EXHIBITION SPACES - CONCEPT DIAGRAM

Visual connection with outdoors

Flexible boundaries between spaces. As exhibits change.

Square footage devoted to exhibitions should be no less than 10,000 sf., but could be more, depending on site chosen.
**ACTIVITY:** Loading and unloading traveling exhibits from the "Museum", and, depending on proximity it may also service the "Performing Arts" zone for similar purposes. This access might also accommodate loading functions for vending/dining areas shared by these zones. This area is also likely to be used for trash disposal/pick-up from the same facilities.

**EQUIPMENT:** Sufficient access and turning area for up to 2 trailers. Raised dock platform or lift if appropriate. Dumpsters (see fold-out sheets from 'Graphic Standards').

**ADJACENCIES:** Refer to matrix, also try to allow dock to serve several zones which have loading requirements.

**ENVIRONMENTAL:** For aesthetic reasons this area prefers a separate access to the site and wants to have direct views into this area from pedestrian areas, primary approaches and public thoroughfares screened or obscured. It should, however, be easily located (using visual cues) for drivers with deliveries. Transfer point(s) should be weather protected.

**MISCELLANEOUS:** Interior unloading spaces square footage is a function of the type of cargo being dispersed. Museum and performing arts deliveries can be made directly into storage areas. Commercial dining may require a dispersal area of up to 800 ft.
GENERAL NOTES:
1. Maintain a minimum space of 1' - 0" between first door opening and either the end of the building or the driveway.
2. The slope of the pavement is to be the minimum required for drainage.
3. Door dimensions shown are the same for all types of motor carrier docks.
4. Check local codes and laws.

Dimensions:

<table>
<thead>
<tr>
<th>Size of Vehicle</th>
<th>Panel Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>55' - 0&quot;</td>
<td>4' - 0&quot;</td>
</tr>
<tr>
<td>30' - 0&quot;</td>
<td>4' - 0&quot;</td>
</tr>
<tr>
<td>25' - 0&quot;</td>
<td>3' - 0&quot;</td>
</tr>
</tbody>
</table>

2 Wheel Handtruck Operations

<table>
<thead>
<tr>
<th>Size</th>
<th>Panel Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>6' - 0&quot;</td>
</tr>
<tr>
<td>E</td>
<td>50' - 0&quot;</td>
</tr>
</tbody>
</table>

Forklift Truck Operations

<table>
<thead>
<tr>
<th>Size</th>
<th>Panel Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>10' - 0&quot;</td>
</tr>
<tr>
<td>E</td>
<td>60' - 0&quot;</td>
</tr>
</tbody>
</table>

4 Wheel Handtruck Operations

<table>
<thead>
<tr>
<th>Size</th>
<th>Panel Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>10' - 0&quot;</td>
</tr>
<tr>
<td>E</td>
<td>80' - 0&quot;</td>
</tr>
</tbody>
</table>

Drag Line Oper.

<table>
<thead>
<tr>
<th>Size</th>
<th>Panel Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>10' - 0&quot;</td>
</tr>
<tr>
<td>E</td>
<td>80' - 0&quot;</td>
</tr>
</tbody>
</table>

Automatic Spur Type Drag Line

<table>
<thead>
<tr>
<th>Size</th>
<th>Panel Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>10' - 0&quot;</td>
</tr>
<tr>
<td>E</td>
<td>120' - 0&quot;</td>
</tr>
</tbody>
</table>
NOTES
1. Allow for off-street employee and/or driver parking.
2. Entrances and exits should be of reinforced concrete when excessive twisting and turning of vehicles is expected.
3. Average gate (swing or slide) 30'-0" wide for two-way traffic. People gate 5'-0" wide with concrete walkway 4'-0" to 6'-0" wide.
4. For yard security use a 6'-0" high chain link fence with barbed wire on top.
5. It is desirable to provide on-site fueling facilities for truck units as they leave the yard.
6. Provide general yard lighting from fixtures mounted on buildings or on 24'-0" high minimum poles at fence line. Mercury vapor or high pressure sodium preferred.
7. Tractor parking requires 12'-0" wide x 20'-0" long slot minimum. Provide motor heater outlets for diesel engines in cold climates.
8. Tractor parking requires 12'-0" wide slot minimum. Provide 10'-0" wide concrete pad for landing gear. Score concrete at 12'-0" o.c. to aid in correct spotting of trailer.
9. 4'-0" wide minimum concrete ramp from dock to grade. 3 to 15% slope (10% average) score surface for traction.
10. Vehicles should circulate in a counterclockwise direction, making left hand turns, permitting driver to see rear of unit when backing into dock.
11. Double trailers are backed into dock separately.

VEHICLE DIMENSIONS

<table>
<thead>
<tr>
<th>Length (L)</th>
<th>Floor Height (H)</th>
<th>Vehicle Height (H)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tractor</td>
<td>4'-0&quot; to 4'-6&quot;</td>
<td>12'-6&quot;</td>
</tr>
<tr>
<td>Semitractor</td>
<td>4'-0&quot; to 4'-2&quot;</td>
<td>12'-6&quot;</td>
</tr>
<tr>
<td>Straight body</td>
<td>3'-8&quot; to 4'-2&quot;</td>
<td>12'-6&quot;</td>
</tr>
<tr>
<td>Van</td>
<td>2'-0&quot; to 2'-8&quot;</td>
<td>7'-0&quot;</td>
</tr>
</tbody>
</table>

E: Refer to other pages for truck and trailer sizes.

AVERAGE WIDTHS OF DOCKS

<table>
<thead>
<tr>
<th>TYPE OF OPERATION</th>
<th>TWO-WHEEL HAND TRUCK</th>
<th>FOUR-WHEEL HAND TRUCK</th>
<th>FORKLIFT TRUCK</th>
<th>DRAGLINE</th>
<th>AUTO SPUR DRAGLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dock width (A)</td>
<td>50'-0&quot;</td>
<td>60'-0&quot;</td>
<td>60'-0&quot; to 70'-0&quot;</td>
<td>80'-0&quot;</td>
<td>120'-0&quot; to 140'-0&quot;</td>
</tr>
<tr>
<td>Work aisle (B)</td>
<td>8'-0&quot;</td>
<td>10'-0&quot;</td>
<td>15'-0&quot;</td>
<td>10'-0&quot; to 15'-0&quot;</td>
<td>10'-0&quot; to 15'-0&quot;</td>
</tr>
</tbody>
</table>
EXHIBIT PREPARATION

EXHIBIT STORAGE 5,000 S.F.

Activity: These areas are used for exhibit assembly, collection storage (long and short term) and as a loading area for collections being transferred. About 50% of floor exhibit area is needed for these functions. Tool storage required.

Equipment: Small hand tool and construction equipment storage area, work tables and benches, requires further investigation.

Adjacencies: See matrix.

Environmental: Good work light, high security, element protection at loading area, excellent ventilation, in work areas, efficient storage/circulation arrangement.

Staff Offices (3) 330 sf

Refer to matrix for proximities and “Staff Office” (pg 1) of the administration section for functional & spatial descriptions.

Reference Area

Refer to matrix for proximities and “Library” in the “Educational Development Area” (pg ).

Restrooms

For public use, based on average building population. See matrix for adjacencies.
ENTRY (FORMAL) / LOBBY

Activity: Entry into this zone should be in a controlled situation for security purposes and if admissions are to be charged for special exhibitions.

Equipment: Turnstiles, electric doors, ticket desk, seats for waiting

Adjacencies: See matrix

Environmental: If entry to this space is external provide an airlock there. Provide milling space for large group arrivals. Circulation patterns to exhibit areas, service functions, and educational areas should be clearly "mappable" from this point. Externally entry should be clearly defined. Entry should 'work' for handicapped patrons too.
COMPUTER TERMINAL

ACTIVITY: For use museum staff for reference, filing and managerial work. May also be used in conjunction with security, electric and thermal monitoring systems.

EQUIPMENT: Refer to diagram on pg. of "administration area"

ADJACENCIES: Refer to matrix, may also be shared with library area of "educational zone"

ENVIRONMENTAL: Auxiliary and carefully controlled thermal and electrical balance

FILMROOMS

CLASSROOMS 2 @ 570' R: 1140

These spaces may double function with each other. Two such spaces are needed, and could be spaces borrowed from the economic or educational areas. Refer to matrix for proximic requirements and (pg ) of the "educational development" section for function and spatial descriptions.

