

A Playground for All Children

HUD-271



HUD-0000271

U.S. Department of Housing and Urban Development
Office of Policy Development and Research

ORIGINAL

A Playground for All Children

Book-1
User Groups and Site Selection



HUD Contract No. H-2388

The research and studies forming the basis for this report were conducted by the City of New York Department of City Planning pursuant to a contract with the U.S. Department of Housing and Urban Development (HUD) Office of Policy Development and Research. The statements and conclusions contained herein are those of the contractor and do not necessarily reflect the views of the U.S. Government in general or HUD in particular. Neither the United States nor HUD makes any warranty, expressed or implied, or assumes responsibility for the accuracy or completeness of the information herein.



A PLAYGROUND FOR ALL CHILDREN

FOREWORD

The three booklets of A Playground for All Children describe in considerable detail a unique project that we at HUD are most interested in: the development, by the City of New York, of the nation's first outdoor public playground to be especially designed for integrated play between handicapped and able-bodied children.

The first booklet describes the special play needs of the children, ages three to eleven, who are expected to use the playground, along with their abilities and disabilities. It also describes the comprehensive research studies that underlay the project, including site analysis and criteria.

The second booklet deals with the design competition, devised by the City of New York to encourage the widest variety of approaches and solutions to this challenging assignment.

The third booklet -- the resource volume -- documents the playground's development and deals with both process and product. Included in it are the survey of existing playgrounds, which was made in preparation for the competition, the four winning entries, and a description of other innovative concepts, designs, and play components.

We believe that the materials in these booklets will be of interest to recreation specialists, architectural designers, to those involved in special education of handicapped children, and to public officials and administrators all across the country. As the resource booklet concludes, perhaps the playground, when built, "will become a model for similar projects everywhere."

We look forward to learning of your reactions to A Playground for All Children.



Donna E. Shalala
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A Playground for all Children

USER GROUPS AND SITE SELECTION

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January 1976

NYC DCP 76-02

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INTRODUCTION

There has been a long felt need for appropriate recreation facilities for the many thousands of New York City children who are disabled. No such facilities are presently available. Recognizing the need, the City has set aside \$100,000 from its first federal Community Development Block Grant to design such a playground. It will be the first public playground in the nation specifically designed for the integrated recreational enjoyment of children with disabilities as well as able-bodied youngsters.

The concept for this kind of playground as well as other issues concerning accessibility evolved from discussions with representatives of various organizations concerned with the problems of the disabled. These discussions led to the formal establishment, in September of 1974, of a unit in the Department of City Planning to coordinate work on programs for persons with disabilities.

One of the first efforts of the office was to move part of the hearings on the 1975-76 Draft Capital Budget from City Hall to the Tweed Courthouse which has an elevator. This made it possible for disabled persons in wheelchairs to attend part of the proceedings. However, it was clearly a make-do shift. Funds were subsequently included in the Draft Proposed Community Development

Program and Application for Community Development Program Block Grant Funds for an elevator at City Hall. As the Commission noted in its application:

“This is a start of a long term commitment to the handicapped and disabled. The construction of an elevator and appropriate ramps will enable the handicapped to participate in all activities held at City Hall. The City will therefore be expanding its capacity for citizen participation and thus furthering a substantial mandate of the Housing and Community Development Act.

The importance of this initial project is highlighted by the concern of representatives of various groups serving the handicapped, expressed at recent Capital Budget hearings of the City Planning Commission.”

In March 1975 the Board of Estimate changed its hearings on the Community Development application to a location accessible to the handicapped. Several parent organizations, affiliated with institutions serving handicapped children, petitioned New York City to create an integrated playground that could be used for recreation by their children as well as able-bodied children. The Parks, Recreation and Cultural Affairs Administration endorsed the request. The Board of Estimate

voted to approve undertaking this project and set aside \$100,000 for the initial design work. This effort then also became part of the official application for New York City's Block Grant application under the Housing and Community Development Act of 1974.

There are three objectives to be met in the design of this playground:

- 1 *Creation of a public playground that may be enjoyed by children in the three to 11 year age group, regardless of disability.*
 - 2 *Provision of an integrated play experience for disabled and able-bodied children. Many children with disabilities have little opportunity to participate in the larger community and are isolated from all kinds of experiences that are considered normal and desirable parts of development. Even the few recreation facilities available to the disabled child are often totally segregated by type of disability. Similarly, the able-bodied child's perception of his world is generally limited to play with other able-bodied children.*
 - 3 *Development of prototypical playground features that may be used in neighborhood playgrounds throughout the city. It is hoped that this playground will become an example of how the needs of*
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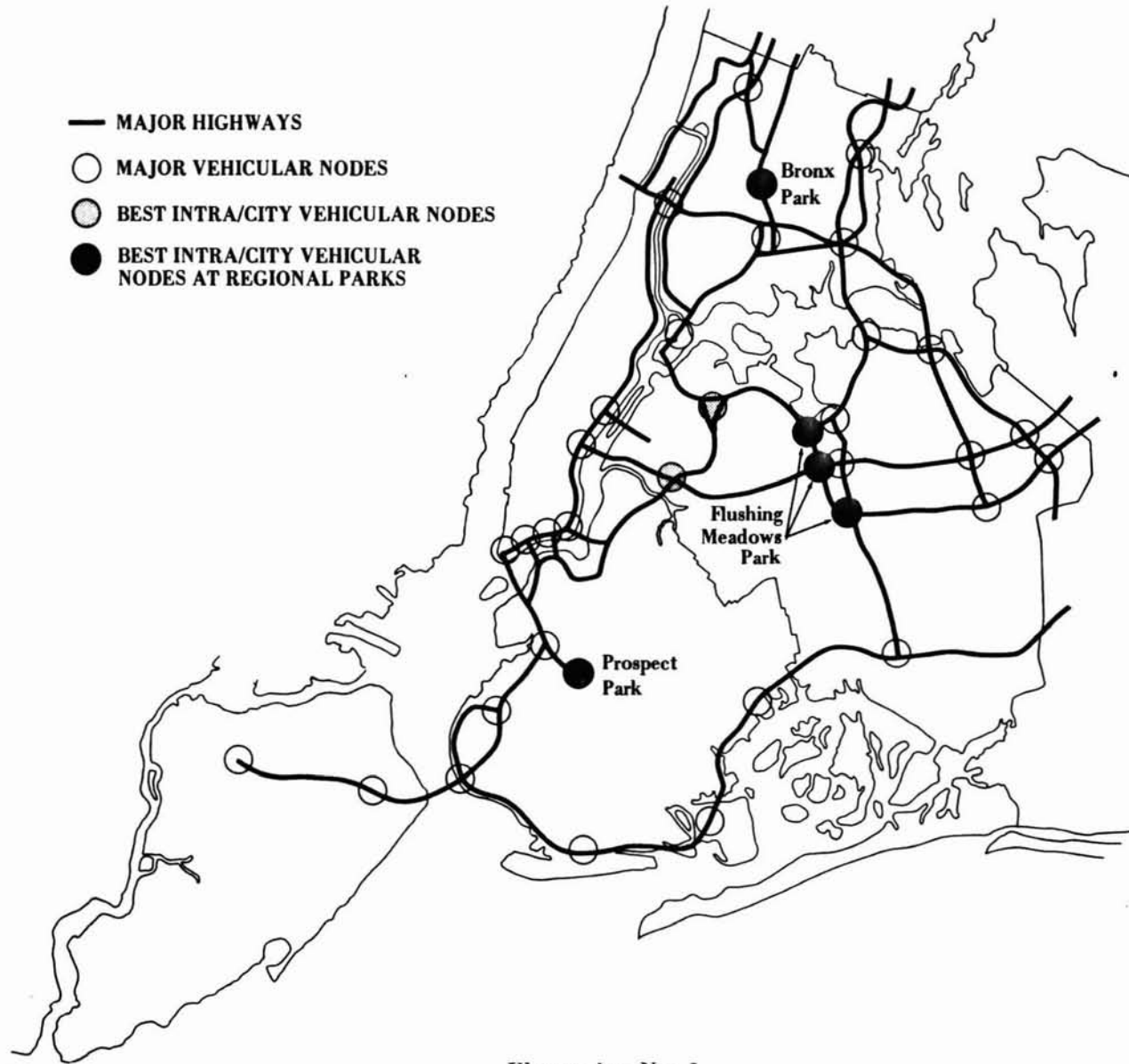


Illustration No. 1

the handicapped can be served in the city recreation facilities. Successful components of this playground will be reproduced in neighborhood playgrounds as they are refurbished or developed.

