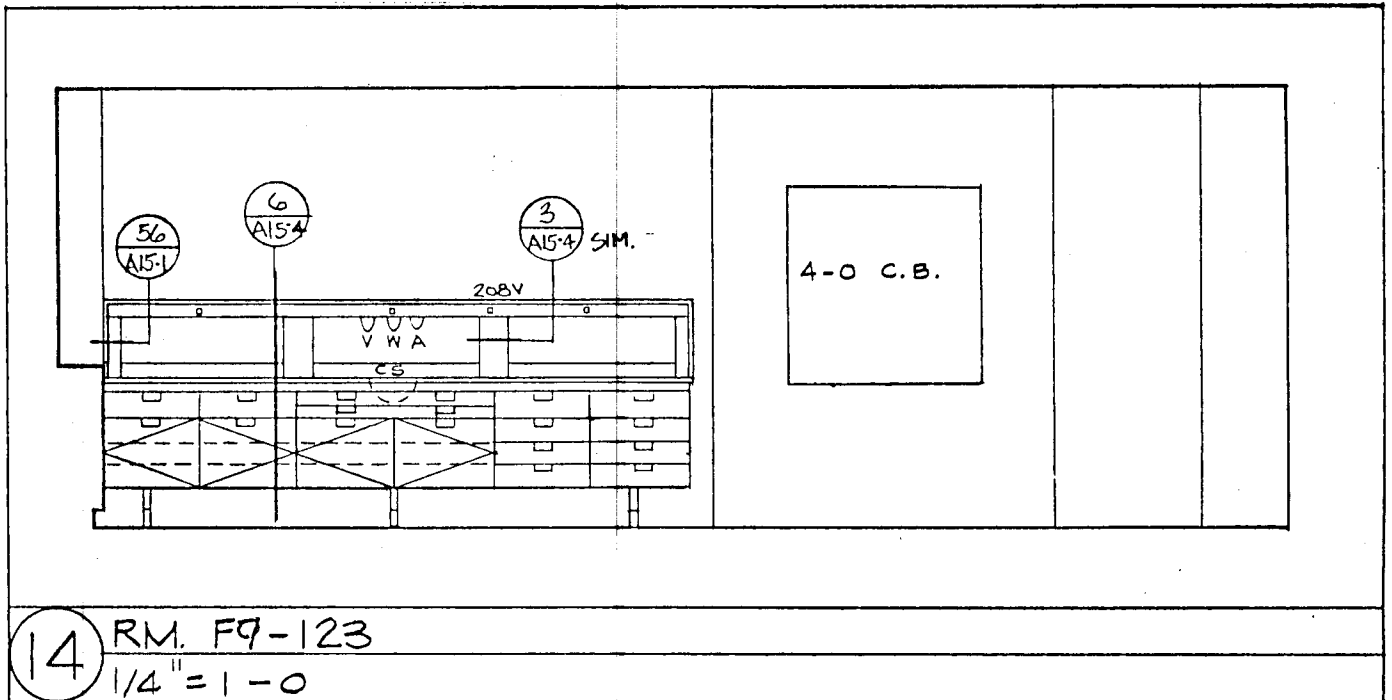
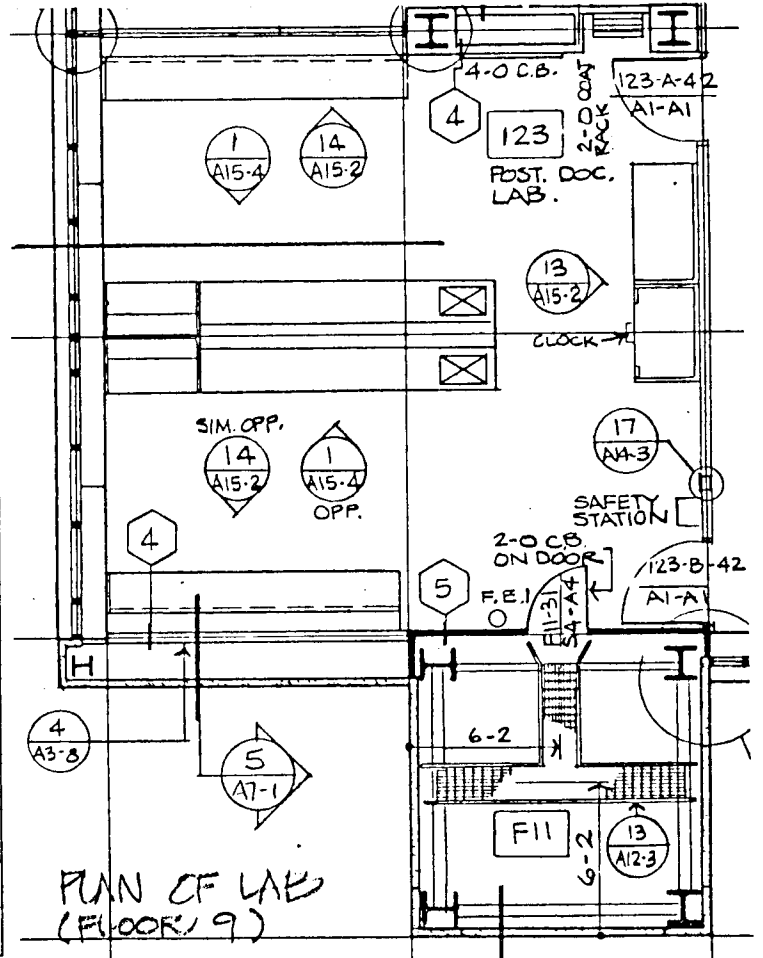
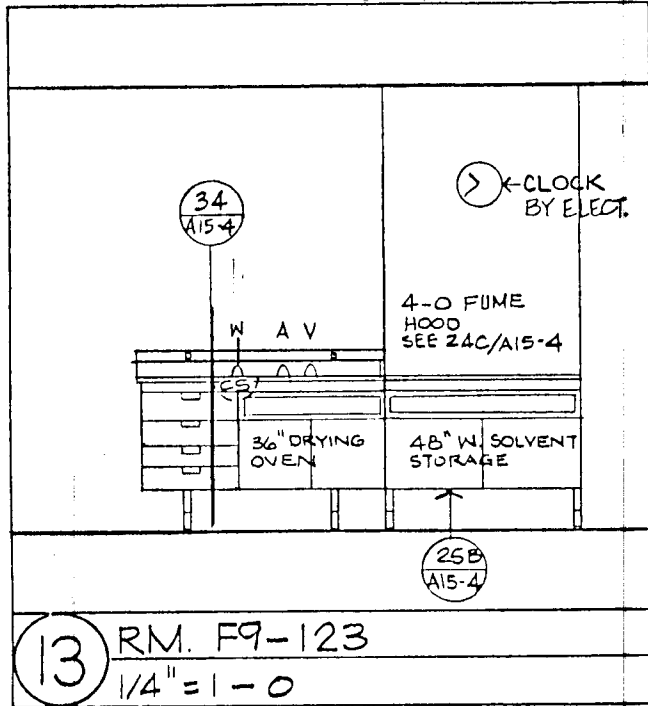
NURSING RESEARCH & EDUCATIONAL DEVELOPMENT

Floor Plans (1/16" = 1'-0")



Summary of Spaces

	SPACE	AREA	NO.	TOTAL
Floor 9	NURSING LAB	600	1	600
Floor 2	ECOLATION ROOM (PREPARE)	125	1	125
	MULTIPURPOSE LAB	515	1	515
	OFFICE / CONTROL	150	1	150
	OBSERVATION	75	1	75
	TOILET	35	1	35
	STORAGE	35	1	35



UNIT F REDESIGN,
DETAILED PROGRAM

Standard Units Studio

THE ARCHITECTS COLLABORATIVE, INC.
HEALTH SCIENCES ARCHITECTS & ENGINEERS, INC.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION, UNIT F

MEETING NOTES:

DATE : 14 November 1975
TAC JOB : 75003
PROJECT : Unit F
 College of Pharmacy
 School of Nursing
SUBJECT : Preliminary Code Review
NOTES BY : Kurt Rogness
PRESENT : Gene Kogl, Gus Scheffler U/M
 Ernest Ibs, Kurt Rogness HSAE

The purpose of the meeting was to discuss Code Provisions which may effect replanning now in progress. The following items were discussed:

1. A packet of information on Unit F, herein attached, was transmitted by the Architect to Messrs. Kogl and Scheffler. This information included an updated section showing programmatic organization, a set of grant application plans (currently out-of-date) and the Architects code review work sheets.
2. It was agreed that the building will be generally classified as F-2 office occupancy and as such will benefit from the provisions of Chapter 18 for high rise buildings. Sub-occupancies occur on Floors 2, 3, 8 and 9. On Floors 2 and 3 large Auditoria and Classrooms will be designated B-3 assembly space. On Floors 8 and 9 Faculty research space shall be divided from educational labs and support by a 1-hour partitions. Essentially this is a compartmentation technique to separate spaces which use flammable liquids.
3. Exit requirements of the floors were discussed. One stairway and a horizontal exit (two exits wide) are the legal means of egress from all floors except at Floors 2 and 3 which exit to grade. The Architects expressed concern that the aggregate total of occupants on a given floor plus 50% of the floor above and 25% of the second floor above that exceeded in some case 500. in which case a third exit stair would be required. Gus Scheffler pointed out (quite insightfully) that the horizontal exit to Unit A does not create an aggregating load on a particular stair but is dispersed horizontally. Therefore a third exit stair will not be required.
4. Two alternatives were discussed for providing smoke lobbies adjacent to the elevators. The first located the smoke lobby behind the bank connected to the combination passenger freight elevator which is the only elevator serving all floors. The second alternative used the corridor along the front face of the elevator bank as a smoke lobby and thus connected to all three elevator cabs.

Problems with the first alternative centered on the multiple use demanded of that space. Specifically the charging of the trash chute, the unloading of freight and the free access by the handicapped and fire crews in an emergency appeared to demand a great deal of the area. The second alternative appeared in the meeting to be somewhat more workable. The Lobby would have to include the entire concourse on the Second Level even though the space connects with another smoke lobby on the Third Level. This space would be separated by smoke doors from adjacent spaces and corridors. The lounge furniture in the concourse lounge should be non-combustible type.

5. The inclusion of Carrel, Lounge, and Reception spaces and furnishings within the exit corridor system was challenged. Gus indicated that it should be separated from the corridors by non-combustible wall construction.
6. A fire management room must be provided on Floor 3 accessible from the exit corridor system and close to the elevators if possible.
7. The Architects are currently preparing approaches to fire management and to conformance with the State Energy Code. Memoranda will be forthcoming in the next two weeks and further meetings to discuss these issues will be set up shortly.

cc: Gene Kogl
Gus Scheffler
Gary Zaworski
John Scott

THE ARCHITECTS COLLABORATIVE, INC.
HEALTH SCIENCES ARCHITECTS & ENGINEERS, INC.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION, UNIT F

MEETING NOTES:

DATE: 17 November 1975

SUBJECT: School of Nursing Administration Area

TAC JOB: 75003

NOTES BY: Kurt Rogness

PRESENT: Dean Ramey Sheila Corcoran U/M
 Georgia Parks, Eli Ndosi U/M
 Gary Zaworsky U/M
 Kurt Rogness HSAE

The purpose of the meeting was to tour Unit A to examine planning principles which will be extended into Unit F. In addition spaces with functional parallels to those in nursing were looked at in detail; in particular the Dentistry Administration Area. The following items were discussed following the tour:

1. Dentistry Administration is divided into two areas, one for student and business affairs and the other related to the activities of the Dean and assistant Deans. The clerks in the student admissions areas have collateral duties which relate to the assistant Deans as well. Space is provided for waiting as well as for writing (for filling out forms). The space though quite modest is quite adequate to process registration for 1000 students. It was noted, however, that the Dental curriculum is highly standardized while nursing's is not. The Dental Schools admissions clerk reported that scheduling techniques have eliminated long lines and new strategies are constantly being developed to improve their registration process.
2. The Architect recommended that the admissions and deans areas be combined and located on the 5th level with separate entrances similar to the Dental plan. His reasons included the following:
 - a. More efficient space utilization (no duplication of records and copying space).
 - b. More efficient manpower sharing with the administrative secretarial pool.
 - c. Location of Floor 5 is more prominent for students than on Floor 1.

- d. Proximity to faculty located on Floor 6 (whether students go up or faculty come down for group or individual counseling sessions.
 - e. Research and educational development space would have to be located on Floor 5 if displaced by admissions on Floor 1.
 - f. The problem of crowding and disruption to Floor 5 could be overcome by scheduling strategies which would limit the group of students waiting to 20 at any one time. Furthermore the waiting area could be programmed to handle a group of this size without spilling into the corridor.
3. Nursing School concerns regarding this proposal center on building circulation and identification of admin.functions by students & visitors. Dean Ramey felt that the location on Floor 5 for student admissions made a great deal more sense if circulation to this floor was improved. This implies the continuation of the stair well to the 5th level or if it can be justified by traffic projections the substitution of escalators. Currently the floor is dependent on the elevators for vertical movement. The development of an intensive administrative use of Floor 5 will generate more traffic to this level than was evident when only the Pharmacy School Administration occupied this level.

Dean Ramey felt that the circulation pattern was more important in directing students and public to the two separate reception points than signage. Care must be taken to make the dual entry work well for those unfamiliar.

4. It was concluded from these discussions that the Architect should proceed to develop schematics which locate both areas of Nursing Administration on Floor 5. In doing so the Architect shall attempt to answer the concerns of the Nursing School as it relates to vertical circulation and clarity of functional identification. The Architect will review the circulation criteria with the vertical transportation consultant, Lerch, Bates within the next few weeks.

cc: Gary Zawarsky
Dean Irene Ramey
John Scott

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

RECEIVED
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HSAE

MEETING NOTES

DATE: 19 November 1975

TAC JOB: Unit F Redesign, TAC Job No. 75036

SUBJECT: School of Nursing Teaching Schedule

PLACE: Powell Hall

NOTES BY: Don Mawha

PRESENT: Dean Ramey, Sheila Corcoran, Paul Sodergren, Gary Zaworski (U/M)
John Scott, Herman Zinter, Don Mawha, Kurt Rogness (TAC/HSAE)

UNIV. OF MINN.
HEALTH SCIENCE
PLANNING OFFICE

HSAE	
REC'D	1/6/76
ARCH	
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TAC	
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ITEM

ACTION REQUIRED

1. The purpose of the meeting was to review TAC/HSAE progress in analyzing Nursing's schedules as they relate to teaching space requirements and utilization levels.
2. TAC presented a rough draft of a chart designed to show teaching space utilization per quarter. On the chart hourly time blocks for a typical week's schedule are displayed horizontally, the vertical stacking of these blocks indicating the numbers and sizes of teaching groups (or spaces) scheduled for each hour.
3. The remainder of the meeting was spent clarifying TAC's questions on the schedule date for specific courses.

Using the course descriptions prepared by Kurt Rogness, Gary Zaworski, and the Nursing staff, TAC/HSAE will complete space utilization chart for the fall, winter, and spring quarters for review with the School of Nursing.

SCHOOL OF NURSING
ANALYSIS OF PROJECTED ROOM UTILIZATION

1. CLASSIFICATION OF ROOMS BY SIZE:

NO. PERSONS PER ROOM	2	8	15	20	30	40	60	80	160
ROOM AREA	30 [#]	120 [#]	225 [#]	300 [#]	400 [#]	600 [#]	900 [#]	1200 [#]	2400 [#]
ROOMS IN PRESENT USE FALL '75*		POH 1121 POH 5327 HSUA 1.528	HSUA 1.526 HSUA 2.107 HSUA 2.126	HSUA 2.542 HSUA 2.548	POH 1326 POH 2309 HSUA 2.533	MtdH 118 Cure 117	Cure 111 Cure 113	POH 1305 Mayo D230 HSUA 2.520	JactH 74

2. GRAPHIC INVENTORY OF TEACHING SPACES:

PRESENT ROOMS FALL '76 *									
PROGRAM FOR HEALTH ASSESS.									
PROGRAM FOR HELPING RELATION									
PROGRAM FOR HEALTH SCIENCES									
					CLASSROOM			AUDITORIUM	

3. ROOM ASSIGNMENT FOR COURSES:

UNDERGR. COURSES		5.409	5.409	5.201	5.201 5.640 5.650	5.201 5.203	5.202 5.207 5.408	5.407 5.408 5.615 5.816	5.409
GRAD. COURSES		8.003 8.203 8.313 8.505	8.051 8.204 8.300	8.100 8.200	8.020 8.350				

* NOT INCLUDING NURSING ARTS CLASSROOMS

SCHOOL OF NURSING

SPACE UTILIZATION OF INTERMEDIATES + GROUP
CONFERENCE + INTERVIEW ROOMS

<u>COURSE</u>	<u>CLASS SIZE</u>	<u>NO. SECTIONS</u>	<u>HRS/SESSION</u>	<u>/WEEK</u>	<u>TOTAL HRS</u>	<u>REMARKS</u>
5.409	110-130	11 @ 12	2	1	22	
8.003	12	1 @ 12	2	4	8	+ LAB
8.103	15-20	2 @ 10	2	2	8	+ LAB
8.313	10	1 @ 10	2	1	2	
8.505	6-24	2 @ 12	2	2	8	COMBINED 50%
8.051	10	1 @ 10	2	1	2	
8.104	15-20	3 @ 6	1	2	6	
8.300	18-21	3 @ 7	2	2	12	+ LAB
		<u>24</u>			<u>68</u>	

1 CLASSROOM = 45 HRS 100% UTIL.

19 CLASSROOMS = 855 HRS 100%

68 HRS 7% UTIL.

UNDERGRADUATE COURSES

	COURSE	CLASS SIZE	NO. SECTIONS	FALL	WINTER	SPRING
SEPH	5.201	ROLE... HEALTH CARE	60	3@20		
	5.202	SYS. PROCESS I	40			
	5.203	ADAPTATION I	40-60			
	5.204	HELP REL. I	100-130	11@12		
	5.205	TOOLS I	60	6@10		
	5.206	TOOLS I	60	6@10		
	5.207	SYNTHESIS	40	-		
	5.208	SMALL GRP. ANALYSIS	150	2@7		
JR.	5.403	TOOLS II	60	6@10		
	5.404	"	60	6@10		
	5.405	"	60	6@10		
	5.407	SYS. PROCESS II	60	-		
	5.408	ADAPTATION II	60	-		
	5.409	HELP REL. II	100-130	11@12		
	5.611	SYN... CHRONICITY	60	5@12		
	5.612	SYN... STRESS	65	4@17		
SR	5.613	SYN... LOSS	50	6@8		
	5.614	SYN... HEALTH	60-110	12@10		
	5.615	SYN... COMPLEX SIT.	40	5@8		
	5.620	INDEP. STUDY				
	5.702	NUR. ELECTIVE	18	3@6		
	5.703	"	14	-		
	5.704	"	24	2@12		
	5.705	"	8	-		
5.816	LEADERSHIP MGT	50	5@10			
5.999	CLINICAL STUDIES	100-150	30@5			

NO. COURSES :

16

15

11

 GROUP 1
 GROUP 2

GRADUATE COURSES

COURSE	CLASS SIZE	NO SECTIONS	FALL	WINTER	SPRING
8.001 EDUC. EXPERIENCES	?				
8.008 HEALTH ASSESS.	12		—————	—————	—————
8.009 SPEC. TOPICS	10-15		—————	—————	—————
8.020 FOUND. OF NURSING	60	4@15	—————		
8.021 RESEARCH	75	3@25		—————	
8.050 PROBLEMS	30-60		—————	—————	—————
8.051 SPECIAL TOPICS	10		—————	—————	—————
8.060 ADV. CLINICAL NUR	2		—————	—————	—————
8.062 INTERDISC. HEALTH	25	5@5			
8.063 NUR. CONSULTATION	15	2@6-8			
8.100 NUR. ASSESS	18	4@4-5	—————		
8.101 CRISIS EXPERIENCE	18	4@4-5		—————	
8.102 ASSIST. IMPROVE HEALTH	18	4@4-5			—————
8.200 FOUND. - PSYCH NUR	15-20	3@6	—————		
8.201 PSYCH. NUR	15-20	-		—————	
8.202 PSYCH. NUR - GROUP SKILLS	15-20	2@10			—————
8.203 PSYCH. NUR - COMMUNITY	15-20	2@10	—————		
8.204 PSYCHOPATHOLOGY	15-20	3@6	—————		
8.300 CHILDREARING FAM.	18-21	3@6-7	—————		
8.301 " " " "	↓	↓		—————	
8.302 " " " "	↓	↓			—————
8.310 CHILDREARING FAMILY I	12-15	2@6-8	—————		
8.311 " " " "	II 12-15	2@6-8		—————	
8.312 " " " "	III 10-12	2@6			—————
8.313 CHILDR. FAMILY (RSK)	10	-	—————		
8.314 NURSE-MIDWIFERY	?		—————	—————	—————
8.350 CHILDR. FAMILY (HEALTH I)	6-8	2@4	—————		
8.351 " " " " II	6-8	2@4		—————	
8.352 CHILDR. FAM. (ILLNESS)	6-8	2@4			—————
8.504 CURRICULUM DEVELOP.	6-18	2@3-9		—————	
8.505 TEACH. LEARN PROCESS	6-24	6@4-10	—————		—————
8.509 SPEC. TOPICS	6-30	2@18	—————	—————	
8.600 HEALTH CARE INSTIT.	?				
8.601 LEADERSHIP I	6	-		—————	
8.602 " " " " II	6	-			—————
8.609 SUPERVISION	?				

NO. COURSES :

17 15 13

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEETING NOTES

DATE: 20 November 1975

TAC JOB: Unit F Redesign, TAC Job No. 75036

SUBJECT: Pharmacy/Nursing Joint Planning Review.

PLACE: Powell Hall

NOTES BY: Don Mawha

PRESENT: Dean Ramey, Paul Sodergren, Shiela Corcoran, Andy Johnson, Paul Maupin,
Gary Zaworski (U/M)
John Scott, Herman Zinter, Kurt Rogness, Don Mawha (TAC/HSAE)

ITEM

ACTION REQUIRED

1. Areas of possible shared use were again discussed.
 - a) Copying Facilities: The volume of copying anticipated would require that Nursing and Pharmacy would each have its own Xerox equipment on the administrative level, and it is likely that additional copying equipment will be required at the faculty and research levels. Some sharing of facilities by Nursing and Pharmacy Administrations is foreseen during periods of equipment breakdown. Also sharing might be used to justify acquisition of more sophisticated equipment.
 - b) Pharmacy Educational Development: Shared use by Nursing would be minimal and not on a continuing basis. (Nursing's audiovisual functions will be centered on Floor 4.) Location of Educational Development spaces on

Item

this floor is desirable but not absolutely necessary. That is, however, a close relationship with Continuing Education.

- c) Pharmacy Autotutorial: Could be located on Floor 7 where it would be near Clinical Pharmacology and Pharmacy Administration teaching areas. The space on Floor 5 may be needed as project support space for preparing grant application, publications, etc.
- d) Elevator Lobby and Lounge Areas: Kurt reported on his meeting with Mr. Kogl and Mr. Schaffer, indicating that a third stair will not be required but that the areas directly adjacent to the elevator entrances would have to be enclosed by partitions. This requirement could be met by enclosing the rear entrance of the joint passenger service elevator, but enclosing the front elevator lobby is probably a more workable alternative. Positioning of the lounge-study areas from the elevator lobbies suggests expanded utilization of these areas.

Primary design constraints were next discussed. Further progress on detailed planning is contingent on completion of the evaluation of space utilization and the budget as it relates to possible reductions in building volume. Current status is as follows:

- a) Nursing Teaching Utilization: TAC/HSAE are now preparing space utilization charts for the fall, winter, and spring quarters, based on course description information received last Friday. The first drafts should be completed early

TAC completed ~~utilization~~ charts and ~~plans~~ for the Office, new ~~space~~ and Nursing ~~space~~ and non-teaching ~~space~~ spaces.

Item	11	Action Required
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next week. Additional non-scheduled and non-teaching use of classroom space needs to be identified by the University.

b) Pharmacy Teaching utilization: Keith Johnson has been asked to prepare utilization information for classrooms, auditoria, and teaching labs. TAC will meet with him next week to review.

TAC review with Keith Johnson and prepare utilization charts.

c) Verification of Budget: TAC/HSAE are in the process of completing an evaluation of the figures listed in the 1975 grant application. This should be completed prior to the next round of planning meetings. Completion is contingent upon review by the Planning Office of non-building costs such as land acquisition, off site utility work, etc., some of which may be accounted for under separate funding.

TAC/HSAE will obtain additional cost breakdown information from Hodges, Jage and complete evaluation of building construction costs prior to next Unit F meeting. TAC will also evaluate possible means of building volume reduction and design implications relating thereto. The Planning Office will review non-building costs and advise TAC/HSAE.

d) Building Configuration: Possible means of reducing building volume are as follows:

- 1) Reduce area per floor
- 2) Reduce number of floors
- 3) Leave as is but treat certain areas as shell space or deductive alternates.

Further discussion of these alternatives would be premature until the budget evaluation has been completed.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEETING NOTES

DATE: 20 November 1975

TAC JOB: Unit F Redesign, TAC Job No. 75036

SUBJECT: School of Nursing Planning Review

PLACE: Powell Hall

NOTES BY: Don Mawha

PRESENT: Dean Ramey, Paul Sodergren, Gary Zaworski (U/M)
Kurt Rogness, Herman Zinter, Don Mawha (TAC/HSAE)

U. OF MINN.	
DATE:	
H.G.S.P.	
P & D	
H.S. COORD.	X
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LEACH	
D.M.A.	
NURSES	X

Sketch plans of several floors were reviewed with the following comments being made:

Floor 4

1. Preliminary analysis of Nursing's teaching schedule indicates that the intermediate size rooms should be large enough for groups of ten. A 10' x 12' room with properly sized modular tables and chairs could handle such a group but with little space left over for other furniture or equipment.
2. Utilization of groups of ten reaches peak levels at the same time that Health Assessment classes, which use similar sized exam rooms, are meeting. TAC suggested that the need for rooms of this size might be reduced by adjusting course schedules to avoid extreme peaks in utilization.
3. TAC asked which courses use the Health Assessment exam rooms and was given the following information:

- Course 5-405 (80 students - partial use)
- Course 8-003 (12 students)
- Course 8-314 (15 students)
- Future Graduate level core programs (all graduate students)

U. OF MINN.	DATE	TIME															
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It was suggested that these rooms might be planned for multipurpose use if utilization as exam rooms is low. Frequent moving of exam tables would be a problem. The use of these rooms other than for scheduled courses needs to be documented.