These rooms may be the location of classroom instruction or used for public film viewing to small groups in conjunction to an exhibit.
# A MATRIX OF RELATIONSHIPS BETWEEN PROGRAM AREAS FOR THE CULTURAL DEVELOPMENT AREA - PERFORMING ARTS ZONE

<table>
<thead>
<tr>
<th>TOTAL AREA EXCLUDING CIRCULATION AND SERVICES.</th>
<th>APPX. 5700</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEATING AREA, STAGE AREA, SCREEN, RESTROOMS, CONCESSIONARY, TICKET AREA</td>
<td>1200</td>
</tr>
<tr>
<td>WING AREA, PROP STORAGE, CATWALK, MECHANICALS, MAINTENANCE, LOBBY, EMPLOYEE DRESS, MANAGER, ORCHESTRA</td>
<td>600</td>
</tr>
</tbody>
</table>

**KEY**
- Required
- Desirable
- Acceptable
- Unacceptable

**Proximity to Commercial Dining and Exhibit Areas desirable.**

**Shaded areas have multifunctions or are shared spaces.**
SEATING AREA 6,67 $/PERSON & 2,000 SF
10 $/PERSON (DINNER THEATER STYLE) 3,000+

ACTIVITY: AN AREA FOR SEATING UP TO 300 PEOPLE
FOR A STAGE PERFORMANCE OR FILM. MAY BE USED
BY THE EXHIBIT AREA ALSO.

EQUIPMENT: COMFORTABLE SEATING

ENVIRONMENTAL & GOOD VIEW TO STAGE AND
ACOUSTIC PERCEPTION OF PERFORMANCE FROM
ANY SEAT IN THE HOUSE. AREA SHOULD HAVE
ACOUSTIC ISOLATION FROM ADJACENT SPACES.

MISCELLANEOUS: $ BASED ON PROJECTED AUDIENCE
SIZE. REFER TO XEROXES FROM 'STANDARDS'.

FAN SHAPED SEAT PATTERN IS MOST EFFICIENT
IN MULTIPLE-PERFORMANCE-TYPE ARRANGEMENTS,
SUCH AS FILM, PLAY, MUSIC THEATERS.

WING, STAGE, SCREEN ETC. 1,800 SF.

REFER TO SHEETS FROM 'STANDARDS'

RESTROOMS & 160 $ EA (X2)

PER CODE BASED ON 150 PERSONS OF EACH SEX
SEE MATRIX FOR PROXIMITIES.
FLOOR SLOPE WITH CONSTANT RISE PER ROW

HORIZONTAL FOCAL PLANE
\[ R = \frac{\overline{E} + (N-1)C}{C} \]

VERTICAL FOCAL PLANE
\[ D = \frac{\overline{E} - C}{C} \]

E = \frac{\overline{R} - (R-C)C}{C}

FLOOR SLOPE GIVEN AS PERCENTAGE VERTICAL FOCAL PLANE
\[ P = \frac{\overline{R} - C}{100} \]

NOTE: WHEN EYE LEVEL AT FIRST ROW IS BELOW APS, E IS NEGATIVE

CONSTANT RISE SLOPE - SOLID LINES
ISCODOMAL SLOPE - DOTTED LINES
NOTE: ISCODOMAL SLOPE AT FIRST ROW WILL HAVE REVERSE SLOPE WHEN APS IS ABOVE FIRST ROW EYE LEVEL BY MORE THAN 0.03/R WHERE D3 = L + T

SLIGHTLY SLOPED FLOOR - VERTICAL FOCAL PLANE

NOTE: BALCONY MAY ALSO BE DESIGNED WITH AN ISCODOMAL SLOPE

NOTE: MAXIMUM STAGE HEIGHT FOR LIVE PERFORMANCE IS 43\(^\circ\) (E+0.1)

SEE LOCAL CODE FOR REQUIRED HEIGHT (28\(^\circ\) TO 30\(^\circ\) TYP)
IMMEDIATE RISERS: Build full space between clear aisle edge of chair. "C" clearance recommended.

REG'D CLEAR Aisle WIDTH: In multiple aisle seating, vary seat widths and/or alternate Odd and even numbers of seats per row to obtain staggering in center seat banks. Cross aisle clear width must equal - measure from seat back.

MULTIPLE AISLE SEATING:
- 12 to 17 seats max. (7 seats typ max.)
- See local code for modified continental or hybrid-8 to 10 seats
- Datum or chair size line

CEAR AISLE WIDTH AS REG'D CLEARANCE PERPENDICULAR TO VE OF TRAVEL.

VE OF TRAVEL

CONTINENTAL SEATING

CHAIRS AS SEEN FROM ABOVE

CHAIR BACKS: Plastic, molded plywood, rolled stamped metal, upholstered front, rear. Higher backs and bottom extension for scuff protection also available.

CHAIR SEATS: Upholstered, plywood, plastic, metal pan, coil or serpentine springs, polyurethane foam.

ROW SPACING / TREAD T

LEGAL CRITERIA: See local code for required minimum sarking. Code typically stipulate a minimum clear plumbine distance measured between the unoccupied chair and the rear of the back of the chair in front.

37'-39" typical minimum for multiple aisle seating
34'-37" typical minimum for modified continental seating
35'-42" typical minimum for continental seating

COMFORT FOR THE SEATED PERSON:
33"-35" knees will touch chair back; uncomfortable
34"-35" minimum spacing for comfort
35"-37" ideal spacing for maximum comfort
38" and up: audience cohesion may suffer

EASE OF PASSAGE IN FRONT OF SEATED PERSONS:
35'-37" seated person must rise to allow passage
36'-38" seated persons will rise
40" and up: passage in front of seated persons possible

SAFETY: Excessive plumbine distance may entice existing persons to squeeze ahead and cause jam.

EFFICIENCY: Choice of minimum spacing satisfying criteria above reduces maximum distance to stage.

INTERIOR DESIGN ELEMENTS

Frank and Beucler: Architects, Philadelphia, Pennsylvania
**Concessionary**

Activity: may be of conventional theater type or may sell special foodstuffs and beverages which correspond to the performance inside. (If option for 'dinner theater' is used, there should be provision for a waitress station.)

Equipment: vending counters, drink fountains, (bar?) cash register, popcorn machine?, warming ovens or microwaves, display lighting, menu board

Adjacencies: see matrix, may want to be directly connected to 'commercial kitchen' shown in the "large assembly area" section of the "cultural development area" (pg 7)

Environmental: cooking aroma should be encouraged in adjacent lobby to boost sales, also visual contact for the same reason. Light and sound from this space must not reach the theater space; counter edge should be maximized to serve "greatest speed, circulation, simple and non-conflicting"

Standard concessionary: ± 165 ft

Diagram: [Diagram of concession stand layout]

- Customers
- Corn counter
- Drinks
- 15 ft
- 4 ft
ACTIVITY: CONTROL CENTER FOR MIXED MEDIA PRESENTATIONS

EQUIPMENT: SOUND BOARD, LIGHT BOARD, 2 FILM PROJECTORS, 2 SLIDE PROJECTORS, COUNTER, CHAIRS (2 OR 3) TOOLS FOR PROJECTOR REPAIR, "SAFE LIGHT", (INTERCOM TO STAGE MGR.?)

ADJACENCIES: SEE MATRIX, SHOULD HAVE CLEAR PROJECTION TO SCREEN

ENVIRONMENTAL: PROJECTIONIST/TECHNICIANS SHOULD HAVE AUDITORY AND VISUAL CONTACT WITH AUDITORIUM DURING TESTING SESSIONS. THESE SHOULD BE MUFFLED DURING PERFORMANCES. VERTICAL CIRCULATION (STAIR/LADDER) REQUIRED @ ENTRY. VISUAL ACCESS WHILE OPERATING CONTROL PANELS

DRESSING ROOMS (3) @ 60, 2 @ 300

EMPLOYEE DRESSING ROOMS (2) @ 40

ACTIVITY: A PLACE TO CHANGE CLOTHING, APPLY MAKE-UP, SPEND BREAKS OR INTERUMS, STORE COSTUMES OR CLOTHING AND WASH UP. MORE INTENSIVE FOR PERFORMERS.

EQUIPMENT: ONE VANITY SPACE (4 ACTORS), COMFORTABLE SEATING OR COUCHES, ADJUSTABLE LIGHTING, MIRRORS, COSMETIC STORAGE, LOCKABLE WARDROBE UNITS, LAVATORIES, TABLES, INTERCOM.
ADJACENCIES = SEE MATRIX

ENVIRONMENTAL: SEPARATE SPACES FOR PRINCIPAL VS. SUPPORT PERFORMERS VS. EMPLOYEES. AREA SHOULD HAVE ACoustic AND LIGHT ISOLATION FROM THEATER AND SEATING. AN INTERCOM WILL PREVENT MISSED CUES. VISUAL CONTACT WITH OUTDOORS AND SEpARATE EXITS ARE DESIReABLE.

PRINCIPAL PERFORMERS DRESSING (2 PERFORMERS) (2 RQD)

\[ \approx 60 \text{ ft}^2 \text{ EA.} \]

SUPPORT PERFORMERS DRESSING (16+) (2 RQD)

\[ \approx 300 \text{ ft}^2 \text{ EA.} \]

EMPLOYEE DRESSING

\[ \approx 37.5 \text{ ft}^2 \]
MANAGER'S OFFICE

Refer to Matrix for proximities and "Staff Office" in "Administration Area" (pg 79) for further info. Additional Eqpt. includes a safe.