In order to encourage a variety of approaches and solutions, the City, with funds set aside for beginning design work, will hold a design competition, with the Parks, Recreation and Cultural Affairs Administration and the Department of City Planning acting as joint sponsors.

This report is intended to give playground designers preliminary information about the playground and the children who are expected to use it.

Background Studies

In developing the concept of the playground, the City has been working with agencies and individuals experienced in the recreational needs of children with disabilities. Lists of the individuals and agencies consulted may be found in appendices A and B. Among the many private groups consulted were the Manhattan, Queens, and Nassau County United Cerebral Palsy centers, the New York University Medical Center Institute of Rehabilitation Medicine, and the Muscular Dystrophy Association. Among the individuals consulted were physicians, physical therapists, recreation specialists, and parents of children with handicaps.

Transportation-Population Study

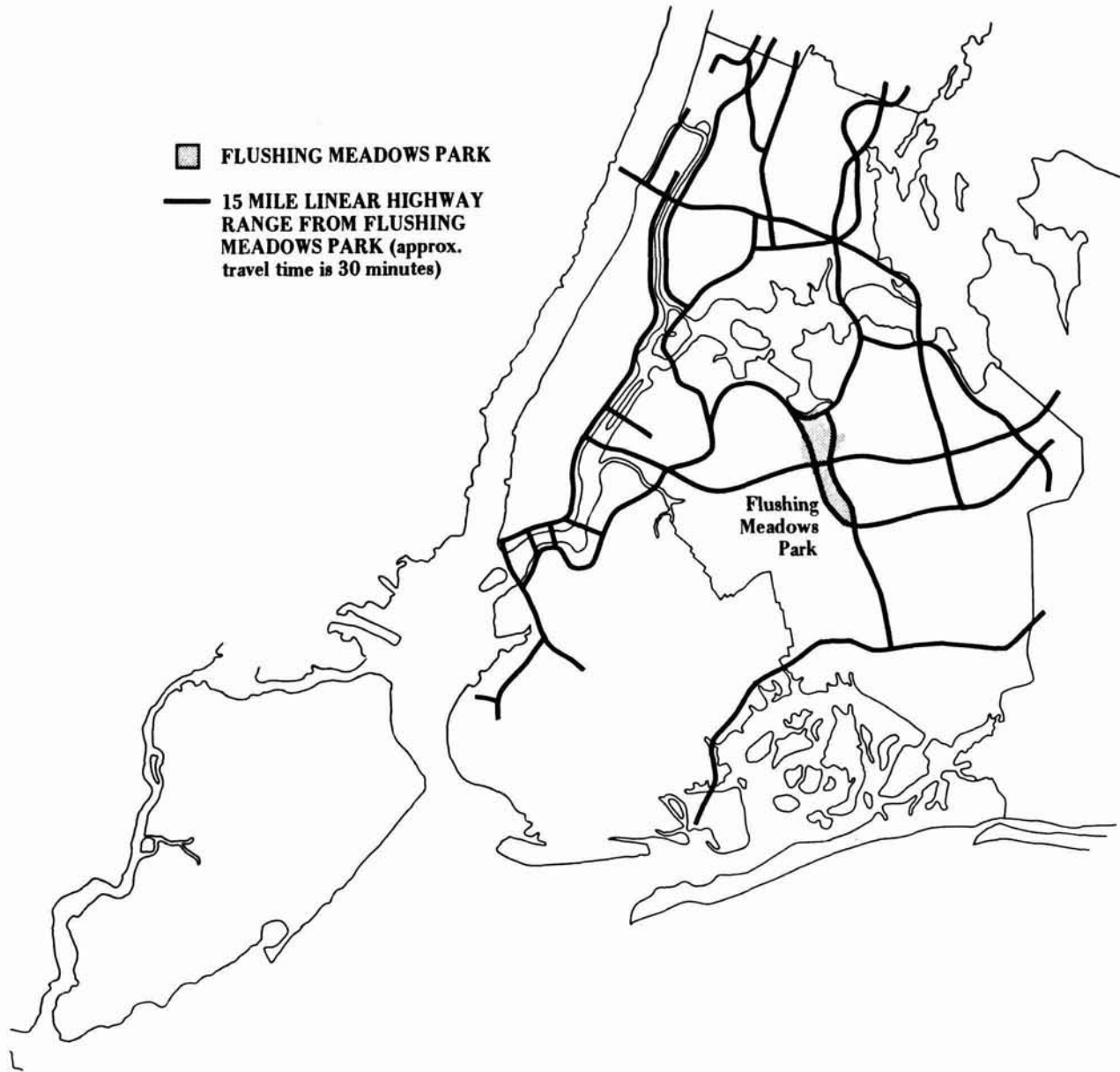
Because this playground will be the first, and for some time at least, the only facility of its kind in New York, it is expected to draw children from the entire city. Therefore, it must be conveniently accessible to the largest possible number of children with disabilities.

In order to eliminate land costs and reduce the time required for site selection, the decision was made to locate the playground in an existing regional park in the City. Transportation and population studies were then undertaken to determine which park was most readily accessible to the largest number of disabled children.

A number of agencies serving handicapped youngsters were surveyed to check the validity of three assumptions regarding transportation:

1. Agencies serving handicapped children would use this playground as a program resource.
2. Parents would bring their own youngsters.
3. All groups would travel primarily, if not exclusively, by cars, vans, and buses rather than subways.

■ FLUSHING MEADOWS PARK
— 15 MILE LINEAR HIGHWAY RANGE FROM FLUSHING MEADOWS PARK (approx. travel time is 30 minutes)



