DEVELOPMENTAL DISABILITY CENTER

ANDERSON, INDIANA
THOMAS H. ENGLE

MAY, 1981

PROF. PAUL LASEAU
ABSTRACT

This facility is programmed to meet the growing needs of the Madison County Association for Retarded Citizens, a public agency serving over 300 persons in its programs. There are five departments in the agency: administration, residential services, human services, developmental services, and adult services. The first three of these departments comprise the main offices and provide general services to all clients involved in any of the agency’s programs throughout the county.

The administrative branch provides support services such as transportation, financial records, general coordination of programs, food service, and maintenance services.

Residential service personnel run group homes in the community, respite services with community volunteers, and life skill training for adults. A "simulated living" apartment is included to teach basic living skills to clients in a "normal" setting.

The human services department handles clients of all age groups and does intake and referral; diagnosis and evaluation; provides counseling services and coordinates recreational programs. Caseworkers prepare Individual Habilitation Plans for clients on an annual basis.

The developmental and adult service departments both provide a number of programs which vary according to client age, level of retardation, level of academic skill, and level of vocational skill. This facility will include two related programs: a developmental workshop and an adult (sheltered) workshop. The developmental workshop is provided for adults whose productivity level is less than 25% of a normal worker. Clients progress through three components: the education component which teaches academic skills; the prevocational component which provides training in basic job skills such as counting, being on time, coordination, etc...; and finally to the work component where the client is paid wages and develops skills in production quality and in recognizing supervisors. Clients who achieve the necessary level of productivity are then placed in a sheltered workshop run by the adult services department. The emphasis is no longer on academic or self-help skills but strictly on vocational skills necessary for placement in a normal job in the community.
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PROBLEM STATEMENT

INTRODUCTION

Almost all mentally retarded individuals have the capacity to learn, to develop, and to grow. The great majority can become economically productive, fully participating members of society.

All retarded children and adults need the same basic services which other human beings need for normal development. These services include education, vocational preparation, health services of all types, recreational opportunities, religious services and many more. Unfortunately, many retarded persons have been denied access to these services or have been provided with inappropriate services, often at exorbitant costs to their families.

In addition to basic generic services, many retarded persons need specialized services to meet extra-ordinary needs. Examples include: vocational rehabilitation, sheltered workshops, work activity centers, diagnostic and evaluation centers, day training, preschool classes and all types of residential services. The provision for day care for children of school age and for activity centers for adults who are too severely handicapped to fit into the special class programs or into competitive sheltered employment are relatively new and rapidly expanding components of the service system.

PHILOSOPHY

The concept which is to be the guiding philosophy of this facility is called "normalization". The normalization principle calls for the use, as much as possible, of human service methods that are understood and valued, so that these methods and techniques do not stigmatize the client more than is necessary. Furthermore, the normalization principle implies that persons be enabled to take full advantage of their culture, to have access to the same privileges and amenities as other citizens, to play valued roles and to lead valued lives. In regard to severely handicapped persons, it calls for the use of the highest technical competence, equipment, and processes. In regard to service facilities, it implies value-enhancing structures, appearances, locations, and designs.

ORGANIZATION

The Madison County Association for Retarded Citizens is a public agency serving over 300 persons in its programs. The constitutional purpose is to serve as an advocate and to insure adequate and complete services to meet the needs of mentally retarded individuals in Madison County. The agency also has the responsibility of providing many of these services to the mentally retarded or the developmentally disabled.

To provide the services currently needed, the agency is dependent upon an array of financial resources which includes county revenue sharing monies, the United Way, local contributors, membership fees, memorial contributions, state funds from the Department of Mental Health, and federal funds (Title I & XX). A volunteer recruitment program is being developed to assist in the services listed and to develop programs in the area of prevention and advocacy.

There are five departments in the agency: residential, human services, developmental services, adult services, and administration. The residential services department sponsors a group home, life skill training for adults and coordinates respite services with community volunteers. Two residential assistants run the group home; three life skills instructors teach classes on topics such as money concepts, time telling, voting, camping, etc...; and the department director also runs the respite service where clients are matched with volunteers for tutoring and companionship.
The human services department handles clients of all age groups and does intake and referral; diagnosis and evaluation; provides counseling services and coordinates recreational programs. Caseworkers prepare Individual Habilitation Plans for clients on an annual basis.