LOBBY

Activity: space to circulate before, after, and during breaks in performance for up to 1/3 of the audience.

Adjacencies: see matrix, also outdoor spillover.

Environmental: should have excellent ventilation and be zoned into smoking/non smoking areas.
<table>
<thead>
<tr>
<th>Dining for</th>
<th>Dancing for</th>
<th>Kitchen Facility</th>
<th>Loading Dock</th>
<th>Seating Area</th>
<th>Lobby?</th>
<th>Restrooms</th>
<th>Speaker/Platforms</th>
</tr>
</thead>
<tbody>
<tr>
<td>approx. 17,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**A Matrix of Relationships Between Program Areas for the Cultural Development Area**

**Total Area Excluding Circulation and Services**

**Large Assembly Area**
DINING AREA FOR 220

ACTIVITY: DINING OF MODERATE FORMALITY (COMMERCIAL)

EQPT: FLEXIBLE TABLE ARRANGEMENTS FOR GROUPS OF 2 - 8 PEOPLE, (WAITRESS AND HOSTESS STATIONS?)

ADJACENCIES: SEE MATRIX, ALSO DESIRABLE TO BE NEAR PERFORMING ARTS AND EXHIBITION AREAS.

ENVIRONMENTAL: ACOUSTIC SEPARATION FROM SERVICE AREAS, SEPARATE THERMAL CONTROL IN THIS ZONE, ABILITY TO SECTION OFF THIS ZONE.

MISCELLANEOUS: 13 $/PERSON x 220 = 2860
SEE "GRAPHIC STANDARDS" FOR SUPPORT INFO ON THIS SPACE

COMMERCIAL KITCHEN (50% OF DINING)

ACTIVITY: FOOD PREP AND STORAGE FOR ABOVE DINING AREA, THEATER AND POSSIBLY AN OUTDOOR DINING SPACE.

EQPT: REFER TO "GRAPHIC STANDARDS" INFO INCLUDED HERE

ADJACENCIES: SEE MATRIX AND SPACES LISTED ABOVE

ENVIRONMENTAL: EXCELLENT VENTILATION, EFFICIENT CIRCULATION & STORAGE SYSTEMS.

DANCING 8 $/PERSON x 100

900 - 1000 SF

ACTIVITY: DANCING, IN CONJUNCTION W/ EATING, UP TO 100 PEOPLE

EQPT: DANCEFLOOR THAT WON'T TIRE DANCERS, VARIABLE LIGHTING, STRUCTURAL ISOLATION OF LOADING
DANCING (cont)

**Adjacencies:** See matrix; it would be desirable to allow this function to spill into outdoor areas.

**Environmental:** Extra cooling capacity desirable in this area.

**Lobby (20) 384**

**Activity:** Waiting area/entry space to dining/dancing area. Could be used as overflow seating.

**Equipment:** Seating, small tables?, a place for controlling entry or taking tickets.

**Speaker/Platform (3,4'x8' units?) 120**

**Activity:** A podium area for public addresses, dance bands, or D.J.'s in this space.

**Equipment:** Portable speaker platforms, storage area, for when it's not in use, hook-ups for P.A., speakers.

**Adjacencies:** See matrix, also outdoor area.

**Environmental:** Potential for hook-ups in sev. interior locations.
SEATING AREA 10¢/PERSON

ACTIVITY: RESTING BETWEEN DANCES, CONSUMPTION OF SNACKS AND BEVERAGES BY DANCERS. MAY DOUBLE W DINING AREA OR LOBBY

EQUIPMENT: TABLES & SEATING FOR 70

ADJACENCIES: SEE MATRIX, ALSO THIS FUNCTION MAY WANT TO BE CONNECTED TO AN OUTDOOR SPACE INTO WHICH THIS FUNCTION MAY SPILL IN SUMMER.

ENVIRONMENTAL: LOW LIGHT LEVEL (ADJUSTABLE) FROM POINT SOURCES ("MOOD LIGHTING") SIMPLE CIRCULATION TO DANCE AREA, FROM KITCHEN.
Commercial kitchens are normally defined as those having food to be consumed away from home. Most of these are kitchens within restaurants, hotels, cafeterias, snack bars, coffee shops, school cafeterias, and other similar institutions. The size, type, quantity, and layout of equipment in the kitchen and the related service areas are a direct reflection of the menu, amount of patronage, and the time in which the items are to be served.

The schematic drawings shown here do not attempt to present kitchen design solutions, but rather to familiarize the reader with the typical characteristics of commercial kitchen design.

**NOTES**

Workers and materials should travel minimum distances. They should proceed in a logical sequence with minimum of crossing and backtracking. Delay and storage of materials in processing and serving should be reduced to a minimum. Garbage and trash disposal facilities are required for all functions.

**RECOMMENDED STORAGE TEMPERATURES**

1. **Dry Food Storage:** 68°F (20°C).
2. **Common Storage:** 55° to 60°F (13° to 16°C).
3. **Freezer Storage:** 0°F to -10°F (-18° to -23°C).
4. **Refrigerated Storage:** 31° to 35°F (-0.5° to 1.6°C).

**RECOMMENDED WARE WASHING TEMPERATURES**

1. **Pre-Rinse:** 120° to 140°F (49° to 60°C).
2. **Wash:** 140°F (60°C).
3. **Rinse:** 180°F (82°C) for 10 sec. 170°F (77°C) for 30 sec or longer.

If sanitizing agent is used - 140°F (60°C) is acceptable for all ware washing functions.

**NOTE:** Check local codes for requirements.

**VENTILATORS**

Ventilators are generally required over all types of major cooking equipment. The exhaust system should be either a canopy type or high speed backdraft exhaust. Grease removal should be accomplished through the use of filters or internal centrifugal extraction. Fire extinguishing equipment should be installed in compliance with the National Fire Protection Association and local codes. The NFPA has standard codes for fire extinguishing equipment that must be strictly adhered to. At present, the most commonly used systems are the Carbon Dioxide and Dry Chemical Extinguishing Systems in conjunction with Portable Fire Extinguishers.

Ventilator installations should completely cover the equipment being ventilated with minimum overhangs on all sides regulated by National and local codes. Maximum floor to canopy height should be approximately 7 ft, and the canopy from bottom to top should be 2 ft or more.
This system is designed for trays made up in a hospital patient tray assembly system.

Institutional

WARE WASHING SYSTEMS

Cir-Griscom Associates, Inc.; Food Service Consultants; Washington, D.C.

CIRCULAR TYPE
NOTE
The circular system is overall less labor intensive than other designs and is most useful in a large volume operation.
NOTE

Design of the service counter will depend on the number of stations required for efficient service and the amount of space available.

NOTE

This type of operation has many variables. Sandwiches and hot entrees may or may not be offered. The equipment requirements are directly related to the menu, volume, and style of service.

NOTE

The area will vary depending on the menu and method of preparation. Alternate equipment would include a charbroiler, conveyor charbroiler, and more fry space for expanded fry menu items.

NOTE

This area has been designed for preportioned refrigerated chicken parts. An alternate layout includes ovens for preheated, frozen portions.

NOTE

The window serves the same menu as the inside operation. Service may be pass-window or bank-drawer type.
Counters and Seating

**AVERAGE CAPACITIES PER PERSON**

<table>
<thead>
<tr>
<th>TYPE OF ROOM</th>
<th>SQUARE FEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banquet</td>
<td>10-12</td>
</tr>
<tr>
<td>Cafeteria</td>
<td>12-15</td>
</tr>
<tr>
<td>Tea room</td>
<td>10-14</td>
</tr>
<tr>
<td>Luncheon/coffee shop</td>
<td>12-16</td>
</tr>
<tr>
<td>Dining room/restaurant</td>
<td>13-16</td>
</tr>
<tr>
<td>Specialty/formal dining</td>
<td>17-22</td>
</tr>
</tbody>
</table>

**NOTE**

Figures are general and represent minimum average dimensions. No maximum exists. Seating allowances and requirements may vary to suit individual operations.

**GENERAL DESIGN CRITERIA**

Service aisles: 30-42 in.
1. Square seating, 66 in. minimum between tables, 30 in. aisle plus two chairs back to back.
2. Diagonal seating, 36 in. minimum between corners of tables.
3. Wall seating, 30 in. minimum between wall and seat back.
4. Minimum of 30 in. for bus carts and flaming service carts.

Customer aisles:
1. Refer to local codes for restrictions on requirements.
2. Wheelchair requirements, 35-44 in. aisle.
3. Wall seating, 30 in. minimum between walls and table.

Tables:
1. Average 26 in. high.
2. Allow space around doors and food service areas.

**CAL SEATING ARRANGEMENTS**

- All dimensions are minimum clearances. Seating layouts show general configurations and are not intended to depict any specific type of operation. Tables may be converted from square to round to enlarge seating capacity. Booth seating makes effective use of corner space.