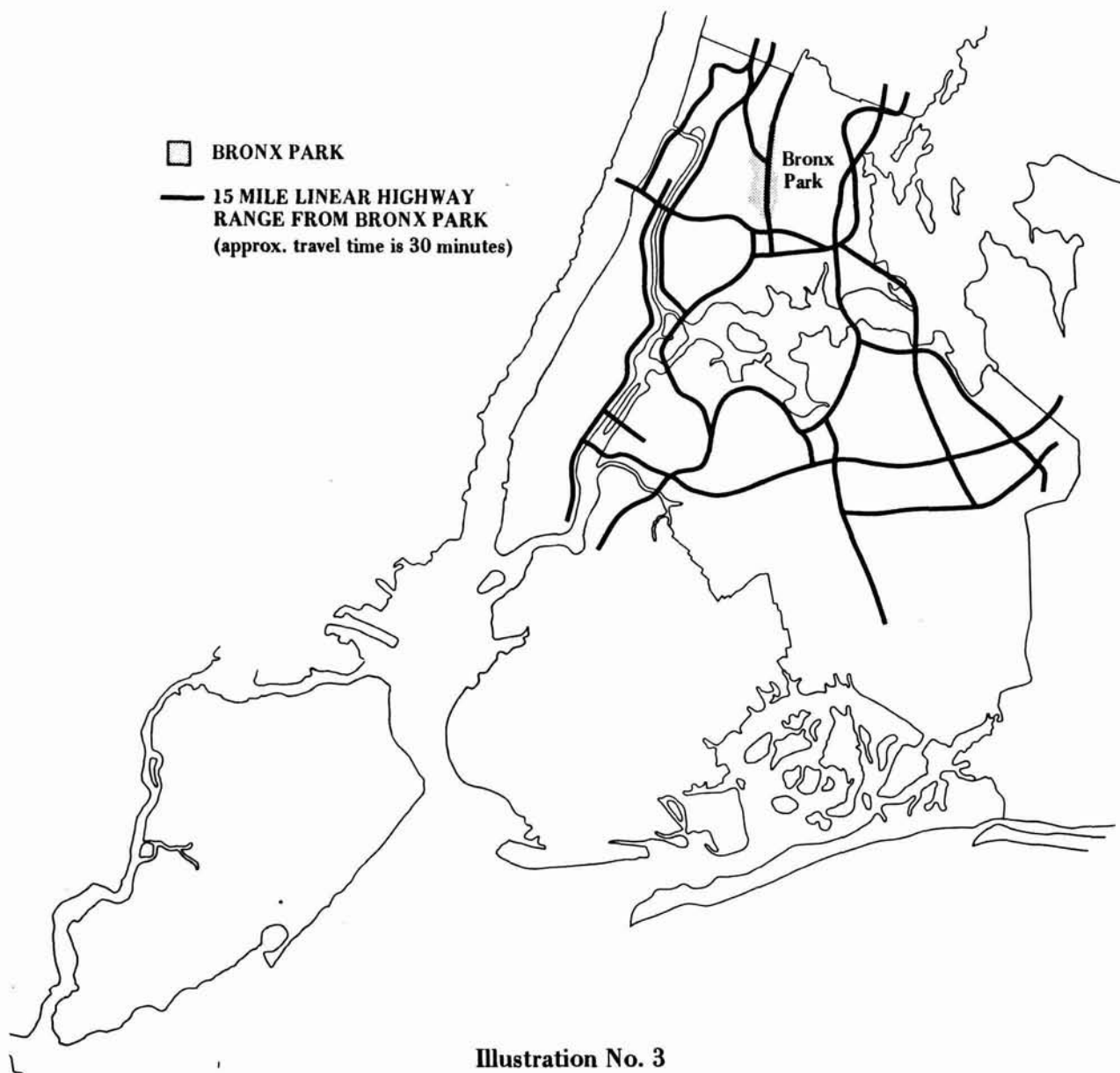


Illustration No. 3

In all instances these assumptions were validated.

Transportation specialists, utilizing the primary criterion of vehicular accessibility, identified the most accessible locations or areas within each borough and then determined which of these areas were most accessible to the remainder of the City. Altogether, 35 major vehicular traffic nodes were identified. Five of these nodes were then selected on the basis of accessibility to the regional parks. (Illustration no. 1). The choice of parks was then narrowed to Bronx, Flushing Meadow, and Prospect parks.

The three regional parks were analyzed for comparative highway accessibility. A 15-mile highway range (approximately a 30-minute trip) from each park was projected, and comparative highway accessibility was mapped. (Illustrations nos. 2, 3, 4).

In the absence of a census, handicapped children were assumed to be evenly distributed throughout the population. Gross population within a ten-mile radius of Flushing Meadow Park, Bronx Park, and Prospect Park was computed by borough and by total numbers: (Illustration no. 5)

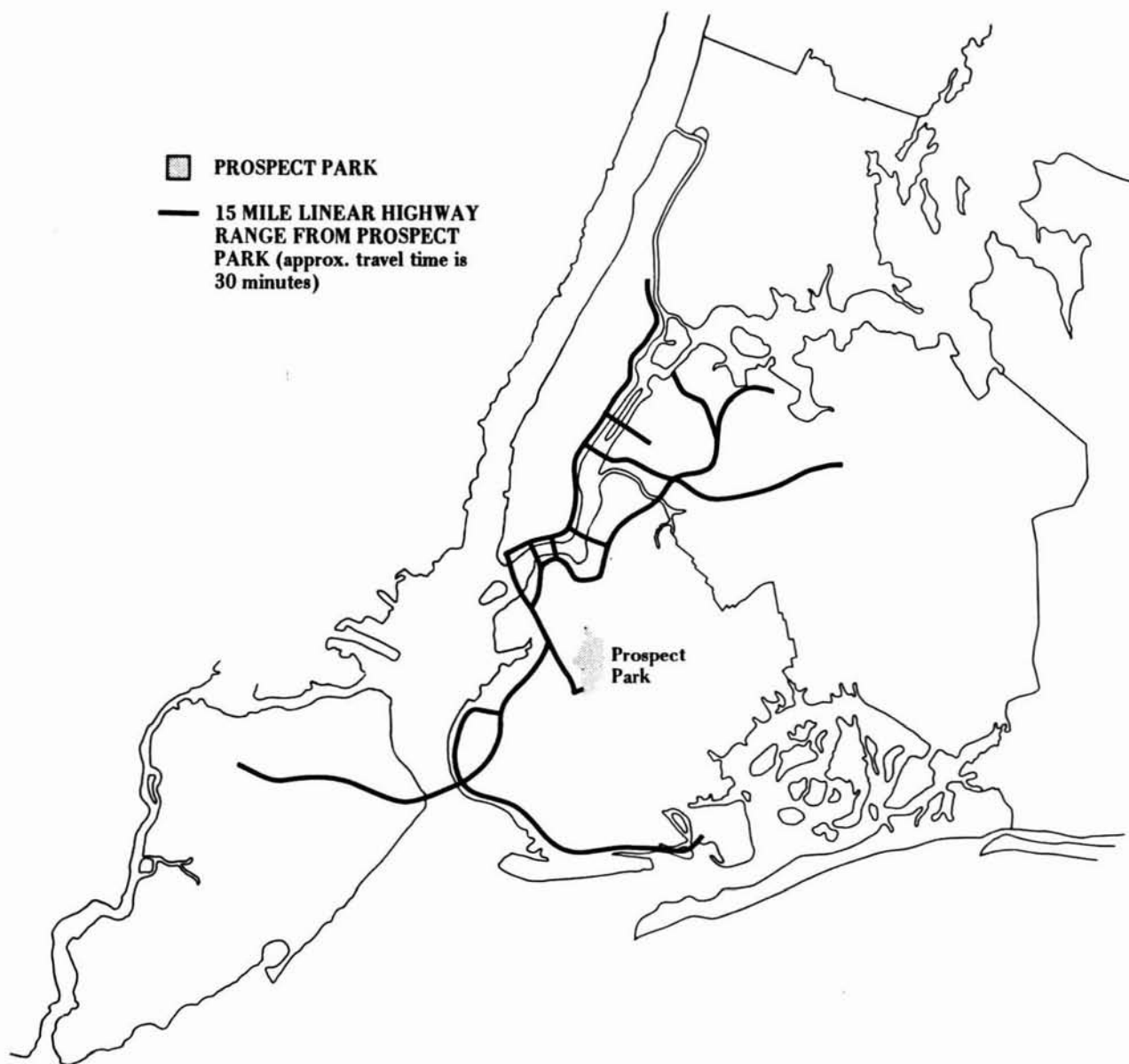


Illustration No. 4

Gross Population* Within Ten-Mile Radius of:

Flushing Meadow Park:	Manhattan	814,628
	Bronx	763,892
	Queens	1,871,452
	Richmond	--
	Brooklyn	<u>1,057,370</u>
	Total	4,507,342
Bronx Park:	Manhattan	921,833
	Bronx	1,471,690
	Queens	522,927
	Richmond	--
	Brooklyn	<u>--</u>
	Total	2,916,450
Prospect Park	Manhattan	602,252
	Bronx	--
	Queens	615,471
	Richmond	72,070
	Brooklyn	<u>2,602,012</u>
	Total	3,891,805

*Source: 1970 Census

The locations of public and private agencies, institutions, and schools serving handicapped children were mapped in relation to the regional parks, as were New York City's 28 poverty areas. Eight of the poverty areas were within the ten-mile radius of Bronx Park, 13 were within the ten-mile radius of Prospect Park, and 14 were within the ten-mile radius of Flushing Meadow Park (Illustration no. 5).

