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Providence Recreation Center

Preliminary Master Plan

hughes
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We would like to thank all of those who participated in the design, preparation and review of this preliminary master plan: the Authority staff, the Division of Conservation, the Department of Recreation and Community Services, the Fairfax County Schools and the staff of Falls Church High School.

HUGHES GROUP ARCHITECTS

September 18, 1979

PROVIDENCE RECREATION CENTER

PRELIMINARY MASTER PLAN

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INTRODUCTION

The purpose of this Preliminary Master Plan is to provide the Fairfax County Park Authority with an analysis of the feasibility of constructing an indoor recreation center on a proposed 11.8 acre site at the junction of Route 50 and Route 495 known as the "CHILES TRACT". In order to formulate a complete picture of the potential for such a community resource this report examines the site characteristics, the demographics of the service area and a preliminary facility design.

SUMMARY

There is a heavy demand for indoor recreation facilities on this primary service area of over 40,000 people. In addition, population trends indicate an increasing demand for swimming and related recreational activities. The site is ideally suited for the proposed recreation center. It has prime vehicular access from Route 50 and a positive geology and topography. In addition, its adjacency to Falls Church High School will reinforce the role of both facilities as central community resource.

The facility proposed for this site centers on a 25 meter by 25 yard pool with tot pool and heated whirlpool. In an effort to capitalize on the multi-use characteristics which have made Wakefield Park so successful, a community room, meeting and craft rooms and dance and exercise/weight rooms are also included in the plan. The Mt. Vernon Pool Facility has been used as a design model for this project because of its compatibility with the proposed site and program and because of the potential budget and time savings resulting from design re-use. The estimated development cost is \$3,000,000. We project a bid date of April 1980 and completion in the Spring of 1981.

SERVICE AREA ANALYSIS

Service Area Delineation

The primary service area for this proposed recreation center is defined as the geographic area within a two mile radius of the site. To obtain a more accurate demographic profile of the potential user group we have further refined this radius to specific Fairfax County Sub-Census Tracts which reflect man-made geographic features such as street patterns and land uses usually ignored by a radial analysis.

The primary service area, graphically shown in Attachment A, also indicates the Sub-Census Tracts used as a demographic base. The rough boundaries of this area are: Route 29-211 to the North, Sleepy Hollow Road to the East; Little River Turnpike to the South and Prosperity Avenue to the West. We would like to point out that the proposed facility will be programmed to serve the entire district, the above service area delineation being for analytical purposes only.

Population Base

The 1977 population base for the primary service area is 41,222 people. Because this is one of the County's more densely populated areas the rate of growth is projected to be relatively stable and the age characteristics of this user group parallel the current County-wide averages which are:

<u>Age Group</u>	<u>1970 Fairfax County</u>	<u>1977 Fairfax County</u>
Under 5	9.0	5.6
5-9	11.4	7.3
10-14	12.3	10.1
15-19	9.4	11.1
20-24	7.5	8.4
25-34	14.3	15.8
35-44	14.9	13.8
45-54	13.0	14.3
55-64	5.2	9.8
65 & Over	4.0	3.8

We have shown both the 1970 and 1977 "Results of the Demographic Survey of Fairfax County, Virginia", by the Office of Research and Statistics to illustrate population trends. The most significant of these is the increase in the 55-64 age category. This

increase mirrors a national trend and is a factor which will have a major impact on future recreation and transportation demands of our area.

Another factor which must be recognized as influencing the potential user profile of this proposed facility is the existing and projected industrial and office development in the primary service area. Existing concentration of this use group along Route 29-211, Route 50 and Prosperity Avenue coupled with a recent scaled down proposal for an additional 2.5 million square foot office complex at the Northeast junction of Route 50 and Route 495 indicates heavy day-time demand for recreation services. In addition to the above, the property adjacent to and to the west of the Chiles Tract is currently zoned residential but plans for commercial development are pending.

Competing Recreation Facilities

One of the most significant findings of our research on this project was the lack of recreation facilities in this service area. According to the County's Office of Research and Statistics, "Structures File" for the given Census tracts there are no major recreation facilities in this area other than a health spa at Loehmann's Plaza, indicating a definitive need for a facility such as the one proposed.