- Tables are usually recommended only for seating 10 or more.
- A depends on the perimeter (1'-10" - 1'-2") per necessary to seat required number. For cocktail, 6' is sufficient.
- B are satisfactory for drink service when tables with widespread bases are more four-legged tables.
- C and arrangements are affected by the type of units and the style of service. The use of flaming using carts, high chairs for children, and handrails must be considered.

**BENCH SEATING ARRANGEMENTS**

- Arrangements depend on the perimeter (1'-10" - 1'-2") per necessary to seat required number. For cocktail, 6' is sufficient.
- B are satisfactory for drink service when tables with widespread bases are more four-legged tables.
- C and arrangements are affected by the type of units and the style of service. The use of flaming using carts, high chairs for children, and handrails must be considered.
NOTE: MATRICES FOR THESE CULTURAL DEVELOPMENT ZONES WILL NOT BE OUTLINED AS THESE FACILITIES SHOULD BE DEVELOPED INDEPENDANTLY OR IN SUBSEQUENT STAGES OF PLANNING: SOCIAL CLUBS FOR NATIONALITIES, SENIOR CITIZEN'S CLUB(S) & COMMERCIAL SPACES.
OFFICES FOR:
  DIRECTOR
  SEC'y
  COUNSELORS (2)
  LEGAL ADVISOR

PUBLICATIONS AREA

MEDIA TAPING ROOM?

EQPT. STORAGE

WAITING AREA

FAMILY OR GROUP COUNSELING SPACE

STAFF MEETING SPACE?

RESTROOMS
A MATRIX OF RELATIONSHIPS BETWEEN PROGRAM AREAS FOR THE HUMAN SERVICES AREA

TOTAL AREA EXCLUDING CIRCULATION AND SERVICES

APPROX. 1600 sf

DIRECTOR SE'Y
COUNSELOR
COUNSELOR
LEGAL ADVISOR
PUBLICATIONS
MEDIA / TAPING RM.
EQPT. STORAGE
WAITING AREA
FAMILY / GROUP COUNSEL
STAFF MEETINGS
ENTRY / CIRCL.
MECHANICAL
PARK / BOARD
RESTROOMS.

KEY

REQUIRED
DESIRABLE
ACCEPTABLE
UNDESIRABLE

SHADING SPACES IMPLIES THE POSSIBILITY OF A DOUBLE (MULTIPLE) FUNCTION SPACE, OR SHARED USE WITH ANOTHER ZONE.
**DIRECTOR**

See functional and space descriptions on pgs. 1 under "Director" in the "Administration Area".

**SECRETARY**

See functional and space descriptions on pgs. 1 under "Secretary" in the "Administration Area".

**COUNSELOR (2)**

See functional and space descriptions on pgs. 1 under "Staff Office" in the "Administration Area".

**LEGAL ADVISOR**

See above.

**PUBLICATIONS AREA**

% 330 SF.

Activity: Production and assembly of pamphlets and newsletters about the Center's programs and activities. Printing will be contracted out.

Equipment: Typewriters, layout/paste up area, tack space, phones, message boards, paper supplies, source and photo files, office supply storage, photo development area, camera equipment lockable storage, light lock, film loading, chem bath & sink area, enlargers counter, drying, storage, editor's desk.
ADJACENCIES: REFER TO MATRIX, A SEPARATE MODE OF ENTRY FOR EVENING VOLUNTEER WORK MIGHT BE APPROPRIATE.

ENVIRONMENTAL: AMBIENT, NATURAL, AND TASK LIGHTING, SAFE LIGHTS IN DARK ROOM, MUSIC DESIREABLE

PHOTO AREA X 150 $/

PRODUCTION AREA X 150 $/
**WAITING AREA**

Refer to "Waiting Area" (POS 1) of the "Administration" section. Area may be a shared space with another zone such as "Education" or "Economic Development."

**FAMILY OR GROUP COUNSELING**

Activity: formal or informal counseling sessions for groups of 4-10 people. May double as staff lounge.

Equipment: table and informal seating for 4-10 people

Adjacency: see matrix

Environmental: acoustic and visual privacy, focused interior arrangement, flexible formality, visual relief to exterior space, psychologically relaxed and democratic. Feelings evoked, (this requires further investigation) distances between participants should be limited, intimate low glare, low contrast lighting

**ENTRY/CIRCULATION AREA**

Refer to this area on POS 1 of "administration." See matrix for adjacencies.
EDUCATIONAL AREA - SPACES REQ'D

"OFFICES" FOR:

DIRECTOR (1)
SECRETARY (1)
ESL INSTRUCTORS (6)
COMPUTER ED. STAFF (1)
LIBRARIAN (1)
TESTING STAFF (1)

LIBRARY

CLASSROOMS (W A.V. ROOMS OR HOOK UP) (6)

MEDIA STORAGE

TESTING AND ADVISING CENTER

WAITING AREA

VENDING AREA

RESTROOMS

VIDEO

SEE SPACE ROOMS IN ADMINISTRATION AREA FOR SIMILAR OFFICE
A MATRIX OF RELATIONSHIPS BETWEEN PROGRAM AREAS FOR THE EDUCATIONAL AREA

TOTAL AREA EXCLUDING CIRCULATION AND SERVICES:

APPX. 2400 #

* NOT IN AREA

<table>
<thead>
<tr>
<th>DIRECTOR</th>
<th>SECRETARY</th>
<th>ESL, INSTRUCTOR (6)</th>
<th>COMPUTER ED. STAFF</th>
<th>LIBRARIAN</th>
<th>TESTING STAFF</th>
<th>LIBRARY</th>
<th>CLASSROOMS (6)*</th>
<th>MEDIA STORAGE</th>
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<tr>
<td></td>
<td>DATA</td>
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<td>WAITING AREA</td>
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<td></td>
<td>RESTROOMS</td>
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<td>VIDEO</td>
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<tr>
<td></td>
<td>ENTRY</td>
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<td></td>
<td>PARK/BOARD</td>
<td>MECHANICALS</td>
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</tbody>
</table>
OFFICES:

- **Director**: 110 sq ft
- **Secretary**: 120 sq ft
- **ESL Instructors Office (6) @ 65 sq ft (ea)**
  - Activity: For instructors to meet 1 on 1 with students, a place to prepare class materials etc.
  - Eqpt. Desk, chair, shelves, seating for 1 or 2 students.
  - Adjacency: Needs to be near class rooms, central office & library/media area.
  - Needs both task & natural light, needs both visual & acoustic privacy.

- **Testing Staff Office**: 100 sq ft
  - Activity: Aptitude testing, learning problem identification for placement in the vocational or ESL programs. Interviewing clients.
  - Eqpt. same as instructor's office with some additional filing & testing area & eqpt. storage.
  - Adjacency: Near central office

- **Librarian's Office**: See Staff Office
  - 110 sq ft
  - Adjacent to library.

- **Computer Education Staff**: 2@ 115 sq ft 230
  - This space is shared with and listed under "Economic Development Area."
ACTIVITY: Classroom instruction in English as a second language for classes of up to 20 students. Classes will utilize audio visual equipment to enrich learning.

These rooms can also be used for job search training classes, business enrichment classes, seminars etc.

EQUIPMENT: Movie screen, phonograph/tape player, slide projector, movie projector, headphones, hookups, seating for up to 30 people, podium, overhead projector, blackboard, tack space, study carrels, video tape player

ADJACENCY: It is desirable to be near the library and instructor's offices since these spaces may be used by the same group often & restrooms.

ENVIRONMENTAL: HVAC should be locally controllable. Rooms should be completely darkenable during films but have potential for natural light (on 2 sides) when there are no films. A/V eqpt. should be directly accessible during viewing, but lockable when not in use. Room should be flexible in arrangement possibilities. There should be several hookups for elec. eqpt. in ea. room.
INSTRUCTOR'S OFFICE ≈ 65 ft

CLASSROOM FOR 20-30
W/ A.V. HOOK-UP AND
STORAGE ≈ 570 ft

25' → 30'

AV. EQPT. & STORAGE

60" X
LIBRARY

STAFF: 1 LIBRARIAN, 7 VOLUNTEERS.

ACTIVITY: THE LIBRARY WILL SERVE AS A RESOURCE CENTER WHERE MARION COUNTY RESIDENTS CAN CHECK OUT BOOKS, TAPES, PERIODICALS, ETC. ON SUCH TOPICS AS HISPANIC ART, MUSIC LANGUAGE, CULTURE ETC., AS WELL AS INFORMATIONAL MATERIALS ABOUT RIGHTS & SOCIAL SERVICES, ETC...

THE LIBRARY WILL SERVE AS A RESOURCE CENTER FOR THE EDUCATIONAL AND ECONOMIC DEVELOPMENT PROGRAMS.

IT COULD OFFER A SPECIAL YOUTH PROGRAM ON WEEKENDS.