Site selection analysis of 12 specific locations within these three parks is detailed on page 26.

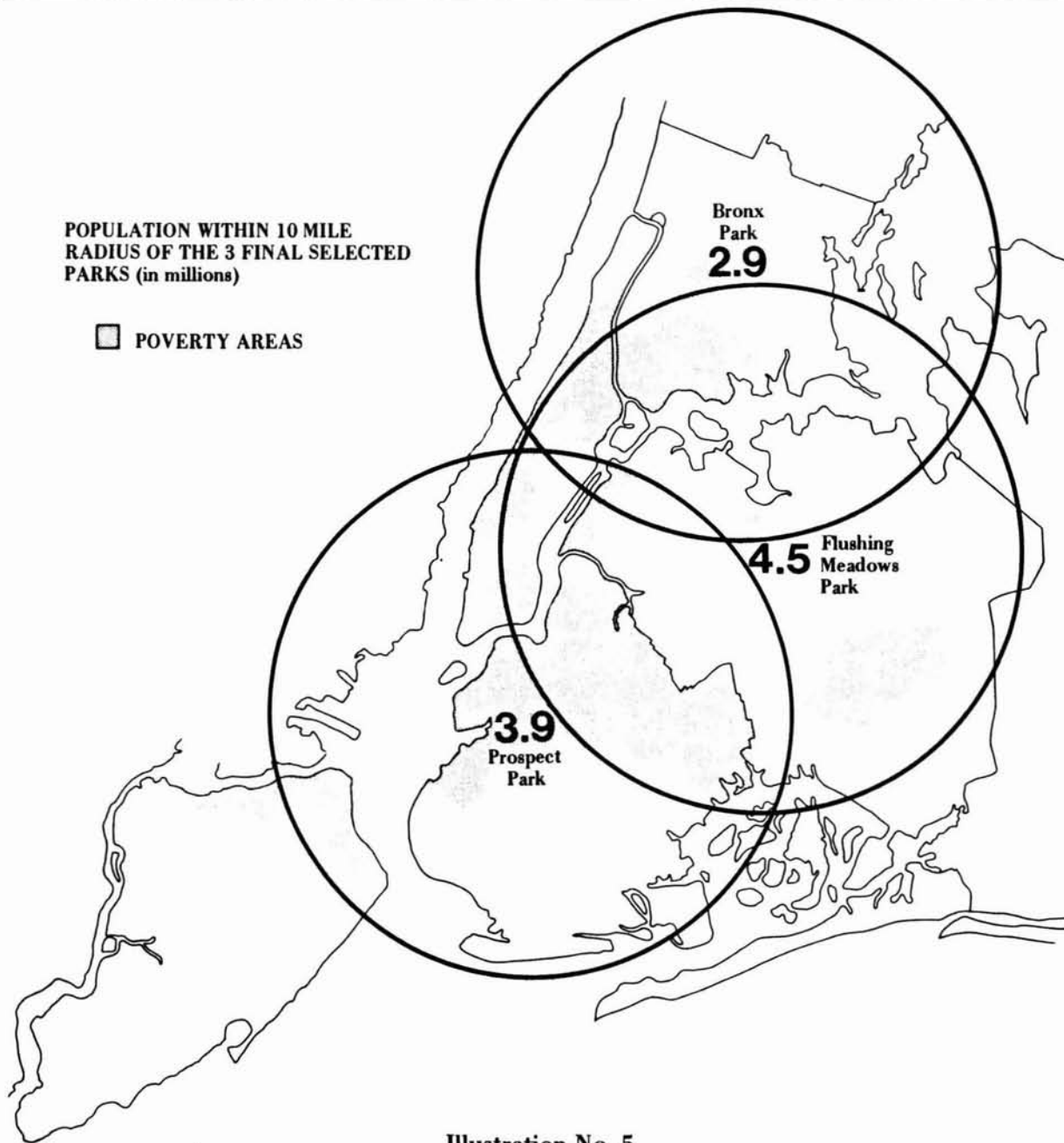


Illustration No. 5

User Group Study

After preliminary conceptualization of the park was completed, an overview survey was undertaken* of individuals and agencies serving children with disabilities. Reactions were sought to proposed play activities and to assumptions regarding physical adaptations, special play programs, and special monitoring for the playground. Information was sought so that the potential users of this facility might be defined by type of dysfunction. Several typical responses are appended.**

A second study was then undertaken to learn, in depth, of the effects of the disability on the child in this age group.*** What were the manifestations of the handicap or disease? Were there related disabilities? What were the physical limits imposed on the child by the handicap? What did children with this disability particularly enjoy? What would help them develop? What should be avoided? What were the special needs and safety requirements? What are his relations with other children, handicapped and able-bodied?

A general search of the literature was undertaken. Interviews, field visits, correspondence, and telephone discussions were employed in both studies.

*Appendix C, Overview Survey

**Appendix D, E, F, G, Responses to Overview Survey

Summary of Findings - User Groups

There are two distinct factors influencing potential use of the playground. The first is the size of the population affected by the particular disability. Because there has been no census of the disabled, agencies serving the handicapped were asked to indicate their perceptions of the largest potential user groups.

The second factor is whether or not children with a particular disability would benefit from, or require, special playground facilities. Children who are mildly retarded, although they are the largest group of disabled children, can use play facilities no different from those used by able-bodied children. Because they do not require special playground facilities, they are not expected to attend the playground any more frequently than able-bodied children.

For purposes of analysis, the disabilities perceived to be the most prevalent have been classified into five user groups. The sixth category is the able-bodied child. The user groups should not be considered as finite or exclusive categories. Many disabilities not specifically mentioned will also require special planning. The user groups are simply a way of breaking down the population to facilitate analysis. The playground is intended for all children in the appropriate age groups.

The surveys led to the conclusion that the largest group of special users of the playground would be children with neuromuscular and orthopedic handicaps. These include amputees and children with cerebral palsy, spina bifida, and muscular dystrophy. The second largest group was thought to be youngsters affected by mental retardation and brain injuries. The third group consisted of the blind or visually impaired and the deaf or hearing impaired. The fourth group was chil-

dren with arthritis. Children with other chronic conditions, such as diabetes, heart disease, epilepsy, and hemophilia, would be the smallest group of special users of the playground.

The following sections deal specifically with these six groups. They contain descriptions of the children, suggested play activities, and design considerations.





USER GROUPS

USER GROUP I ABLE-BODIED CHILDREN

This playground will be a new experience for the able-bodied youngster. He probably will have no prior experience in relating to children who are disabled. We anticipate that special considerations are necessary to make the able-bodied child feel that the playground is one that he too will find exciting and yet be comfortable in.

In general, it is expected that true integration of able-bodied youngsters will be easiest when the child is below school age, because children at that age tend to be more tolerant and freer of value judgments than older, school aged children. The younger children, however, may be more apt to embarrass their parents with questions about handicaps that they are exposed to. An older child is likely to swing from withdrawal and avoidance to the role of a "volunteer helper." The success of the playground and the program will be partially measured by the degree to which the able-bodied child is influenced to participate openly, fully and equally in play with disabled children.