The developmental services department handles the preschool programs, homebound services, and runs developmental activities. The preschool program consists of three morning and three afternoon classes for a total of 35 children. A speech therapist, a physical and occupational therapist, and a parent/child technician (who works with families) provide services in conjunction with the three lead teachers, two support teachers, and six high school aides. The homebound program consists of three instructors who work with either infants up to 2 1/2 years and adults confined to nursing homes. They work on developing primary social and self-help skills. A developmental activity center is provided for adults whose productivity level falls below that necessary for a sheltered workshop. Clients progress through three components: the education component which has one instructor who teaches academic skills; the vocational component which has one instructor providing training in basic job skills such as counting, being on time, coordination, etc. . . ; and finally to the work component, run by three aides, where the client is paid wages and develops skills in production quality and in recognizing supervisors.

Clients who achieve the necessary level of productivity are then placed in a sheltered workshop run by the adult services department. This department also has a "regular work" program for those clients preparing for normal competitive employment outside the agency. The emphasis in these programs is not education in academic or self-help skills but strictly on vocational skills necessary for placement in a "normal" job.

The final department of the MCARC is administration. This branch provides support services such as food service, transportation of clients, maintenance, keeping of financial records, and general coordination. Due to varied facility needs, not all of the above services will be included in this program.

**SCOPE**

The following program will include the three support service departments: residential, human services, and administration; and a work activity center coupled with a developmental activity center. The rationale for the pairing of these last two centers is threefold; the developmental activity center is a small scale program and does not seem to warrant a separate facility; this pairing will prevent redundant services such as food preparation and cafeteria space; the clients in the developmental center will benefit from the example presented by the sheltered workshop employees and not feel "different" or alienated from their fellow workers.

The benefits to come from grouping residential services, human services and administration together will be: closer contact between director and department heads; the use of common meeting rooms and restrooms; and simpler access to client files and case histories.

These services must be housed in a facility providing a distinction between these departments because of the agency's philosophy of separating education and vocation. Clients seem to become more productive working in a facility that is purely vocational, where they come to work like ordinary people; and if they were in need of other instruction in either academic or life skills, they would go to another area just like
someone would go to school.

Advantages of locating these services on the same site include: reduced transportation time and expense; simpler management for the agency; a more protective environment for the clients in the developmental activity center; and the placing of clients with a higher level of dependency in the sheltered workshop on the site, while allowing more independent ones to work at a more distant location.

SITE

The site chosen for this project is located in Anderson, Indiana between 32nd and 34th Streets, one block east of Columbus Avenue, and just north of the old Nicholson File Company. East and southeast of the site is a residential zone, while the land to the west is vacant. It is hoped that this mix of land use in the area will help the two components of the new facility blend into the community. Site features include: a major bus line running directly adjacent to the site; a major park facility located a few blocks to the south; and a number of shops and restaurants also in the vicinity. The site is zoned industrial and is approximately 10.7 acres.

PARTICIPANTS

This project was done for completion of the architectural thesis at the College of Architecture and Planning, Ball State University. Studio critics were: Paul Laseau, Sonny Palmer, Robert Koester. Other critics included: Jim Anderson, Daniel Nobbe, and Robert Fisher. Special thanks to Kaye Kasterline and the staff of the Madison County Association for Retarded Citizens.
SPACE REQUIREMENTS
RESIDENTIAL SERVICES

Director of Residential Services
residential assistants - 2 (group home)
life skills instructors - 3
respite services

storage

classroom

classroom

meeting room

instructors' offices

"simulated living" apartment

director

restrooms

respite

private entry

entry

janitor
HUMAN SERVICES

Director of Human Services
secretary
recreation director
caseworkers - 8
social worker
speech therapist
occupational therapist
physical therapist
ADMINISTRATION

Executive Director
Agency secretary
business manager
financial coordinator
bookkeeper
payroll clerk

ARC coordinator (Association for Retarded Citizens)
secretary
DEVELOPMENTAL SERVICES

Director of Developmental Services
homebound services - 3 teachers
(preschool programs)
developmental activities
education instructor
prevocation instructor
work supervision aides - 3

restrooms
meeting room
director
home-bound
storage
staff offices
entry
classroom
vocational training
skills classroom
workshop
storage

cafe-teria
receiving
lounge
sick room
restrooms/lockers
janitor
service entry
ADULT SERVICES