Schools

There are eleven elementary schools in the service area providing limited indoor recreation and meeting facilities along with outdoor ball fields. Falls Church High School offers the service area a large gymnasium, outdoor football and baseball fields and tennis facilities. The area schools include the following:

- Luther Jackson Intermediate School
- Pine Spring Elementary
- Falls Church High School
- Graham Road Elementary
- Westlawn Elementary
- James Lee Elementary
- Camelot Elementary
- Woodbury Elementary
- Walnut Hill Elementary
- Sleepy Hollow Elementary
- Beech Tree Elementary
- Masonville Elementary
- Belvedere Elementary

Parks

The service area is populated with the following parks which offer well balanced outdoor recreation amenities such as lighted ball fields, a golf course, picnic facilities, nature trails and conservation areas:

- Round Tree
- Luria
- Broyhill
- Jefferson District
- Holmes Run Stream Valley
- Annandale Community
- Accotink Stream Valley

SITE ANALYSIS

Description

The proposed site is approximately 11.8 acres to the west of and adjacent to Falls Church High School, as shown in Attachment B.

The entire site is heavily wooded with average 8" diameter trees of soft and hard woods, and light underbrush. The wooded areas to the south and west of the center offer an ideal wooded view from the outdoor deck as well as acoustic and visual privacy from the beltway. A tree buffer will also be provided between the center and the high school site.

For the purpose of this report the site boundaries shown are:

North: proposed Wood Creek Drive
East: Falls Church High School boundary
South: continuation of school boundary to west
West: eastern limit of the Holmes
Run storm easement

Located in the vicinity of the proposed center are two historic sites: The Melpar Pre-Historic Site and the Dulin Farm Site. The Authority's Divisions of History and Conservation have reviewed the Preliminary Master Plan and are supportive of its progress.

Access

We have used the proposed Wood Creek Drive as the main access drive from Arlington Boulevard to the site. The alignment shown is the latest plan submitted to the County by the developers of the subject and adjacent properties. These plans are known as the "Wood Creek" development, designated as number P-2609 at the County's Plan Review Office and was approved on May 31, 1978. In the event the construction of Wood Creek Drive is delayed or postponed, the Fairfax County Public Schools have granted the Park Authority the use of Marc Drive as a site entry. The parking area is designed to accommodate both entries.

Topography/Soils

The proposed site has an average 6% slope to the west with sub-surface conditions as per county analysis and the analysis of our soil engineer indicating a high water table with good soil

bearing capacities. These conclusions are based on surface observations and should be specifically verified with a complete soil analysis immediately.

Storm Water Detention

Storm water detention for this site can easily be accommodated between the western property line and the parking area with a dry detention pond typical for this type of site. There is a strong possibility, however, that no storm water detention will be required by the county thus saving site development costs. We recommend the Park Authority submit a request for storm detention waivers to the County Plan Review Office stating the following: by allowing continual, controlled site run-off, the proposed site's storm flow peak will actually precede the Holmes Run Basin peak flow. Storm water detention for this site would release site water into the basin at its peak contradicting the County's detention policy of creating a smooth storm water flow.

Flood Plain

The proximity of the structure to the designated flood plain will be approximately 10 feet above the 100 year grade. The flood plain line shown on the conceptual plan is taken from large scale county maps which are based on USGS design data. We have further verified the 100 year line with Fairfax County's "Massey Study" of the Holmes Run Basin.

Site Utilities

The proposed site has good access to existing utility lines. The "Woodcreek Development Plan" mentioned above calls for an 8" water main to be extended from its present location on Marc Drive at the high school parking lot. Should this development not proceed on schedule, the cost of extending the line along Marc Drive will have to be added. The sanitary sewer runs along the Holmes Run Basin and is shown on Attachment B.

Parking

The parking area shown is 175 cars. Because of the linear configuration of the site this area will precede on approach to the building and should, therefore, receive special landscape treatment. To avoid a "sea of asphalt" approach, we have designed the parking with a tree lined esplanade entry terminating at the drop-off point and have allowed for heavily planted lane-breaks which will be terraced into the existing grade. There is additional room for an expansion of another 175 cars should the facility expand.