EQUIPMENT: BOOK SHELVES, VERT. FILE, CARD CATALOG, CHECK OUT DESK, COMFORTABLE SEATING, STUDY CARRELS, TYPEWRITER, TAPE MACHINES W/ HEADPHONES, ETC. (MEDIA CENTER)

ADJACENCIES: LIBRARIAN'S OFFICE, CLASSROOM, INSTRUCTOR'S OFFICES, CIRCULATION REALM, MEDIA STORAGE ROOM.

ENVIRONMENTAL: READING LIGHT (NATURAL & ARTIFICIAL) FLEXIBILITY IN QUALITY OF BACKGROUND SOUND IN READING AREAS. SOME READING/STUDY AREAS SHOULD HAVE INTERIOR OR EXTERIOR VIEWS TO (LARGER) OTHER SPACES, OTHERS SHOULD HAVE CONTROLLED OR CLOSED FOCUS. FIRE & SECURITY SHOULD RECEIVE EXTRA ATTENTION.
LIBRARY

SHELVING AREA - CATALOGS 375 SF.

(Shelving area should have potential for expansion.)

STUDY AREAS:

WORK TABLE (2) 37.5 $ EA.

ADJACENT TO CIRCULATION PATH OR OTHER OBJECTS 37.5 $ EA.

(GROUP STUDY - LOUD AREA)

STUDY CARREL (4) 10 $ EA.

A. (FOCUSED STUDY - SILENT AREA)

B. (AUDIO/VISUAL CARREL - ANY AREA)
COMFORTABLE SEATING AREA - FLEXIBLE \( \approx 200 \) 

CONTROL / SERVICE DESK \( \approx 75 - 100 \) 

VERTICAL FILE  DESK  WORK AREA  

RET. CHECK OUT  MCHL  7.5'  10' - 12' 

TYPOGRAPHY AREA \( \approx 20 \) 
(SOUND SHOULD BE IN ISOLATION) 

4.5'
LIBRARIAN'S OFFICE

FUNCTIONALLY SIMILAR TO "STAFF OFFICE" UNDER ADMINISTRATION; SEE MATRIX FOR PROXIMITIES

MEDIA STORAGE

ACTIVITY: STORAGE OF FILMS, TAPES, MICROFILMS, PHOTOS, VIDEOTAPE, RARE PRINTED MATERIALS, ETC. FILING SYSTEM FOR LOCATING AND CATALOGING THESE ITEMS. WORK TABLE FOR SORTING/REPAIR/LABELING.

EQUIPMENT: APPROPRIATE LOCKABLE, FIREPROOF STORAGE FOR EACH MEDIA TYPE. WORK TABLE, CHAIR.

ADJACENCIES: SEE MATRIX

ENVIRONMENTAL: SECURE, FIRE PROOF, WORK LIGHTING, VIEW TO LIBRARY DESK (IF THERE IS ONLY ONE LIBRARIAN ON DUTY) MINIMIZE CIRCULATION, INTENSIFY DEVELOP STORAGE AREAS.

[Diagram of media storage area]
**ACTIVITY:** An area for quick snacking between classes, while visiting exhibitions, or while studying and munching.

**EQUIPMENT:** Snack and beverage vending machines, microwave, tables, chairs, newspaper stand, trash.

**ADJACENCIES:** See matrix, also exhibition area lobby, service.

**ENVIRONMENTAL:** Moderate sound localization. View desirable from seating. Efficient circulation.
RECREATIONAL FACILITIES

- Fields for Soccer Leagues*
- Jai - Lai Courts*
- A roofed outdoor space (for large gatherings)?
- Picnic areas?*
- EQPT. Storage Facilities for
  - Maintenance EQPT.
  - Sports EQPT.*
  - Festival Framing Pieces*

* These areas will likely be covered in off-site or future planning locations so they will not be dealt with further in this program.
A MATRIX OF RELATIONSHIPS FOR RECREATIONAL FACILITIES.

KEY

REQUIRED
DESIREABLE
ACCEPTABLE
UNACCEPTABLE

NOTE: DEPENDING ON THE CENTER LOCATION, IT MAY BE POSSIBLE TO HANDLE RECREATIONAL FUNCTIONS ON OTHER CITY PROPERTIES (EX. PARKS, IUPUI)
MECHANICAL - SPACES REQ'D

To be no more than 10% of the total building volume or no more than 15% if solar tech. are applied.

CIRCULATION SPACES REQ'D

10% or less of liveable square footage in all structures but the museum where this cannot exceed 20%.

SITE DEVELOPMENT REQ'D

This section to be devil. After a site is selected, there should be one gathering area capable of holding 1000 persons for festivals & performances outdoors. Not to exceed 18% of building cost.

SERVICE AREAS [\*to be located appx. centrally in functional area.]

* Rest Rooms (by code) Total \[\]
* Water Fountains 1/50 patrons in public areas.
* Telephones 1/50 in public areas (near entries)

Janitor Spaces - see \[\] area.

Coat/Locker Area - in public spaces? in classroom areas?

Parking (by code)
MORE ON SERVICE FUNCTIONS

- **MECHANICAL** in most cases these systems should be zone or locally controllable. In public areas a master control would be more appropriate. In sensitive areas, such as computer areas or some "museum" spaces back-up systems should be used for precise balance and in case of failure of the main system. Natural ventilation and passive solar heating and cooling systems should be used wherever possible to lower maintenance costs.

- **PLUMBING** systems should be concentrated into as narrow zones as possible and located centrally among the cluster of functions for each area as far as possible. Functions such as restrooms and water fountains may be concentrated to serve several adjacent divisions.

- **JANITORIAL** space should be allocated as efficiently as possible; one larger space in a building is preferable to several smaller, (especially feasible in a multi-story scheme w/ elevator service) it should be adjacent to a service entry/trash disposal location. Should be near plumbing core.

- **VERTICAL CIRCULATION** - should be near and "mappable" from principal entry locations if there is a multi-story scheme. Location should also be pivotal in proximity to various building zones to minimize distances of travel and square footage devoted to circulation. (Important when possibility of Gov't building funds exists.)
More on Service Functions

- Vertical Circulation Cont. - Amount of Circulation (and type) shall be determined after the general building form and approximate traffic volumes in each area are determined.

- On-site automobile traffic should be limited to a principal (central?) path which provides access to the parking areas. Number of spaces allocated should be the minimum required by code for each functional zone. Distance from parking to entry should be minimized, but a "sea of parking" is undesirable; clusters of parking spaces are preferable. Parking areas should be buffered or screened from major building areas with views and from adjacent major streets, if any. Parking areas should be sufficiently well lit and open enough to be secure. This concern and the concern for buffering should be resolved carefully to satisfy both. Auto areas should have low glare.

- Public transportation should be encouraged as the predominant means of arrival and provision should be made for interchanges to occur near the entry points. This reduces the amount of on-site paving required, as does the multiple use of auto approaches.

- Security systems should be most stringent in these areas: economic development zone, museum area, computer terminal areas, and anywhere money or valuables are stored.

- Fire safety systems: fire exits and alarm systems must be quickly and easily accessible from all people spaces, especially high density areas. Detection systems should be
MORE ON SERVICE FUNCTIONS.

- **Fire Protection, Cont.** - Used throughout and special extinguishing systems should be used in areas of the museum, library, and computer zones where properties are more or less irreplaceable. All vaults should be fire proof.

- **Access to all public spaces should be provided for the handicapped. Special provisions should be made so that services (restrooms, water fountains, phones, vertical circulation etc.) can be used w/out assistance in most cases. Public transportation and principal entry points should be designed with these patrons in mind.**
NOTE
Housekeeping and maintenance facilities are an important program item in practically every building. Provide adequate space for all standard custodial functions, and add space for special equipment if required.

KEY—OPTIMUM CUSTODIAL CLOSET
1. Storage area for hoes, extension wands, pipes, etc.
2. Built-in ceramic tile floor sink with drain (second choice: wall mounted utility sink).
3. Shelves over utility sink 9 in. deep, 12 in. spacing.
4. Storage shelving over floor stock, 18 in. deep, 12 in. spacing.
5. Moppping outfit in stored position.
6. Floor stock (drums, cans, etc.).
7. Floor machine in stored position.
8. Vacuum in stored position.
9. Accessories, fittings, and tools mounted on pegboard.
10. Aluminum or ceramic drip tray.
11. Mop in stored position.
12. Trigrip tool holders.
13. 4-in. spacer to keep mops away from wall.
14. Bulletin board containing instructions, schedules, etc.
15. 30-in. wide door with louver—location of door interchangeable with accessories pegboard if necessary because of orientation of area.
16. Ceiling light providing minimum 40 ft-c; light should be shielded to prevent damage.
17. Floor of ceramic tile or concrete with floor drain if possible.
18. Bibb (threaded) faucet with brace.
19. Length of hose for washing equipment. A custodial cabinet should be used where there is insufficient space to install a custodial closet.