4. Most of the time there will be one class of 20 students using ten beds. The remaining beds will be used for unscheduled student practice. Sometimes the class of 20 will use all the beds, with "patients" or subjects brought in from outside. Two class sections may occasionally be scheduled at one time. The skills lab will also be used by graduate and Ph.D. programs. (Gary Zaworski will look into the level of utilization by these programs.)

Floor 5

1. Deam Ramey stressed the need for easy access to the floor by students if the Admissions Office is to be located at this level. TAC has asked Lerch, Bates (vertical transportation consultants) for an overall review of Unit F circulation.
2. Continuing Education has primary contact with the Deans and other administrative functions, rather than with students. (Registration is by mail.) Its location in the admissions area would permit shared use of the conference room, the computer terminal (for scheduling and record keeping), and in some cases admissions clerical staff.
3. The plan of the Deans' offices was discussed, including modifications to permit more direct communication between the Dean and her secretary. There should also be close communication between the administrative officer and the business office staff.

Floor 6

1. The secretarial pool should be more centrally located on the floor, possibly in the block of space behind the elevators.
2. Project support space should be divided into separate workrooms and offices which can be assigned to specific projects. Secretaries for project support are included in the main secretarial pool.
3. More private offices would be desirable since sharing of offices limits privacy for counseling. The provision of small interview rooms should compensate.

Floor 7 11

1. Conference and seminar rooms were grouped with the shared lounge on this floor so that they could be used together for special functions. Nursing would prefer the meeting rooms on Floor 6 for convenience and for closer control of scheduling. A more independent function such as research support would be more appropriately located on Floor 7.
2. A small kitchen (with controlled access) should be adjacent to but screened from the lounge. The coffee facility in the lounge should also be somewhat screened.
3. There would be some advantage to moving the lounge to the interior of the building where the unobstructed space would provide a room more suitable for faculty meetings. This type of function could be managed in the exterior location with the speaker's position at the center of the room. Otherwise the exterior location would be preferable.

4. Options at the \$80 per square foot figure include building as unfinished shell space those portions of the building south of grid line S10 (areas below the entrance plaza), or building an equivalent amount of shell space elsewhere in the building. Options at \$85 per square foot include deleting entirely the portion of the building south of S10, building substantially greater portions of the project as shell space, or deleting an entire floor.
5. TAC/HSAE indicated that the information of the two charts was strictly preliminary in nature, being based on assumptions concerning available funds which have yet to be verified by the University. Also that the possibility of further options for cost reduction could not be ruled out, although they would have to be similar in scope in order to achieve a similar result.
6. TAC/HSAE will give the matter further study and come back next month with a proposal as to the direction in which we think the University should proceed. This proposal will most likely suggest a basic package to build the entire facility as finished space, with a series of deductive alternates of ascending scope to cover the anticipated range of bid costs.

COPY FOR ~~ANDY JOHNSON~~
Ken Miller

THE ARCHITECTS COLLABORATIVE, INC.
HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION - UNIT F

MEETING NOTES:

DATE: 31 December 1975
TAC JOB: 75003
SUBJECT: Research Animal Facilities
NOTES BY: Kurt Rogness
PRESENT: Dr. Manning U/M
Dean L. Weaver U/M
Andy Johnson U/M
Gary Zaworski U/M/HSP0
Kurt Rogness HSAE

The purpose of the meeting was to determine a policy for housing research animals in Unit F. The following items were discussed:

1. Two animal holding locations in the building were considered. One was located on Floor 1 the other on Floor 9. Dr. Manning favored the former due to concerns for serving and relating to other animal facilities throughout the Health Sciences. He also was concerned that animal facilities not become part of departmental domain. Dean Weaver favored the latter due to concerns that the facilities would not be used if located on Floor 1 because animal research functions are concentrated on the 9th Floor of the facility. Re-organization of the facility to relate to animal holding function seemed ill-advised at this point. Furthermore the Architect suggested that the space located below the plaza on Floors 1 and 2 may well be shell space or not built at all due to budgetary constraints. Therefore it was resolved that the animal facilities will be planned on Floor 9 provided that the facility be replanned in accordance with N.I.H. standards and provide a cage washing facility.
2. The Architect was requested to develop with Dr. Manning an appropriate animal transport system to serve the 9th Floor location.
3. The Architect presented two alternate plans for Floor 9 which anticipated the cage washing requirement. From the discussion the following points were raised:
 - a. The Cooler shall be for animal cadavers only. A refrigerator may be necessary to hold green diets.

- b. The cage washing room should have a clean and a dirty zone. The zones can be separated by a tape line on the floor. The dirty zone shall have a cage washer and a small bottle washer. The clean zone should accommodate clean cages (up to 30% of total).
 - c. Dr. Manning prefers a small work counter with sink in each animal room. Storage below or above counter is not advised, however.
 - d. A small post-operative holding space would be desirable.
 - e. A desk area should be provided and relate to the receiving room and prep/surgery area.
 - f. Additional storage and cart parking space should be provided.
 - g. The 7'-0" corridor width requirement will be negotiable to 6'-0" where it can be demonstrated that cart circulation is not impaired.
4. The Architect is to meet with Dr. Manning and Ken Miller of Pharmacy soon to review further plan developments.

cc: Those present
Paul Maupin U/M
John Scott TAC

THE ARCHITECTS COLLABORATIVE Inc.
HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEETING NOTES

DATE: 12 February 1976
TAC JOB: 75036, Unit F Redesign
SUBJECT: Nursing Teaching Spaces for Health Assessment
PLACE: Room 4411 Powell Hall
NOTES BY: Herman Zinter
PRESENT: Ken Burns, Sheila Corcoran, Paul Sodergren (U/M)
Ernst Ibs, Herman Zinter (TAC/HSAE)

The purpose of the meeting was to review schematic plans of the teaching spaces for Health Assessment on Level 4 and to discuss detailed requirements for rooms and equipment. The following items were discussed:

ITEM

ACTION REQUIRED

-
1. After TAC/HSAE presented the attached partial plan of Level 4 and summary of spaces assigned to Health Assessment, the following comments were made:
 - a. Door swings in exam rooms should be reversed to improve conditions for privacy within the rooms.
 - b. Access to the observation room should be directly from the corridor rather than from the nursing skills laboratory.
 - c. To comply with code requirements which limit the length of dead-end corridors to 20 feet, the doors to the skills laboratory must be relocated as indicated.

 2. Ken Burns presented a sketch (attached) to illustrate the general arrangement in a typical examination room which includes the following items of equipment:

ITEM

ACTION REQUIRED

a.	Exam table, cabinet type	1 each
b.	Exam light, floor type (gooseneck)	1 each
c.	Stool, revolving	1 each
d.	Spygmomanometer, wall- mounted	1 each
e.	Sink, handwashing with foot controls	1 each
f.	Soap dispenser with foot controls	1 each
g.	Cabinet for storage of gowns & supplies	1 each
h.	Desk, writing with side drawers	1 each
i.	Chair, straight	2 each
j.	Scale, adult	1 each
k.	Scale, pediatric (infant) with stand	1 each

3. A nurse-call type signal device is required in each examination room to discretely notify receptionist or instructor that a student requires assistance.

4. Glazing for the windows between the observation and examination rooms, and lighting within the rooms, should provide the capability to observe from either side. Windows should be approximately 4 feet wide.

TAC/HSAE will verify details of lighting and glazing specifications.

5. The observation room should be furnished to provide for children's play or adult conference, and the storage function as indicated in the plan either should be relocated or minimized by using enclosed cabinets. Large items can be stored with other equipment in the nursing skills laboratory support area.

Nursing/HSPO will complete a list of furnishings for this room, based on its dual use as observation/teaching and playroom/conference.

cc: P. Maupin, K. Burns, S. Corcoran, P. Sodergren, E. Ibs, HSAE

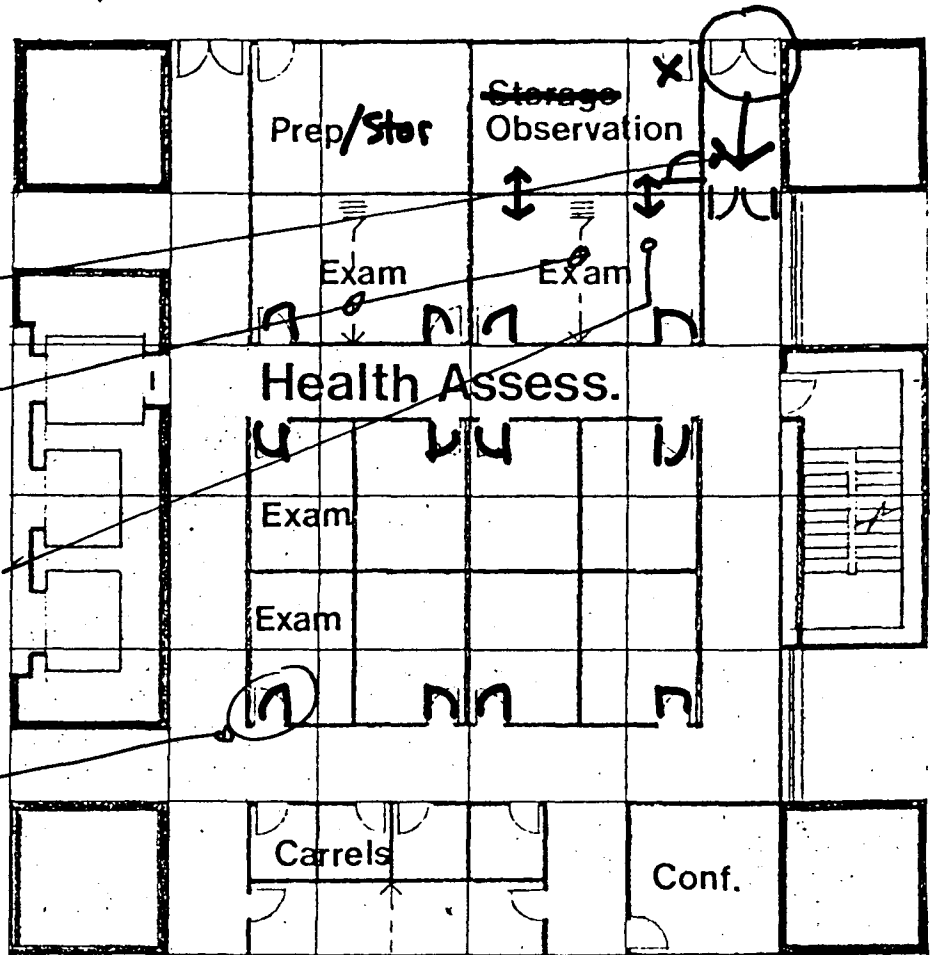
PARTIAL
Floor Plan (1/16" = 1'-0")
(LEVEL 4)

RELOCATE DOORS
(ACCESS + CODE)

CAN BE FABRIC
CURTAINS

PROVIDE TWO-WAY
OBSERVATION CAPABILITY
(2 EXAM ROOMS)

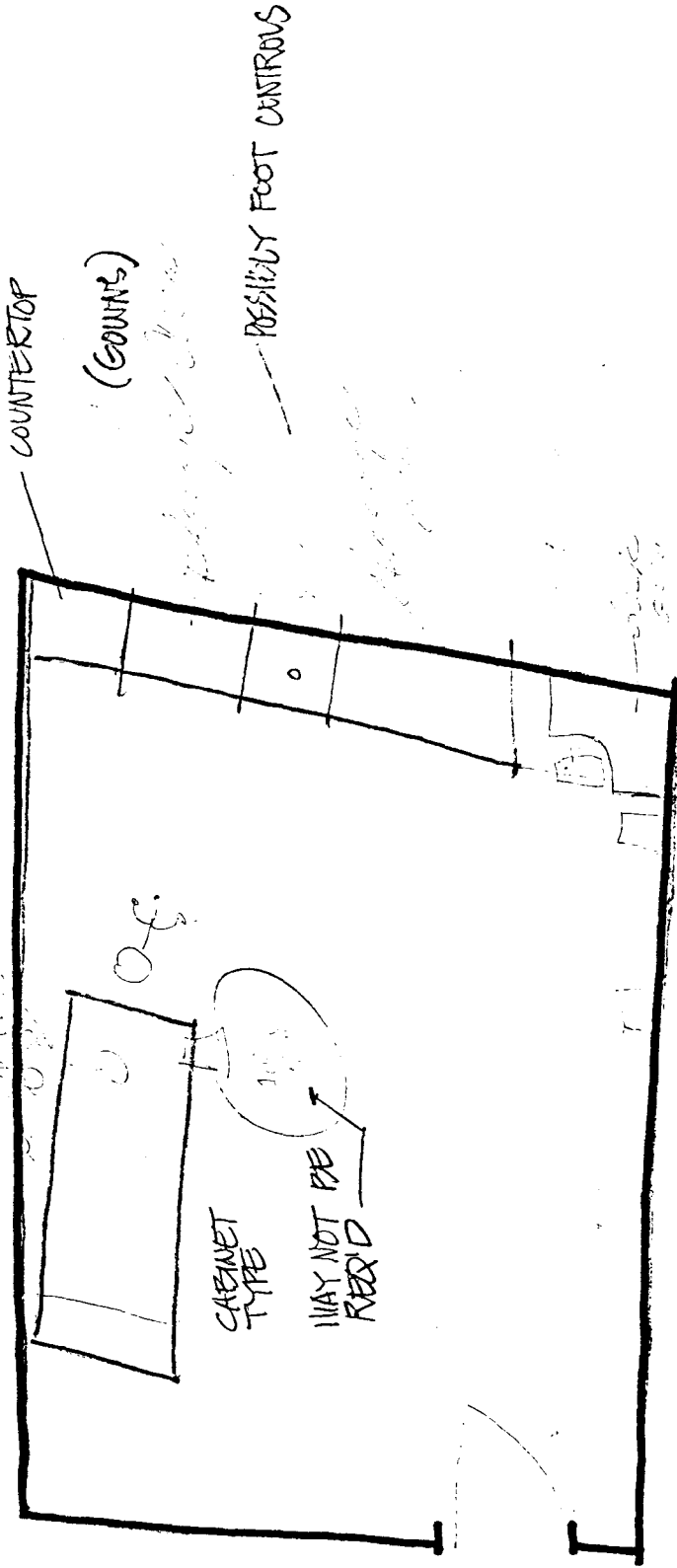
REVERSE DOOR SWINGS
(TYPICAL)



Summary of Spaces

SPACE	AREA	NO.	TOTAL
EXAM ROOM, SINGLE	110	8	880
EXAM ROOM, DOUBLE	225	2	450
OBSERVATION ROOM	225	1	225

2/10/76



NO FILM ILLUMINATORS RECD

THE ARCHITECTS COLLABORATIVE Inc.
HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.

Unit F - Planning
Notes

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEETING NOTES

DATE: 12 February 1976

TAC JOB: Unit F Redesign, TAC Job No. 75036

SUBJECT: Pharmacy Undergraduate Labs

PLACE: Powell Hall 4112

NOTES BY: Don Mawha

PRESENT: Dr. Monem, Dr. Miller, Dr. Nelson, Andy Johnson, Kurt Rogness, and
Don Mawha

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1. Previous equipment layouts of undergraduate labs were reviewed. It was agreed that both labs on Floor 3 should be similar to the old Pharmaceuticals lab with 64 work stations, 8 on each side of the 4 island benches. The wall next to the doors should have some bench space for special equipment and some space for floor mounted equipment such as refrigerators, freezers, etc. A typical student work station will be 4 feet wide, containing 2 drawers and 2 cupboard spaces. Thus the two labs together will have individual storage spaces for 256 students. Services at the island benches will be arranged as in the original plan. Chalkboard and tackboard surfaces will be on the south wall.
2. Fume hood rooms will be essentially as shown in the original layouts. The original fume hood layout for the old Pharmacognosy lab on Floor 4 will be used in the same location of Floor 3.
3. Conference rooms will remain essentially unchanged. Provision should be made for projection screens and room darkness.
4. TV monitors should be provided in the labs and in conference rooms. Details will be worked out in consultation with the University's TV people.
5. The instrument room, prep, stock, and balance rooms will be laid out similar to the original drawings with the hooded bench for gas chromatography located back to back with the prep and stock rooms. Gas cylinders will be located in the prep or stock room with lines feeding through the wall to the bench. Instrument bench space should be increased if possible.

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UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEETING NOTES

DATE: 12 February 1976
TAC JOB: 75036 Unit F Redesign
SUBJECT: Nursing Research and Educational Development
PLACE: Room 3321, Powell Hall
NOTES BY: Herman Zinter
PRESENT: Ida Martinson, Sheila Corcoran, Gary Zaworski (U/M)
Ernst Ibs, Herman Zinter (TAC/HSAE)

The purpose of the meeting was to review schematic plans of nursing research facilities on Levels 2 and 9 and to discuss detailed requirements for rooms and equipment. The following items were discussed:

ITEM	ACTION REQUIRED
1. After TAC/HSAE presented the attached schematic plans and summary of spaces for nursing research facilities on Levels 2 and 9, the following comments were made:	
a. The adjacent 600 sq. ft. laboratory space at Level 9 is to be assigned to Nursing Research, for a total of approximately 1200 sq. ft.	TAC/HSAE will verify with Pharmacy program.
b. The environmental laboratory should not be combined with the behavioral laboratory as shown because of space limitations. Likewise, it is not feasible to locate the labs on separate floors since control and monitoring equipment is to be shared between facilities.	Nursing/HSP0 will determine the feasibility for joint use of environmental lab facilities in Physiologic Hygiene (Unit A)
2. Ida Martinson indicated that additional space was required for data analysis (20 students at 10 work stations) and 2 graduate laboratories with counters and sinks.	Nursing/HSAE will clarify program requirements for additional research space
3. TAC/HSAE recommended that further detailed programming and design development work be deferred until space allocations are determined for Levels 1 and 2.	

ITEM

ACTION REQUIRED

4. In preparation for the next meeting, the following information was exchanged,
 - a. Nursing/HSP0 presented equipment lists for the Behavioral Studies, Physiology and Physiological Health laboratories.
 - b. TAC/HSAE presented 1/4" scale plans and casework details for the laboratory spaces at Level 9 (based on former contract documents for Unit F).

cc: P. Maupin
I. Martinson
S. Corcoran
✓ G. Zaworski
E. Ibs
HSAE

UNIT F REDESIGN
SPACE UTILIZATION

APPENDIX

W.F. KES.

Physiological Hygiene
Unit A

The following spaces are assigned to Physiological Hygiene in Health Sciences Unit A as shown on the graphics contract documents for Level 1:

	ROOM	DESCRIPTION	AREA	NUMBER	TOTAL
Medical Examination	1-347	Dressing	100	1	100
	1-347B	Toilet	20	1	20
	1-347A	Shower	20	1	20
	1-342	EKG Room	80	1	80
	1-346	EKG Room	80	1	80
	1-350	X-Ray Room	150	1	150
	1-350A	Control	35	1	35
	1-350B	Dark Room	35	1	35
	1-364	Observation	100	1	100
	1-356	Exam	100	1	100
	1-360	Exam	100	1	100
					<u>820</u>
Physiology Lab	1-355	Testing	935	1	935
	1-240	Testing	140	1	140
	1-242	Observation	140	1	140
	1-246	Gas Analysis	80	1	80
					<u>1295</u>
Nutrition Research	1-234	Nutrition	430	1	430
	1-232	Kitchen	400	1	400
	1-232A	Storage	50	1	50
					<u>880</u>
Chemistry Lab	1-269	Cold Room	50	1	50
	1-248D	Blood Laboratory	160	1	160
	1-248C	Serum Lipid Laboratory	275	1	275
	1-248B	Instrument Laboratory	140	1	140
	1-248A	Balance Room	20	1	20
	1-248	Laboratory Equipment	250	1	250
	1-368	Supply	200	1	200
	1-271	Volatile Storage	50	1	50
					<u>1145</u>

CRIT I REDESIGN
SPACE UTILIZATION

Physiological Hygiene	ROOM	DESCRIPTION	AREA	NUMBER	TOTAL
Administration	1-210	Office, General	550	1	550
	1-226	Data Processing	300	1	300
	1-226A	Data Processing	430	1	430
	1-331	Office	110	1	110
	1-329	Office	110	1	110
	1-325	Office	150	1	150
	1-321	Office, Director	220	1	220
	1-317	Graphics, Workroom	325	1	325
	1-314	Office	110	1	110
	1-318	Office	100	1	100
	1-322	Office	150	1	150
	1-326	Office	150	1	150
	1-332	Office	100	1	100
	1-338	Office	110	1	110
	1-278	Office	110	1	110
	1-276	Office	110	1	110
	1-277	Office	120	1	120
					<u>3255</u>
Shop	1-279	Shop	240	1	240
	1-285	Storage	120	1	120
					<u>360</u>
TOTAL NSF					7755
Spaces Shared With Epidemiology	1-112	Reception & Waiting	200	1	200
	1-194	Conference	240	1	240
	1-108	Conference	300	1	300
	1-122	Reading	300	1	300
	1-122A	Study	150	1	150
					<u>1190</u>

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UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEETING NOTES

DATE: 12 February 1976

TAC JOB: 75036, Unit F Redesign

SUBJECT: Nursing Administration and Admissions

PLACE: Room 4327, Powell Hall

NOTES BY: Herman Zinter

PRESENT: Paul Sodergren, Georgia Park, Sheila Corcoran, Gary Zaworski (U/M) ✓
Ernst Ibs, Herman Zinter (TAC/HSAE)

The purpose of the meeting was to review schematic plans of nursing administration and admissions facilities on Level 5 and to discuss detailed requirements for rooms and equipment. The following items were discussed:

ITEM

ACTION REQUIRED

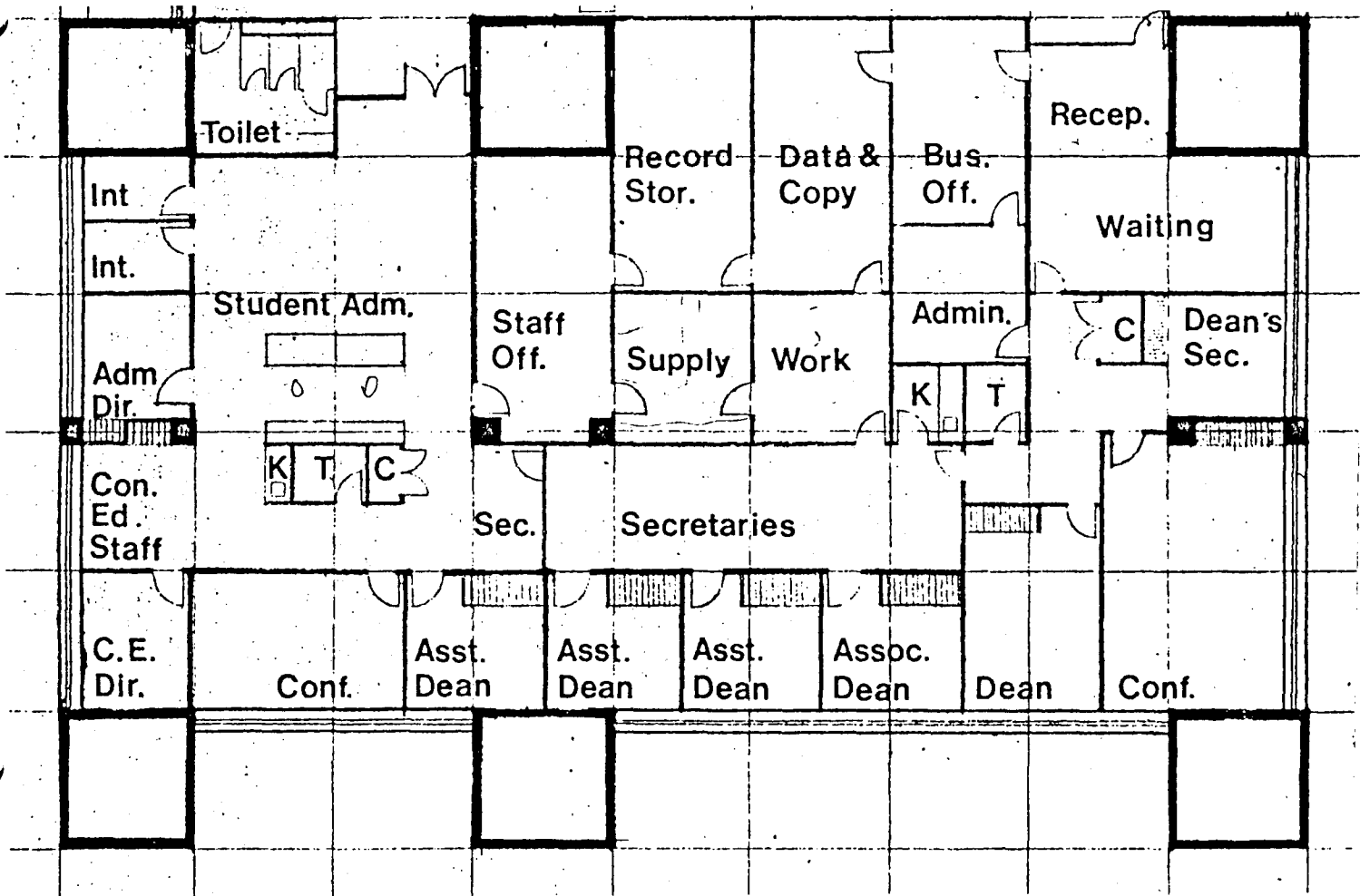
1. After TAC/HSAE presented the attached partial floor plan of Level 5 and summary of spaces assigned to Nursing Administration and Admissions, the following comments were made:
 - a) The Dean's office and conference room should be reversed for two reasons: circulation between the reception or waiting area and the Associate or Assistant Dean's suite should not pass the door to the Dean's office; and only visitors to the Dean should pass through the office to the Dean's secretary.
 - b) The office for the Business staff is to contain 3 desk stations; the office for the Administrative Officer should be relocated to the exterior wall; and the waiting/reception space can be reduced (to accommodate 3-4 chairs).