Outdoor Recreation

An 1,800 square foot paved area has been provided on the south of the facility for court games. In addition, we have also indicated a path from the recreation center to a proposed hiking trail which will run along the Holmes Run Stream Valley. In addition, Marco Drive will serve as the trail link with the high school.

Land Use Compatibility

The proposed site's adjacency to the Falls Church High School will enhance the character of both as a central community resource. The facilities offered by the High School gymnasium, tennis, football, baseball and soccer fields will be complimented by the program of the proposed recreation center. The area to the west of the site, across Holmes Run is heavily wooded offering a sound buffer from the beltway beyond. The planned residential developments north and south of the site will be completely buffered from the proposed recreation center by over 400 feet of trees.

Land Acquisition

The Park Authority is in the process of acquiring this site. According to Superintendent of Land Acquisition, Dick Jones, of the Authority staff, the currently scheduled hearing date is set for January 14, 1980. Both the property owner and the Park Authority are in agreement to try to move this date closer.

FACILITY ANALYSIS

For the purpose of this report, we have used the Mt. Vernon Pool Facility as the basis of analysis because of this facility's compatibility with the Providence District's site and projected user profile. Other advantages of re-using this existing design include time and dollar savings in terms of reduced design time, construction cost, and consultant fees.

Facility Use Characteristics

A user survey conducted by the Park Authority on the Wakefield Park Center indicates that multiple use is the key to its success. Fully 64.5% of the people using the center made use of more than one of the recreation facilities available. The pool was the main draw followed by the gymnasium, exercise/weight room, and then the dance and meeting rooms. An area which was not surveyed but which has generated a high level of revenue for the center is the gym-mezzanine room which houses electronic games. A summary of the above survey is included as Attachment C. We would like to reference the Mt. Vernon Magisteria District Pool Feasibility Study by EDAW, Inc. which has provided a more thorough analysis of pool related user characteristics.

Proposed Facility Design

In order to capitalize on the obvious benefits of multi-use facility, the program of the Mt. Vernon Pool Facility has been expanded to include the following:

1. Mt. Vernon Pool Facility
 - a. 25 yd. x 25 meter main pool with two 3 meter diving boards
 - b. Tot pool and whirlpool
 - c. Locker rooms and saunas
 - d. Entrance lobby and snack bar
 - e. Exercise room and pool observation seating
 - f. Unisex area
 - g. Administrative, mechanical and service areas

2. Additional Program Areas

- a. Community room
- b. Meeting and craft rooms
- c. Child-care area
- d. Electronic games area
- e. Exercise/weight room
- f. Dance room
- g. Outdoor sun deck

The above combinations represent the same dynamic use mix as the Wakefield Center and the Mt. Vernon Pool and Ice Rink use mix on a scaled down basis. The total area of the proposed 34,821 square feet and a preliminary floor plan and section are included as Attachment D.

As mentioned above, the proposed design utilizes the same basic design and pre-engineered building system used for the Mt. Vernon Pool Facility. With minor modifications this design has accommodated the additional program requirements.

As shown on Attachment B we have planned for the future addition of 24,438 square feet to the building. It is designed to be a natural extension of the circulation patterns and structural bays and accommodate a variety of future uses. The proposed parking area is also designed to expand to a total of 350 cars.

Projected Costs & Time

Using the Mt. Vernon Pool Project as an accurate cost model and then projecting to a bid date of April 1, 1980, we estimate the following project cost summary (a cost breakdown is shown on Attachment F).

Site work & utilities	\$ 359,369
Facility construction	<u>2,123,945</u>
Total Current Construction Costs	\$2,483,314
Inflation & Contingency 15% (8% Inflation, 7% Contingency)	395,456
Professional Fees	121,230
Project Total	\$3,000,000