Director of Adult Services (plant manager)
- receptionist
- bookkeeper
- billing clerk
- sales representatives - 2
- shipping clerk
- foreman
- job expeditor
- quality control
- maintenance personnel

entry

reception

book-keep.

billing clerk

plant manager

meeting room

sales

sales

service entry

workshop

cafe-eria

lounge

sick room

tool room

maintenance

rest rooms/ lockers

receiving

storage
# SPACE SUMMARY

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<td>Director</td>
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<tr>
<td>Classroom</td>
<td>500</td>
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<tr>
<td>(with training kitchen and bath)</td>
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<tr>
<td>Classroom</td>
<td>500</td>
</tr>
<tr>
<td>Storage</td>
<td>100</td>
</tr>
<tr>
<td>Instructor’s Offices (5 @ 80)</td>
<td>400</td>
</tr>
<tr>
<td>Apartment</td>
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<td>total</td>
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<td>Secretary</td>
<td>250</td>
</tr>
<tr>
<td>Meeting Room (shared with Administration)</td>
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<tr>
<td>Conference Room</td>
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<tr>
<td>Files &amp; Storage</td>
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<td>Caseworker’s Offices (5 @ 100)</td>
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<td>Social Worker</td>
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<td>Testing Rooms (3 @ 100)</td>
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<td>ARC Secretary</td>
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<tr>
<td>Homebound Instructors (3 @ 100)</td>
<td>300</td>
</tr>
<tr>
<td>Staff Offices (5 @ 100)</td>
<td>500</td>
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<tr>
<td>Meeting Room</td>
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<td>(shared with Adult Services)</td>
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<td>Classroom - academic</td>
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<tr>
<td>Classroom - skills</td>
<td>1050</td>
</tr>
<tr>
<td>Storage</td>
<td>300</td>
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<tr>
<td>Vocational Training</td>
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</tr>
<tr>
<td>Workshop</td>
<td>2500</td>
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<tr>
<td>Warehouse (shared with A.S.) (5 @ 100)</td>
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<td>Receiving (shared with A.S.) (2 @ 100)</td>
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<td>Sales Representatives (2 @ 100)</td>
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<td>Foreman</td>
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<td>Billing Clerk</td>
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<td>Shipping Clerk</td>
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<tr>
<td>Job Expeditor</td>
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<td>Quality Control</td>
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<td>Bookkeeping</td>
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<td>Workshop</td>
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DEPARTMENTS

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<td>Human Services</td>
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<td>Administration</td>
<td>2280</td>
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<tr>
<td>Developmental Services</td>
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| Adult Services          | 18530| 34490
| total                   |      |

INTERDEPARTMENTAL

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<td>Sick Room</td>
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<td>Maintenance</td>
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<tr>
<td>Cafeteria</td>
<td>1500</td>
</tr>
<tr>
<td>Kitchen</td>
<td>700</td>
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| Kitchen Storage           | 300  | 3180
| total                     |      |

NET SQUARE FEET
(75% of gross)

37670

ALLOWANCES

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<td>(6% of gross)</td>
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<tr>
<td>HVAC and mechanical</td>
<td>3516</td>
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<tr>
<td>(7% of gross)</td>
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<tr>
<td>circulation</td>
<td>6027</td>
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<tr>
<td>(12% of gross)</td>
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| total                      |      | 12556

GROSS SQUARE FEET

50226
SITE ANALYSIS

LOCATION

The site for this Anderson, Indiana project is located between 32nd and 34th Streets, one block east of Columbus Avenue. The site is 10.7 acres and is zoned industrial. Bordering to the east and southeast is a residential neighborhood. To the north and the southwest are industrial buildings and the land to the west, beyond an abandoned railroad track, is vacant. The primary feature of the site is its thick stand of trees, giving the location an almost park-like mood.
ZONING