ITEM

ACTION REQUIRED

- c) The arrangement which detaches the kitchenette from the conference room is acceptable; however, the toilet should be contiguous to the Dean's office.
 - d) The partition which is shown as dividing the secretarial pool should be relocated to place all of the Assistant Deans in one suite. The partition should separate Admissions from Administration.
 - e) Reference was made to other plan studies for the Admissions and Continuing Education suites. These were developed by Kurt Rogness from previous meetings but not included in the present plans. TAC/HSAE will verify former plan arrangements and incorporate details into revised drawings.
2. General information and equipment requirements were discussed for typical offices and secretarial spaces; conference and interview rooms; and shared work and storage rooms. Nursing/HSPO will complete a list of furnishings and equipment for each of the programmed spaces and resolve the joint use of copier and data processing equipment with Pharmacy Administration.

Floor Plan (1/16" = 1'-0")



REFER TO PAGE 2 FOR SUMMARY OF SPACES

Summary of Spaces,
Administration

SPACE	AREA	NO.	TOTAL
DEAN'S OFFICE	225	1	225
ASSOCIATE DEAN	150	1	150
ASSISTANT DEAN	150	3	450
ADMINISTRATIVE OFFICER	150	1	150
CONFERENCE	400	1	400
CONFERENCE PREP / COATS	35	1	35
STAFF TOILET	35	1	35
DEAN'S SECRETARY	150	1	150
SECRETARIAL POOL	525	1	525
RECEPTION & WAITING	400	1	400
BUSINESS STAFF	225	1	225
RECORD WORK ROOM	160	1	160
DIRECTOR, CONTINUING EDUC.	150	1	150
CONTINUING EDUC. STAFF	150	1	150

Shared Facilities

DATA PROCESS & COPY ROOM	300	1	300
SUPPLY & STORAGE	160	1	160

Admissions & Records

DIRECTOR, ADMISSIONS & RECORDS	150	1	150
STAFF OFFICE	300	1	300
STUDENT ADMISSIONS	600	1	600
RECORD STORAGE & WORK ROOM	300	1	300
INTERVIEW ROOM	75	2	150
CONFERENCE ROOM	225	1	225
CONFERENCE PREP / COATS	35	1	35
STAFF TOILET	35	1	35

Research
(Floor 6)

RESEARCH DIRECTOR	150	1	150
RESEARCH SUPPORT	600	1	600
SECRETARY / RECEPTION	150	1	150

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UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEETING NOTES

DATE: 13 February 1976
TAC JOB: 75036, Unit F Redesign
SUBJECT: Nursing Teaching Spaces for Nursing Skills
PLACE: Room 4114, Powell Hall
NOTES BY: Herman Zinter
PRESENT: Linda Grummer, Ken Burns, Paul Sodergren, Sheila Corcoran
Gary Zaworski (U/M)
Ernst Ibs, Herman Zinter (TAC/HSAE)

The purpose of the meeting was to review schematic plans of the teaching spaces for nursing skills on level 4 and to discuss detailed requirements for rooms and equipment. The following items were discussed:

ITEM

ACTION REQUIRED

1. After the schematic plan of Level 4 was reviewed the following teaching stations and support spaces were identified for Nursing Skills:

<u>Type</u>	<u>Number</u>
Typical acute care bed station.	17
Critical care bed station.	3
Charting and communications station.	2
Medicine preparation station.	1
Tub station with hydraulic lift.	1
Toilet with bedpan washer.	1
Utility/preparation counter.	1
Storage room with issue window.	1
Technicians office.	1
Equipment storage area.	1

2. Classroom spaces for 20 students is provided elsewhere on Level 4 and facilities can be shared.

3. Nursing/HSP0 presented a draft copy of the equipment list for Nursing skills. Equipment is itemized by room, including storage and preparation, bathroom, critical care unit, hospital care unit, nurses station and treatment preparation area.

TAC/HSAE will analyze list and incorporate items into detailed plan studies.

ITEM

ACTION REQUIRED

4. Storage is required for large and small items (including equipment for the examination rooms in Health Assessment--Reference Item 5 of the meeting notes, dated 12 February 1976). Access to the storage room should be controlled and supplies or small items of equipment should be issued through a dutch-door or similar arrangement. Desk space should be provided for a technician who would be responsible for equipment maintenance, stock inventory and other laboratory management functions.

5. It was agreed that bed stations within the skills laboratory are to be arranged in 3 zones as indicated on the attached plan: 5 beds for critical care and special set-ups, 10 beds in 2 groups of 5 for typical acute care (2 class sections of 10 students each), and 5 beds for non-scheduled individual student practice.

TAC/HSAE will study as an option the reorientation of bed zones from an East-West to a North-South configuration.

cc: P. Maupin
~~G. Zaworski~~
L. Grummer
K. Burns
S. Corcoran
E. Ibs
HSAE

FOR
REF

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JT

NUR. FAC OFF

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HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEETING NOTES

DATE: 13 February 1976
TAC JOB: 75036, Unit F Redesign
SUBJECT: Nursing Faculty Offices
PLACE: Room 4114, Powell Hall
NOTES BY: Herman Zinter
PRESENT: Paul Sodergren, Sheila Corcoran, Gary Zaworski (U/M)
Ernst Ibs, Herman Zinter (TAC/HSAE)

The purpose of the meeting was to review schematic plans of the faculty office and project spaces on Level 6 (and 7) and to discuss detailed requirements for rooms and equipment. The following items were discussed:

ITEM ACTION REQUIRED

1. The schematic floor plans for Levels 6 and 7, dated 10 February 1976, indicate the following distribution of faculty offices:

TYPE OFFICE	LEVEL 6	LEVEL 7	TOTAL OFFICES	TOTAL DESKS
Single	42	8	50	50
Double	11		11	22
Multiple	5		5	25
Project	4	1	5	5
Research	1		1	1
			<u>72</u>	<u>103</u>

2. The above program was developed from meetings with the Health Sciences Planning Office and based on the Preliminary Program for the School of Nursing, dated 22 October 1975.

ITEM

ACTION REQUIRED

-
3. After a review of the floor plans, the following comments were made regarding office suites:
- a. The number of multiple (5-desk) offices should be reconsidered, based on the projected number of full and part time faculty who need to be assigned to single and double offices.
Nursing/HSPO will verify the number and type of single and double Faculty offices required for present and future assignments.
 - b. The number of faculty offices included in the area of potential shell space should be tabulated separately to determine whether or not present space assignments can be met.
TAC/HSAE will develop alternate office suite layouts (at the perimeter cantilevers).
 - c. Wherever possible single and double offices should be accessible directly from corridors rather than from passage through multiple office suites.
4. Faculty and student mail boxes should be located in the typing-pool workroom. The typing supervisor's office and the workroom should be reversed to place the pass-through mail boxes along the corridor wall.
Nursing/HSPO will determine the number of mail boxes required.
5. General requirements for furnishings and equipment were discussed, including typical offices; typing-pool and workroom; project and research support offices; reception and waiting area; and conference and seminar rooms.
Nursing/HSPO will complete a list of furnishings and equipment for all program spaces.

cc: P. Maupin
G. Zaworski
P. Sodergren
S. Corcoran
E. Ibs
HSAE

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UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEETING NOTES

DATE: 13 February 1976

TAC JOB: 75036, Unit F Redesign

SUBJECT: Nursing Teaching Spaces for Helping Relationships

PLACE: Room 4114, Powell Hall

NOTES BY: Herman Zinter

PRESENT: Marie Albrecht, Helen Hansen, Sheila Corcoran, Paul Sodergren,
Gary Zaworski (U/M)
Ernst Ibs, Herman Zinter (TAC/HSAE)

The purpose of the meeting was to review schematic plans of the teaching spaces for Helping Relationships on Level 4 and to discuss detailed requirements for rooms and equipment. The following items were discussed:

ITEM	ACTION REQUIRED			
1. After the schematic plan for Level 4 was reviewed, the program of spaces assigned to Helping Relationships was summarized as follows:	Nursing/HSPO will complete a list of furnishings and equipment for these spaces.			
<u>Room</u>	<u>No. Persons</u>	<u>Area</u>	<u>No.</u>	<u>Total</u>
Seminar	30 - 40	682	1	682
Seminar	15	216	4	864
Conference	10 - 12	152	7	1064
*Carrels	2	38	12	456
A/V Control		300	1	<u>300</u>
TOTAL NET SQUARE FEET				3366
* to be modified by Item 3 below				

ITEM

ACTION REQUIRED

2. The plan arrangement includes 1 additional conference room and 12 of the 16 individual interview (carrel) rooms that were originally programmed. The total area remains the same. The main seminar room is divisible and the secondary seminars and conference rooms can be combined to provide 9 teaching spaces for groups of 15-20 persons.
 3. In general, the arrangement of spaces was approved except for the size and number of the interview rooms. Larger spaces are required to accommodate small group interviews of 3-4 persons in graduate courses such as Nu 8-311 (Childbearing) and Nu 8-351 (Childrearing). It was recommended that intermediate partitions be deleted to double the size of rooms and to add two individual interview rooms, 38 square feet each along the east perimeter wall at the end of both corridors.

Nursing/HSP0 will verify the space utilization requirements for the reduced number of interview rooms.

TAC/HSAE will determine installation requirements of the audio-visual equipment that is proposed for interview and laboratory rooms.
 4. It was suggested that the secondary seminar and conference rooms assigned to Helping Relationships should be redesignated as group laboratory and interview rooms. Teaching spaces which are shared and managed by centralized scheduling are designated as "classrooms" and "seminars."
- cc: P. Maupin, G. Zaworski, M. Albrecht, H. Hansen, S. Corcoran, P. Sodergren, G. Zaworski, E. Ibs, HSAE

Study

Exam

Exam

Health Assess.

Elevator
Lobby

Exam

Dn Up

Exam

Waiting

Carrels

Conf.

REMOVE
PARTITIONS
(TYPICAL)

Seminar

Helping
Relation.

Conf.

A/V
Work
Room

Seminar

Seminar

Conf.

Conf.

Carrels

ADD
INTERVIEW
ROOMS

Carrels

REVISIONS.

JOB NO.

SHEET TITLE

SHEET

DRAWN BY

Unit F: Floor 4

CHECK BY

SCALE

DATE 10 FEB 76

OF

THE ARCHITECTS COLLABORATIVE Inc.
HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

TELEPHONE CONVERSATION

DATE: 26 February 1976
TAC JOB: Unit F Redesign, 75036
SUBJECT: Nursing Faculty Offices
PARTICIPANTS: Sheila Corcoran, Herman Zinter

The purpose of the telephone conversation was to clarify the number and type of nursing faculty offices required for Unit F. The following items were discussed:

ITEM ACTION REQUIRED

1. During the telephone conversation of 19 February 1976, between the above participants, it was indicated that a total of 124 desks would be required for faculty in combination of single, double and multiple offices. This figure was based on personnel projections to 1980 for full and part time faculty and clinical appointments as shown on Page 2 of the Preliminary Program Report for the School of Nursing, dated 22 October 1975. These figures do not include desks for Civil Service personnel.
2. A deficiency of 21 desks in single or double offices is indicated by comparing the above figures with the total number of desk spaces on Levels 6 and 7 in the schematic floor plans. According to the meeting notes of 13 February, only 103 desk spaces have been provided.
3. To correlate faculty assignments with single, double and multiple offices, the following assumptions were made:
 - a. Offices are to be provided for full and part-time faculty, research assistants or

ITEM

ACTION REQUIRED

- associates and continuing education faculty who have teaching assignments. Offices for the Dean, Associate Dean, Assistant Deans and Research Director are included in the faculty offices.
- b. Offices for the Administrative Officer, Admissions and Continuing Education Directors, other staff positions and secretaries are included as civil service spaces.
 - c. Project offices are to be included as faculty offices; associated workspaces and research support spaces are not included.
 - d. In general, part-time faculty will be assigned to double (2-desk) offices rather than multiple (5-desk) offices.
 - e. Second offices for clinical appointment faculty will not be provided in Unit F. However one room of approximately 300 square feet on Level 6 will be designated for clinical appointment resource and work space.
4. In assuming that offices will not be provided for the projected 25 clinical appointment faculty, the space for multiple (5-desk) offices can be reassigned to single or double offices and the total number of required desks can be reduced from 124 to 99.
5. Based on the above discussion of assumptions, a revised floor plan for Level 6 indicates that the program now can be fulfilled:
- a. By dividing multiple desk space into smaller rooms, faculty offices can be distributed as follows:

ITEM ACTION REQUIRED

TYPE OFFICE	FLOOR 6	FLOOR 7	TOTAL OFFICES	TOTAL DESKS
Single	56	8	64	64
Double	18		18	36
Project	4	1	5	5
Research	1		1	1
			88	106

b. The number and type of faculty offices within the zone of potential shell space is as follows:

TYPE OFFICE	SHELL OFFICES	SHELL DESKS	NET OFF	NET DESKS
Single	17	17	47	47
Double	6	12	12	24
Project	2	2	3	3
Research			1	1
	25	31	63	75

cc: P. Maupin
 S. Corcoran
 HSAE

THE ARCHITECTS COLLABORATIVE Inc.
HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.

*Unit F - Pharmacy/Nursing
Feasibility Study*

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

RECEIVED

AUG 13 1976

UNIV. OF MINN.
HEALTH SCIENCE
PLANNING OFFICE

MEETING NOTES

DATE: 20 July 1976
TAC JOB: 76044, Pharmacy/Nursing Feasibility Study
SUBJECT: Project Schedule and Evaluation of Options
PLACE: Morrill Hall
NOTES BY: Herman Zinter
PRESENT: Dean Ramey, Dean Weaver, Cherie Perlmutter, Paul Maupin (U/M)
John Scott, Herman Zinter (TAC)

The purpose of the meeting was to review the project schedule and establish deadlines for completing studies, and to review criteria for evaluating options.

ITEM

ACTION REQUIRED

- | | |
|---|--|
| 1. After TAC presented an outline of the criteria to be used for evaluating options (attached), which includes aspects of program, master plan, code, building systems and cost, the following comments were made: | TAC will develop a detailed description of tasks and criteria in the proposal for the feasibility study. |
| a. In developing options which require renovation of space in Appleby Hall or Powell Hall, proposals to provide interim facilities for present teaching and research programs will need to be included and evaluated. | |
| b. Aspects of life expectancy or long-term utility of capital investment will need to be determined for each option in conjunction with costs and energy conservation. | |

ITEM

ACTION REQUIRED

2. After TAC presented a draft of the project schedule (attached), which indicates the phases and general deadlines for developing options, the following comments were made:

- a. Items 6 through 8 will need to be advanced so that all options can be identified before December and two full months are available to organize material for the legislative request.
- b. Meetings were scheduled for alternate Tuesdays at 2:00 pm, on 17 August and 31 August to review the development of all potential options and preliminary analysis.

Cherie Perlmutter will verify the deadline for submitting building requests and its influence on this schedule.

cc: C. Hewitt
C. Perlmutter
D. Ramey
D. Weaver
HSAE
P. Maupin

PHARMACY/NURSING
FEASIBILITY STUDY

20 JULY 76

The following items will be analyzed to determine the general feasibility and construction costs of options to accommodate the program requirements of the School of Nursing and the College of Pharmacy (based on the planning of Unit F):

INTERIM
TEACHING
FACILITIES

LIFE EXPECTANCY
VS. CAPITAL
INVESTMENT

1. Adaptability of Program:
 - a. Available net / gross area
 - b. Space configuration
 - c. Functional relationships
2. Relationship to Master Plan
 - a. Related departments
 - b. Future expansion
 - c. Phasing (Schedule)
3. Requirements of Code and Building Systems:
 - a. Construction rating
 - b. Structure (live load)
 - c. Life safety (egress)
 - d. Sanitary (toilet)
 - e. Handicapped Code
 - f. Partition relocation
 - g. Ceiling
 - h. Interior finishes
 - i. Ventilation (HVAC)
 - j. Plumbing
 - k. Sprinkler
 - l. Electrical power
 - m. Electrical lighting
 - n. Communications
 - o. Energy Conservation
 - p. Vertical Transportation
4. Cost Estimate(s)
5. Summary of analysis and overall rating

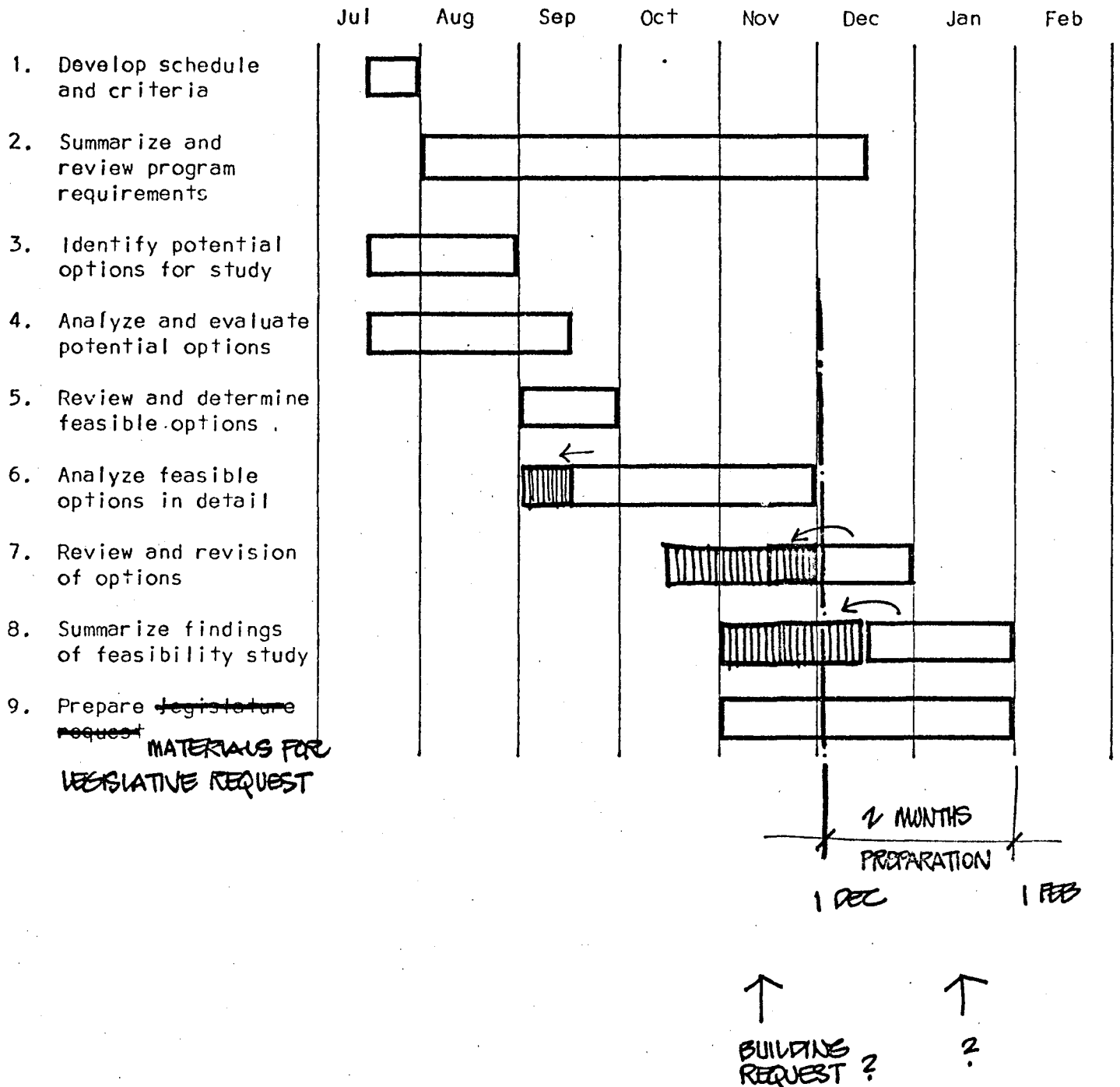
	Option 1	Option 2	Option 3	ETC.
1. Adaptability of Program:				
2. Relationship to Master Plan				
3. Requirements of Code and Building Systems:				
4. Cost Estimate(s)				
5. Summary of analysis and overall rating				

PHARMACY/NURSING
FEASIBILITY STUDY

10 JULY 1976

SCHEDULE

It is assumed that an analysis to determine the feasibility of remodeling existing (or future) facilities to accommodate the program requirements of the School of Nursing and the College of Pharmacy, based on the planning of Unit F, will be developed according to the following schedule:





THE ARCHITECTS COLLABORATIVE INC.

JEAN B. FLETCHER
1945 1965
WALTER GROPIUS
1945 1969
NORMAN FLETCHER
JOHN C. HARKNESS
SARAH P. HARKNESS
LOUIS A. McMILLEN

RICHARD BROOKER
ALEX CVIJANOVIĆ
HERBERT GALLAGHER
WILLIAM J. GEDDIS
ROLAND KLUVER
PETER W. MORTON
H. MORSE PAYNE
ERNEST L. BIRDSALL
TREASURER

ROBERT F. CRANE
HOWARD ELKUS
ALLISON GOODWIN
BASIL HASSAN
JOHN HAYES
JOSEPH HOSKINS
LEONARD NOTKIN
RICHARD SABIN
DAVID SHEFFIELD

QAZI B. AHMED
ROBERT BARNES
KENDALL P. BATES
SERGE CVIJANOVIĆ
ROYSTON DALEY
ROBERT DEWOLFE
GREGORY DOWNES
GAIL FLYNN
GERALD FOSTER
THOMAS LARSON
RALPH MONTGOMERY
PERRY NEUBAUER
IGOR G. PLATONOFF
RICHARD PUFFER
WALTER ROSENFELD
JOHN J. SCOTT
EDMUND SUMMERSBY
KENNETH TAYLOR
MALCOLM TICKNOR
ROBERT TURNER
ROBERT WILSON
LAURENCE ZUELKE

13 August 1976

Mr. Clinton N. Hewitt
Assistant Vice President
Physical Planning
University of Minnesota
340 Morrill Hall
Minneapolis, MN 55455

Re: University of Minnesota
Health Sciences Expansion
Pharmacy/Nursing Feasibility Study
TAC Job No. 76044

RECEIVED

AUG 18 1976

UNIV. OF MINN.
HEALTH SCIENCE
PLANNING OFFICE

Dear Clint:

In response to your request of 7 June 1976, we developed a detailed outline of work to be included in a Pharmacy/Nursing Feasibility Study. The attached proposal, dated 12 August 1976, is based on our recent discussions and on meetings of 30 June and 20 July 1976 which clarified the intended scope and schedule of the study.

During the meetings it was agreed that the program requirements for Unit F would be the basis for evaluating alternative facilities and that work to define and analyze options would be substantially completed by December 1976 to allow sufficient time for preparing materials to be used in legislative presentations.

As you are aware, all aspects of programming and architectural work involved in the redesign of Unit F were discontinued last March before documents for the Design Development phase were completed. Copies of record remain to be made of the material currently on file at our offices. While all of the redesign work is specific to the Unit F building configuration, much of the programming information listed in Part One, Items A1 and A2, of the attached proposal is fundamental to any further planning effort involving the College of Pharmacy or School of Nursing. For this reason, we have incorporated the work to compile and cross-reference the basic planning documents in Part One of the proposal. Assuming that the incomplete equipment layouts and room studies and the preliminary equipment lists (as developed by the Health Sciences Planning Office) would not be revised or correlated, we estimate that the cost to complete Items A1 and A2 would be approximately \$ exclusive of reimbursable printing expenses. As an option, this work could be assigned to a separate account and deducted from the scope of the actual feasibility study if so desired.

THE ARCHITECTS COLLABORATIVE INC.

Mr. Clinton N. Hewitt
13 August 1976
Page 2

In the remaining work of Part One extending over a two-month period, we expect to identify locations and define various options for accommodating the program requirements. The options would be evaluated for conformance to program, implementation of the Master Plan, date of availability, and probable cost, etc. We estimate that the cost to complete this work would be approximately \$ with additional reimbursable expenses of \$

We assume that Part Two, Items A through D, will extend over the subsequent two or three month period and would involve more definitive planning and detailed analysis of code, building systems, project delivery methods, schedules and costs. Based on the detailed development of two options, we estimate that the cost to complete this work would be approximately \$ with additional reimbursable expenses of \$

Numerous variables exist in the outlined scope, particularly in the process of developing and analyzing options in conjunction with the Master Plan, and in preparing a final report and other material that will be suitable for legislative presentations. We assume that our joint efforts will continue to evaluate and direct the results within the allotted time and that we will mutually reassess the requirements and the upsets noted if so required.

At this time we would like to formalize a letter agreement or AIA Document B141 (Standard form of Agreement between Architect and Owner) based on the above discussion and documents. We propose to provide architectural services requested by the University of Minnesota as an additional service in accordance with the following:

The Architect, as requested by the University, will perform under his Scope of Services (Article 1.3) any or all of the architectural and engineering work required by the Pharmacy/Nursing Feasibility Study 12 August 1976 (attached). Before commencing such work, the Architect will consult the University to mutually determine the specific scope, requirements, and costs of the study or any portion thereof.

Compensation for Extra Services (Article 6.2) shall be computed on the basis of Employee's time at a multiple of 2.75 times the employee's Direct Personnel Expense.

Under Reimbursable Costs (Article 5) the University shall reimburse the Architect for the following:

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION
THE ARCHITECTS COLLABORATIVE Inc.
12 AUGUST 1976

PROPOSAL TO DETERMINE THE FEASIBILITY OF ALTERNATIVES TO UNIT F THAT
ACCOMMODATE THE PROGRAM REQUIREMENTS FOR THE COLLEGE OF PHARMACY
AND SCHOOL OF NURSING

This is a proposal for professional services to develop and evaluate alternatives to Unit F that provide renovated facilities for the College of Pharmacy and the School of Nursing in existing space or future expansion space. It is based on the recent planning of Unit F, the 1968 Health Sciences Planning Report, and the revised 1971 Master Plan, as modified by present conditions and subsequent inventory or planning documents. The study will include two parts:

- I. Definition and evaluation of potential options
- II. Development and detailed analysis of feasible options

The scope of work proposed for these parts are described on the pages which follow. A third section contains a fee proposal and project schedule.

THE ARCHITECTS COLLABORATIVE INC.