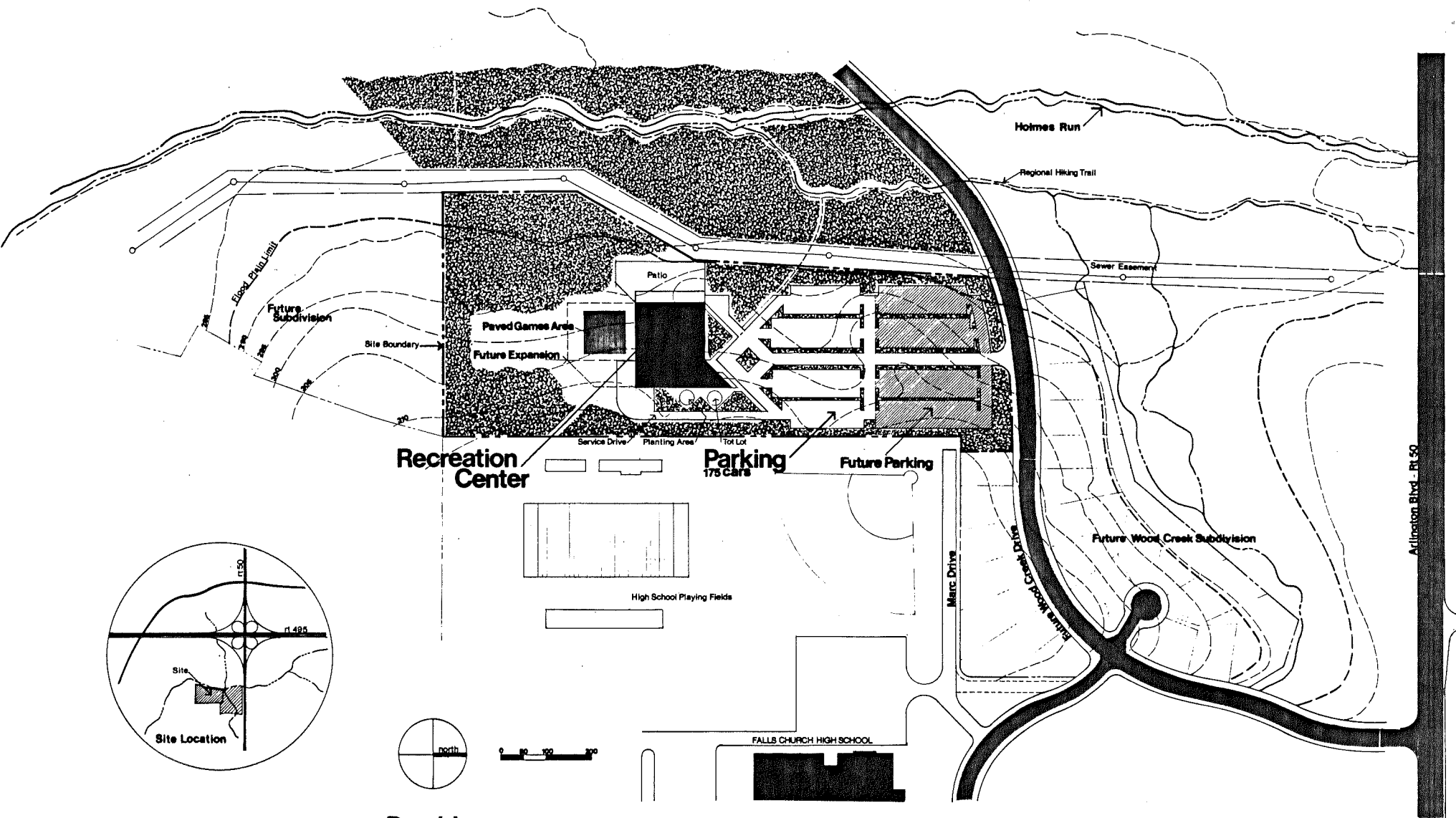
We estimate this proposed project to be bid April 1, 1980, with a completion date of June 1, 1981

Revenue

This facility is being programmed to be revenue producing in the manner of the Wakefield Center and will require no funds from the County's general operating fund.