ACTIVITIES

The able-bodied youngster is used to being in command of his body, and actively mobile in a playground. He enjoys darting from one activity to another and using physical energy

as his whim dictates. The challenge in this setting will be to check excess speed and total abandon. This goal would best be achieved by activities that substitute in-depth exploration and concentration for speed and space conquest.

For example, activities such as animal care and gardening will put all youngsters on an equal basis. Providing wheelchairs for all to use in wheelchair basketball and wheelchair mazes should be exciting and challenging. Blindfolded children will have fun and gain greater respect for blind children in identification games based on touch.

**USER GROUP II
CHILDREN WITH NEUROMUSCULAR
AND ORTHOPEDIC HANDICAPS**

DESCRIPTIONS

Cerebral Palsy

There are three main types of cerebral palsy. First, there is the *spastic* individual, who moves with difficulty. This condition varies from the minor occurrence, where one has an awkward gait, to the most extreme case, where one is completely stiff and unable to move voluntarily. Second, there is the *athetoid* individual, who has too much motion; his movements are involuntary and uncontrolled. Most athetoid individuals have some mobility and many of them can walk with difficulty. Very few of them are totally immobilized. Third, there is the *ataxic* child, who has jerky movements and disturbed balance and coordination. He may also have a disturbed sense of depth perception.

Many children with cerebral palsy are also mentally retarded, thereby being multiply handicapped. Many children with cerebral palsy use orthopedic devices or wheelchairs. The condition is not progressive.

Spina Bifida

Spina bifida is a malformation of the nervous system commonly known as "open spine."

Most individuals with spina bifida are paraparetic -- they have impaired control and sensation below the waist. Consequently many ambulate only with the aid of leg or knee braces, and/or crutches.

Some of them are wheelchair-bound. Normally they do not have bladder or bowel control. However, most of them have full use of their upper extremities. Mild retardation may sometimes be a secondary handicap. Spina bifida is not progressive.

Muscular Dystrophy

Muscular dystrophy consists of a group of chronic diseases whose most prominent characteristic is the progressive degeneration of the voluntary muscles. There are variations in the age of onset and the rate of progression. As a rule* the earlier the clinical symptoms appear, the more rapid is the progression.

The major type of muscular dystrophy is Duchenne. It occurs predominantly in males. Its onset usually occurs between the ages of two and six. Initially the muscles of the pelvic girdle are involved, and the sufferer develops postural defects, a waddling gait, and difficulty in ascending stairs and rising from the floor. Muscles of the shoulder girdle become involved a few years later.

Most children with muscular dystrophy walk until they are around six years of age, at

which time they may go into braces to keep from falling. Frequently at the age of ten they are confined to wheelchairs. Generally they are unable to grasp well, and many have limited arm movement. Mental retardation is not a related secondary handicap.

*Muscular Dystrophy Association Description of Diseases, Patient and Community Service Programs

Amputees

Amputees may have loss of any of their extremities, or portions of them. Depending upon their condition, they may use artificial limbs, crutches, or wheelchairs.

ACTIVITIES

The playground experience should offer social, motor, cognitive and sensory stimulation for the children. It should motivate them to try new things -- the activities should be exciting and challenging. Ideally, the environment should motivate the wheelchair-bound child to use his abilities to the fullest -- to climb, crawl or wheel to the play equipment.

Individual play activities should give the child a variety of stimuli in movement, balancing, and texture. The designs should create interaction among handicapped and able-bodied children playing in small groups of two to five individuals. The following play activities should be provided for:

1. Swinging and rocking equipment of various sizes, with special back and arm supports.
2. Sliding surfaces that prevent children from falling out or tipping over, such as hill slides. Consideration should be given to children who must slide on their stomachs.
3. Multi-level equipment that provides climbing, walking, and balancing experiences.
4. Exploration of textures and resilient densities. Sand, lawn, and fabricated soft play areas should prove valuable in this context.
5. Play in shallow running water, including floating toys and gentle sprinklers. Particular attention must be paid to the safety of the handicapped child in water.
6. Crawling through tunnels and rolling over mounds.
7. Passive play, such as checkers and picnicking.

It was suggested that some larger group activities might be provided for in suitably modified forms. Provision of the following activities will depend upon the size of the playground and its location.

1. Basketball, volleyball, softball.
2. Puppet shows, wheelchair dancing.
3. Bowling.
4. Shuffleboard.
5. Horseshoes.
6. Miniature golf or croquet.

SPECIAL FEATURES

Listed below are special features that are necessary for this group of children:

1. Spaces and equipment should be accessible to and able to accommodate children using crutches, walkers, or canes; children sitting in and getting in and out of wheelchairs; children crawling on their hands and knees; and children who must stay in a prone position. Handrails for the different age groups must be provided. (They should not be greater than 3/4 of an inch in diameter so that they can accommodate amputees with hooks on artificial limbs.)
2. Many of these children have poor sitting balance. Some provision should be made for special back and arm rests. Another suggestion was that some benches should be provided without backs, so that these children could straddle the bench and lean on their hands and arms to support themselves.
3. Safety is a feature that must be built into any playground. However, children who have difficulty in moving and balancing themselves pose special problems. Consequently, a strong emphasis should be put on the creation of a safe environment in this new playground. Materials, placement of equipment, heights, and edges should all receive particular scrutiny. Another aspect of safety is control. Parents or supervisors

should be able to monitor the children visually and occasionally exercise physical control over them, without undue difficulty. Arrangements might include separation of certain play activities, and placement of adult sitting areas so that they have strong visual control of activity areas.

4. Shade from trees during warm weather provides a pleasant way for anyone to keep cool. However, shade is particularly important for many disabled children. Drinking can be a difficult problem; consequently, they can dehydrate quickly. Some children must take medication that can interfere with the normal perspiration process and cause overheating. In addition, some drugs cause sun-sensitivity. The amputee has less skin area for his body to perspire with; therefore, he needs shade. (Many spina bifida children have problems with spinal fluid building up in the brain, and this condition combined with excessive heat may result in the child having a seizure.)
5. The location of extra drinking fountains must be considered for the child who has difficulty getting about. Drinking fountains and toilet rooms must be accessible to the disabled. In addition many of the children of all ages do not have bladder and bowel control. Provision must be made for shielded diaper changing areas for the older children.

**USER GROUP III
CHILDREN WITH MENTAL
RETARDATION AND BRAIN INJURIES**

DESCRIPTIONS

Mental Retardation

Mental retardation may be caused by brain damage, post-birth trauma, genetic reasons, or unknown factors. The mentally retarded child is developmentally disabled. Development is not only slower in mentally retarded children, it is frequently uneven and different from normal development patterns. The retarded child may have varying degrees of maturity in each facet of development -- physical, social, intellectual, and emotional. Retardation is generally classified into four broad functional categories -- mild, moderate, severe, and profound retardation.

Mildly Retarded

Slightly less than 90 per cent of the mentally retarded are classified as mildly retarded. They are very similar to non-retarded children except that their rate and degree of development is slower, and retardation of neuromuscular development may lead to retardation of the motor skills. The recreational needs of the mildly retarded can be met in any good playground facility designed for the able-bodied child.

Moderately, Severely, Profoundly Retarded

Around ten per cent of the retarded are classified as moderately, severely, or profoundly retarded. Approximately 30 per cent of the people in these categories have serious secondary handicaps. Children suffering from Downs Syndrome, or mongolism, often have congenital heart defects as well; the profoundly retarded child may be spastic. Otherwise secondary handicaps have no set pattern.

There is unusual slowness in overall development and a qualitative difference in thought organization; there may be a lack of physical self-awareness. All of these children lag in motor development, perception, balance, and coordination. Some of them are not toilet trained. Many may not be able to understand the cause of danger, or any cause and effect, and so safety is a major concern.