Mr. Clinton N. Hewitt
13 August 1976
Page 3

The cost of any special consultants when the employment of such special consultants has been approved in advance by the University. The Architect will be compensated at a multiple of 1.1 times the amount billed to the Architect for such services. (Cost estimating services will be considered as a special consultant.)

The cost of the Architect for living and travel expenses in connection with the project when approved in advance by the University.


The cost of computer time, telephone, postage and handling and the reproduction of drawings and reports.

Payment (Article 6) for Extra Services of the Architect and for Reimbursable Expenses shall be made monthly upon presentation of the Architect's statement of services rendered.

If this method of proceeding is satisfactory to you, please sign one copy of this letter and return it to us with the appropriate order for billing purposes.

Very truly yours,

THE ARCHITECTS COLLABORATIVE Inc.


John J. Scott

JJS:KVB

Approved:

Date _____

PART I - DEFINITION AND EVALUATION OF POTENTIAL OPTIONS

A. Summary of Unit F Program Requirements

1. Consolidate, cross-reference, and bind the uncompleted Design Development phase documents, studies and meeting notes of programming and architectural planning involved in the redesign of Unit F during the period October 1975 through March 1976 and furnish two copies of the following material:
 - a. Notes of meeting and telephone conversations
 - b. Correspondence and interim reports
 - c. Program or tabulation of spaces and areas
 - d. Floor plans (1/16" = 1'-0") of Levels B through 9
 - e. Equipment lists (as prepared by HSPO)
 - f. Equipment layouts or detailed room studies (1/4" = 1'-0")
2. Complete a summary of type, size and number of spaces and the total net area requirements of the programs for the College of Pharmacy and School of Nursing, including Pharmacy/Nursing shared facilities and Health Sciences shared facilities as developed for Unit F and shown on plans dated 15 March 1976.
3. Develop alternative programs or criteria for options which separate Pharmacy and Nursing departments having shared facilities in the Unit F program.
4. Identify the basic minimum dimensions or modules of typical and specialized spaces and the basic configuration(s) of inter-related spaces or suites.
5. Identify the key functional relationships of administrative, teaching, research, clinical and service facilities as established for each program during the redesign of Unit F.

B. Summary of Unit F Cost and Construction Schedules

1. Summarize the gross area and net-to-gross ratios by floor and/or assigned functions as developed for Unit F and establish appropriate net-to-gross area factors for assigning basic program elements to space available in various options.
2. Summarize the estimated construction costs and total project costs for Unit F, escalated through December 1978 in accordance with recent planning, for comparison with estimated costs of various options.

3. Summarize the major events in the projected construction schedule for completion and delivery of Unit F for comparison with other options.

C. Survey of Available Space and Implementation Schedules

1. Review floor and site plans of existing and projected facilities to determine the location(s) and the net useable (or assignable) areas and gross areas of shelled space, vacated space, potential expansion space, and space currently assigned to Pharmacy or Nursing functions.

a.	Unit B/C	Shell space
b.	Mayo Complex	Assigned and vacated space
c.	Unit A	Expansion space (below plaza)
d.	Unit K/E	Vertical expansion space
e.	Harvard Street Apartments	Vacated and expansion space
f.	JOML	Assigned and vacated space
g.	Powell Hall	Assigned and vacated space
h.	Appleby Hall	Assigned and expansion space
i.	Fraser Hall	Assigned and vacated space
j.	Others	

2. Review the revised 1971 Master Plan and subsequent inventory or planning documents to determine the actual and projected assignment of space by department.
3. Review the implementation programs and schedules of shell space development in Unit B/C, renovation of Jackson-Owre-Millard-Lyon (JOML) and Mayo Hospital, projected new construction of Unit D and other Phase I elements of the Master Plan to determine alternatives for assignment of space.
4. Review program options and implementation schedules of the vertical expansion of Unit K/E, the development of Unit J and other Phase II elements of the Master Plan to determine alternatives for assignment of spaces.

D. Definition and Evaluation of Potential Options

1. Identify and record all potential options for generally accommodating the program elements in available space, based on net and gross area requirements.
2. Develop phasing schedules or other proposal(s) to provide interim teaching facilities for options which require renovation of space in Appleby Hall, Powell Hall or other facilities.

U/MINN HSE

TAC

Proposal for Pharmacy/Nursing Feasibility Study

12 August 1976

3. Evaluate each of the potential options for general conformance to the program requirements of Pharmacy and Nursing functions.
4. Identify the influences of each option on the long-range programs, departmental adjacencies, expansion requirements, and implementation schedules contained in the Master Plan for the Health Sciences Expansion.
5. Indicate probable start and completion of construction based on Phases I and II of the Master Plan.
6. Estimate probable construction and total project costs based on gross area and factors appropriate to the type of facility and general conditions of the available space.
7. Summarize findings as a matrix of information and assist in selecting the most feasible options for detailed development and analysis.

PART II - DEVELOPMENT AND DETAILED ANALYSIS OF FEASIBLE OPTIONS

A. Schematic Development of Options

1. Analyze the floor plans of existing or projected buildings and indicate the present (or required) primary corridor circulation, egress stairs, vertical transportation, service shafts, toilets and housekeeping facilities to differentiate space assignable to program functions.
2. Suggest the location of specific program elements and the configuration of inter-related spaces or suites, and evaluate the arrangements for conformance to program requirements.
3. Summarize and compare the net-to-gross area ratios of the options.

B. Survey of Existing (or Projected) Buildings

1. Inspect buildings and plans identified in options and assemble information regarding date(s) of construction and remodeling, floor-to-floor and floor-to-ceiling heights, structure, materials, construction, finishes, corridor widths, stair and ramp dimensions, elevator capacities and other data required for planning and code analysis.
2. Determine age, type, scope and condition of plumbing, heating, ventilation, air-conditioning, fire protection, power, lighting and communication systems.
3. Analyze existing structure for design load, construction classification and condition.
4. Analyze buildings for aspects of life safety, including allowable area, fire divisions, occupant content, stair capacity and travel distance to egress based on program content of options.

C. Implementation of Options

1. Develop detailed schedules for completing options in conjunction with Phases I and II of the Master Plan.
2. Identify critical dates or sequences of implementation of options.
3. Suggest appropriate contractual methods of project delivery.
4. Summarize and compare project delivery methods and schedules.

D. Detailed Cost Analysis of Options

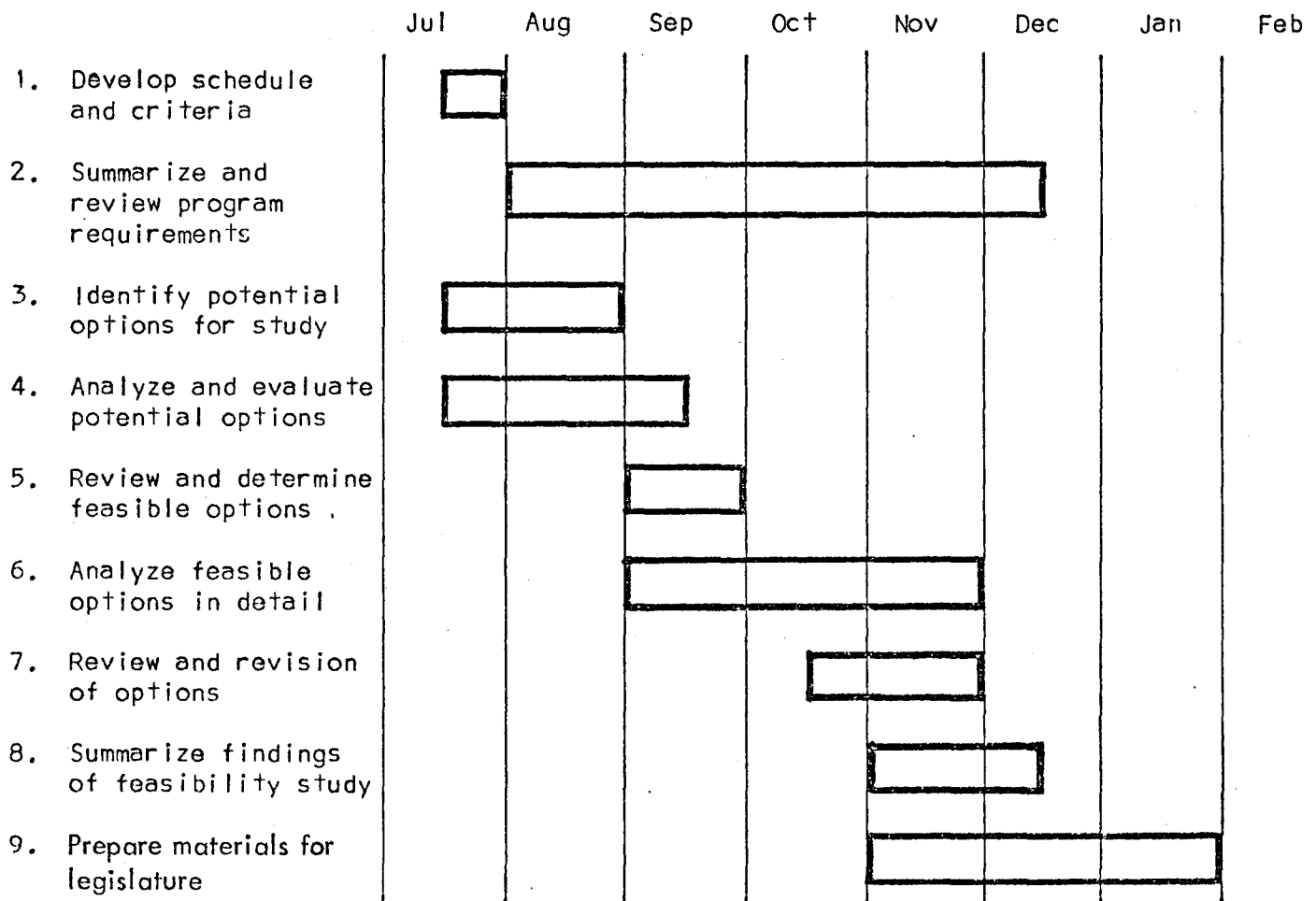
1. Define the scope and complexity of new structural remodeling and finishes based on program requirements.
2. Define the scope and type of new mechanical and electrical services, including modifications to central plant and distribution systems.
3. Identify items of new construction required to comply with code provisions for life-safety, the handicapped and energy conservation.
4. Summarize and compare the estimated construction and total project costs for options, based on scope of work and time schedules.
5. Indicate the life expectancy and long-term utility of capital investments based on quality of construction and implementation of the Master Plan.

E. Findings and Conclusions

1. Summarize the program, survey and analytic data developed in Parts I and II of this proposal.
2. Issue a report of findings and conclusions.
3. Assist in the preparation of graphic and other material for legislative presentations.

PART III - FEE PROPOSAL AND PROJECT SCHEDULE

- A. We propose that the University shall compensate the architects for the work outlined in Part I and Part II of this proposal according to the conditions outlined in the attached documents:
1. Standard Form of Agreement Between Owner and Architect, (A.I.A. Document B141); Compensation of the basis of a multiple of direct personnel expense.
 2. Schedule of Charges, Time Charge Contracts as a multiple of direct personnel expense; TAC document, effective date May 1974.
- B. It is assumed that the work proposed in previous sections to determine the feasibility of remodeling existing (or future) facilities to accommodate the program requirements of the School of Nursing and the College of Pharmacy, based on the planning of Unit F, will be developed according to the following schedule:



UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEETING NOTES

DATE: 17 August 1976

TAC JOB: 76044, Pharmacy/Nursing Feasibility Study

SUBJECT: Development of Potential Options

PLACE: Room 340, Morrill Hall

NOTES BY: Herman Zinter

PRESENT: Clint Hewitt, Cherie Perlmutter, Dean Weaver, Paul Maupin (U/M)
John Scott, Herman Zinter (TAC/HSAE)

The purpose of the meeting was to review and screen preliminary options for accommodating facilities for the College of Pharmacy and School of Nursing. The following items were discussed:

ITEM

ACTION REQUIRED

-
- | | |
|--|--|
| <p>1. Copies of the proposal for the feasibility study, dated 12 August 1976, were distributed as detailed information regarding the assumed scope and schedule of the study.</p> | |
| <p>2. TAC presented and distributed a summary of the program requirements for the College of Pharmacy and School of Nursing, derived from the redesign of Unit F, that will be used to develop and evaluate options. The program contains the following parts:</p> <ul style="list-style-type: none">a) Area summary by department, including approximate net areas required for programmed space and unit areas based on a factor of 1.25 to account for circulation. The unit area figure will be refined and adjusted during the study to reflect the more specific requirements for office, classroom or laboratory planning.b) General design criteria based on Health Sciences master plan documents and the development of Unit F.c) Adjacency diagrams which graphically indicate the desired and important functional relationships of program elements and where divisions can logically be made, when necessary, to accommodate programs on several floors or in different buildings. | <p>TAC requested that the program be reviewed in detail by all task force members. Additions and corrections will be discussed at subsequent meetings.</p> |

ITEM

ACTION REQUIRED

- d) Summary of required spaces as shown on the attached floor plans of Unit F, dated 15 March 1976, separately tabulated for Pharmacy, Nursing and shared facilities.
3. In conjunction with the program requirements, TAC presented for review a preliminary inventory of sites or buildings which included a floor-by-floor tabulation of existing and potentially available space in Unit B/C; Mayo Hospital; Powell, Appleby and Fraser Halls; and the Fenwick, Marlan and Willshire apartment buildings on Harvard Street. Additional space available through new construction was identified in Unit K/E, in-fill of the Harvard Street apartments, Appleby Hall addition, Unit H and Mayo Hospital (southeast court). The inventory included figures for approximate net useable and gross area by floor, and the present and projected (assigned) use by department of function.
4. TAC presented separate lists of potential options for locations the College of Pharmacy and School of Nursing, and a matrix of composite options showing possible combinations which utilize existing and new space. After review, the following options were selected for further study:

Pharmacy		Nursing	
P1	P50	N1	N50
P2	P51	N2	N51
P3	P52	N4	N52
P4	P53	N5	
		N6	
		N7	
		N8	

HSPO will arrange for keys and access to buildings for surveys by TAC.
TAC will refine assumptions regarding available area and condition of facilities.
Cherie Perlmutter will forward copy of a facility utilization report and a space inventory of Powell Hall.

TAC will continue analysis and development of options, particularly with regard to master plan considerations for schedule and phasing, and extent of construction or renovation required.

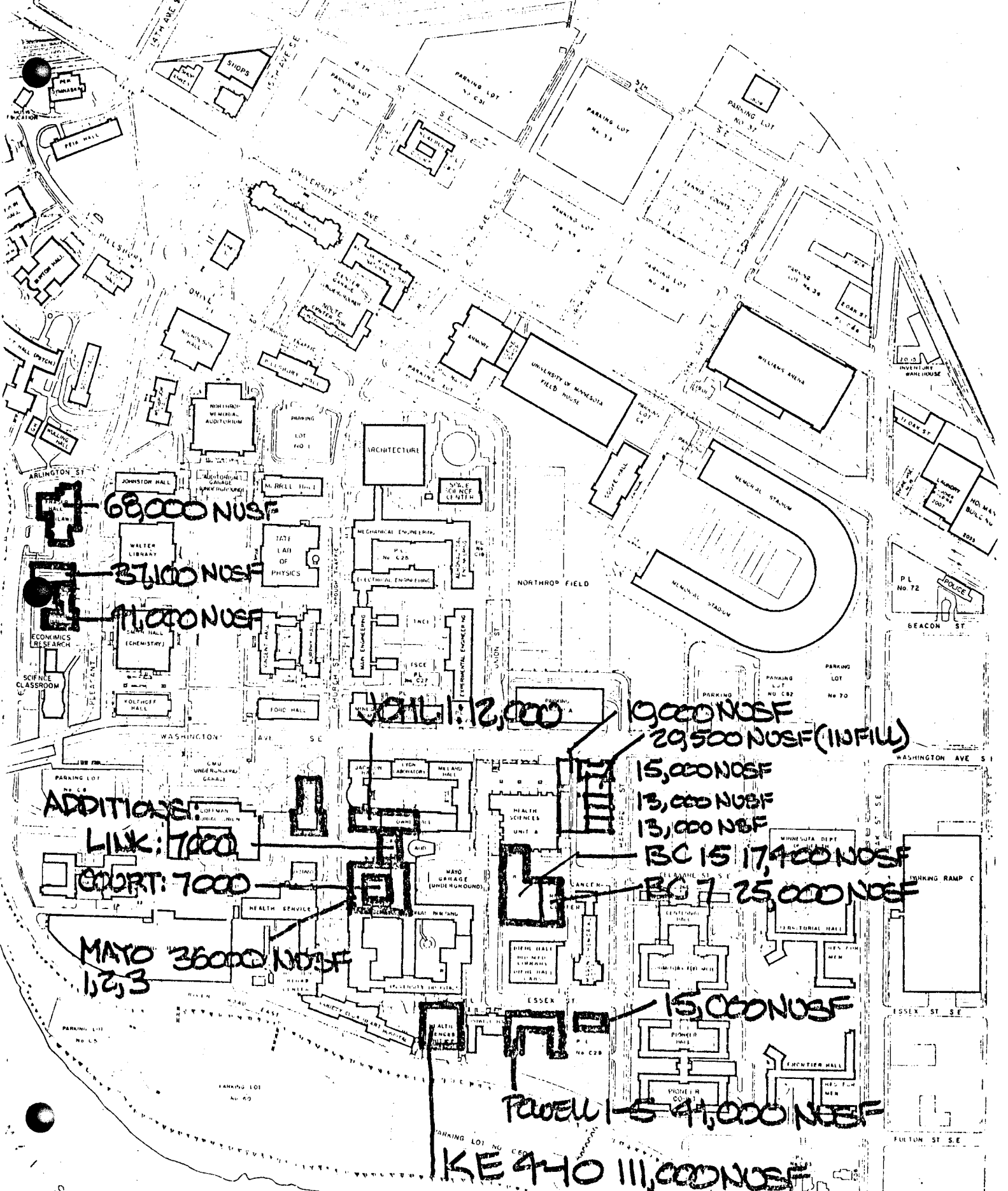
cc: C. Hewitt
C. Perlmutter
D. Ramey
D. Weaver
P. Maupin
HSAE

SUMMARY OF OPTIONS (30 AUG 76)

OPTION	BUDS	
N1 Hold	WILSHIRE/MARLAN/FENWICK	
N1 (ALT.) Hold	"	
N2 Hold	APPLEBY	
9 Hold - N4 REV Possible	MAYO north clinic	
Hold - N5 REV	MAYO/POWER	
Hold - N6	WILSHIRE/POWER	
Hold - N7 REV Possible	MAYO/FENWICK	
Hold - N8	POWER	
OUT. N9	MAYO/JOML	
Hold - N50	K/E	14,000 per floor x 7 additional floors
Hold - N51	K/E	
Hold - N52	K/E	
N54 Possible	MAYO + INFILL NORTH COURT	
N55 Possible	MAYO + LINK TO JOML	
N56 Possible	New Bldg on (Wilshire/Marlan/Fenwick site)	
OUT P1 REV	FRASER	
P2 Possible	APPLEBY/MAYO	
P3 Possible	APPLEBY/WILSHIRE/MARLAN/FENWICK	
P4 Possible	MAYO/WILSHIRE/MARLAN/FENWICK	
9 OUT? P5 REV Possible	B/C/APPLEBY	
P6 REV Possible	B/C/WILSHIRE/MARLAN/FENWICK	
P10 REV OUT	MAYO/JOML/WILSHIRE/FENWICK	
P11 Possible	B/C + MAYO	
OUT. P12	B/C/MAYO/JOML	
P50 Possible	APPLEBY + ADDN	
OUT. P52	K/E	
6 P53 Hold	HARVARD ST. APTS + INFILL	
OUT P54 Hold	B/C + INFILL HARVARD APTS	
OUT. P56	FRASER	
OUT. P57	MAYO + LINK TO JOML/JOML	

UNIVERSITY OF MINNESOTA INVENTORY OF OFFICES (REVISED)

FEASIBILITY STUDY



30 AUGUST 1976

PHARMACY/NURSING
FEASIBILITY STUDY

COLLEGE OF PHARMACY/SCHOOL OF NURSING = OPTIONS.

CRITERIA

THE OPTIONS LISTED ARE SELECTED FOR THEIR ABILITY TO SATISFY AREA REQUIREMENTS OF THE COLLEGE OF PHARMACY AND THE SCHOOL OF NURSING. SELECTED SITES, IDENTIFIED IN THE INVENTORY OF SITES, ARE CHOSEN FOR THEIR ABILITY TO CONTAIN MAJOR PORTIONS OF PROGRAM SPACE WITHOUT SUBDIVISION OF PROGRAM ELEMENTS DEFINED IN ADJACENCY DIAGRAMS. THESE SITES ARE THEN ANALYZED FOR THEIR ABILITY TO SATISFY PROGRAM REQUIREMENTS, MASTER PLAN OBJECTIVES AND SCHEDULE NEEDS.

OPTIONS WHICH USE SPACE IN MATO, FOWELL, FRASER AND UNIT B/C, HAVE BEEN REUSED AFTER FURTHER STUDY OF THESE SITES. A NEW SERIES OF OPTIONS USING THE VACATED CLINIC SPACE AROUND THE NORTH COURTYARD OF THE MATO COMPLEX AND POSSIBLE ADDITIONS, EITHER AS A LINK TO JOML OR AS COURTYARD INFILL, HAVE BEEN INCLUDED.

METHOD

OPTIONS ARE LISTED SEPARATELY FOR PHARMACY AND FOR NURSING. WITHIN EITHER PHARMACY OR NURSING, OPTIONS USING EXISTING SPACE ARE SEPARATED FROM THOSE REQUIRING NEW SPACE.

THE MATRIX SUMMARIZING COMPOSITE OPTIONS IDENTIFIES THE POSSIBLE COMBINATIONS OF PHARMACY AND NURSING OPTIONS LISTED TO DATE. THERE ARE 3 MAJOR CATEGORIES OF COMPOSITE OPTIONS: P/N COMBINATIONS IN EXISTING SPACE; P/N COMBINATIONS USING BOTH NEW & EXISTING SPACE; AND P/N OPTIONS IN NEW SPACE.

30 AUG 76

PHARMACY/NURSING
FEASIBILITY STUDY

MATRIX OF COMPOSITE OPTIONS

THE MATRIX BELOW SUMMARIZES POSSIBLE COMBINATIONS OF THE OPTIONS FOR LOCATING THE COLLEGE OF PHARMACY AND THE SCHOOL OF NURSING

Options	N1	N2	N4	N5	N6	N7	N8	N9	N50	N51	N52	N54	N55
P1	●	●	●	●	●	●	●	●	●	●	●	●	●
P2	●	●			●		●		●	●	●		
P3			●	●			●	●	●	●	●	●	●
P4							●		●	●	●		
P5	●		●	●	●	●	●	●	●	●	●	●	●
P6		●	●	●			●	●	●	●	●	●	●
P10		●			●		●		●	●	●		
P11	●	●			●		●		●	●	●		
P12	●	●			●		●		●	●	●		
P50	●		●	●	●	●	●	●	●	●	●	●	●
P52	●	●	●	●	●	●	●	●				●	●
P53		●	●	●			●	●	●	●	●	●	●
P54		●	●	●			●	●	●	●	●	●	●
P56	●	●	●	●	●	●	●	●	●	●	●	●	●
P57	●	●			●		●		●	●	●		

OPTIONS
IN NEW
& EXISTING
SPACE

OPTIONS
IN NEW
SPACE

OPTIONS IN NEW
& EXISTING SPACE

40 COMBINATIONS IN EXISTING SPACE
72 COMBINATIONS IN NEW & EXISTING SPACE
25 COMBINATIONS IN NEWSpace

30 AUG 76

SCHOOL OF NURSING = OPTIONS IN EXISTING

OPTION	PROGRAM				MASTER PL
Number	Location	Assigned Function	Area Fit	Comment	Present
	Useable Area	Unit Area	+/-		Assignment
N-1	WILSHIRE 15,000	TEACHING & RESEARCH 14,700	+300		APARTMENT
	FENWICK 13,000	FACULTY OFFS 13,000	—	2/3 FACULTY OFFICE SPACE	APARTMENT
	MARLAN 13,000	FACULTY OFFS 5,200 ADMINISTRATION 7,600	+200	1/3 FACULTY OFFICE SPACE	APARTMENT
N-1 ALTERNATE	W/F/M B 5000	RESEARCH & RESEARCH ADMIN 4950	+50	ADD CONNECTING LINKS & ELEVATOR TO ALL LEVELS	APARTMENT & MECH.
	W/F/M 1 11,500	TEACHING 10,900	+600	ENTRY LEVEL	APARTMENT
	W/F/M 2 11,500	FACULTY OFFS 11,500	—	2/3 FAC. OFF. PROGRAM	APARTMENT
	W/F/M 3 11,500	FACULTY OFFS 6,700 ADMINISTRATION 6,500	-1700	1/3 FAC. OFF. PROGRAM	APARTMENT
N-2	APPLEBY B 10,300	RESEARCH HEALTH ASSESS. NURSE SKILLS 10,100	+200	TEACHING SPLIT	PHARMACY
	APPLEBY 1 10,200	HELP. RELATION. ADMINISTRATION 10,200	—	ADMINISTRATION SPLIT	PHARMACY
	APPLEBY 2 10,200	ADMINISTRATION FACULTY OFFICES 9,600	+600	FACULTY OFFS. SPLIT	PHARMACY
	APPLEBY 3 10,200	FACULTY OFFICES 10,200			PHARMACY