ATTACHMENT A
SUB-CENSUS MAP





**Providence
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Preliminary
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FAIRFAX COUNTY PARK AUTHORITY

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ATTACHMENT C

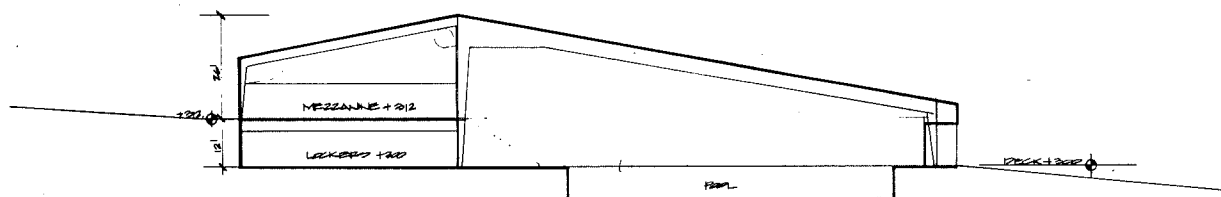
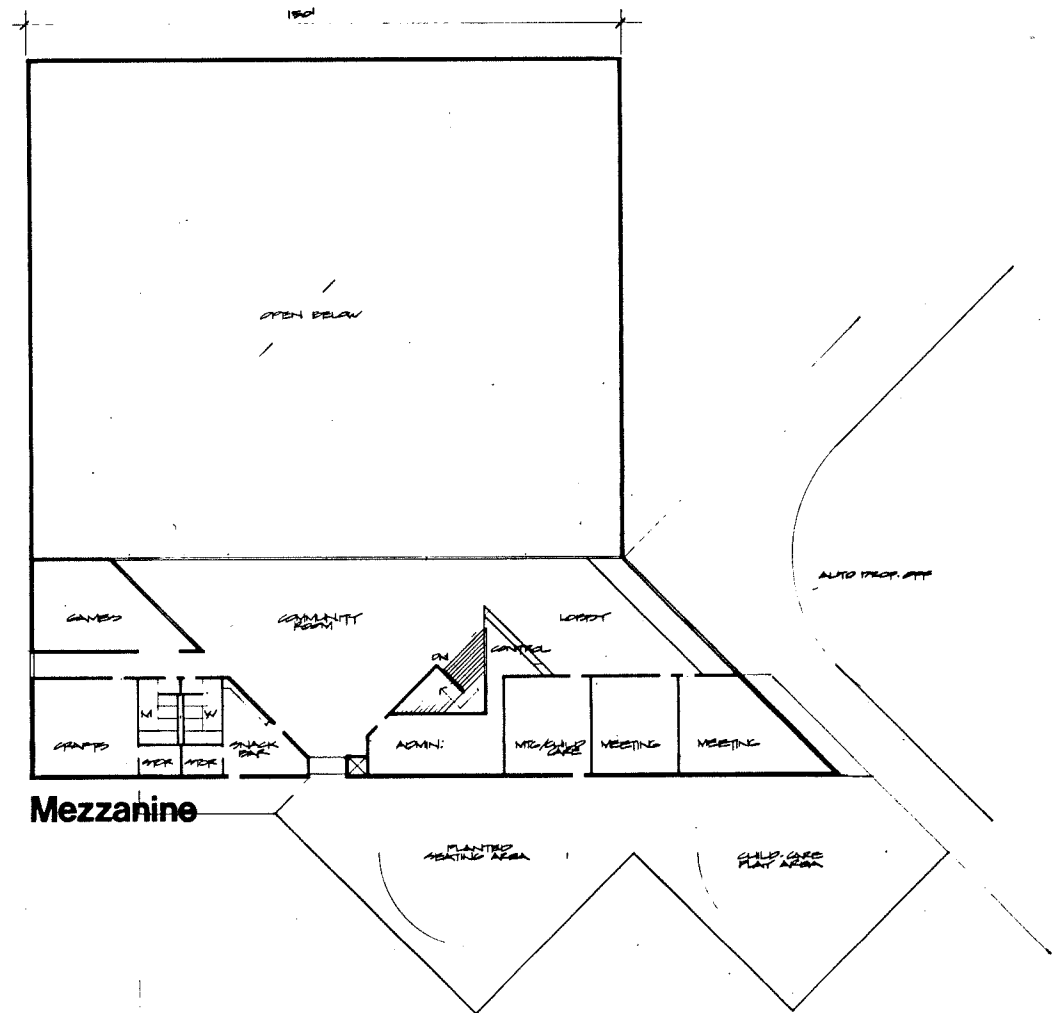
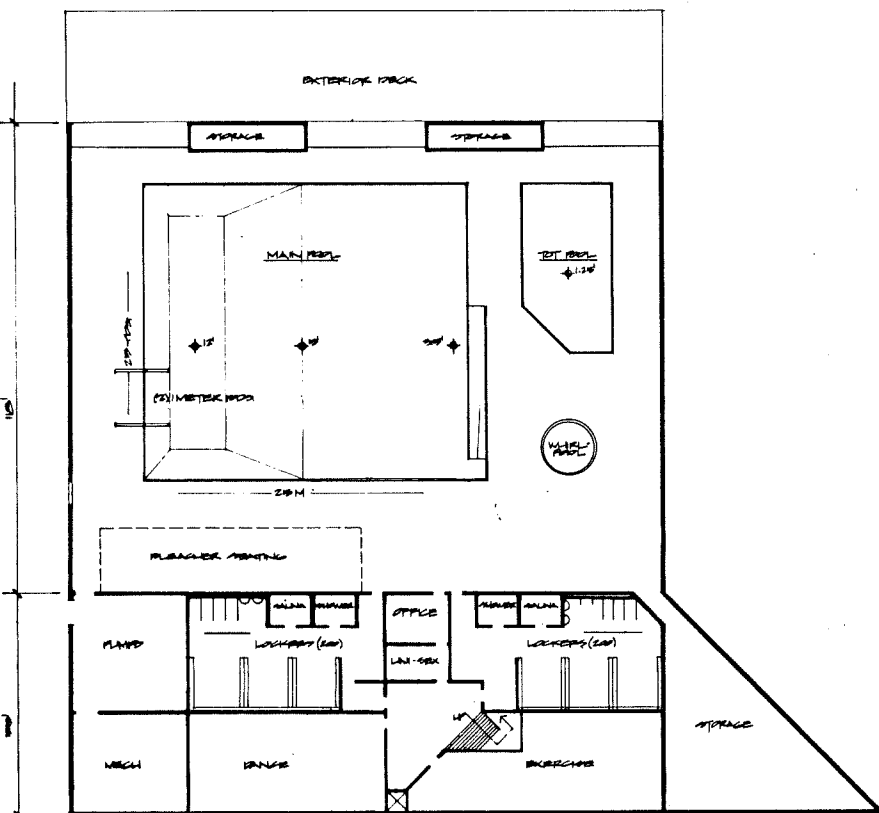
Facility Use Levels: Wakefield Recreation Center