OPTIMUM CUSTODIAL CLOSET (18'x9' inside)

SHELVING
SINK
SHELF
WORKTABLE
DESK
PEGBOARD
PAPER GOODS ON PALLET
CANS, CASES, ETC.
EQUIPMENT STORAGE (VACUUMS, CARTS, ETC.)
STORAGE CABINET

SMALL CENTRAL STORAGE AREA (8'x18' inside)

MINIMUM CLOSET (4.5'x8')

TYPICAL CUSTODIAL CABINET (METAL)

JANITORIAL SPACES
GENERAL NOTES
Examples shown are for easy driving at moderate speed. See the preceding page for vehicle dimensions (L, W, and CFI). The "U" drive shown below illustrates a procedure for designating any drive configuration, given the vehicle's dimensions and turning radius. The T (tangent) dimensions given here are approximate minima only and may vary with the driver's ability and speed.

PRIVATE ROADS INTERSECTING PUBLIC ROADS

"U" DRIVE AND VEHICLE TURNING DIMENSIONS

<table>
<thead>
<tr>
<th>VEHICLE</th>
<th>R</th>
<th>RI</th>
<th>T</th>
<th>D</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small car</td>
<td>19'-10&quot;</td>
<td>10'-9&quot;</td>
<td>12'-0&quot;</td>
<td>10'-0&quot;</td>
<td>6&quot;</td>
</tr>
<tr>
<td>Compact car</td>
<td>21'-6&quot;</td>
<td>11'-10&quot;</td>
<td>15'-0&quot;</td>
<td>11'-2&quot;</td>
<td>7&quot;</td>
</tr>
<tr>
<td>Standard car</td>
<td>22'-5&quot;</td>
<td>12'-7&quot;</td>
<td>15'-0&quot;</td>
<td>12'-0&quot;</td>
<td>8&quot;</td>
</tr>
<tr>
<td>Large car</td>
<td>23'-0&quot;</td>
<td>12'-7&quot;</td>
<td>15'-0&quot;</td>
<td>12'-0&quot;</td>
<td>9&quot;</td>
</tr>
<tr>
<td>Intercity bus*</td>
<td>55'-0&quot;</td>
<td>33'-0&quot;</td>
<td>30'-0&quot;</td>
<td>22'-6&quot;</td>
<td>1'-0&quot;</td>
</tr>
<tr>
<td>City bus</td>
<td>53'-6&quot;</td>
<td>33'-0&quot;</td>
<td>30'-0&quot;</td>
<td>22'-6&quot;</td>
<td>1'-0&quot;</td>
</tr>
<tr>
<td>School bus</td>
<td>43'-6&quot;</td>
<td>26'-0&quot;</td>
<td>20'-0&quot;</td>
<td>13'-0&quot;</td>
<td>1'-0&quot;</td>
</tr>
<tr>
<td>Ambulance</td>
<td>30'-0&quot;</td>
<td>18'-9&quot;</td>
<td>25'-0&quot;</td>
<td>13'-3&quot;</td>
<td>1'-0&quot;</td>
</tr>
<tr>
<td>Paramedic van</td>
<td>25'-0&quot;</td>
<td>14'-0&quot;</td>
<td>25'-0&quot;</td>
<td>13'-0&quot;</td>
<td>1'-0&quot;</td>
</tr>
<tr>
<td>Hearse</td>
<td>30'-0&quot;</td>
<td>18'-9&quot;</td>
<td>20'-0&quot;</td>
<td>13'-3&quot;</td>
<td>1'-0&quot;</td>
</tr>
<tr>
<td>Airport limousine</td>
<td>28'-3&quot;</td>
<td>15'-11½&quot;</td>
<td>20'-0&quot;</td>
<td>15'-11½&quot;</td>
<td>1'-0&quot;</td>
</tr>
<tr>
<td>Trash truck†</td>
<td>22'-0&quot;</td>
<td>18'-0&quot;</td>
<td>20'-0&quot;</td>
<td>18'-0&quot;</td>
<td>1'-0&quot;</td>
</tr>
<tr>
<td>U.P.S. truck</td>
<td>28'-0&quot;</td>
<td>16'-0&quot;</td>
<td>20'-0&quot;</td>
<td>14'-0&quot;</td>
<td>1'-0&quot;</td>
</tr>
<tr>
<td>Fire truck</td>
<td>48'-0&quot;</td>
<td>34'-4&quot;</td>
<td>30'-0&quot;</td>
<td>15'-8&quot;</td>
<td>1'-0&quot;</td>
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*Cul-de-sac

<table>
<thead>
<tr>
<th>CUL-DE-SAC</th>
<th>SMALL</th>
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<tr>
<td>0</td>
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<td>22'-0&quot;</td>
</tr>
<tr>
<td>1</td>
<td>50'-11&quot;</td>
<td>67'-3&quot;</td>
</tr>
<tr>
<td>A</td>
<td>46.71&quot;</td>
<td>38.58&quot;</td>
</tr>
<tr>
<td>B</td>
<td>273.42&quot;</td>
<td>251.18&quot;</td>
</tr>
<tr>
<td>Ra</td>
<td>32'-0&quot;</td>
<td>100'-0&quot;</td>
</tr>
<tr>
<td>Rb</td>
<td>38'-0&quot;</td>
<td>50'-0&quot;</td>
</tr>
<tr>
<td>Lb</td>
<td>26'-1&quot;</td>
<td>61'-5&quot;</td>
</tr>
</tbody>
</table>

NOTE: R values for vehicles intended to use the cul-de-sac should not exceed Rb.

William F. Mahan, AIA, Santa Barbara, California

PRIVATE ACCESS ROADS

TRANSPORTATION
NOTE: Small car dimensions should be used only in areas designated for small cars or with entrance controls that admit only small cars. Placing small car stalls into a standard car layout is not recommended. Standard car parking dimensions will accommodate all normal passenger vehicles. Large car parking dimensions make parking easier and faster and are recommended for luxury, a high turnover, and use by the elderly. When the parking angle is 60° or less, it may be necessary to add 3 to 6 ft to the bay width to provide adequate space for pedestrians walking to and from their parked cars. Local zoning laws should be reviewed before proceeding.

RECOMMENDED RANGE OF STALL WIDTHS (SW)

<table>
<thead>
<tr>
<th>WIDTH (ft)</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
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<tr>
<td>Small car use</td>
<td>**</td>
<td>**</td>
<td></td>
<td></td>
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<tr>
<td>All day parker use</td>
<td>**</td>
<td>**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard car use</td>
<td>**</td>
<td>**</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Luxury and elderly use</td>
<td>**</td>
<td>**</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Supermarket and camper use</td>
<td>**</td>
<td>**</td>
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<td></td>
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<tr>
<td>Handicapped use*</td>
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*Minimum requirements = 1 or 2 per 100 stalls or as specified by local, state, or federal law; please consult the appropriate regulations.

WP = SW/2 + 6

PARKING DIMENSIONS IN FEET AND INCHES

<table>
<thead>
<tr>
<th>ANGLE OF PARK</th>
<th>PARALLEL PARKING STALLS AND &quot;T&quot; MARKER DETAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW</td>
<td>W</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Group I:</strong> small cars</td>
<td></td>
</tr>
<tr>
<td>8'-0&quot;</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Group II:</strong> standard cars</td>
<td></td>
</tr>
<tr>
<td>8'-6&quot;</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Group III:</strong> large cars</td>
<td></td>
</tr>
<tr>
<td>9'-0&quot;</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Group IV:</strong> very large cars</td>
<td></td>
</tr>
<tr>
<td>9'-6&quot;</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Group V:</strong> very large cars</td>
<td></td>
</tr>
<tr>
<td>9'-0&quot;</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Group VI:</strong> very large cars</td>
<td></td>
</tr>
<tr>
<td>10'-0&quot;</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

NOTE: If angles greater than 70° have aisle widths wide enough for two-way travel.