ING SPACE

30 AUG 76

MASTER PLAN				SCHEDULE		COST	
Department	Intended Assignment	Option Assignment	Comment	Date Available	Construction Start	Construction End	Extent of Construction
ATHLETIC	EXPANSION SITE	SCHOOL OF NURSING	LONG TERM FACILITY CONFLICT WITH FUTURE EXPANSION SITE.	1977	1977	1978	EXTENSIVE RENOVATION
ATHLETIC	EXPANSION SITE	SCHOOL OF NURSING	"	1977	1977	1978	MINOR RENOVATION
ATHLETIC	EXPANSION SITE	SCHOOL OF NURSING	"	1977	1977	1978	MINOR RENOVATION
ATHLETIC	EXPANSION SITE	SCHOOL OF NURSING	LONG TERM FACILITY CONFLICT WITH FUTURE EXPANSION SITE.	1977	1977	1978	EXTENSIVE RENOVATION
ATHLETIC	EXPANSION SITE	SCHOOL OF NURSING	"	1977	1977	1978	EXTENSIVE RENOVATION
ATHLETIC	EXPANSION SITE	SCHOOL OF NURSING	"	1977	1977	1978	MINOR RENOVATION
ATHLETIC	EXPANSION SITE	SCHOOL OF NURSING	"	1977	1977	1978	MINOR RENOVATION
ATHLETIC	EXPANSION SITE	SCHOOL OF NURSING	LONG TERM FACILITY REMOTE FROM HEALTH SCIENCES CAMPUS	1979	1979	1980	MINOR RENOVATION
ATHLETIC	HEALTH SCIENCES	SCHOOL OF NURSING	"	1979	1979	1980	MINOR RENOVATION
ATHLETIC	HEALTH SCIENCES	SCHOOL OF NURSING	"	1979	1979	1980	MINOR RENOVATION
ATHLETIC	HEALTH SCIENCES	SCHOOL OF NURSING	"	1979	1979	1980	MINOR RENOVATION

SCHOOL OF NURSING: OPTIONS IN EXISTING S:

OPTION	PROGRAM				MASTER PLA
Number	Location	Assigned Function	Area Fit	Comment	Present
	Useable Area	Unit Area	+/-		Assignment
N-4 REVISED	MAYO 1 5200	RESEARCH & RES. ADMIN. 4950	+250	ACCESS TO B/C ANIMAL QUARTERS	MED. STUD SPACE
	MAYO 2 12,500	TEACHING 10,900	+1600	ACCESS TO LEVEL 2 CONCOURSES	HOSPITAL CLINICS
	MAYO 3 18,500	FACULTY OFFS. 18,200	+300	ACCESS TO PLAZA	HOSPITAL CLINICS
	MAYO 5 6800	ADMINISTRATION 6,500	+300	REMOTE FROM TEACHING & FACULTY OFFS.	MED. APTS STUDIO
	N-5 REVISED	MAYO 1 5200	RESEARCH & RES. ADMIN. 4950	+250	ACCESS TO B/C ANIMAL QUARTERS
MAYO 2 12,500		TEACHING 10,900	+1600	ACCESS TO LEVEL 2 CONCOURSES	HOSPITAL CLINICS
MAYO 3 18,500		FACULTY OFFS 18,200	+300	ACCESS TO PLAZA	HOSPITAL CLINICS
POWELL 3 7750		ADMINISTRATION 6,500	+1250	REMOTE FROM TEACHING & FACULTY	SCHOOL OF NURSING & OB/GYN CLINIC
N-6		WILSHIRE 15,000	TEACHING & RESEARCH 14,700	+300	REMOTE FROM FACULTY & ADMIN
	POWELL 3 10,250	ADMIN & FACULTY OFFS 10250	—	REMOTE FROM TEACHING; FACULTY SPACE SPLIT	SCHOOL OF NURSING; OB/GYN CLIN NURSING ADI
	POWELL 4 10,250	FACULTY OFFS 10250	—	"	SCHOOL OF NURSING & OB/GYN DE
	POWELL 5 5300	FACULTY OFFS 5300	—	"	SCHOOL OF NURSING

PLANNING SPACE

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MASTER PLAN

SCHEDULE

COST

Present Assignment	Intended Assignment	Option Assignment	Comment	Date		Extent of Construction
				Available	Construction Start / End	
MED. STUD. SPACE	MED. STUD. SPACE	SCHOOL OF NURSING	LONG TERM	1977	1977 - 1978	MINOR RENOVATION
HOSPITAL WINGS	SCHOOL OF NURSING	SCHOOL OF NURSING	LONG TERM	NOV 77	1978 - 1979	EXTENSIVE RENOVATION
HOSPITAL WINGS	SCHOOL OF NURSING	SCHOOL OF NURSING	LONG TERM	NOV 77	1978 - 1979	EXTENSIVE RENOVATION
ED. APTS STUDIO	NURSING ADMIN	SCHOOL OF NURSING	SHORT TERM MOVE; TO BE CONSOLIDATED IN HAYO NORTH [J]	NOV 77	1978 - 1978	MINOR RENOVATION
ED STUD SPACE	MED STUD SPACE	SCHOOL OF NURSING	LONG TERM	1977	1977 - 1978	MINOR RENOVATION
HOSPITAL WINGS	SCHOOL OF NURSING	SCHOOL OF NURSING	LONG TERM	NOV 77	1978 - 1979	EXTENSIVE RENOVATION
HOSPITAL WINGS	SCHOOL OF NURSING	SCHOOL OF NURSING	LONG TERM	NOV 77	1978 - 1979	EXTENSIVE RENOVATION
SCHOOL OF NURSING (GYN) WING	HOSPITAL EXPANSION SITE. [UNIT J]	SCHOOL OF NURSING	SHORT TERM TO BE CONSOLIDATED IN HAYO NORTH	NOV 77	1978 - 1978	MINOR RENOVATION
HOSPITALS	EXPANSION SITE	SCHOOL OF NURSING	SHORT TERM, CONFLICT WITH FUTURE EXPANSION	1977	1977 - 1978	EXTENSIVE RENOVATION
SCHOOL OF NURSING; GYN CLINIC; SIG. ADMIN	EXPANSION SITE, HOSPITAL	SCHOOL OF NURSING	"	NOV 77	1978 - 1978	MINOR RENOVATION
SCHOOL OF NURSING & GYN DEPT.	EXPANSION SITE, HOSPITAL	SCHOOL OF NURSING	"	NOV 77	1978 - 1978	MINOR RENOVATION
SCHOOL OF NURSING	EXPANSION SITE, HOSPITAL	SCHOOL OF NURSING	"	NOV 77	1978 - 1978	MINOR RENOVATION

SCHOOL OF NURSING: OPTIONS IN EXISTING

OPTION Number	PROGRAM Location Useable Area	Assigned Function Unit Area	Area Fit +/-	Comment	MASTER PLAN	
					Present	Assignment
N-7 REVISED	MAYO 1 5200 ²⁵⁰	RESEARCH & RES. ADMIN 4950	+250	ACCESS TO B/C ANIMAL QUARTERS	MED. STUD. SPACE	
	MAYO 2 12,500 ¹⁶⁰⁰	TEACHING 10,900	+1600	ACCESS TO LEVEL 2 CONCOURSES	HOSPITAL CLINICS	
	MAYO 3 18,500 ³⁰⁰	FACULTY OFFS 18,200	+300	ACCESS TO PLAZA	HOSPITAL CLINICS	
	MARLAN 13,000 ⁶⁵⁰⁰	ADMINISTRATION 6500	+6500	REMOTE FROM TEACHING & FACULTY	APARTMENTS	
N-8	POWELL 1 10250 ¹⁵⁰	RESEARCH HEALTH ASSESS NURSE SKILLS 10,100	+150	TEACHING SPACE SPLIT	SCHOOL OF NURSING & FAN SUIC.	
	POWELL 2 10250 ⁰	HELP. RELATIONS FACULTY OFFS 10,250	-	FACULTY SPACE SPLIT	SCHOOL OF NURSING & MAN. SUIC.	
	POWELL 3 10,250 ⁰	ADMINISTRATION FACULTY OFFS 10,250	-	FACULTY SPACE SPLIT	SCHOOL OF NURSING & CLINIC & NURS ADMIN.	
	POWELL 4 10,250 ⁶⁰⁰	FACULTY OFFS 9,750	+500		SCHOOL OF NURSING & NURSING ADMIN.	
N-9	MAYO 1 5200 ¹⁵⁰	RESEARCH & RESEARCH ADMIN 4950	+250	ACCESS TO B/C ANIMAL QUARTERS	MED. STUD. SPACE	
	MAYO 2 12,500 ¹⁶⁰⁰	TEACHING 10,900	+1600	ACCESS TO LEVEL 2 CONCOURSES	HOSPITAL CLINICS	
	MAYO 3 18,500 ³⁰⁰	FACULTY OFFS 18,200	+300	ACCESS TO PLAZA	HOSPITAL CLINICS	
	JOH 1 12,000 ⁵⁵⁰⁰	ADMINISTRATION 6500	+5,500	ACCESS TO PLAZA	MED SCHOOL SPACE	

2
4950
10900
18200
6500

40550

EXISTING SPACE

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MASTER PLAN

Present Assignment	Intended Assignment	Option Assignment	Comment	SCHEDULE			COST
				Date Available	Construction Start	Construction End	Extent of Construction
ED. STUD. SPACE	MED. STUD. SPACE	SCHOOL OF NURSING	LONG TERM	NOV 77	1978	1979	MINOR RENOVATION
HOSPITAL LUNGS	SCHOOL OF NURSING	SCHOOL OF NURSING	LONG TERM	NOV 77	1978	1979	EXTENSIVE RENOVATION
HOSPITAL LUNGS	SCHOOL OF NURSING	SCHOOL OF NURSING	LONG TERM	NOV 77	1978	1979	EXTENSIVE RENOVATION
APPOINTMENTS	EXPANSION SITE	SCHOOL OF NURSING	SHORT TERM; MOVE TO MAYO NORTH AFTERW.	1977	1978	1978	MINOR RENOVATION
SCHOOL OF NURSING & N. SUC.	HOSPITAL EXPANSION SITE	SCHOOL OF NURSING	SHORT TERM; ENW. SUC TO MAYO I	NOV 77	1978	1979	EXTENSIVE RENOVATION
SCHOOL OF NURSING & N. SUC.	HOSPITAL EXPANSION SITE	SCHOOL OF NURSING	SHORT TERM; MAN. SUC TO COMPUTER SPACE DEPT SPACE TO ROBBES	NOV 77	1978	1979	EXTENSIVE RENOVATION
SCHOOL OF NURSING & CLINIC & NURSE TRAIN.	HOSPITAL EXPANSION SITE	SCHOOL OF NURSING	SHORT TERM; CLINIC TO B/C NURSE ADMIN TO MAYO 5	NOV 77	1978	1978	MINOR RENOVATION
SCHOOL OF NURSING TRAIN.	HOSPITAL EXPANSION SITE	SCHOOL OF NURSING	SHORT TERM ORIGINAL DEPT SPACE TO ETC	NOV 77	1978	1978	MINOR RENOVATION
ED. STUD. SPACE	MED. STUD. SPACE	SCHOOL OF NURSING	LONG TERM	1977	1978	1979	EXTENSIVE RENOVATION
HOSPITAL LUNGS	SCHOOL OF NURSING	SCHOOL OF NURSING	LONG TERM	NOV 77	1978	1979	EXTENSIVE RENOVATION
HOSPITAL LUNGS	SCHOOL OF NURSING	SCHOOL OF NURSING	LONG TERM	NOV 77	1978	1979	EXTENSIVE RENOVATION
MED SCHOOL SPACE	ANATOMY	SCHOOL OF NURSING	LONG TERM	1978	1978	1979	EXTENSIVE RENOVATION

PHARMACY NURSING
FEASIBILITY STUDY

SCHOOL OF NURSING: OPTIONS IN NEW SPACE

OPTION	PROGRAM	MASTER PLAN			
Number	Location Useable Area	Assigned Function Unit Area	Area Fit +/-	Comment	Present Assignment
NS0	KE 4 14,960	TEACHING RESEARCH 14,700	+260		ROOF
	KE 5 12,530	ADMIN & FACULTY OFFS 12,530	—	1/3 FACULTY OFFICE PROGRAM	—
	KE 6 14,245	FACULTY OFFS 13,270	+975	2/3 FACULTY OFFICE PROGRAM	—
NS1	KE 5 12,530	TEACHING RESEARCH 14,700	-2170		—
	KE 6 14,245	ADMIN & FAC OFFS 14,245	—	40% FACULTY OFFICE PROGRAM	—
	KE 7 14,245	FAC OFFS 10,575	+3670	60% FACULTY OFFICE PROGRAM	—
NS2	KE 9 18,330	TEACH, RESEARCH ADMIN 18,330	-1920	50% ADMIN	—
	KE 10 18,330	ADMIN FAC OFFS 18,330	-1920	50% ADMIN N 4200 SF DEFICIENT	—
NS4	MAYO 2 FUS COURT W/FILL 20,000	TEACHING RESEARCH & FAC OFFS 21,000	-1000	1/3 FAC OFF PROGRAM	HOSP. CLINICS
	MAYO 3 18,500	FAC OFFS & ADMIN 19,500	-1000	2/3 FAC OFF PROGRAM	HOSP. CLINICS
NS5	MAYO 1 5200	RESEARCH & RES ADMIN	+250	ACCESS TO BK ANIMALS & SUK	MED. STUD. SPACE
	MAYO 2 12,500	TEACHING 10,900	+1600	ACCESS TO LEVEL 2 CONCOURSE	HOSP. CLINIC
	MAYO 3 FUS NORTH LINK 24,500	FAC OFFS & ADMIN 24,700	-200	ACCESS TO PLAZA	HOSP. CLINICS

CE

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MASTER PLAN

SCHEDULE

COST

Project	Intended Assignment	Option Assignment	Comment	Date Available	Construction Start	Construction End	Extent of Construction
DF	VCHH RESEARCH [PAR/SICU]	SCHOOL OF NURSING	LONG TERM; CONFLICT WITH HOSP.	1977	1978	1980	NEW CONSTRUCTION
-	VCHH RESEARCH EXPANSION	SCHOOL OF NURSING	LONG TERM; CONFLICT WITH HOSP.	—	1978	1980	NEW CONSTRUCTION
-	VCHH RESEARCH EXPANSION	SCHOOL OF NURSING	LONG TERM; CONFLICT WITH HOSP.	—	1978	1980	NEW CONSTRUCTION
-	VCHH RESEARCH EXPANSION	SCHOOL OF NURSING	LONG TERM; CONFLICT WITH HOSP.	—	1978	1980	NEW CONSTRUCTION
-	VCHH RESEARCH EXPANSION	SCHOOL OF NURSING	LONG TERM; CONFLICT WITH HOSP.	—	1978	1980	NEW CONSTRUCTION
-	VCHH RESEARCH EXPANSION	SCHOOL OF NURSING	LONG TERM; CONFLICT WITH HOSP.	—	1978	1980	NEW CONSTRUCTION
-	VCHH BEDS	SCHOOL OF NURSING	LONG TERM; CONFLICT WITH HOSP.	—	1978	1980	NEW CONSTRUCTION
-	VCHH BEDS	SCHOOL OF NURSING	LONG TERM; CONFLICT WITH HOSP.	—	1978	1980	NEW CONSTRUCTION
P. CLINICS	SCHOOL OF NURSING	SCHOOL OF NURSING	LONG TERM	NOV 77	1978	1980	NEW CONST. & EXTENSIVE RENOVATION
P. CLINICS	SCHOOL OF NURSING	SCHOOL OF NURSING	LONG TERM	NOV 77	1978	1980	EXTENSIVE RENOVATION
STOD	MED. STOD. SPACE	SCHOOL OF NURSING	LONG TERM	1977	1978	1980	MINOR RENOVATION
P. CLINICS	SCHOOL OF NURSING	SCHOOL OF NURSING	LONG TERM	NOV 77	1978	1980	EXTENSIVE RENOVATION
CLINICS	SCHOOL OF NURSING	SCHOOL OF NURSING	LONG TERM	NOV 77	1978	1980	NEW CONST. & EXTENSIVE RENOVATION

PHARMACY NURSING
FEASIBILITY STUDY

COLLEGE OF PHARMACY: OPTIONS IN EXISTING SP

OPTION	PROGRAM	MASTER PLAN			
Number	Location Useable Area	Assigned Function Unit Area	Area Fit +/-	Comment	Present Assignment
P-1 REUSED	FRASER 68,000	TOTAL PROGRAM 78,100	-10,100	AREA DEFICIENT SEE OPTION P50	LAW
P-2	APPLEBY B 10,300	SERVICE, ADMIN & RESEARCH	—	RESEARCH SPLIT. REMOTE FROM HS. CAMPUS & REST OF PROGRAM	COLLEGE OF PHARMACY
10,300	APPLEBY I 10,200	RESEARCH	—		COLLEGE OF PHARMACY
10,200	APPLEBY 2 10,200	RESEARCH	—		COLLEGE OF PHARMACY
10,200	APPLEBY 3 10,200	RESEARCH	-500		COLLEGE OF PHARMACY
40,900	MAYO 1 5,200	CLINICAL PHARM & HOSP. PHARM 6,000	-800	SPLIT FROM PHARM ADMIN.	MED STUD SPACE
5,200	MAYO 2 12,500	UNDERGROUND 13,000	-500	REMOTE FROM SERVICE ACCESS TO LEVEL 2 COURSE	HOSP. CLIN
12,500	MAYO 3 18,500	ADMIN, PROG INFO & PHARM ADMIN 17,680	+800	REMOTE FROM RESEARCH ACCESS TO PLAZA	HOSP CLINIC
18,500					
36,200					
77,100					
P-3	APPLEBY B 10,300	SERVICE, ADMIN RESEARCH	—	RESEARCH SPLIT; REMOTE FROM HS. CAMPUS & REST OF PHARM. PROGRAM	COLLEGE OF PHARMACY
	APPLEBY I 10,200	RESEARCH	—		COLLEGE OF PHARMACY
	APPLEBY 2 10,200	RESEARCH	—		COLLEGE OF PHARMACY
	APPLEBY 3 10,200	RESEARCH	-500		COLLEGE OF PHARMACY

1000 SPACE

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MASTER PLAN

SCHEDULE

COST

Present Assignment	Intended Assignment	Option Assignment	Comment	Date Available	Construction Start	Construction End	Extent of Construction
LAW		COLLEGE OF PHARMACY					
COLLEGE OF PHARMACY		COLLEGE OF PHARMACY	LONG TERM. REQUIRES TEMP. LAB SPACE DURING CONSTRUCTION	1977	1978	1979	EXTENSIVE RENOVATION
COLLEGE OF PHARMACY		COLLEGE OF PHARMACY	"	1977	1978	1979	EXTENSIVE RENOVATION
COLLEGE OF PHARMACY		COLLEGE OF PHARMACY	"	1977	1978	1979	EXTENSIVE RENOVATION
COLLEGE OF PHARMACY		COLLEGE OF PHARMACY	"	1977	1978	1979	EXTENSIVE RENOVATION
RED STUD	MED STUD SPACE	COLLEGE OF PHARMACY	LONG TERM	1977	1978	1979	MINOR RENOVATION
REP. CLINIC	SCHOOL OF NURSING	COLLEGE OF PHARMACY	LONG TERM	NOV 77	1978	1979	EXTENSIVE RENOVATION
SP CLINIC	SCHOOL OF NURSING	COLLEGE OF PHARMACY	LONG TERM	NOV 77	1978	1979	EXTENSIVE RENOVATION
COLLEGE OF PHARMACY		COLLEGE OF PHARMACY	LONG TERM REQUIRES TEMP. LAB SPACE DURING CONSTRUCTION	1977	1978	1979	EXTENSIVE RENOVATION
COLLEGE OF PHARMACY		COLLEGE OF PHARMACY	"	1977	1978	1979	EXTENSIVE RENOVATION
COLLEGE OF PHARMACY		COLLEGE OF PHARMACY	"	1977	1978	1979	EXTENSIVE RENOVATION
COLLEGE OF PHARMACY		COLLEGE OF PHARMACY	"	1977	1978	1979	EXTENSIVE RENOVATION

OPTION	PROGRAM	MASTE			
Number	Location Useable Area	Assigned Function Unit Area	Area Fit +/-	Comment	Present Assign
P-3 CONTINUED	WILSHIRE B,1,2,3 15,000	UNDERGRAD & DRUG INFO 14,100	+900	REMOTE FROM SERVICE	APART
	FENWICK 13,000	CP/HP/PA 14,600	-1600		APART
	MARLAN 13,000	ADMIN. 8,000	+5000	REMOTE FROM RESEARCH	APART
P-4 5 200 12 500 18 500 36 200	MAYO 1 5200	SERVICE & ANIMALS 6100	-900	ACCESS TO RC ANIMALS & SERVICE	MED & SPACE
	MAYO 2 12,500	RESEARCH	-2150	ACCESS TO LEVEL 2 CONCOURSE	HOSP. CLINIC
	MAYO 3 18,500	RESEARCH	-2150	ACCESS TO PLAZA	HOSP CLINIC
15 000 13 000 13 000 41. 000 77 200	WILSHIRE B,1,2,3 15000	UNDERGRAD & DRUG INFO 14,100	+900	REMOTE FROM SERVICE	APART
	FENWICK B,1,2,3 13000	CP/HP/PA 14600	-1600		APART
	MARLAN B,1,2,3 13000	ADMIN 8000	+5000	REMOTE FROM RESEARCH	APART
P-5 REVISED	BC-7 25000	SERVICE RESEARCH	+500	RESEARCH SPIT	SHELL
	BC-15 17000	ANIMALS RESEARCH	+500		SHELL
	APFLEBY B,1,2,3 40,900	UNDERGRAD CP/HP/PA ADMIN 36,700	+4200	REMOTE FROM RESEARCH	COLLEGE PHARMACY

EXISTING SPACE

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MASTER PLAN

SCHEDULE

COST

Present Assignment	Intended Assignment	Option Assignment	Comment	Date Available	Construction Start	Construction End	Extent of Construction
APARTMENTS	EXPANSION SITE	COLLEGE OF PHARM.	SHORT TERM UNSATISFACTORY BLDG. FOR LABS TO MAYO NORTH AFTER	1977	1978	1979	EXTENSIVE RENOVATION
APARTMENTS	EXPANSION SITE	COLLEGE OF PHARM	SHORT TERM CONSOLIDATE IN MAYO NORTH AFTER	1977	1978	1978	MINOR RENOVATION
APARTMENTS	EXPANSION SITE	COLLEGE OF PHARM	SHORT TERM CONSOLIDATE IN MAYO NORTH AFTER	1977	1978	1978	MINOR RENOVATION
MED STUD SPACE	MED STUD SPACE	COLLEGE OF PHARM	LONG TERM	1977	1978	1979	EXTENSIVE RENOVATION
HOSP. CLINIC	SCHOOL OF NURSING	COLLEGE OF PHARM	LONG TERM	NOV 77	1978	1979	EXTENSIVE RENOVATION
HOSP CLINIC	SCHOOL OF NURSING	COLLEGE OF PHARM	LONG TERM	NOV 77	1978	1979	EXTENSIVE RENOVATION
APARTMENT.	EXPANSION SITE	COLLEGE OF PHARM	SHORT TERM CONSOLIDATE IN MAYO NORTH AFTER	1977	1978	1979	EXTENSIVE RENOVATION
APARTMENT.	EXPANSION SITE	COLLEGE OF PHARM.	SHORT TERM CONSOLIDATE IN MAYO NORTH	1977	1978	1978	MINOR RENOVATION
APARTMENT	EXPANSION SITE	COLLEGE OF PHARM	SHORT TERM CONSOLIDATE IN MAYO NORTH	1977	1978	1978	MINOR RENOVATION
SHELL	DEPARTMENT CLINIC	COLLEGE OF PHARM	LONG TERM	1978	1978	1980	NEW CONSTRUCTION IN SHELL
SHELL	AMBICADE HOTEL	COLLEGE OF PHARM	LONG TERM	1978	1978	1980	NEW CONSTRUCTION IN SHELL
USE OF DEMACY		COLLEGE OF PHARM.	LONG TERM REQUIRES TEMP SPACE IN APT BLDGS	1977	1978	1979	EXTENSIVE RENOVATION

OPTION	PROGRAM	MASTER PI			
Number	Location Useable Area	Assigned Function Unit Area	Area Fit +/-	Comment	Present Assignment
P-6 REVISED	BC-7 25000	SERVICE RESEARCH	+500	RESEARCH SPLIT	SHELL
	BC-15 17,400	ANIMALS RESEARCH	+500		SHELL
	WILSHIRE FEWICK HARLAN 41,000	UNDERGRAD CP/HP/PA ADMIN 36,700	+3,300	SAME ASSIGNMENTS AS IN OPTION P3	APTS.
P-10 REVISED	MAYO 1 5200	SERVICE RESEARCH	-1,100	ACCESS TO B/C ANIMALS & SERVICE	MED STUD SPACE
	MAYO 2 12,500	RESEARCH	-1,100	ACCESS TO LEVEL HOSP CLIN 2 CONCOURSE	HOSP CLIN
	MAYO 3 18,500	RESEARCH	-1,100	ACCESS TO PLAZA	HOSP CLIN
P-11	JOHL 1 12,000	UNDERGRAD 14,100	-2,100	ACCESS TO PLAZA	MED SCH
	BC-B 5700	ANIMALS 2,500	+3200		SHELL
	WILSHIRE 15,000	CP/HP/PA 14,600	+400	REMOTE	APTS.
	FEWICK 13,000	ADMIN 8,000	+5000	REMOTE	APTS.
	BC 7 25000	SERVICE RESEARCH	+500		SHELL
	BC-15 17400	ANIMALS RESEARCH	+500		SHELL
MAYO 1 5200	CP/HP 6000	-800		MED STUD SPACE	
MAYO 2 12500	UNDERGRAD 13,000	-500	REMOTE FROM SERVICE	HOSP CLIN	
MAYO 3 12,500	PA ADMIN 12,600	+820	REMOTE FROM RESEARCH	HOSP CLIN	