Activity Areas	Total Number of Users*	<u>Place of User Residence</u>		% Total Users/ Total Attendance
		County % Activity	Non-County % Activity	
Pool	3,139	78.8	21.2	72.3
Gym	2,348	64.1	35.9	54.1
Dance	262	79.8	20.2	6.0
Class	95	93.7	6.3	2.2
Weights	1,301	69.6	30.4	29.9
TOTAL	7,145	72.5	27.5	164.5**

* There were 4,339 persons using the facility during the survey week. Many participated in more than one activity during a single visit as indicated by a total of 7,145 different activity users.

** This percentage reflects the relationship between total attendance (4,339) and actual activity participation.

Source: Survey conducted by the Fairfax County Park Authority,
February 23 - March 1, 1978.



Providence Recreation Center

FEASIBILITY SKETCHES
6/24/79 VS SCALE

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ATTACHMENT E

PROVIDENCE RECREATION CENTER

CURRENT ESTIMATED COSTS

<u>DIVISION</u>	<u>COST</u>
General Requirements	\$ 164,872
Site Work	359,369
Concrete	96,984
Unit Masonry	126,079
Structural Steel	232,761
Wood & Plastics	14,547
Thermal & Moisture Protection	283,678
Doors & Windows	70,313
Finishes	101,833
Specialties	12,123
Equipment	36,369
Furnishing	-
Special Construction	353,991
Conveying Systems	-
Mechanical	543,110
Electrical	87,285
 TOTAL	 \$2,483,314
Inflation & Contingency	395,456
Professional Fees	121,230
 PROJECT TOTAL	 \$3,000,000