PARKING
SOUND ISOLATION CRITERIA

<table>
<thead>
<tr>
<th>TYPE OF OCCUPANCY</th>
<th>WALL OR PARTITION BETWEEN:</th>
<th>ADJACENT AREA (RECEIVER)</th>
<th>SOUND ISOLATION REQUIREMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive areas, doctors' suites—confidential privacy requirements</td>
<td>Office</td>
<td>Adjacent offices</td>
<td>STC 52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>General office areas</td>
<td>STC 52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corridor or lobby</td>
<td>STC 52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Washrooms and toilet areas</td>
<td>STC 52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exterior of building</td>
<td>STC 37-50*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kitchen and dining areas</td>
<td>STC 52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Manufacturing areas and mechanical equipment rooms</td>
<td>STC 52+</td>
</tr>
<tr>
<td>Normal office areas—normal privacy requirements</td>
<td>Office</td>
<td>Adjacent offices</td>
<td>STC 45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>General office areas</td>
<td>STC 45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corridor or lobby</td>
<td>STC 45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Washrooms and toilet areas</td>
<td>STC 45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exterior of building</td>
<td>STC 37-50*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kitchen and dining areas</td>
<td>STC 47</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Manufacturing areas and mechanical equipment rooms</td>
<td>STC 52+</td>
</tr>
<tr>
<td>Any normal occupancy, using conference rooms for group meetings or discussions</td>
<td>Conference rooms</td>
<td>Other conference rooms</td>
<td>STC 45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adjacent offices</td>
<td>STC 45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>General office areas</td>
<td>STC 45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corridor or lobby</td>
<td>STC 45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Washrooms and toilet areas</td>
<td>STC 47</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*Exterior of building</td>
<td>STC 37-60*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kitchen and dining areas</td>
<td>STC 52+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Manufacturing or other noisy interior areas</td>
<td>STC 52+</td>
</tr>
<tr>
<td>Normal business offices, drafting areas, banking floors, etc.</td>
<td>Large general office area</td>
<td>Corridors of lobby</td>
<td>STC 37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exterior of building</td>
<td>STC 37-50*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Data processing areas</td>
<td>STC 42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Manufacturing areas and mechanical equipment areas</td>
<td>STC 47+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kitchen and dining areas</td>
<td>STC 42</td>
</tr>
<tr>
<td>Office in manufacturing, laboratory or test areas requiring normal privacy</td>
<td>Shop and laboratory offices</td>
<td>Adjacent offices</td>
<td>STC 42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Manufacturing, laboratory, or test areas</td>
<td>STC 42+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Washrooms and toilet areas</td>
<td>STC 42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corridor or lobby</td>
<td>STC 37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*Exterior of building</td>
<td>STC 37-60*</td>
</tr>
<tr>
<td>Motels and urban hotels (similar to apartments)</td>
<td>Bedrooms</td>
<td>Adjacent bedrooms, separate occupancy</td>
<td>STC 48+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bathrooms, separate occupancy</td>
<td>STC 52+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Living rooms, separate occupancy</td>
<td>STC 52-58*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dining areas</td>
<td>STC 42-56*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corridor, lobby, or public spaces</td>
<td>STC 48-56*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mechanical equipment rooms</td>
<td>STC 48-56*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*Exterior of building</td>
<td>STC 42-60*</td>
</tr>
<tr>
<td>Apartments, multiple dwelling building</td>
<td>Bedrooms</td>
<td>Adjacent bedrooms, separate occupancy</td>
<td>STC 48-56*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bathrooms, separate occupancy</td>
<td>STC 52-58*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bathrooms, same occupancy</td>
<td>STC 45-52*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Living rooms, separate occupancy</td>
<td>STC 50-67*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Living rooms, same occupancy</td>
<td>STC 42-56*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kitchen areas, separate occupancy</td>
<td>STC 52-58*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kitchen areas, same occupancy</td>
<td>STC 48-56*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mechanical equipment rooms</td>
<td>STC 48-56*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corridors, lobby, public spaces</td>
<td>STC 42-60*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*Exterior of building</td>
<td>STC 42-60*</td>
</tr>
</tbody>
</table>

*Depends on the nature of the exterior background noise—its level, spectrum shape, and constancy—as well as on the client's budget and on thermal considerations. Use qualified acoustical consultants for analysis of high noise outdoor environments such as airports, highways (with heavy truck traffic especially), and industrial facilities.

†Use acoustical consultants for mechanical equipment rooms housing other than air handling equipment—chillers, pumps, compressors, etc.—and manufacturing areas employing equipment generating high vibration levels.

Don Kieson, AIA, Bott, Beranek and Newman, Inc., Cambridge, Massachusetts
### SOUND ISOLATION DESIGN CRITERIA

#### WALL OR PARTITION BETWEEN:

<table>
<thead>
<tr>
<th>TYPE OF OCCUPANCY</th>
<th>ROOM CONSIDERED (SOURCE)</th>
<th>ADJACENT AREA (RECEIVER)</th>
<th>SOUND ISOLATION REQUIREMENT (MIN.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apartment, multiple dwelling building</td>
<td>(b) Living rooms</td>
<td>Adjacent living rooms, separate occupancy</td>
<td>STC 48-65*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bathrooms, separate occupancy</td>
<td>STC 50-57*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bathrooms, same occupancy</td>
<td>STC 48-52*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kitchen areas, separate occupancy</td>
<td>STC 48-53*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mechanical equipment rooms</td>
<td>STC 58-65*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exterior of building</td>
<td>STC 37-60+t</td>
</tr>
<tr>
<td>House, single family residences</td>
<td></td>
<td>Adjacent bedrooms</td>
<td>STC 40-48*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Living rooms</td>
<td>STC 42-50*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bathrooms, not directly connected with bedroom</td>
<td>STC 45-52*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kitchen areas</td>
<td>STC 45-62*</td>
</tr>
<tr>
<td>School building</td>
<td>(a) Classrooms</td>
<td>Adjacent classrooms—speech use only</td>
<td>STC 43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adjacent classrooms—speech and visual use</td>
<td>STC 48</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corridors or public areas</td>
<td>STC 42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kitchen and dining areas</td>
<td>STC 52+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shops</td>
<td>STC 52+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recreational areas</td>
<td>STC 52+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Music areas</td>
<td>STC 55+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mechanical equipment rooms</td>
<td>STC 47</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exterior of building</td>
<td>STC 37-60+t</td>
</tr>
<tr>
<td></td>
<td>(b) Large music or drama areas</td>
<td>Adjacent music or drama rooms</td>
<td>STC 52+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corridors or public areas</td>
<td>STC 52+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Practice rooms</td>
<td>STC 52+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shops</td>
<td>STC 52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recreational areas</td>
<td>STC 52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Laboratories</td>
<td>STC 52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Toilet areas</td>
<td>STC 58-65+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mechanical equipment rooms</td>
<td>STC 37-60+</td>
</tr>
<tr>
<td></td>
<td>(c) Music practice rooms</td>
<td>Adjacent practice rooms</td>
<td>STC 52+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corridors and public areas</td>
<td>STC 52+</td>
</tr>
<tr>
<td></td>
<td>(d) Language laboratories</td>
<td>Same as for theaters, concert halls, auditorium, etc.</td>
<td>STC 52+</td>
</tr>
<tr>
<td></td>
<td>(e) Counseling offices</td>
<td>Same as for executive offices</td>
<td>STC 52+</td>
</tr>
</tbody>
</table>

- **Any occupancy where serious performances are given (requirements may be raised for elementary schools or other educational types of occupancy).**

**Discretionary—depend on client's budget, climate, interior planning (closed vs. open), site planning, and other factors. Use qualified acoustical consultants for analysis of high noise outdoor environments such as airport areas, industrial facilities, and highways.**

**The STC ratings shown are guidelines only. These situations require, typically, double layer construction with resilient connections between layers or, preferably, structurally independent, "room-within-a-room" construction. The level of continuous background noise, such as that provided by the HVAC system or an electronic masking system, has a significant impact on the quality of construction selected and must be coordinated with the other design parameters.**
<table>
<thead>
<tr>
<th>Function</th>
<th>Sq. Ft</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landscaping/Parking</td>
<td></td>
<td>383,759</td>
</tr>
<tr>
<td>Administration Functions</td>
<td>1400</td>
<td>(5120) 78,480</td>
</tr>
<tr>
<td>Educational Functions</td>
<td>2400</td>
<td>(49.65) 119,140</td>
</tr>
<tr>
<td>Human Service Functions</td>
<td>1500</td>
<td>(52.15) 78,319</td>
</tr>
<tr>
<td>Economic Development Functions</td>
<td>4100</td>
<td>(50.20) 230,420</td>
</tr>
<tr>
<td>Cultural Development Functions</td>
<td>29,000</td>
<td>Zone 1: (63.60) 363,520</td>
</tr>
<tr>
<td>Recreational Facilities (external)</td>
<td></td>
<td>Zone 2: (55.00) 913,000</td>
</tr>
<tr>
<td>Mechanical &amp; Service Functions</td>
<td>80,64</td>
<td>Zone 3: (60.05) 442,580</td>
</tr>
<tr>
<td>Building Cost</td>
<td>47,864</td>
<td>15% of rest of building</td>
</tr>
<tr>
<td>Total (Excluding Land)</td>
<td></td>
<td>$: 2942,152.50</td>
</tr>
</tbody>
</table>

* Acres

[This cannot be done at this point as building costs depend on configuration, site location, and which functions are retained on site – cannot be figured w/o initial design phase.]
A ROUGH SCHEDULE FOR PROJECT COMPLETION
(EA. WEEK'S WORK SHOULD BE BRIEFLY DOCUMENTED)

I.
1. SITE SELECTION, VICINITY ANALYSIS, LOCAL HISTORY FEASIBILITY ASSURANCE.
2. IMMEDIATE SITE ANALYSIS, PLAN/ZONING REQUIREMENTS, CODES, SPECIAL FEATURES, SITE MODEL
3. CULTURAL RESEARCH & DOCUMENTATION - ONGOING
4. SIMILAR FACILITIES RESEARCH/DOCUMENTATION (OTHER ETHNIC & EDUCATIONAL CENTERS, MUSEUMS, THEATERS)
5. HISPANIC ART AND ARCHITECTURE STUDY JURY
   SEVERAL CULTURES: ASIAN, AFRICAN, HISPANIC, INDIAN
6. EDUCATIONAL / ORGANIZATIONAL FIELD RESEARCH (EX. BI-CULTURAL ED. FACIL., SOCIAL SERVICES)
7. ADMINISTRATIVE STRUCTURE, FUNDING, GETTING TO KNOW CONSTITUENTS, ETC.
8. CONCEPTUAL SITE DIAGRAMS, DEVELOPMENT SCHEDULE
9. PRESENTATION
10. CRITIQUE AND EVALUATION
    PHASE ONE DOCUMENTED IN BOOK FORM.