STING SPARE

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MASTER PLAN

SCHEDULE

COST

Project	Intended Assignment	Option Assignment	Comment	Date		Construction		Extent of Construction
				Available		Start	End	
ELL	DENTAL CLINIC	COLLEGE OF PHARM.	LONG TERM	1977		1978	1980	NEW CONSTRUCT. IN SHELL
ELL	AMB CADE HOTEL	COLLEGE OF PHARM	LONG TERM	1977		1978	1980	NEW CONSTRUCT IN SHELL
S.	EXPANSION SITE	COLLEGE OF PHARM	SHORT TERM RELOCATE TO HAYO NORTH 4,5,6 AFTER J.	1977		1978	1979	RENOVATIONS
STUD	HED STUD. SPACE	COLLEGE OF PHARM	LONG TERM HAYO NORTH SCHEME	1977		1978	1979	EXTENSIVE RENOVATION
CLINIC	SCHOOL OF NURSING	COLLEGE OF PHARM	"	NOV 77		1978	1979	EXTENSIVE RENOVATION
CLINIC	SCHOOL OF NURSING	COLLEGE OF PHARM	"	NOV 77		1978	1979	EXTENSIVE RENOVATION
SCHOOL	ANATOMY	COLLEGE OF PHARM	"	1978		1978	1979	EXTENSIVE RENOVATION
L	ANIMALS	COLLEGE OF PHARM	LONG TERM	1977		1978	1979	NEW CONSTRUCT IN SHELL
P.	EXPANSION SITE	COLLEGE OF PHARM	SHORT TERM RELOCATE TO HAYO NORTH	1977		1978	1978	MINOR RENOVATION
P.	EXPANSION SITE	COLLEGE OF PHARM	AFTER J.	1977		1978	1978	MINOR RENOVATION
-	DENTAL CLINIC	COLLEGE OF PHARMACY	LONG TERM	1977		1978	1980	NEW CONST. IN SHELL
-	AMB CADE HOTEL	COLLEGE OF PHARMACY	LONG TERM	1977		1978	1980	NEW CONST. IN SHELL
STUD	HED STUD. SPACE	COLLEGE OF PHARMACY	LONG TERM	1977		1978	1979	MINOR RENOVATION
CLINIC	SCHOOL OF NURSING	COLLEGE OF PHARMACY	LONG TERM	NOV 77		1978	1979	EXTENSIVE RENOVATION
CLINIC	SCHOOL OF NURSING	COLLEGE OF PHARMACY	LONG TERM	NOV 77		1978	1979	EXTENSIVE RENOVATION

OPTION Number	PROGRAM		Area Fit +/-	Comment	MASTER PL
	Location Useable Area	Assigned Function Unit Area			Present Assignment
P12	BC 7 25000	SERVICE RESEARCH	+500		SHELL
	BC 15 17400	ANIMALS RESEARCH	+500		SHELL
	MA102 12,500	UNDERGRAD 14,100	-1600	REMOTE FROM RESEARCH; LEVEL 2 ACCESS	HOSP CLINICS
	MA103 18,500	CP/HP/PA 14,600	+3900	PLAZA ACCESS	HOSP CLINICS
	JOH 61 12,000	ADMIN 8000	+4000	REMOTE FROM RESEARCH; PLAZA ACCESS	MED SCHOOL

IN EXISTING SPACE

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MASTER PLAN

SCHEDULE

COST

Present Assignment	Intended Assignment	Option Assignment	Comment	Date Available		Construction		Extent of Construction
						Start	End	
SHELL	DENTAL CLINIC	COLLEGE OF PHARM	LONG TERM	1977	1978	1980		NEW CONST. INSHELL
SHELL	AMBOCADE HOTEL	"	LONG TERM	1977	1978	1980		NEW CONST. INSHELL
DSP CLINICS	SCHOOL OF NURSING	"	LONG TERM	NOV 71	1978	1979		EXTENSIVE RENOVATION
DSP CLINICS	SCHOOL OF NURSING	"	LONG TERM	NOV 71	1978	1979		EXTENSIVE RENOVATION
ED School	ANATOMY	"	LONG TERM	1978	1978	1979		MILOR RENOVATION

PHARMACY, NURSING
FEASIBILITY STUDY

COLLEGE OF PHARMACY = OPTIONS IN NEW

OPTION	PROGRAM				MASTER P
Number	Location Useable Area	Assigned Function Unit Area	Area Fit +/-	Comment	Present Assignment
P50	APRIBST & ADDITION 78100	TOTAL PROGRAM 78100	—	REMOTE FROM HS CAMPUS	COLLEGE OF PHARM
P52	KE 6 14245	ADMIN 8000	+6245		—
	KE 7 14245	CP/HP/PA 14600	-355		—
	KE 8 18,330	UNDERGRAD SERVICE 17,700	+630		—
	KE 9 18,330	RESEARCH	—		—
	KE 10 18,330	RESEARCH & ANIMALS	+1140		—
P53	HARVARD APTS + INT'L				
	B 22000	RESEARCH SERVICE ANIMALS ADMIN.	—	RESEARCH DIVIDED ON THREE LEVELS IN NEWS PAPER	APTS
	FL. 1 16,300		1		APTS
	FL. 2 16,300	CP/HP/PA	—		APTS
	FL. 3 16,300	RESEARCH UNDERGRAD	—		APTS
	FL. 4 8000	RESEARCH	+900		ROOF

FEW SPARE

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MASTER PLAN				SCHEDULE			COST
Project	Intended Assignment	Option Assignment	Comment	Date Available	Construction Start	Construction End	Extent of Construction
PHARM		COLLEGE OF PHARM	STAGED ADDITION & RENOVATION LONG TERM	1977	1978	1981	NEW CONSTRUCT & EXTENSIVE RENOVATION
VCHH RESEARCH		COLLEGE OF PHARM	CONFLICT WITH HOSP. EXPANS; LONG TERM	—	1978	1980	NEW CONSTRUCT
VCHH RESEARCH		"	"	—	1978	1980	"
VCHH BEDS		"	"	—	1978	1980	"
VCHH BEDS		"	"	—	1978	1980	"
VCHH BEDS		"	"	—	1978	1980	"
S EXPANSION SITE		COLLEGE OF PHARM	LONG TERM	1977	1978	1981	NEW CONSTRUCT
S	"	"	"	1977	1978	1981	"
S	"	"	"	1977	1978	1981	"
S	"	"	"	1977	1978	1981	"
F	"	"	"	1977	1978	1981	"

PHARMACY, NURSING
FEASIBILITY STUDY

COLLEGE OF PHARMACY - OPTICUS IN NEW

OPTION	PROGRAM				MASTER PL
Number	Location Useable Area	Assigned Function Unit Area	Area Fit +/-	Comment	Present Assignment
P54	BC-7 25,000	RESEARCH	—	RESEARCH SPLIT. SERVICE REMOTE	SHELL
	HARVARD APTS & WFLU 61,500	RESEARCH PLUS REST OF PROGRAM	-1900	RESEARCH SPLIT	APTS.
P56	FRASER				
	SB 6000	SERVICE ANIMALS	-100	ADD NEW ELEVATORS	LAW
	B 14000	UNDERGRAD	-100		"
	G 4600	CLASSROOM RECEIVING DOCK	*		"
	FLOOR 1 17400	CP/HP/PA ADMIN	—		"
	MEZZ 5600	ADMIN	—		"
	FLOOR 2 17400	RESEARCH	—	RESEARCH SPLIT	"
	FLOOR 3 18,400	RESEARCH	+500		"
P57	MAYO 1 5200	SERVICE ANIMALS	-900	ACCESS TO B/C SERVICE & ANIMALS	MED STOR SPACE
	MAYO 2 19700	CP/HP/PA	+5100	ACCESS TO CONCOURSE	HOSP CLIN & COURTYARD
	MAYO 3 25,200	RESEARCH	-3100	ADJACENT ON ONE LEVEL ABOVE SERVICE & ANIMALS; PLAZA ACCESS	HOSP CLIN & COURTYARD
	LINK 3 7000	RESEARCH	—		—
	JOHN 1 12000	UNDERGRAD	-2100		MED SCH
	LINK 4	ADMIN	-1000		—

NEW SPACE

30 AUG 76

MASTER PLAN				SCHEDULE			COST
Department	Intended Assignment	Option Assignment	Comment	Date Available	Construction Start	Construction End	Extent of Construction
ELL	DENTAL CLINIC	COLLEGE OF PHARM	LONG TERM	1977	1978	1980	NEW CONST. IN SHELL
S	EXPANSION SITE	"	LONG TERM	1977	1978	1980	NEW CONST.
	?	COLLEGE OF PHARMACY	LONG TERM	1977(?)	1978	1980	EXTENSIVE RENOVATION
	"	"	"	"	"	"	EXTENSIVE RENOVATION
	"	"	"	"	"	"	DEMOLITION & RENOVATION
	"	"	"	"	"	"	LEVEL FLOORS & RENOVATION
	"	"	"	"	"	"	RENOVATION
	"	"	"	"	"	"	INFILL FLOOR & RENOVATION
	"	"	"	"	"	"	ADDITION ON ROOF, INFILL FLOOR
STUD E	MED STUD SPACE	COLLEGE OF PHARM	LONG TERM NORTH COURT SCHEME	1977	1978	1980	EXTENSIVE RENOVATIONS
POLYCLINIC	SCHOOL OF NURSING	"	"	NOV 77	1978	1980	EXTENSIVE RENOVATION
CLINIC	SCHOOL OF NURSING	"	"	NOV 77	1978	1980	NEW CONSTRUCT & RENOVATION
	—————	"	"	—————	1978	1980	NEW CONSTRUCT
SEWER	ANATOMY	"	"	1978	1978	1980	RENOVATION
	—————	"	"	—————	1978	1980	NEW CONSTRUCT

THE ARCHITECTS COLLABORATIVE, INC.
HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.

PHARMACY/NURSING FACILITY
ENGINEERING AND CONSTRUCTION MEETING
24 AUGUST 1977

AGENDA:

1. Project Background

2. Team Organization

Participants

- Procedures - Scheduling of meetings/dates
- Advisory Committee

3. Project Schedule

Construction Document Packages
Phasing Study/Sequence
Schedule Dates

4. Project Costs

Project Scope v.s. Project Budget
Cost Analysis of Components

5. Overall Planning Issues

Plaza Design
Expansion
Deduct Alternates
Casework Systems
Countertop Material
Chilled Water System

6. Mechanical Systems

7. Electrical Systems

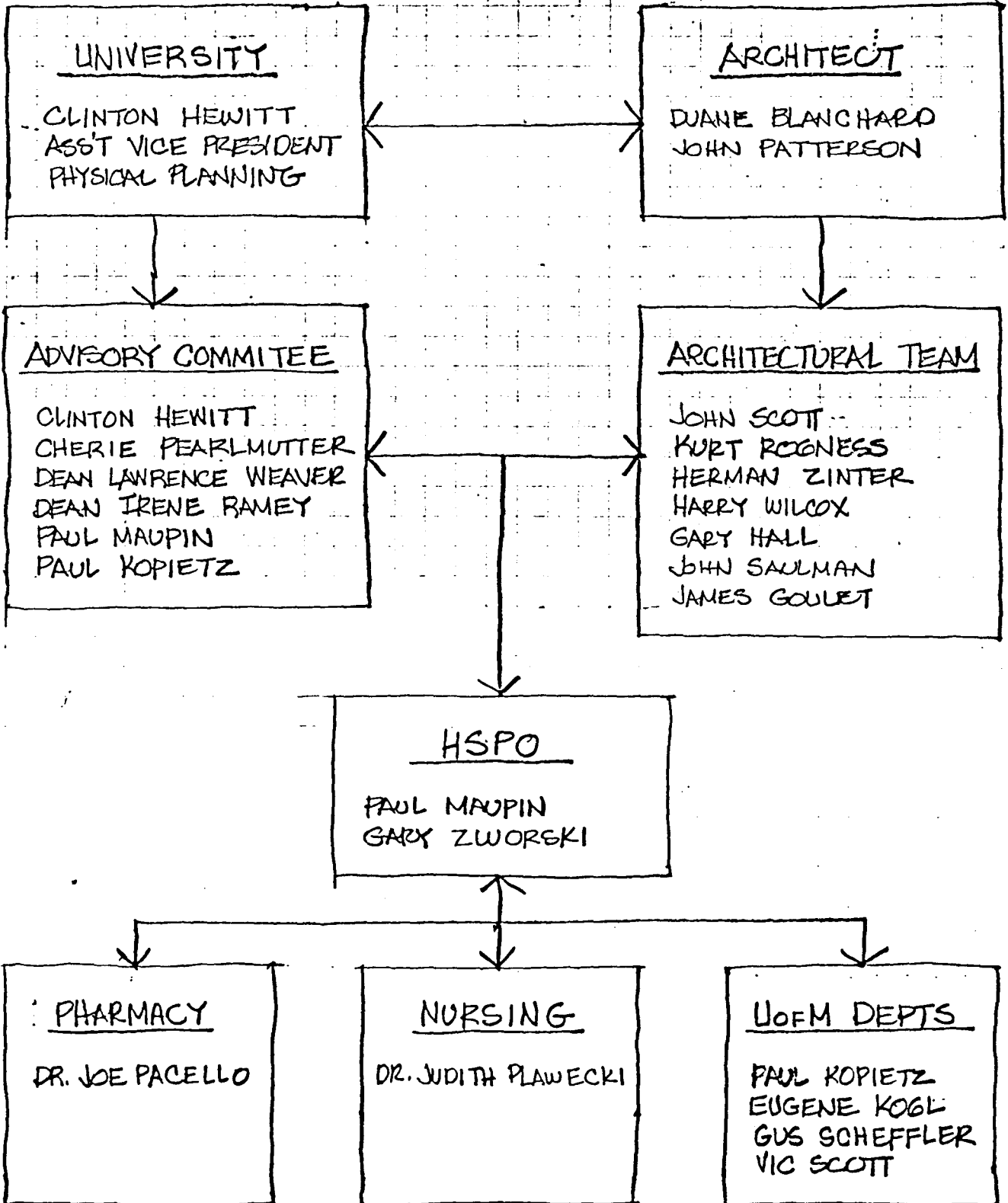
UNIT F - OWNER / ARCHITECT ORGANIZATION DESIGN PHASE

SCHOOL OF NURSING AND COLLEGE OF PHARMACY
UNIVERSITY OF MINNESOTA

CONTRACTS

PROGRAM POLICY REVIEW

PLANNING, DESIGN, EQUIPMENT



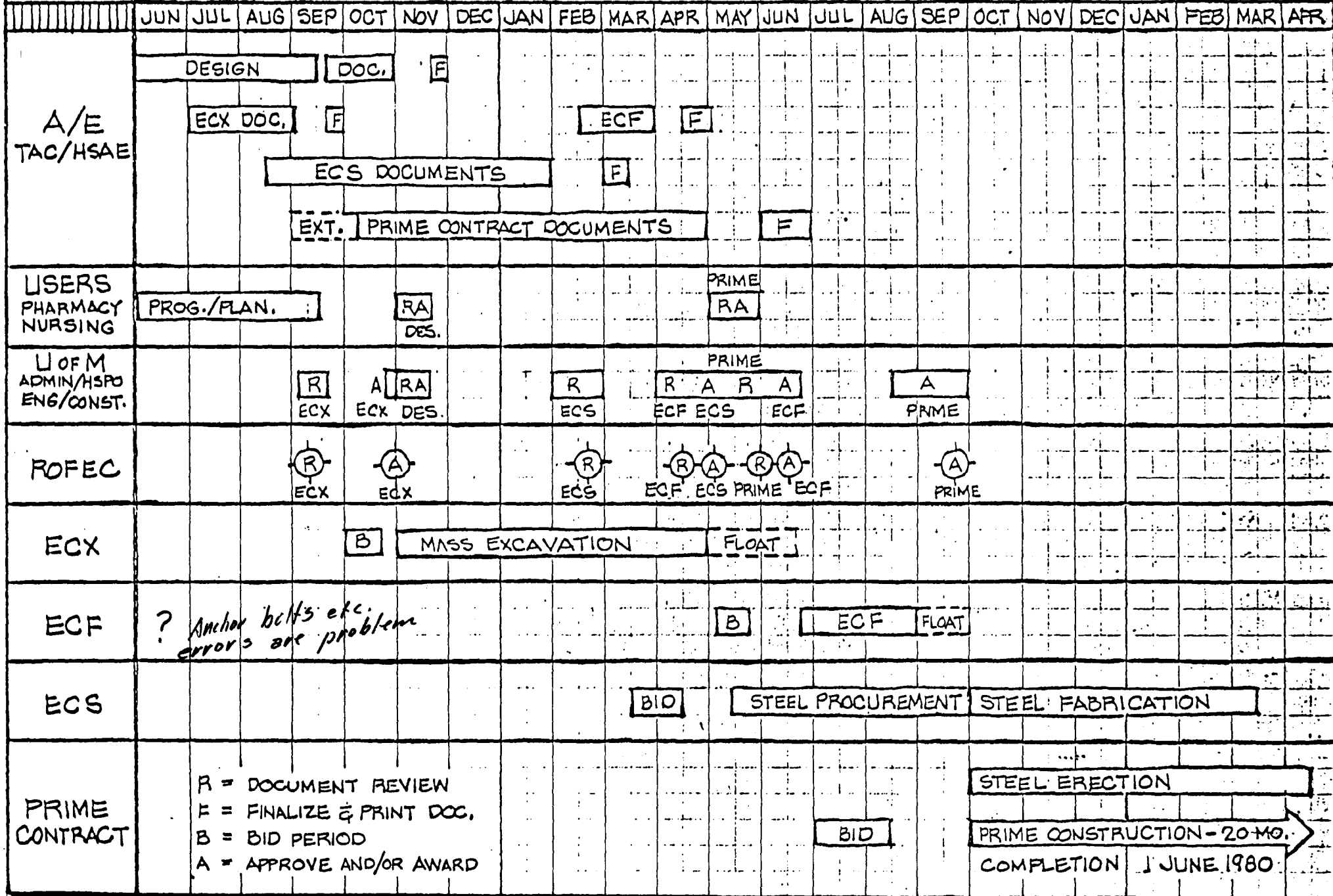
28 JULY 1977

UNIT F - PROJECT RESPONSIBILITY/TIME SCHEDULE CHART

77

78

79



1977 TARGET DATES

- 1 Jun 1977 - Begin Design Phase
- 1 Jul 1977 - Begin ECX Contract Documents
- 15 Aug 1977 - Begin ECS Contract Documents
- 29 Aug 1977 - Begin Exterior Envelope for Prime Contract
- 2 Sep 1977 - Finish ECX C.D. for U of M review
- 8 Sep 1977 - Review ECX and Design Documents with ROFEC
- 9 Sep 1977 - ROFEC approval to bid ECX Contract
- 16 Sep 1977 - Finish Program and Planning Phase
- 19 Sep 1977 - Begin Final Design Phase Documents
- 29 Sep 1977 - Begin ECX Bid Period (21 days)
- 10 Oct 1977 - Begin Final Contract Documents for Prime Contract
- 20 Oct 1977 - Receive ECX Bids
- 27 Oct 1977 - ROFEC and U of M approval to award ECX Contract
- 28 Oct 1977 - Award ECX Contract
- 31 Oct 1977 - Finish Design Documents for U of M review approval
- 18 Nov 1977 - Finish U of M review of Design Documents
- 2 Dec 1977 - Issue final approved Design Documents

1978 TARGET DATES

- 27 Jan 1978 - Finish ECS C.D. for U of M review
- 13 Feb 1978 - Begin ECF Contract Documents
- 22 Feb 1978 - ROFEC approval to bid ECS Contract
- 16 Mar 1978 - Begin ECS Bid Period (26 days)
- 31 Mar 1978 - Finish ECF C.D. for U of M review
- 11 Apr 1978 - Receive ECS Bids
- 14 Apr 1978 - ROFEC approval to bid ECF Contract
- 30 Apr 1978 - ECX Contract complete
- 1 May 1978 - Finish C.D. for Prime Contract for U of M review
- 4 May 1978 - Begin ECF Bid Period (21 days)
- 5 May 1978 - ROFEC and U of M approval to award ECS Contract
- 12 May 1978 - Award ECS Contract
- 25 May 1978 - Receive ECF Bids
- 31 May 1978 - ROFEC approval to bid Prime Contract
- 15 Jun 1978 - ROFEC and U of M approval to award ECF Contract
- 23 Jun 1978 - Award ECF Contract
- 29 Jun 1978 - Begin Prime Contract Bid Period (49 days)
- 17 Aug 1978 - Receive Prime Contract Bids
- 31 Aug 1978 - ECF Contract complete
- 21 Sep 1978 - ROFEC and U of M approval to award Prime Contract
- 25 Sep 1978 - ECS Fabrication ready for erection
- 29 Sep 1978 - Award Prime Contract

1979 TARGET DATES

- 15 Mar 1979 - ECS Contract (Fabrication) complete
- 15 Apr 1979 - Finish Steel Erection under Prime Contract

1980 TARGET DATES

- 15 Apr 1980 - Substantial completion date
- 1 Jun 1980 - Final completion of Prime Contract
- 1 Sep 1980 - Project ready for User occupancy

MECHANICAL SYSTEMS

A. AIR CONDITIONING AND VENTILATION

1. Separate air handling systems for:
 - 12 hour classroom/office
 - 24 hour graduate/undergraduate laboratory areas.
 - 24 hour animal holding areas
2. Classroom/Office
 - VAV (variable air volume system) with VAV/induction in perimeter office spaces. Rooms will be controlled on an individual basis (one VAV box per room).
 - Air circulation will be dependent on room internal heat gain, rather than air change criteria set up for Unit A-B-C.
3. Graduate Laboratory/Research, undergraduate labs with fume hoods and specialty work areas (dark rooms, audio visual)
 - VAV box with reheat box can be interlocked with 2-speed motor provided on fume hoods such that on low speed of fume hood, VAV box serving lab space reduces supply air by approximately 50%.
4. Use plenum return air system on all classroom/office floors. Use plenum space above lab/research floors for air transfer for hood make up air. Gas piping within ceiling plenum to be welded for all sizes.
5. VAV terminal diffusers to be same as used in Unit "A" and "B-C" for constant volume service as manufactured by Lok Products.
6. VAV and VAV/induction boxes to be Titus or Barber-Coleman as specified for JOML.
7. Use factory package fan section with built-up coil and filter sections up to approximately 15,000 CFM.
8. Above 15,000 CFM use central built-up units enclosing fans, coils and filters.
 - Masonry enclosure
 - Vs. - sheet metal sandwich panels.
9. Employ in-line vane axial fans for VAV supply and return fans vs. centrifugal.
10. Fume hoods supplied for 2-speed operation; normal CFM for normal hood usage, and 50% CFM reduction to provide ventilation for hood lower cabinet flammable storage.
 - High efficiency fume hood motors or power factor correction by capacitor.

11. Exhaust air in the building will be handled by separate systems for:
 - Toilet/Janitor's exhaust,
 - General exhaust
 - Fume hood - where more than one hood occurs in a room, exhaust is combined, otherwise separate system for each fume hood.
 - Animal exhaust.

12. Heat recovery from exhaust to supply provided as an alternate. Consideration on toilet and general and animal exhaust system, no consideration on fume hoods.
 - Glycol run around system
 - Heat wheel
 - Heat pipe

13. Design Criteria Data
 - Winter: -19°F
 - Summer: 89°F dry bulb } energy code (*Outside temp.*)
 75°F wet bulb }

14. Indoor Design Data
 - Winter: occupied areas 68°F , approximately 20% R.H. } energy code
 - Summer: occupied areas 78°F , approximately 55% R.H. }

Note: Verify adequacy of above for laboratory/research or other specialized work areas.

B. CHILLED WATER SYSTEM

1. High pressure absorption chiller
 - Trane

2. Variable speed secondary chilled water pumping systems (two total)
 - Variable speed coupling - Unit B-C
 - Variable current source variable frequency - JOML

3. Sixth chiller to be installed in central plant. Sixth associated cooling tower has been installed as part of Unit B-C/JOML on Unit "A" roof.

- Chilled water status of Unit A-B-C central plant with six chillers operative:

3 at 1100 TR	=	3,300
3 at 976 TR	=	<u>2,928</u>

Total 6,228 TR

Plus Owner's
experienced usage factor 1,244 TR (20%)

Grand Total 7,472 tons of refrigeration available

- Requirements of building served:

Unit "A"	3,025 TR
Unit B/C	2,190 TR (shell space completed)
JOML	600 TR (Phase I)
Unit F	<u>1,074</u> TR (estimated)

Total Requirement 6,889 TR

4. Consideration of seventh cooling tower location.

- In the conceivable future, the following additional chilled water requirements will have to be met by the central A-B-C plant. This would necessitate the addition of the seventh chiller and its associated cooling tower.

JOML	1,470 TR (Phase II completed)
Mayo Auditorium	750 TR
Radiation Therapy Unit D	275 TR (estimate)
Diehl Hall	210 TR
Chiller phase out Mayo Aud.	<u>750</u> TR

3,455 TR

- The seventh cooling tower may be needed before master plan location is built (roof of Unit "A" expansion).

- Unit "F" roof.

C. HEATING SYSTEMS

1. Perimeter radiation - outdoor/indoor reset on water temperature.
 - Standby pump and convertor.
2. Reheat - Individual room reheat coils will be provided in conjunction with VAV boxes serving laboratory/research spaces.
 - Standby pump and convertor.
3. Pipe insulation shall be increased from Unit A-B-C standard to that required by energy code.

D. PLUMBING SYSTEMS

1. The following systems will be provided:
 - Domestic cold water (booster pump provided)
 - Domestic hot water (booster heater)
 - Laboratory cold water
 - Laboratory hot water (booster heater)
 - Natural gas (extend from Unit "A")
 - Compressed air (laboratory), extend from Unit "A"
 - Vacuum (laboratory), extend from Unit "A"
 - Waste stack
 - Acid waste stack
 - Distilled or deionized central equipment or non-central (downspout)
2. Plumbing Fixtures
 - Trim: Water Saver vs. Chicago Faucet
 - Public Lavatories: Self-closing valves to limit flow (energy code).

E. FIRE PROTECTION SYSTEM

The following is required as per Section 1807 of the Uniform Building Code:

1. Building shall be sprinklered throughout.
2. Air handling systems shall assist in smoke removal.
3. A separate supply air unit shall be provided to pressurize stairwells on fire alarm. *Hansen*
4. Stairwells shall be provided with wet standpipe risers and 2-1/2" fire department valves on each floor level.
5. Two fire pumps required. Assume variance will be granted to allow one fire pump plus interconnection with Unit "A" fire pump system. (Variance granted by University of Minnesota Code Authority and Fire Department on Unit B-C).
6. 20,000 gallon on-site water storage tank required. Assume variance will be granted to allow elimination of this tank if wet pipe standpipe system is interconnected with Unit "A" system giving two sources of water from two separate streets. (Variance granted by University of Minnesota Code Authority and Fire Department on Unit B-C).

MISCELLANEOUS SYSTEMS

1. Radiator Coolant System

A closed loop glycol system shall be provided for emergency generator radiators.

2. Fuel Oil System for Emergency Generator

-[CNG]-

National Electric Code requires on-site fuel supply for emergency generators rather than natural gas.

3. Closed Loop Condenser Water System Environmental Rooms

Cooling tower system, air cooled with mechanical ventilation.