The site itself is zoned Industrial, as is most of the land in the surrounding area. Most of this is owned and operated by Delco-Remy. There is, however, a substantial residential zone to the east and southeast, moderating the industrial influences.
The City of Anderson Transportation System maintains bus routes throughout the city. Route 5A loops around the site and currently has a stop at the northeast corner of the site. This is significant because many of the clients using the facility need transportation, either public, from parents and friends, or that provided by the agency.
Logical vehicle access must come from either 32nd or 34th Streets and by no means from the east. Being the most accessible and more heavily traveled, 32nd Street would be best used as the main entry road, while 34th Street might only be appropriate for a secondary entrance or exit. Because of the location of the bus stop, the pedestrian circulation should be from the north.
LAND USE

The industrial image of the vicinity is a strong orienting factor for the developmental services workshop and the adult services workshop. In terms of normalization, the location is appropriate for the work-oriented activities and the facility would not be seen by the community as out of place.
EDGES

The branch line coming from the main railroad line, though abandoned, should be turned away from but not necessarily kept at a distance. The alley between the site and the neighboring homes to the east is very narrow and should be buffered and the building should be set back considerably from this edge. The right-of-way and setbacks along 32nd and 34th Streets should be respected.
The most pleasant views are to the east and south. To the west, the views are not as favorable and to the north there is very little view from the site due to the thick foliage. Due to the large open areas on the site to the south-east, any construction would be most prominent from this side.
VEGETATION

Vegetation almost exclusively consists of large, mature trees, ranging in size from 12" to 30". Species include: oak, hickory, cherry, and walnut. Preservation of these trees should be a major factor in locating any construction on the site.
TOPOGRAPHY

The topography of the site is virtually flat, with the lowest portions being located near the center of the grounds. Drainage has not been an observable problem, the soil having adequate drainage properties as well as good bearing capacity.
INTERPRETATION

Because of views both into and from the site, solar access, and wind access, the facility's southern elevation should exhibit a strong response to these external forces. The image created by the facility's north facade, facing the street, is crucial in determining how the community responds to the project: how well it is understood and how well it is accepted. Parking should be located to the west or southwest where it will be away from the residential areas and near the existing abandoned lot. Considerable distance should be maintained between any buildings and the site's eastern edge. Access might be from the south, leaving the northern portion of the site undisturbed.

Of the five programmatic portions of the facility, the developmental workshop and the adult workshop should be visually oriented to the southwest toward the old Nicholson File Factory, and the service and administrative segments should be oriented to the northeast but set back considerably from the street.
BUILDING TYPE ANALYSIS

SUMMARY

During the analysis of five related facilities, four critical issues were identified as needing to be dealt with in the design of this Developmental Disability Center. These are as follows:

1. Image - does the image of the facility fit the concept of normalization? i.e. the sheltered workshop should look like an industrial building and the education areas should look academic.

2. Zoning - are the vocational, educational, and recreational zones distinct from one another, both physically and visually, so as to promote consistency in the purpose of each program?

3. Organization - is the facility designed as a single unit center, a satellite center, or as a campus facility? The site context and the image created by the facility should both be considered.

4. Site - is the facility located within a context suitable to accommodate the number of clients involved and is it congenial with the image of the facility?
CONCLUSIONS

The conclusions reached include:

1. The single unit center such as the Adult Achievement Center in Indianapolis and the Hillcroft Center in Muncie, has tremendous problems in most of the above areas. With the large number of clients involved, the community has a difficult time accepting them. Zoning of functions is a problem in that spaces are not easily distinguished from one another. This then creates an image that can be confusing to the clients.

2. The campus organization approach has merit in that the zoning can be done more consistently and with more clarity. A large number of clients, however, is necessary to support this type of arrangement and this can create community problems similar to the large single unit center. Another problem is image; this approach tends to foster the idea that the retarded should be cloistered into large facilities and should not be absorbed into the community. The Harris Center in Houston and the Derbyshire Center in England are designed with the campus plan.

3. The satellite concept, where the different programs are housed in separate facilities in appropriate areas of the community, seems to be the best solution. In this way, zoning problems are solved and the context has a better chance of accepting small, scattered facilities. In addition, the image of the facility can be much more strongly defined, where a fewer number of different functions are occurring. Thus vocational centers can be located in industrial areas; group homes in residential areas; and educational services located where appropriate.
SUMMARY OF ISSUES

PROGRAMMATIC

DISTINCT IDENTITY OF PARTS

As mentioned in the section on philosophy, there is a need to separate educational functions from vocational ones. This distinction should be evident from both inside and outside the facility.