II.
1. PRELIMINARY DESIGN SCHEMES
   BUBBLE DIAGRAMS - "BOXES" - MODELS (ROUGH)
   DRAWINGS (AT "ROOMS" LEVEL)
2.
3.
4. DEVELOPMENT / PRESENTATION OF IDEAS
5. JURY
6. PERSPECTIVE STUDIES, MAT'L STUDIES
7. SYSTEMS & STRUCTURES STUDIES
   DETAIL DEVELOPMENT
II. CONT.

8. CONTINUATION OF WKS. 6 & 7

9. PRESENTATION

10. CRITIQUE AND EVALUATION
    BOOK PHASE II DOCUMENTED

III.

1. FINE TUNING OF DESIGN - MAT'LS SCHEDULES.

2.

3.

4.

5. JURY COST ANALYSIS, ENERGY ANALYSIS

6. MORE FINE TUNING/DETAILING

7. PRESENTATION - PLANS, SECTIONS, ELEVATIONS,
   SITE PLAN, 1 OR 2 MODELS, PERSPECTIVE COLLECTION,
   SEVERAL DETAILS

9. JURY?

10. COMPLETION OF BOOK "JURY"?
CONCLUSIONS OF THIS STUDY... A STARTING POINT FOR FURTHER INTERPRETATION.

I HAVE CONSTRUCTED THIS PROGRAM UNDER THE PRETENSES THAT A CENTER OF SUCH MAGNITUDE WOULD BE APPROPRIATE BASED ON THE NEEDS AND MARKET GROUP SIZE OF THE HISPANIC POPULATION IN CENTRAL INDIANA. I ALSO ASSUMED THAT THE LAND INDICATED WAS AVAILABLE AND THAT THERE EXISTS FUNDING FOR THE DEVELOPMENT OF SUCH A CENTER.

I HAVE ERRED GREATLY IN MY ASSUMPTIONS.

FIRSTLY, IN RE-EXAMINING MY INITIAL STATEMENTS ABOUT THE CONCERNS OF THE HISPANIC POPULATION IN INDIANAPOLIS, (PG ...) MORE ENLIGHTENED THINKING HAS BROUGHT TO MY ATTENTION THAT THESE CONCERNS ARE NOT ONLY COMMON TO HISPANICS IN THIS CITY BUT ALSO TO ANY ONE OF A NUMBER OF CULTURAL SUB-GROUPS OR IMMIGRANT POPULATIONS. MOST OF THESE CONCERNS ARE CONSTANT OVER TIME, THOUGH THE FOCUS MAY SHIFT OVER TIME. FOR THIS REASON, I FEEL THAT THE TARGET GROUP FOR THE PROJECT IS INITIALLY TOO NARROW AND SHOULD BE EXPANDED TO INCLUDE THE MOST SUBSTANTIAL OF THESE GROUPS WITHIN SIMILAR SCOPE OF THE SERVICES AND FUNCTIONS OUTLINED IN THE PROGRAM OF SPACES WHICH FOLLOW.

THIS EXPANSION OF THE TARGET GROUP IS MORE SOUND MONETARILY IN THAT
CONCLUSION, CONT.

The base population is broader and more likely to support the center's services over time. It also lends the center to be more worthy of public support (approval & money) because of the switch to an exo-centric program base for its services. I have concluded that the original target population could not support such a facility without public aid.

To assume, in this capitalist system, that even a significant portion of the funding for such a center could be solicited from public funds or the private sector in substantial quantity to provide for the center's continuous maintenance is unrealistic, foolish and ridiculous. No-one contributes his monetary resources unless there is potential profit for him in doing so. Therefore the program is lacking in this significant way: the center should be able to support itself for the majority of its funding. This is not something which can be sufficiently generated from the sale of artifacts, semi-commercial dining, and proceeds from performances alone. Therefore the center will need to provide some sort of public draw to the monied community. It must provide a service or activity which will be seen as a need by the larger community and not merely an academic or aesthetic indulgence or luxury from which one can walk away with minimal personal involvement.
The actual form that this activity will manifest itself in is not yet defined in my mind and is therefore not included in this proposal in concrete form; it is, however, a change which I consider fundamental to the actual viability of this type of center or a serious proposal.

As far as the programs outlined in this paper are concerned, they, and their proscribed physical facilities should remain primarily intact, simply with an expanded user base in some areas and some minor amendments where group identity and representation are deemed to be needs. [This may take the form of a minority counsel or board of directors composed of representative groups and in autonomous ethno-cultural groups.]

Social isolation is not the key to resolving the concerns outlined in the initial problem statement for the Hispanic community or any other minority population within the city as would be the case with an exclusive center for each population. Neither will massing or consolidating all concerned populations into one center resolve these concerns in that such a concentration would inhibit group identification within each cultural group and have the tendency to produce either apathy or a homogeneous and dissatisfied mass. For this reason such a center may have a headquarters,
OR CO-ORDINATING HEART, BUT HAS THE PHYSICAL NEED FOR APPENDAGES ON SITES REMOTE FROM THIS CENTER THROUGHOUT THE CITY IN LOCATIONS WHERE SPECIFIC NEEDS CAN BE IDENTIFIED.

THIS THESIS PROPOSAL WILL CONCERN ITSELF WITH ONLY THOSE PHYSICAL FACILITIES AT THIS CENTRAL LOCATION WHICH ARE PART OF THE INITIAL STAGES OF PLANNING AND CONSTRUCTION AS THE CENTER GROWS.

I HOPE TO PROCEED THEN, INCORPORATING THESE CHANGES AND MAINTAINING A WATCHFUL EYE TOWARDS THE FUTURE.

DOROTHY A. HENEHAN.
A possible site

The following maps graphically describe the potential locations for the proposed center. It is assumed that these sites could be made available. The sites have been chosen according to the "site selection criteria" outlined in the "general information" section and in accordance with the modifications suggested in the "conclusion" portion of this section.

It is hoped that in locating the center adjunct to the White River Park, Sports Center, and the Mile Square areas that the International Centers—both the city's proposed business and commercial facilities and the proposed cultural/educational/political/human service facility—will be able to forward the interests of the international community as well as those of the city in developing a vital draw to this area and in creating an image of international cultural status.

Some functions (such as sports facilities or the performing arts area) may have their activities taking place in nearby municipally-owned facilities in the Sports Center or White River Park. Outdoor activities may also take place on municipal property.
PUBLIC TRANSIT

The Indianapolis Public Transit Corporation (Metro) focuses bus service on a downtown designation or transfer. It has 36 routes (including 11 suburban express routes and the IUPUI Express) out of 38 routes that converge on downtown. The system's total daily ridership is 55,000 including 13% of the downtown workforce. Ridership is projected to grow to 94,000 people by the year 2000 as the bus fleet is expanded from 230 vehicles to 385 vehicles.

Public transit projects listed in Regional Center Plan, Transportation are:

- Increase ridership on Metro by improving service, including: (1) Dial-A-Ride Services (2) a Fare Free Zone in the Regional Center (3) expanded Park and Ride Expresses (4) a Park and Ride Super Express (5) expanded local service (6) improved bus shelters and (7) the Washington Street Transit Mall.

- Determine the feasibility of a demonstration Automated Transit System.

- Develop a Regional Center shuttle bus system.

- Develop a North-East public transit facility.

- Extend "jitney" services.

--- Stage I:
Alternative 6

--- Stage II:
Alternative 6
The dynamics of the park-building process will also be felt through the 10-year construction phase, creating more orders for businesses which supply materials and more labor and service use from industries which will detail, engineer and construct the multi-million dollar state project.

And, how will the park be perpetuated?
The operation of White River Park is to be scheduled in such a

Department of Commerce Tourism Development Division is already helping...and the way in creating new tourism interest, capitalizing on the fact that Indiana is part of the bridge between major population centers.

White River Park is to be a showcase of Indiana's best, a vehicle which will provide some direction to help Indiana through tough economic times. The strengths and accomplishments of the state will