Brain Injured Children

Although brain injuries may result in many different disabilities, the term is generally used to describe the non-retarded child who is hyperactive. The brain-injured child will also generally have perceptual disabilities. A large portion have poor gross motor coordination and are several years behind able-bodied children in physical coordination. The brain-injured child is impulsive and quick and may be unaware of danger to himself or others. He may be frenetic and easily distractable.

Additional manifestations may include immaturity, difficulties with fine motor coordination, poor judgment, speech problems, and perseveration problems (such a child may repeat an action or word continuously). Unlike the mentally retarded child, the brain-injured child usually has very quick motions.

ACTIVITIES

The play experience for retarded and brain impaired children should encourage motor activities to help them improve their coordination and should be sensitive to their physical coordination difficulties. A child with one of these disabilities very often has a poor perception of his body, its mobility, and the relationship of his body to space. The design of the facility should foster experiences with differentiation of spaces, shapes, and forms. The child should be tempted to try something new and to explore his environment. However, for reasons of safety and supervision the environment must be a contained area.

Many parents tend to baby a retarded child, hindering his development. It would be best if facilities were designed so that the child can gain a sense of being his own master; he will then find his own level in play.

Calming activities are recommended for the hyperactive child. Among these activities

are play with water or with soft or inflatable play equipment, and play in nature areas. Lively activities that allow a safe discharge of energy -- such as play with punching bags, or jumping -- are also recommended.

Specific suggestions for this group include the following:

1. Play involving motor skills. Climbing, especially hand-over-hand climbing, and activities that involve crawling will help coordination and gross motor skill development.
2. Jumping and bouncing activities, similar to play on a trampoline designed with special safety features.
3. Activities that develop the child's eye-hand and eye-foot coordination and spatial perception. One therapist suggested a fixed "baseball stand," which would have a retractable ball strung to it.
4. Balancing and walking on railroad ties, or other activities that develop gait and sense of balance.
5. Mazes -- designed so the child is not aware that he can be watched. These are fun, invite exploration, and help the child's perceptual development.
6. Sand and water play, in appropriate forms for all age groups, including the older and larger children.

7. Flexible soft play equipment (foam blocks have been suggested) so the child can create his own environment. Outdoor inflatables that give slightly when crawled and walked on will help the child's sense of cause and effect.

8. Activities that develop fine motor coordination. These might include play equipment with tactile and visual appeal that involves finger movement.

9. Music, dance and art activities.

10. A nature area

Some group activities mentioned for User Group II were also suggested for these children. However, these activities must also be modified to meet the needs of children with poor coordination and perceptual difficulties -- for instance, basketball hoops will need to be lower. Competitive play is not recommended. In general, individual, parallel, or cooperative play would be best.

SPECIAL FEATURES

1. The most prominent requirement for this group is safety. Many of these children are not aware of cause and effect and do not perceive danger. Provisions must be made to keep them from injuring themselves and others. Rubberized areas have been suggested. Falls should be anticipated;

these children may climb (if physically able) higher than they can safely go, without realizing the danger.

2. All of these children will need supervision. The design should allow for the easy exercise of maximum control. This is an important consideration for individual play equipment, but it must also be taken into account in the design of the whole playground. In particular, the design must ensure that a child will not be able to wander off and get lost, or run into danger.
 3. A substantial number of these children will have secondary handicaps, as in User Group II, and will require accessibility features such as those mentioned in User Group II.
 4. Shade is needed, and easily accessible drinking fountains are a special consideration. Some authorities believe that dehydration or overheating may be a problem. Some children require medication which may cause sun-sensitivity.
 5. Shielded diaper-changing areas must be provided for those older children who are not toilet-trained or who lack bladder or bowel control. Additionally, some older children will need adult supervision or assistance in the normal toileting process. Provision should be made for large private toilet cubicles so that an adult may accompany an older child of either sex.
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USER GROUP IV CHILDREN WITH VISUAL AND HEARING IMPAIRMENTS

DESCRIPTIONS

Children who have lost their sight completely are referred to as blind; those with all other degrees of visual loss are considered to have impaired vision. Occasionally, these children are afflicted with other disabilities as well.

Children who are deaf or hard of hearing may have balance and perceptual difficulties directly related to their hearing difficulties.

ACTIVITIES

Play facilities for the blind or visually impaired child should emphasize the use of his other senses. The deaf or hearing impaired child's play needs are not significantly different from those of an able-bodied youngster, except obviously, that visual information must replace all aural information.

In addition to creating a fun place for the able-bodied youngster, special criteria for User Group IV would consist of the following:

1. Use of strong visual cues to supplement aural cues for the deaf and hard of hearing. For instance, signs should be brightly colored and graphically incisive. Strong

contrast of color and shade is also helpful for the partially sighted child.

2. Sound play is fun for all youngsters, but will get special responses from blind children. Strong vibrations that have qualities of rhythm and tone could become sound play for deaf children. Basketball hoops might be equipped with sound devices so that blind children may know where to throw the ball.
3. Space and equipment for the blind child should emphasize textural qualities.
4. Natural areas with fragrance gardens have been recommended for all children, but especially for blind youngsters.
5. Special swinging, balancing, and moving activities should be provided for those deaf children with balance and perceptual difficulties.
6. A multi-level, multi-activity maze has been suggested for use by all children. It could be equipped with braille instructions for blind youngsters.

SPECIAL FEATURES

1. Safety is of special concern for children who have difficulty seeing or hearing. Soft areas must be provided for blind children, who may fall while climbing equipment. A

child who is hard of hearing must be protected not only from personal injury but also from damage to his expensive hearing aid.

2. Special textures and braille signs should be used to help the blind child identify locations and activities within the playground. Waist-high fencing and guard rails have also been recommended.
3. Water play must be designed to be safe for the blind child, and the effect of water on hearing aids must also be taken into consideration.

**USER GROUP V
CHILDREN WITH ARTHRITIS**

DESCRIPTIONS

The most common arthritic or rheumatic disease amongst children is juvenile rheumatoid arthritis. It may appear at any age, and it cripples more girls than boys. Painful joint inflammation, soreness, stiffness, and limitation of motion are common among these children. Joints may be deformed, twisted, and swollen. Juvenile rheumatoid arthritis varies in severity and is characterized by periods of improvement, or remission, followed by new flare-ups that occur without warning. Some children must use canes or crutches while walking.

ACTIVITIES

The arthritic child needs individual play with an emphasis on gradation of activities. He must be able to play at a pace that is tolerant of his physical condition. Competitive play can be harmful to the arthritic child, because it may tempt him to overstress arthritic joints. The individual play activities listed for User Group II would also be good for the arthritic child.

SPECIAL FEATURES

1. Rest between periods of play is of utmost importance to the arthritic child. Conse-

quently, provision must be made for seating areas with passive play activities available that will encourage these children to rest when they need to.

2. Large group activities should not be planned for these children.
3. Special toilet facilities with higher seats and grab bars must be provided.

**USER GROUP VI
CHILDREN WITH OTHER CHRONIC
CONDITIONS SUCH AS HEART DISEASE,
DIABETES, EPILEPSY, AND HEMOPHILIA**

DESCRIPTIONS

It is not possible to enumerate and describe all of the conditions or disabilities which may affect children. Some affect their ability to use or safely enjoy standard playground facilities, but others may not, or may have only a minimal effect.

User Group VI includes those four conditions that, in addition to the ones included in previous user groups, were most commonly perceived as possibly requiring special recreation planning. Once again, it is important to note that many disabilities not mentioned in this report will require special planning. Omission of a particular disability in this report does not mean that the playground will be unable to accommodate a child with that disability. The playground will be for all children in the appropriate age group.