TWO - SIDEDNESS

The building layout should zone the site and be used to separate and define parking from the rest of the site.

CLARITY AND UNITY OF CIRCULATION

The circulation areas should be used as an organizing element for the facility. They must be simple and direct and be such that they clearly delineate types of spaces.
SITE ANALYSIS

ACCESS

Due to the nature of the surrounding roads and major thoroughfares, access should be from 32nd Street, both vehicular and pedestrian.

ZONING

On-site parking should be located adjacent to the parking lot to the northwest, also near the access point. A buffer zone should be maintained on the site adjacent to the surrounding residential areas.

 VEGETATION

In order to respect the outstanding existing vegetation, an effort should be made to evaluate which trees should be preserved in order to properly situate the building.
BUILDING TYPE ANALYSIS

SEPARATE SERVICE ENTRY

In the buildings surveyed, goods, supplies, and other materials had or needed a separate entrance and circulation route.

ZONING BY CONTEXT

Buildings and functions should be placed in appropriate sites and locations. This is necessary so that the facility will "fit" into the existing community and be accepted.

CAMPUS PLAN vs. SINGLE UNIT CENTER

Advantages of both of these arrangements should be addressed, in terms of all the above issues. Elements of each type should be included as appropriate: clarity, organization, unified facility, etc.
Many of these early sketches had no clear direction, but were attempts to identify what goals were desired to be achieved with the facility. As progress was made through these sketches, many of the issues discussed on the following pages became evident. Since the facility is intended for use by the physically handicapped as well as the mentally handicapped, it was decided to place all the services on one level. Many of these studies are done in plan view, but it was recognized that three-dimensional study would be crucial in dealing with the perceptual problems of the mentally retarded. A strong, straightforward concept was essential.
IDENTIFIED GOALS

IDENTITY - Identity of Subelements

It is important that each department be recognizable and distinct from the others, both from the exterior and the interior. This is so that the clients will always have a clear concept of exactly where they are at all times and not become disoriented and confused.

UNITY - Unity of the Overall Concept

Even though each department must be distinct in some way, the facility as a whole must have a unified image. This is important so that the building will be accepted into the community as a respected program.

SITE RESPONSE

Because of the outstanding quality of the trees on the site, locating the building must respect this. Also important is the building's relationship to the residential areas and to 32nd Street.

CLARITY - Clarity of Circulation

The circulation paths in the facility must help contribute to the unity of the facility and also the identity of each department. This feature will be what organizes the building and clarifies the concept.
SUMMARY AND EVALUATION

COURTYARD SCHEME

Identity: subelements distinguishable only in plan, not in perspective
    concept understandable only from courtyard

Unity: image unified only from courtyard

Site Response: limited solar application
    courtyard serves no purpose other than visual orientation
    entry options are confusing
    not responsive to site zoning

Clarity: orderly but confusing circulation path which has no focus or orientation
HORSESHOE SCHEME

Identity: clear identity of subelements only from courtyard

Unity: image unified from courtyard, not from entrance

Site Response: limited solar application
courtyard is not necessary for spatial reasons - only for organization

Clarity: well organized circulation
no clarity of entrance as related to circulation
LINEAR SCHEME

Identity: clear identity of subelements
sense of hierarchy or direction
clear sense of entries

Unity: unity is evident from both sides
of the building

Site Response: possible solar application
positive distinction between site
zones - building used as separation
parking can be broken into modules
preserves more trees

Clarity: circulation is used as a clear
organizing factor
simplest comprehensible form
The linear scheme was singled out as the most outstanding, and offering the most interesting possibilities for design development. These diagrams show correlation of spaces, enclosure, composition, circulation, and site development. Structural and mechanical ideas were formulated and interior spaces began to be studied.
FINAL DESIGN

The major problem left to be dealt with at this point was the modulation of the volumetric emphasis of the major department blocks with the unifying attempts of the diagonal glass elements (skylights, entrances, and cafeteria). The solution included formal as well as solar considerations. One feature of the final design was the development of a "sandwich" concept. With this, the structural grid could become independent from the skylight element, which was placed above the structural/mechanical plane.

Near the end of the design development phase, a rearrangement of some spaces was done in order to more effectively zone the "closed" spaces from the "open" spaces along the circulation spine.
REFERENCES