*Send Mike loan CNG info in
"Building Standards"*

II - ELECTRICAL SYSTEMS OUTLINE

A. Codes and Standards

1. 1978 National Electric Code and University of Minnesota Standards, Minnesota Energy Code.

B. Electrical Service

1. Dual feed, 13,800 volt, 3 phase power source from Owner's system at 13,800 volt switching center at Unit A and extended to the new Unit F substations.

C. Primary to Secondary Power Transformation

- Double ended unit substations primary and secondary selective.
- 13,800 volt delta to 277/480 volt grounded wye dry type air cooled transformers.
- Primary switches to be 15 KV, 3 phase, 200 amperes.
- Automatic ground detection at main and feeder switches with zone selective interlocking.
- Tie switch operation between secondary sections of unit substations.
- Switchboards to be equipped with Kilowatt-hour, indicating demand, ampere and voltage meters and test blocks.

D. Secondary Power Systems

1. Secondary Distribution

- 277/480 volt, 3 phase, 4 wire grounded basic system.
- 120/208 volt, 3 phase, 4 wire grounded subsystems from dry type transformers connected to the 277/480 volt panelboards of the basic system.
- Bus duct risers from unit substation switchboards.

Metering?

2. Dry Type Transformers

- Dry type transformers shall be indoor type, 3 phase, 480 volt to 120/280 Y, Class H Insulation.

3. Panelboards

- All panelboards to be circuit breaker bolted type, 3 phase, full capacity neutral and with a separate ground bus.
- Panelboards to be door-in-door type construction keyed alike.
- All panels sized for future 50% load increase.

E. Grounding

- Main ground bus in each substation and primary switchgear room.
- Ground bus tied to water main and ground grid and extend through the electrical shafts.

F. Emergency System

1. Generation

- Diesel, (2) 500 KW, 480 volt, three phase, 60 hertz, motor generator sets.

2. Distribution

- 277/480 volt, 3 phase, 4 wire grounded basic distribution system.
- 120/208 volt, 3 phase, 4 wire grounded subsystems from dry type transformers connected to 277/480 volt panelboards of the basic system.

3. Automatic Transfer

- Automatic transfer capability from preferred source to emergency source. Transfer switches will separate life safety from motor equipment loads.

G. Basic Material and Systems.

1. Wire and Cable

- All conductors, 98% conductivity copper.
- All primary service high voltage cable to be 15 KV cross-linked polyethylene insulated cable.
- All wiring to be color coded.
- All wiring to be in conduit.

2. Conduit and Fittings

- Conduit in building 3/4" or larger.
- Rigid steel conduit or IMC (Intermediate Metal Conduit) except EMT in casework, interior, hollow partitions and for special conditions.

3. Wiring Devices

- Switches shall be 20 ampere, A.C. rated, quiet mechanical type.
- Duplex receptacles shall be 3 wire grounding type rated 20 amperes.
- Special receptacles lates NEMA "U" ground type.
- Plates shall be satin finish, stainless steel.

No. of outlets.

H. Communications and Signal Systems

1. Telephone System

- Empty conduit and outlet system distribution to telephone cabinets and telephone core.

2. Fire Alarm System

- A multiplexed dedicated logic, zoned, annunciated, electrically supervised system with voice communication, manual fire stations speakers, fixed temperature detectors, rate of rise detectors and smoke detectors located as required by the Building Exits Code, NFPA No. 101 and UBC 1807. System shall be connected to the automatic sprinkler system.
- System shall utilize the central processor of the Unit B/C Building with new voice communication equipment and operators terminal at Unit F central control station.

3. Television and Audio-Visual Distribution

- An empty conduit system to Audio-Visual core.
- Cables and equipment installations by University.

I. Lighting

- Generally fluorescent and mercury vapor, and incandescent for special areas.
- Lighting levels in accordance with IES, 5th Edition, and U of M standards as maximum levels. Light to conform with Minnesota Energy Code.
- Solid state, incandescent dimming equipment where programmed.
- Exit lights, selected corridor lighting, stairwell lighting, and lighting in other critical areas to be on the emergency system.
- Exterior building lighting to utilize mercury vapor type fixtures with photo-electric control.

J. Lightning Protection

- Complete lightning protection system to meet U.L. master label requirements.

K. Motor and Equipment Connections

1. Motor and Motor Control

- Motor control centers in large equipment spaces.
- Power factor correction for motors 5 HP and above.
- Fans connected for smoke removal system of the fire management will interface with the Building A central monitoring and control system.

Telephone - Same as B/C ?

*Mr. Fujiwara to be contacted
re: fire evacuation program*

THE ARCHITECTS COLLABORATIVE Inc.
HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

RECEIVED

SEP 13 1976

UNIV. OF MINN.
HEALTH SCIENCE
PLANNING OFFICE

MEETING NOTES

DATE: 31 August 1976
TAC JOB: 76044, Pharmacy/Nursing Feasibility Study
SUBJECT: Development of Options
PLACE: Room 340, Morrill Hall
NOTES BY: Herman Zinter
PRESENT: Clint Hewitt, Cherie Perlmutter, Dean Ramey
Dean Weaver, Paul Maupin (U/M)
John Scott, Herman Zinter (TAC/HSAE)

The purpose of the meeting was to review and screen potential options for accommodating facilities for the College of Pharmacy and School of Nursing, and to select options for detailed evaluation. The following items were discussed:

ITEM

ACTION REQUIRED

1. Net area requirements, particularly for the School of Nursing program, were compared with previous tabulations for Unit F in the 1975 Grant Application and Option E building configuration, as summarized 1 March 1976. The following comments were made:
 - a. Net area figures, as shown in the summary prepared for the feasibility study, are measured from center lines of partitions between functional or program spaces.
 - b. Unit area figures (as shown) are derived by multiplying the net area by 25% to approximate the additional area required for circulation. These figures are equivalent to net useable area figures that are listed in options as available in various buildings.
 - c. Gross area figures (not listed in the summary) include unit area and additional space required for mechanical shafts, stairs, elevators and perimeter walls.

TAC will continue to use the net and unit area figures based on plans for Unit F dated 15 March 1976. An alternate program will be developed to reapportion Pharmacy/Nursing shared facilities to reflect separate accommodations for the departments.

ITEM

ACTION REQUIRED

2. The following modifications were made in the adjacency diagrams:

- a. A double line should be indicated between the components of Nursing administration and faculty offices.
- b. If Pharmacy administration/admissions offices are located apart from undergraduate teaching facilities (i.e. in separate buildings), the component for educational development should be located adjacent to the undergraduate facilities.

3. Other program requirements as listed in the design criteria statements were modified as noted on the attached copies.

4. Based on a general inspection of the building and drawings, TAC indicated that the large sub-basement areas in Fraser Hall have low headroom and will not accommodate the type functions included in the Pharmacy program, with the possible exception of storage of animal facilities. The corresponding reduction of useable area from previous estimates indicates that to provide sufficient space for all program functions, extensive renovation work will be required, including the addition of an intermediate level within the library reading room.

When completed, Clint Hewitt will forward to TAC a copy of a report on code compliance and re: of Fraser Hall, to be reviewed before final conclusions are made regarding potential options for Pharmacy

5. TAC distributed a revised and annotated site plan to indicate other buildings within or adjacent to the Health Sciences complex which had been suggested in developing options. The following buildings were mentioned in a brief discussion:

Clint Hewitt will forward to TAC applicable planning reports and background data on recent and proposed renovation in buildings noted for consideration with feasibility study.

- a. Zoology
- b. Botany
- c. Jackson-Owre-Millard-Lyon

6. TAC presented revised lists of options for accommodating the College of Pharmacy and School of Nursing, and a revised matrix of composite options. After review, the following comments were made:

- a. Until further information is obtained regarding the designation of Powell Hall as the site for future Unit J, the commitment to VCHH of the upper (expansion) floors of Unit K/E and the reuse of Fraser Hall, evaluation of the following options was deferred:

Clint Hewitt will confirm use of the Powell Hall site.

Cherie Perlmutter will verify use of the Unit K/E site.

<u>Pharmacy</u>	<u>Nursing</u>
P1	N1 N8
P52	N1(alt.) N50
P53	N2 N51
P54	N5(rev,) N52
P56	N6

ITEM

ACTION REQUIRED

- b. The following options, based on the proposed use of space assigned to Medical School administration in JOML, were deleted:

Pharmacy
P10 (rev)
P12
P57

Nursing
N9

- c. The following options were selected for further study:

Pharmacy
P2
P3
P4
P5 (rev)
P6 (rev)
P11
P50

Nursing
N4
N7 (rev)
N54
N55
N56

Dean Weaver and Dean Ramey will list options in order of priority and forward information to Cherie Perlmutter.

c.c.: C. Hewitt
C. Perlmutter
D. Ramey
~~D. Weaver~~
P. Maupin
HSAE

General

The following design criteria are derived from initial programming and master plan documents, grant applications and meeting notes of Unit F redesign and form the basis for evaluation of other options that accommodate facilities for the College of Pharmacy and School of Nursing:

1. Integrate the College of Pharmacy and School of Nursing into the main Health Sciences complex.
 - a. Promote interaction of faculty, staff and students in the interdisciplinary teaching, clinical and research programs.
 - b. Utilize shared classroom, resource and support facilities.
2. Develop facilities in ^{a compatible} ~~the~~ framework of ~~the Master Plan~~ circulation, organization and expansion ⁱⁿ of the Health Sciences Complex.
 - a. Maintain connections with staff, student, patient, visitor and service circulation patterns.
 - b. Assign large undergraduate classrooms and seminar rooms, ^{and school admissions/adminiv.} to Levels 2, 3, or 4 (one level up or down from main level) to minimize requirements for vertical transportation.
 - c. Develop appropriate departmental or facility adjacencies with capabilities for expansion as projected.
 - d. Provide space as programmed for Unit F ^{MIT} that will accommodate projected student enrollment for a minimum of 5 years after completion of facilities.
3. Consolidate administrative, faculty, teaching, research and support facilities.

Pharmacy

Specific requirements for the College of Pharmacy are as follows:

1. Locate the teaching and faculty facilities for convenient access to the Basic Sciences of Anatomy, Pharmacology, Microbiology, Physiology and Pathology, and the clinical departments of the Medical School and the Schools of Public Health, Dentistry and Nursing.
2. Locate undergraduate teaching facilities for convenient access to the Bio-Medical Library in Diehl Hall.
3. Provide greenhouse and animal facilities with convenient and discrete access to laboratories.
4. Locate the Drug Information Center near the Bio-Medical Library in Diehl Hall.

UNIVERSITY CRITERIA
FOR SPACE SIZE STUDS.

Nursing

Specific requirements for the School of Nursing are as follows:

1. Locate teaching and faculty ^{and research} spaces with convenient access to facilities for inpatient and ambulatory care, the Basic Sciences, the Schools of Medicine, Public Health, and Dentistry and the Colleges of Pharmacy, ~~and Liberal Arts.~~
2. Locate undergraduate facilities with convenient access to the Bio-Medical Library in Diehl Hall.
3. Design the spaces for maximum:
 - a) Access between admin and faculty
 - b) Access between Admin and support staff
 - c) Access between faculty and support staff
 - d) Supervision of support staff

THE ARCHITECTS COLLABORATIVE Inc.
HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEETING NOTES

DATE: 13 September 1976

TAC JOB: 76044, Pharmacy/Nursing Feasibility Study

SUBJECT: Development of Options

PLACE: Room 340, Morrill Hall

NOTES BY: Herman Zinter

PRESENT: Clint Hewitt, Cherie Perlmutter, Dean Ramey, Dean Weaver (U/M)
John Scott, Herman Zinter (TAC/HSAE)

The purpose of the meeting was to continue the process of screening options for accommodating facilities for the College of Pharmacy and School of Nursing and to select options for detailed cost analysis. The following items were discussed:

ITEM

ACTION REQUIRED

1. TAC presented a list of 9 composite options based on discussion from the previous meeting (31 August 1976) and in the order as rated by Dean Ramey and Dean Weaver. An annotated site plan was attached to indicate the sites which continue to be considered in the Health Sciences Complex:

Unit B/C (floors 7 and 15)	Pharmacy
Unit K/E (floors 5 - 7)	Nursing
Mayo Hospital (floors 1 - 3)	Nursing (or Pharmacy)
Unit A Plaza (floors 1 and 2)	Nursing (or Pharmacy)
Harvard St. Apartments	Pharmacy

Added to the list were 4 options based on the expansion and remodeling of Appleby Hall for Pharmacy. The following comments were made:

- a. Cherie Perlmutter indicated that further evaluation of options which use Unit K/E should be deferred until studies are completed by University Hospitals which determine the feasibility of using several of the expansion floors for inpatient facilities, thereby eliminating available space for the School of Nursing.

ITEM

ACTION REQUIRED

- b. Clint Hewitt confirmed that Powell Hall has been designated as the site for future Unit J, and that information regarding renovation and reuse of Fraser Hall will be available during the week of 20-24 September. He also suggested that the Botany and Zoology buildings may be available for other programs and, if so, should be included as a potential option for evaluation. TAC will contact C. Hewitt to confirm use of the Botany and Zoology buildings before developing option.
2. In addition to developing detailed cost estimates for selected options, it was indicated that for comparative purposes, estimates will be required for renovation of Powell Hall and Appleby Hall (with expanded facilities).
3. TAC outlined the proposed approach to be used for estimating costs, which will be based on gross area of renovation of new construction multiplied by an appropriate unit cost factor for the type occupancy or complexity of work to yield a projected building cost. Estimated non-building costs will be based on a percentage of the construction cost. The resulting project cost, including total building and non-building costs, will be escalated in accordance with the projected start and duration of construction for each option.
4. TAC also presented a revised matrix of composite options and schematic studies of the following options for Pharmacy and Nursing:
- | | |
|----------|--------------------------------|
| P11 | Unit B/C and Mayo (renovation) |
| P6 (rev) | Unit B/C and apartments |
| P58 | Unit A Plaza (expansion) |
| N56 | Unit A Plaza (expansion) |
| N54 | Mayo (infill) |
| N4 (rev) | Mayo (renovation) |
- TAC will review Option N4 (review) to determine feasibility of relocating additional hospital functions and consolidating the School of Nursing on Levels 2 and 3.
5. Based on discussion of the above items, the following options were selected for further study:
- | | | |
|----------|------------|-------------|
| Option 1 | comprising | P11 and N56 |
| Option 4 | " | P6 and N54 |
| Option 6 | " | P6 and N4 |
| Option 8 | " | P58 and N54 |
| Option 9 | " | P58 and N4 |

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEETING NOTES

DATE: 28 September 1976
TAC JOB: 76044, Pharmacy/Nursing Feasibility Study
SUBJECT: Development of Options
PLACE: Morrill Hall
NOTES BY: Herman Zinter
PRESENT: Cherie Perlmutter, Dean Ramey, Dean Weaver, Paul Maupin (U/Minn)
John Scott, Herman Zinter (TAC/HSAE)

The purpose of the meeting was to review selected options for accommodating facilities for the College of Pharmacy and School of Nursing and to discuss projected schedules for construction and phasing. The following items were discussed:

ITEM	ACTION REQUIRED
------	-----------------

1. TAC presented schematic plans of the following Pharmacy and Nursing options:

- P6 Pharmacy Unit B/C (Floors 7 and 15) and Harvard Apts.
- P11 Pharmacy Unit B/C (Floors 7 & 15) and Mayo No. Court
- P50 Pharmacy Appleby Hall with Addition
- P58 Pharmacy Unit B/C (Floor 7) and Unit A Plaza

- N4 Nursing Mayo North Court
- N54 Nursing Mayo North Court (In-Fill)
- N56 Nursing Unit A Plaza

2. TAC indicated that the plans were developed in sufficient detail to evaluate arrangement and accommodation of program functions, primary and secondary circulation patterns, location of stairs and elevators, and general scope of new construction or renovation. The schematic plans will be used as the basis for detailed cost and code analysis.

ITEM

ACTION REQUIRED

3. In reviewing the options for Pharmacy, the following comment were made:
 - a. In the report on Fraser Hall, renovation work is estimated to require approximately \$400,000 to meet basic code requirements, excluding mechanical and electrical provisions. This will yield approximately 58,000 net useable square feet, which is less than required for the Pharmacy program. Based on requirements in the Pharmacy program for laboratory type spaces, the building configuration and suitable occupancy classifications, the location and general University space needs, and the renovation report, it was concluded that Fraser Hall is not an option for Health Sciences expansion.
 - b. TAC indicated that plans of the Botany and Zoology buildings have been obtained, but that an area analysis and evaluation of the facilities have not been started. Charie Perlmutter requested that further work be deferred.
 - c. Dean Weaver indicated that to consolidate the Pharmacy program in the Mayo (North Court) building on a phased basis was preferable to dividing facilities between Unit B/C and Mayo, provided that the long term schedule was not over-extended.
 - d. Cherie Perlmutter proposed to modify the premise for developing options in the feasibility study from an approach which uses only space vacated after the completion of Unit B/C to schemes which are based on relocation of existing functions (In Mayo Hospital) and consolidation of a single parcel for the entire Pharmacy program.
4. TAC presented a preliminary project time schedule to indicate the phasing of planning and construction work for Health Sciences expansion, including Unit B/C (Phase 2), facilities for Pharmacy and Nursing (in vacated or new space), Unit K, the Powell Hall site, and future

ITEM

ACTION REQUIRED

Units H and J. In developing option(s) to consolidate the Pharmacy program within Mayo Hospital, TAC indicated that basic issues of Health Sciences space utilization, departmental expansion, and detailed project phasing will have to be analyzed, and requested authorization to proceed with work as soon as possible to meet deadlines related to the schedule for the feasibility study.

TAC will begin with a survey to determine existing space utilization in Mayo Hospital, with authorization to follow.

cc: Messrs: C. Hewitt
D. Ramey
D. Weaver
P. Maupin
Ms. C. Perlmutter
HSAE

THE ARCHITECTS COLLABORATIVE, Inc.
HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEETING NOTES

DATE: 12 October 1976

TAC JOB: 76044, Pharmacy/Nursing Feasibility Study

SUBJECT: Development of Options

PLACE: Morrill Hall

NOTES BY: Herman Zinter

PRESENT: C. Hewitt, C. Perlmutter, D. Ramey, D. Weaver (U/Minn)
J. Scott, H. Zinter (TAC/HSAE)

The purpose of the meeting was to review options which accommodate the program for the College of Pharmacy in space consolidated in Mayo Hospital. The following items were discussed:

ITEM	ACTION REQUIRED
1. TAC presented a revised summary of spaces which apportioned the shared facilities of Unit F, including data processing, faculty lounge, and student lockers, study and organization spaces, between programs for Pharmacy and Nursing. The revised program will be incorporated into the development and cost analysis of options.	
2. Separate plans of Levels 1 - 3 in Mayo Hospital were presented by TAC to indicate assignments of space by departments according to the Revised Phase I Schematics (1971), computerized data that reflects existing conditions (1976), and projections after the completion of Unit J (in 1982 or after).	

ITEM

ACTION REQUIRED

3. TAC indicated that the method of contract award for Phase II work in Unit B/C has an influence on the project schedules for renovating space in Mayo Hospital for either Pharmacy or Nursing; and that if the additional contract work is bid, completion of Phase II space could be delayed by 4 to 12 months.
4. After TAC presented schematic plans for Option PS9 (Pharmacy) on Levels 1 - 3 in Mayo Hospital, the following comments were made:
 - a. The scheme is based on the relocation of employee facilities on Level 1 and hospital laboratories on Level 2.
 - b. The feasibility, cost, and time schedule or phasing for consolidating this area for Pharmacy remain to be analyzed.

cc: Ms. Perlmutter
Messrs: C. Hewitt
D. Ramey
D. Weaver
P. Maupin
HSAE

THE ARCHITECTS COLLABORATIVE Inc
HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEETING NOTES

DATE: 27 October 1976

TAC JOB: 76044, Pharmacy Nursing Feasibility Study

SUBJECT: Existing Space Assignment in Health Sciences Facilities

PLACE: Room 432, Morrill Hall

NOTES BY: Herman Zinter

PRESENT: Clint Hewitt, Cherie Perlmutter, Dean Ramey, Dean Weaver (U/Minn)
John Scott, Herman Zinter (TAC/HSAE)

The purpose of the meeting was to review the status of survey work regarding present assignment of space in the Health Sciences complex and off-campus facilities. The following items were discussed:

ITEM	ACTION REQUIRED
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1. TAC presented an example plan of Mayo Hospital, color coded to indicate existing departmental space assignments as reflected by available computerized data, to illustrate the method being used to correlate building plans and tabulary information. Adjusted data in the completed field survey will provide a basis for evaluating departmental requirements for growth and functional adjacencies.
2. In reviewing schematic plans for Appleby Hall with an addition (Pharmacy Option P50), Dean Weaver indicated that at this site, which is remote from Diehl Hall and the Health Sciences complex, the library facility will have to be retained. For planning purposes, assume the required area to be double the present library space. The Drug Information Center is to remain as a separate function.

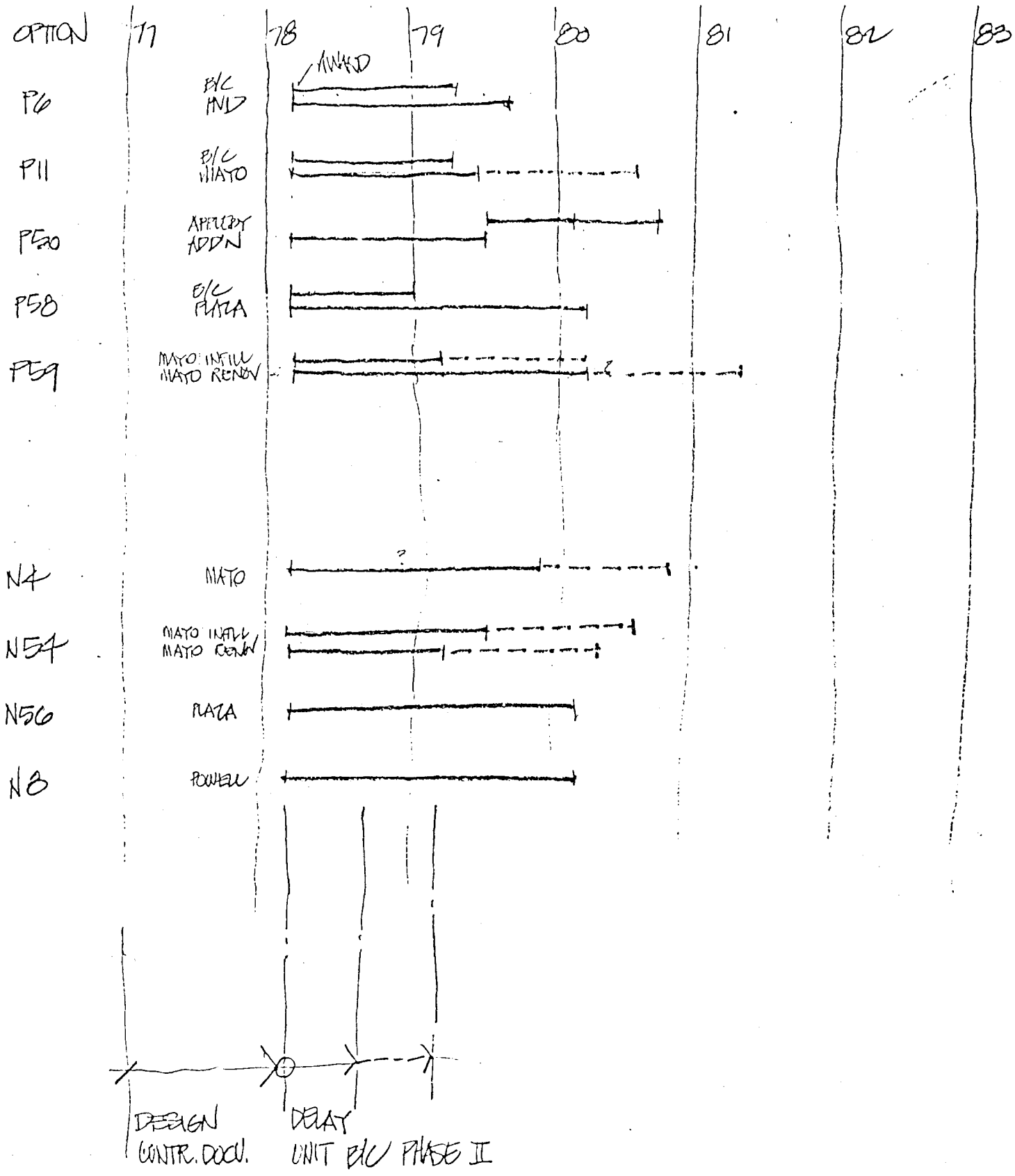
ITEM

ACTION REQUIRED

- | ITEM | ACTION REQUIRED |
|---|---|
| 3. The reuse of both Appleby and Fraser Halls, dependent to conclusions from the Pharmacy/Nursing Feasibility Study, was briefly discussed for potential reassignment of space to the following:
College of Liberal Arts
Music Education
General College | C. Hewitt & C. Perlmutter will continue to evaluate options. |
| 4. TAC proposed to discuss general format and content of materials required for a report to the Legislature. Findings of the space assignment survey and feasibility study, which will be issued as separate reports to the University, are to provide detailed area, cost, and schedule information as required during Legislative review. | C. Hewitt & C. Perlmutter will develop preliminary outline of report to Legislature for discussion at next meeting. |

cc: All present
P. Maupin
HSAE

ASSUMED PROJECT TIME SCHEDULES



THE ARCHITECTS COLLABORATIVE, INC.
HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

2:00 Mon
@ HSAE

MEMORANDUM

MEMO TO : Unit F File
MEMO BY : Gary Hall
DATE : 25 October 1977
SUBJECT : Fire Management & Environmental Control System (FM/ECS) Contract Structure

It is the intent of this memo to review certain expressed concerns by the University with regard to the structure of FM and ECS bidding contract responsibility and project co-ordination.

In order to establish the structure to provide the optimum of project co-ordination and responsibility, it is necessary to review the relative merits and concerns related to the three basic contract relationships itemized as A, B, and C below which might be structured for the Unit F project. Paragraph D identifies past experience with Unit B/C and paragraph E.