Heart Disease

Heart disease in children usually takes one of two forms: congenital heart deformity, or disorders induced by rheumatic fever. A congenital heart deformity is a defect of some part of the heart, or a major blood vessel near the heart, that develops prior to birth. As a general rule children with congenital heart

conditions may have secondary disabilities such as diabetes. Rheumatic fever frequently weakens the pumping action of the heart, and the heart valves may become inflamed. Resultant scar tissue may cause continuing interference with normal blood flow.

Diabetes

Diabetes results from failure of the pancreas to produce sufficient insulin, which is necessary to use food properly. The condition is controlled by diet and insulin intake. Diet and insulin intake are adjusted in anticipation of physical activity. The known diabetic child receiving proper care will have no physical restrictions, and will use a playground as any able-bodied child.

Hemophilia

Hemophilia is a genetically transmitted disorder of blood coagulation. It affects males only. Children with hemophiliac conditions must be on a continuous alert for the occurrence of hemorrhages especially into the joints.

Epilepsy

Epilepsy is the symptom of a neurological disorder that manifests itself in seizures, resulting from too much energy being discharged from the brain. Seizures vary greatly in their intensity and duration. They may involve loss of consciousness, stiffening of muscles, and jerks of the limbs. Drowsiness,

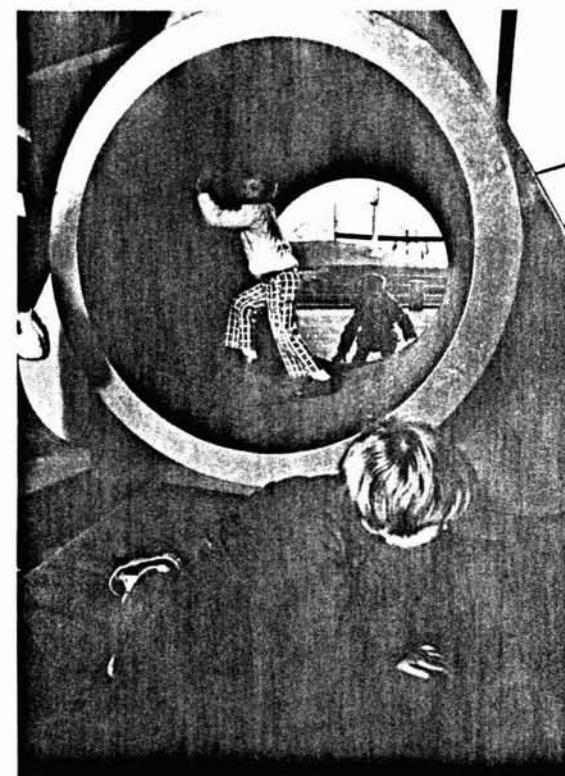
day dreaming, confusion, or fatigue may follow an epileptic seizure. Retarded children may have epileptic seizures and children with cerebral palsy and spina bifida may have similar seizures.

ACTIVITIES

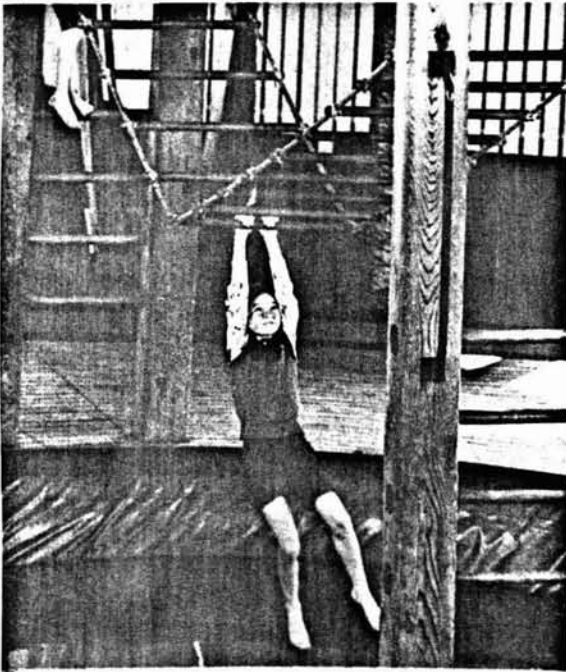
Children within this user group, for the most part, can enjoy the same activities as able-bodied children. However, on occasion some will have lower energy levels than able-bodied children and consequently will have to modify their activities.

SPECIAL FEATURES

1. Many of these children tire easily and on occasion will have weak spells. Consequently provision of attractive rest areas with passive play activities should be considered in the design of the playground.
2. The use of resilient surfaces and the avoidance of sharp edges is especially important for hemophiliac and epileptic children.
3. As in User Groups II and III, shading is of particular concern to some of the children within this group.
4. Safety in water play is of special concern to the epileptic child, who may have an unexpected seizure and loss of consciousness.
5. Diabetic children require immediate availability of orange juice, fruit, or soft drink with added sugar in case of insulin reaction.



CONCLUSIONS



There are a wide variety of special needs that must be planned for in designing the playground. However, despite the wide variance in specific problems, a surprising commonality of needs and possible solutions emerges.

Activities

Multiple levels of activity are needed, from passive games to active sports. Although there may be differing reasons for the activity depending upon the user group, the following types of activities are suggested to meet the recreation requirements of the children in all of the user groups:

1. *A multi-level multi-activity maze (all groups).*
2. *Activities that provide sensory stimulation; textures and tactile play, resilient densities, soft play equipment (especially User Groups II, III, IV, V).*
3. *Play involving body movement - swinging, rocking, sliding, climbing, crawling and jumping (especially User Groups II, III, IV, V).*
4. *Balancing and walking activities (especially User Groups II, III).*

5. *Water play (all groups).*

6. *Sand play (all groups).*

7. *Passive play and interesting rest areas (especially User Groups II, V, VI).*

8. *Grassy areas and nature areas (all groups).*

9. *Modified group sports and other group activities.* Many classic sports can be adapted for play by the disabled child with some change in the physical setup (especially User Groups II, III, IV).

Able-bodied children (User Group I) and those with very similar play needs (User Group VI) will enjoy all of the above activities.

Multiple levels of excitement are needed, from activities that calm through to those that stimulate and excite.

Although facilities for individual, parallel, cooperative, and group play are needed, it is expected that parallel and cooperative play will be the major modes of interaction.

Multiple levels of skill should be planned for. The ideal facility is one that can be used successfully by children of various levels of ability, skill, and agility, and present challenge and fun to each.

Special Considerations

Persons concerned with the special needs of children with disabilities generally have one of two points of view when it comes to the issue of play. One view is that the disabled child needs constant protection and shelter. The other is that the child should be encouraged to act independently. Among the causes of these differing attitudes are the nature of the disability under consideration and the parent's or professional's philosophy, emotional makeup, and judgement based upon years of experience with the disabled child. Both views are valid, and interestingly enough proponents of both points of view support the concept of the integrated playground as presented in this report. It is agreed that *facilities must be designed to allow parental and staff monitoring at fairly close range. However, skillful placement and design can leave the child unaware of the adult's closeness, fostering an illusion of independence.*

For some children, a more closely contained area is necessary for monitoring and safety (especially User Groups II, III).

Safety is of paramount importance. Resilient surfaces and rounded edges on all equipment are mandatory. Falls should be anticipated from all equipment. Grab bars are needed. Handrails, not greater than 3/4 of an inch in diameter, should be provided.

Shading is essential for most groups (especially User Groups II, III, VI).