A. FM/ECS Supplier as Prime Contractor

1. Advantages:

- a) Direct Owner/Architect contact with most directly knowledgeable and responsible party for system installation.

2. Concerns and disadvantages:

- a) Additional prime contractor to co-ordinate with project and contract administration.
- b) FM/ECS supplier must work with an electrical contractor for installation of all FM/ECS conduit and wiring located throughout building. This most likely will result in a second electrical contractor on the project through the entire construction period. The electrical installation is a major portion of the work.
- c) According to FM/ECS suppliers their cost in administering a prime contract is greater and would be reflected in their bid. They would prefer to be a subcontractor and they have for years functioned best in that capacity.
- d) Loss of direct Owner/Architect contact with most directly responsible party installing conduit, wire and electrical equipment. - ?

B. FM/ECS Supplier as Sub-Contractor to Mechanical Contractor

1. Advantages:

- a) Fewer prime contractors.
- b) Prime responsibility for correct operation of temperature control system for mechanical equipment is by mechanical contractor with the supervision of the temperature control sub-contractor.

2. Concerns and Disadvantages:

- a) FM/ECS supplier must work with an electrical contractor for installation of all FM/ECS conduit and wiring throughout the building. Where the FM/ECS is a sub-contractor to the prime mechanical contractor, a sub - electrical contractor to the FM/ECS supplier will most likely occur with the result being two electrical contractors on the project.
- b) The majority of the FM and ECS work is work of the electrical trade or temperature control contractor and therefore, the mechanical contractor is the least likely to assume prime responsibility for overall installation and co-ordination.
- c) Owner/Architect direct contact with party's most knowledgeable of total system installation details and operation is lost. ?
- d) While some mechanical contractors are also associated with an electrical contractor that could accomplish the electrical work, this association is not universal and therefore will not solve the co-ordination where a sub-electrical contractor is involved and will create bidding difficulties for the other mechanical contractors.

C. FM/ECS Supplier as Sub-Contractor to Electrical Contractor

1. Advantages:

- a) Fewer prime contractors to co-ordinate with project and contract administration.
- b) All conduit and wiring accomplish by one prime electrical contractor co-ordinated with overall project.
- c) Nature of majority of work is the work of electrical trade and therefore although the Owner/Architect does not have direct contact with the FM/ECS supplier, the prime electrical contractor and electricians are reasonably knowledgeable of system details and operation. FM/ECS supplier is readily available with electrical contractor to resolve any project problems. X
- d) Temperature control wiring is work of the electrical trade. X
- e) Temperature control pneumatic piping is normally work of the temperature control contractor and therefore is easily accomplished under any prime contractor. X
- f) FM/ECS suppliers would prefer working with prime electrical contract for FM/ECS systems.
- g) Temperature control valves, dampers, etc. are provided by temperature control sub contractor through electrical contractor to the prime mechanical contractor for installation. Normally where temperature control contractor is a sub to the mechanical prime contractor, these valve, dampers, etc. are provided by temperature control to the mechanical prime contractor in a similar manner, therefore no special co-ordination is required.
- h) Prime responsibility for correct operation of temperature control system for mechanical equipment is by the electrical contractor with the temperature control or FM and ECS sub-contractor's supervision. However; temperature control always takes this actual responsibility for temperature control of mechanical equipment even when he is a sub to the mechanical contractor and therefore is not a special co-ordination problem.

D. Unit B/C FM/ECS Experience and Problems

1. Electrical contractor's self protective attitude, grandstanding on each issue or clarification and limited co-operation has created field problems.
2. Incomplete piecemeal and partial shop drawing submittals of system has created field problems due to incomplete details.
3. Design items which have been difficult to resolve with all parties affected due to reserved acceptance of users affected by FM/ECS operation and function.
 - a) Voice communications.
 - b) Interface with existing University methods of fire alarm-control management.
 - c) Interface with existing University mechanical control and monitoring system.
 - d) Manning and responsibility for system operation.
 - e) Expectations - Absolute fail safe operation of system; system capabilities included in contract.
 - f) Security application.
 - g) Maintenance of system equipment concerns.
4. Complexity of system with interface co-ordination of fire alarm, sound systems, motor control, temperature control, mechanical equipment creates a condition where no single person representing the architect/engineer, contractor, FM/ECS supplier or Owner can speak precisely to each and every detail of system.

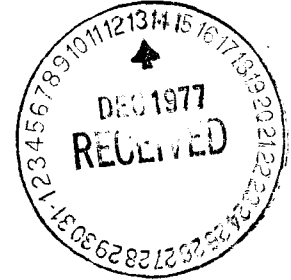
E. Architect/Engineer Recommendation and Conclusion

It is our belief that the FM/ECS supplier as sub-contractor to the prime electrical contractor will provide for the best overall co-ordination of design bidding and installation for the Unit F project. The Unit B/C project experience has alerted all parties concerned to the co-operative effort required to solve the specific design details required for the Unit F fire management system. A process of review meetings has been established to review the fire management criteria for the project.

Disagree!

THE ARCHITECTS COLLABORATIVE, INC.
HEALTH SCIENCES ARCHITECTS & ENGINEERS, INC.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION



MEETING NOTES:

DATE: 8 November 1977
SUBJECT: Unit F Fire Management System
JOB NO.: 343.00
NOTES BY: Kurt Rogness
PRESENT: Paul Kopletz
Gene Kogl
Gus Scheffler
Don Herron
Duane Blanchard
Gary Hall
Kurt Rogness
Harry Wilcox

The purpose of the meeting was to review the fire management/environmental control system. The following items were discussed:

- 1) Provide contacts with the FM System on each floor to lock out local page or intercom system when the voice system is activated.
- 2) Six different message units were reviewed based on Unit B/C.
 - A. Fire floor message
 - B. Floor below message
 - C. Floor above message
 - D. Elevator message
 - E. Remaining space above grade
 - F. Remaining space below grade
- 3) It was decided that space for two additional space units would be provided to bring total possible message units to eight. Cost add for spare message units is to be established by HSAE for review by U of M.
- 4) The issue of the Contractor implementation of the fire management systems was discussed at some length. Gene Kogl promoted a point of view which sought in his mind to make a cleaner separation of responsibility, doing all fire management/environmental control as part of the Mechanical Prime's work. Gary Hall promoted a point of view which is responsive to the wishes of the bidding market, which bids this work as part of the electrical prime contract or as separate temperature control under mechanical contracts and fire management under electrical contract.

Gary Hall provided a memo which outlined the pros and cons of this issue. Dave Kerko stated that while there are possible problems under any contract arrangement, the electrical work of these systems is an

Unit F - Fire Management System
8 November 1977

Page - 2 -

important consideration and may not be adequately handled or administered through a mechanical contractor. It was concluded that the University would further investigate this issue and give HSAE direction by January 1, 1978.

- 5) The minutes of the 25 October meeting were reviewed and approved. The meeting notes established the basic program for the system. Further work will be based on this program.

cc: Those Present
Paul Maupin HSPO
John Patterson TAC
John Scott HST

THE ARCHITECTS COLLABORATIVE, INC.
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HEALTH SCIENCES EXPANSION
UNIVERSITY OF MINNESOTA

MEMORANDUM

MEMO TO: Unit F - Pharmacy and Nursing File
MEMO BY: Duane E. Blanchard
DATE: 20 February 1978
SUBJECT: Building Code Requirements
Occupancy Classification per 1976 UBC

The purpose of this memorandum is to establish the occupancy classification of Unit F and to summarize the code requirements and provisions related to the established occupancy.

The primary building occupancy is classified as Group B Division 2 occupancy, based upon the character of its occupancy as defined in Chapter 11 and Table No. 5-A of the 1976 UBC. This classification is based upon a building use for offices and education beyond the 12th grade. In addition to the primary occupancy of the building, there are areas which are classified as Group A Division 3 occupancy. Occupancy separations are not required between B-2 and A-3, based upon the requirements of Section 503 (d) and Table No. 5-B. The building is being constructed in accordance with the requirements of Type I Fire Resistive Buildings as defined in Chapter 18 of the UBC. Chapter 18 has some special provisions for Group B, Division 2 office buildings and Group R Division 1 occupancies. These provisions and requirements are defined in the code as follows:

Section 1807. (a) Scope. These requirements apply to buildings housing Group B, Division 2 occupancies used primarily as offices, and to Group R, Division 1 occupancies.

Such buildings, having floors used for human occupancy located more than 75 feet above the lowest level of fire department vehicle access, shall conform to the requirements of this section in addition to other applicable requirements of this code.

Based upon our understanding and evaluation of the above quoted code provision, we believe Section 1807 applies to Unit F. We are of the opinion that the character of the primary occupancy of the building is office as covered under the first paragraph of Section 1807 (a). The second paragraph of 1807 (a) applies to Unit F, since levels 9 and 10 are more than 75 feet above the lowest level of fire department access. Our reading of Section 1807 suggests that the term "office building" is used in the context of a building type which conforms to the B-2 occupancy character defined in 1807 (a), and that the provisions and requirements of Section 1807 apply to such buildings in their entirety, not to individual occupancies within such buildings. This opinion is further reinforced by the fact that all of the requirements of Section 1807 are for general building provisions and systems.

The building was initially designed during the years 1971 through 1972, but was put on hold due to the lack of funding by the Federal Government. In 1975, the University added two floors to the project program, increasing its height so that it now exceeds the 75 foot height condition identified in Section 1807. The project was fully funded in the spring of 1977, and the Architect was asked to resume work on the project in June 1977. We have been adjusting the building plans and systems so that the basic building design previously established will be in compliance with the current and projected 1978 codes. We believe the application of the building provisions identified under Section 1807, using the Fire Sprinkler Alternative, are appropriate and should be acceptable to the Building Code Authorities. There are cost and schedule implications for the project if the design intent of Section 1807 cannot be applied to the project.

If the character of the occupancy of Unit F is not in accordance with the occupancy requirements of Section 1807 in the opinion of the Building Official, then we believe the Code Authorities should approve the use of Section 1807 for Unit F with all of its provisions or as specifically modified by the Code Authorities in cooperation with representatives of the Owner.

We believe that all occupied floors in Unit F are of a character comparable to office use, except possibly floors 3, 8 and 9. These three floors include laboratory functions which may be interpreted as not complying with strictly the intent of office occupancy. It is our understanding that the use of hazardous materials, liquid and chemical, are of quantities which exempt these areas from being classified as Group H under Chapter 10; therefore, these areas remain B-2 Occupancy.

The requirements for corridors is defined under Section 3304 (g), which indicates that the walls of the corridors shall be not less than one-hour fire resistive construction. Section 1807 (m) indicates that partitions required to be of one-hour fire-resistive construction by Table No. 17-A and Section 3304(g) may be of noncombustible construction without a fire resistive time period. The corridor walls on floors 3, 8 and 9 could be of one-hour fire-resistive construction from floor to ceiling with the door assemblies complying with Section 3304(h).

Section 3304 (g) indicates that the ceiling shall be not less than that required for a one-hour fire-resistive floor or roof system and when the ceiling of the entire story is an element of a one-hour fire-resistive floor or roof system, the corridor wall may terminate at the ceiling. On January 27, 1975, the Architect and University received a code interpretation by the State Building Code Division that a ceiling constructed of noncombustible materials which included a fire sprinkler system and was suspended below a two-hour fire rated floor assembly was equivalent to the ceiling requirements defined under Section 3304(g).

Corridors on floors 3, 8 and 9 can be designed to comply with the requirements of Section 3304 (g) without modification under Section 1807 (m) by providing corridor walls from floor to ceiling which are not less than one-hour fire-resistive construction with door assemblies complying with Section 3304 (h). No changes to the ceilings should be required on these three floors.

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Another life/safety design provision which could be incorporated into floors 3, 8 and 9 would be compartmentation which is specifically exempted by the fire sprinkler alternative under Section 1807 (m). This provision could be in lieu of providing one-hour fire-resistive corridor walls or in addition to such a provision. We would recommend providing two compartments and relating them to the exit stairways. Additional compartments could be established, subject to evaluation by the Code Authorities. The use of compartmentation will require corridor doors in pairs which exit in both directions. The use of such doors has a dimensional problem because the centerline of corridor walls are typically located 6 feet 2 inches apart, resulting in a clear corridor width of 5 feet 9 inches. The individual leaf of a pair of corridor doors would be 33 inches with a clear opening dimension of approximately 31 inches. These doors would be held open normally with hold-open devices providing a clear corridor opening width of 5 feet 2 inches. Acceptance of this condition by the Code Authorities would be desirable if compartmentation is to be used on floors 3, 8 and 9 in lieu of changing the corridor widths.

It is our opinion that the character of the Unit F occupancy is in accordance with the occupancy requirements of Section 1807, and that the requirements and provisions of Section 1807 applies to all floors including floors 3, 8 and 9.

If the character of the occupancy on floors 3, 8 and 9 is not accepted by the Code Authorities as complying with the provision of Section 1807, we believe the use of one-hour fire-resistive corridor walls discussed above and/or the use of compartmentation on the subject floors should provide an acceptable construction basis so that the provisions of Section 1807 would apply to all floors of the building.

cc: Clinton Hewitt
Paul Kopietz
✓ Paul Maupin
Eugene Kogl
Gus Scheffler
Don Herron

THE ARCHITECTS COLLABORATIVE, INC.
HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.

HEALTH SCIENCES EXPANSION
UNIVERSITY OF MINNESOTA

Saul Maupin FILE
6/1/78

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MAR 6 1978

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HEALTH SCIENCES
PLANNING OFF.

MEMORANDUM

MEMO TO: Unit F - Pharmacy and Nursing File
MEMO BY: Duane E. Blanchard
DATE: 22 February, 1978
SUBJECT: Project Review with State Building Code Division
PRESENT: Messrs; Sivert Hendrickson (SBC Division), Eugene Kogl (U/M),
Gus Scheffler (U/M), Don Herron (U/M), John Scott (HST&P) and
Duane Blanchard (HSAE).

The purpose of the subject meeting was to review with the State Building Code Division the Unit F building design with respect to current and projected code requirements at the anticipated bidding time of August, 1978 for the Prime Contracts.

A. GENERAL PROJECT ORIENTATION:

The Architect provided a general review of the project which included the project location at the University, the history of Unit F and associated Health Sciences Expansion Complex, code reviews done in the past and the current project code reviews.

B. BUILDING OCCUPANCY CLASSIFICATION:

The Architect indicated that they were using the 1976 UBC as the applicable code edition, since the Prime Contracts would not be bid until August, 1978. Using the 1976 UBC, the Architect and University Building Official have established that the basic building occupancy is Group B Division 2, based upon office use and educational use above the 12th grade. In addition to the basic occupancy, there are some areas which would be classified as Group A Division 3, Assembly. Occupancy separations are not required between A-3 and B-2.

C. UBC SECTION 1807 APPLIED TO THE BUILDING DESIGN:

The Architect indicated that the building design and systems were based upon the code provisions of Section 1807 applying the sprinkler alternative.

Mr. Hendrickson indicated that the proposed amendments to the State Building Code will modify Section 1807 such that the corridor requirements under Section 3304(g) would not be modified by the inclusion of an automatic fire-extinguishing system. Mr. Hendrickson was confident that this provision would be included in the adopted amendments of the 1976 UBC and would be effective by June, 1978. Based upon this opinion, there was no discussion as to the corridor requirements under the current code provisions to establish whether one-hour fire-resistive corridor walls were required. (Con't)

(Con't from previous page)

Based upon the above discussion with the SBC Division, we are proceeding with the building design, assuming that all corridors serving 30 or more persons shall be of one-hour fire-resistive construction in accordance with Section 3304.

D. BUILDING DESIGN REVIEW:

The building elevations, sections and plans were reviewed. The exiting provision of the Floor 1 Locker Area was reviewed and accepted. The exiting provisions of the Pharmacy and Nursing Administration Areas on Floor 5 were reviewed at some length and found acceptable, based upon the character of the intended use. The arrangement of the exits on each floor was reviewed and found acceptable, based upon the straight line distance between exits or the direct line of travel distance defined under Section 3302(c).

E. SPECIFIC CODE ISSUES:

The following specific code issues were discussed for comment or acceptance by the SBC Division.

1. The fire pump provisions of interconnecting one new Unit F fire pump with the Units A and B/C pumps, as indicated on the Architect's Drawing M-1, dated 26 January 1978, was reviewed and found acceptable related to the requirements of Section 1807. A copy of Drawing M-1 was left with the SBC Division.
2. The provision of connecting the Unit F water main from Washington Avenue with the Unit A and B/C water mains which are looped between Delaware Street and Essex Street through Mayo Garage was accepted as complying with the on-site water requirement indicated in Section 1807. This design provision is shown on the Architect's Drawing M-1.
3. The omission of the emergency generator for the smoke removal systems, required under Section 1807, would not be acceptable to the SBC Division.
4. The SBC Division would not accept the omission of conduit for telephone distribution lines in return air plenum ceilings.
5. Corridors serving an occupant load of 30 or more must be constructed in accordance with Section 3304.
6. The elevator lobby enclosure provisions for floors 1 through 5 shown on the Architect's Drawings, 1 through 7, dated 16 and 23 January 1978, were acceptable, providing the seating area on floor 2 was omitted by architectural design. Copies of the drawings were left with the SBC Division.
7. The elevator lobby stair provision indicated on the drawings described in item number 6, above, was acceptable to the SBC Division. The rolling shutter on floor 3 was acceptable but they did not favor such provisions.

Copies: Meeting Attendees
Clinton Hewitt
Paul Kopietz
Paul Maupin

HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.
THE ARCHITECTS COLLABORATIVE, INC.

Paul Maupin

HEALTH SCIENCES EXPANSION
UNIVERSITY OF MINNESOTA

MEMORANDUM

MEMO TO: Unit F - Pharmacy and Nursing File
MEMO BY: Duane E. Blanchard
DATE: 27 February 1978
SUBJECT: University Review of ECS Contract Documents
PRESENT: Messrs; Kopietz, Sahlman, Erickson and Blanchard

The purpose of the subject meeting was to review the early contract steel documents for University approval to proceed with the bidding phase of the work.

- A. The drawings and specifications were reviewed with Paul Kopietz at the office of HSAE.
- B. The following items were discussed:
1. The 1976 agreement form should be used in lieu of the one included in the review set.
 2. The wage rates used for the ECX documents still apply and should be used.
 3. The provisions for change order profit and overhead is to remain as specified under Article 12 of the general conditions which limits the total percentage to 20%. This decision was confirmed by Paul Kopietz on February 28, 1978.
 4. Two sections were added to Article 16 - Wage Rates, and they are 16.1.5 and 16.1.6.
 5. Flagmen or uniformed traffic directors will not be required under this contract. The prime contract will include such a provision under that contract.
 6. The Architect will verify that the schedule information identified under Section 1.10 of Article 01010 will be provided by C.P.M.I.
 7. The specifications should be revised to require the use of LeJeune bolts, as specified under Section 05121 Article 2.1E. The Architect will review this item with local erectors for their concurrence.
 8. The painting of the steel as specified in Section 05121 shall remain.
 9. A bid due date of April 13th or 20th will be set as soon as possible.
 10. A ROFEC set is to be delivered to Vic Scott by March 13th for forwarding to ROFEC for their review.
 11. Other miscellaneous items were identified for correction.

cc: Meeting Attendees
Clinton Hewitt
~~Paul Maupin~~
Eugene Kogl

*Unit F - Building Code
Paul Maupin*

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HEALTH SCIENCES EXPANSION

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MAR 17 1978

MEMORANDUM

MEMO TO: UNIT F FILE
MEMO BY: KURT ROGNES
SUBJECT: Telephone Conversation with ROFEC Officials, Henry Ray and Ross Webb, Regarding Unit F Compliance with UBC Earthquake Criteria
DATE: 10 March 1978

UNIV. OF MINN.
HEALTH SCIENCE
PLANNING OFFICE

A conference call was made connecting Henry Ray in Chicago, Ross Webb in Washington, D.C. and Kurt Rogness in Minneapolis. The purpose of the call, placed by Henry Ray, was to advise the Architect that the structural frame for Unit F must be designed to conform with UBC standards for earthquake, which places Minnesota in Earthquake zone 1. Ross Webb is the structural consultant for HEW responsible for the structural portions of the "Guidelines for Minimum Standards of Construction" associated with the Federal Health Manpower Construction Grants. Mr. Ross essentially stated that compliance with the earthquake criteria was a necessary condition for Federal Funding participation on the Unit F project.

It was pointed out by the Architect that the State of Minnesota has amended the UBC standard to classify the state as a zone "0", no damage area, after careful consideration of the potential of seismic disturbance for this area. We also have correspondence with the State to indicate that this will be their position when the 1976 UBC is adopted this summer. Mr. Ray and Mr. Webb felt that this was irrelevant because the Federal criteria was not met.

Mr. Webb suggested that some modification to the design may make the structure comply with the earthquake criteria. This concession was offered after the characteristics of the foundations and steel frame were explained by the Architect. However, the bearing on and the framing into the existing Unit A was seen as a significant stumbling block because Unit A was designed to zone "0" requirements also.

It was decided that the course of action for the Architect was to notify the University of the telephone conversation and seek direction. Mr. Webb suggested that an analysis of the frame may indicate more stiffness than anticipated and essentially comply with the earthquake criteria. He stated that the design must have a period of vibration under seismic forces at less than 0.8 seconds. Such an analysis, together with the plans, would meet his requirements for approving this stage of the work. Thus, we have not forwarded our contract documents of the early steel fabrication contract on to Chicago on Friday, 10 March, as we had agreed.

cc: Clint Hewitt ~~Paul Maupin~~ Gene Kogl John Patterson
 Sherie Perlmutter Paul Kopietz Vic Scott John Scott

THE ARCHITECTS COLLABORATIVE, INC.
HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION
UNIT F

MEMORANDUM

MEMO TO: Unit F File
MEMO BY: Kurt Rogness
SUBJECT: Telephone Conversation with Ross Webb (HEW) by John
Sahlman, Dr. Paul Anderson and Kurt Rogness.
DATE: 29 March 1978

The purpose of the call was to follow-up on the 10 March conversation with Messrs. Ross Webb and Henry Ray, in which the Architects were requested to provide structural data related to the performance of the building under seismic forces. These forces were to be as defined by the UBC Zone 1 criteria.

Pursuant to that conversation, an analysis was prepared by Dr. Anderson in which wind and seismic forces acting on the building frame were compared. Based upon the study of what we considered to be the weakest frame in the building, wind resistance was reported to Mr. Webb as being more critical than seismic resistance. Seismic shear was only 59% of wind shear, while seismic moment resistance was only 62% of wind moment resistance. The period of vibration was found to be .51 seconds, which is less than the .8 second maximum which Mr. Webb required.

Mr. Webb was essentially satisfied with the data provided, however, had one last concern related to horizontal torsion moments or unintentional eccentricity. This design factor was not addressed in the UBC earthquake handbook, however, is part of UBC section 2312 (e) 5. We agreed to look into that requirement and address it in the letter outlining our findings to him. (It was later determined that the deflection of the building was less than 1" and therefore torsional moments were not critical.)

We requested that, if our communication essentially satisfied his concerns, that he so notify Mel Fisher, regional engineer in Chicago. Mr. Webb reported that he was in agreement that we could release for bids and had advised Mr. Fisher of this last week, and any notification at this time was redundant.

cc: Clint Hewitt
Cherie Perlmutter
Gene Kogl
Paul Maupin
John Scott
John Patterson

THE ARCHITECTS COLLABORATIVE, INC.
HEALTH SCIENCES ARCHITECTS AND ENGINEERS, INC.

UNIVERSITY OF MINNESOTA
HEALTH SCIENCES EXPANSION

MEETING NOTES:

DATE: 24 May 1978
SUBJECT: Landscape Review - Unit F
PRESENT: Fran Trojanek - U/M
Archie Glaser - U/M
Jim Goulet
Vlad Chahovskoy
Duane Blanchard
NOTES BY: Kurt Rogness

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HEALTH SCIENCE
PLANNING OFFICE

The purpose of the meeting was to review further detailed development of the landscape design around Unit F. The following items were discussed:

1. The use of steps along the north edge of the building which wrap around on the east side to the concourse entry was reviewed. It was resolved that the steps made sense along the building when compared to other alternatives, but could be terminated 12' east of the building and a grassy slope could be substituted along the remaining length, assuming the same section and plan. This same section would be used south of the concourse entry as well for the stairs leading to the south entry and the grassy edge of the yard extending toward the church.
2. The development of the area south of the Unit F was questioned. Fran would prefer to see a wall along the walk to the south entry from Harvard Street in lieu of continuous plantings shown on architectural drawings. He felt it would do more to detour diagonal traffic. He also suggested that the green space open off the walk along Unit A in lieu of plantings shown there. He suggested that this main access plus a grade change along Harvard Street would tend to secure the area as a Health Sciences space rather than a church space.
3. The funneling down of pedestrian traffic to a 6' neck near the start of the 24' wide walk to the south Unit F entry was questioned by the Architects. The Architects proposed alternative cut off a planned tree and planting bed and open the neck to 18'. Fran decided that the necking down to 6' should be tried and the bed filled in at a later date should it prove unsatisfactory. The Architect will design the juncture to facilitate this eventuality.
4. The extent of University planting around the church was reviewed. A decision was made to omit the plants to be placed right up to the church on the west end of the south facade because of reluctance to do work

(Con't next page)

on the church property. This appears to not be in the University's best interest, and seemingly will not insure a good final resolution to the landscape effort. We hope this can be corrected. Also, it was suggested by the Architect that the University provide a screen to contain the church trash containers.

5. After looking through numerous alternatives, no good solution to bike parking was found and thus will not be part of the planning unless a bright idea emerges.
6. Fran respaced the boulevard trees along Washington Avenue to reduce the numbers of trees. Archie requested that in the general contract, the Architects provide a watering ring, a grate and a guard. Also, between the trees a 3" corrugated poly drain tile should be provided. The grate is to be a Neenah R 8611. Fran is to provide the manufacturer of the tree guard and Archie will transmit a layout of the tree irrigation system.
7. The Architects questioned the University's position on the protection of drop-offs such as the wall behind the church. It was agreed that the normal walkway was 12' from the wall and buffered by planting, thus did not present a significant hazard.
8. It should be noted that University landscape recommendations made in items 2 & 6 are not identified in the current cost estimate.

cc: Those present
Clint Hewitt
✓ Paul Maupin
John Scott
John Patterson