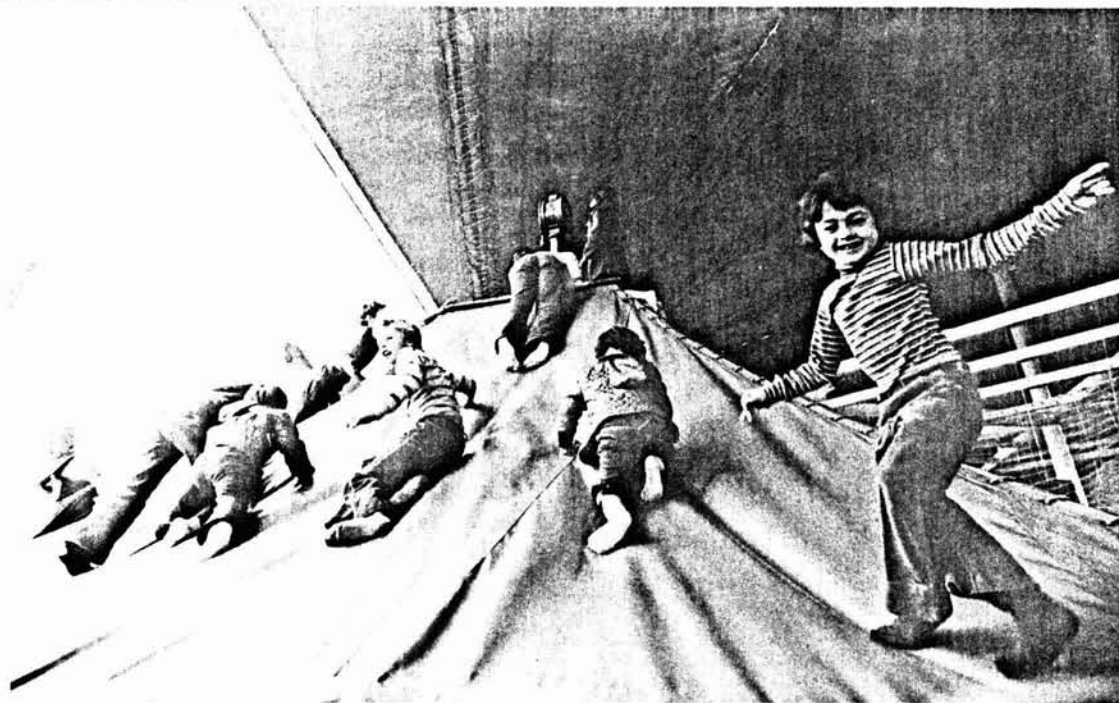
Drinking fountains must be readily accessible for children who have difficulty getting about and for children who dehydrate quickly (User Groups II, III, V, VI).

Special attention has to be given to toilet facilities. Toilets must be usable by the wheelchair-bound. Provision must be made for shielded diaper-changing areas for older children who lack bladder and bowel control. Probably a modified type of bathroom and new type of changing and cleaning area will have to be designed (User Groups II, III, V).

Activities must be planned at multiple physical levels. Children will lie, crawl, sit, sit at varied wheelchair levels, ambulate at varied wheelchair levels, stand, and run.

It is assumed that disabled children will be brought to the playground and supervised by their parents or by the agencies that brought them. However, *it would be desirable to train park personnel to be sensitive to the special needs of the handicapped.* Several agencies volunteered to train park staff along these lines.

A building will be needed in the playground to provide -- in addition to toilet facilities -- storage space, an office for the staff, and a private area for children who require rest or medical attention. The first aid area should have a direct telephone line to a nearby emergency facility, to provide for quick consultation if necessary.



SITE ANALYSIS

INTRODUCTION

The desirability and need for a free-play recreational facility to serve the special requirements of children with disabilities is established in the first part of this report. This portion deals with the problems of identifying and evaluating possible sites.

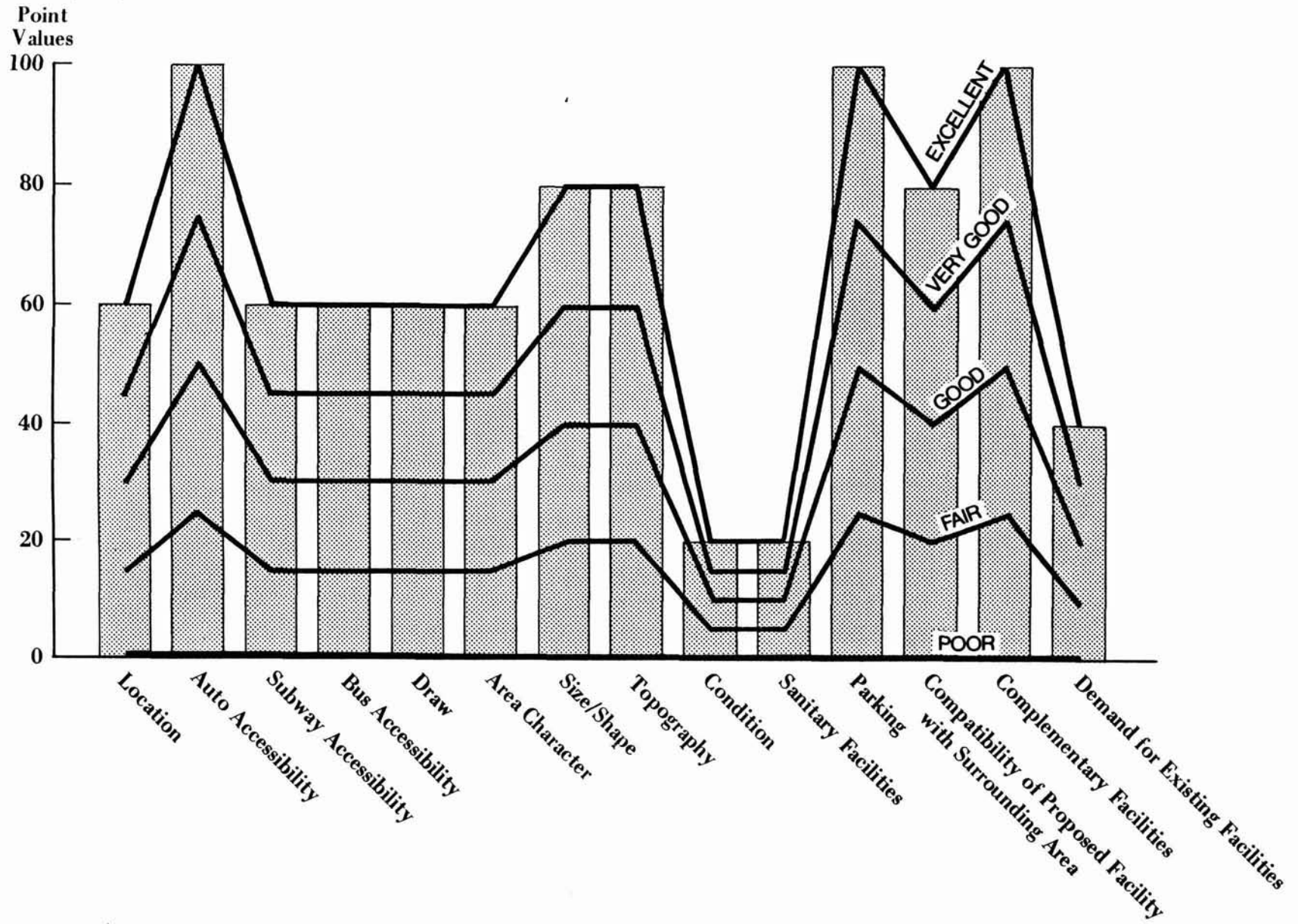
For the present, only a single facility can be contemplated. It is therefore necessary to select a site that will be convenient, ensure the greatest usage, and lend itself to proper development for the intended use. The preferred site was chosen after establishing basic criteria for selecting a site, and then visiting and evaluating a large number of locations.

Summary of Recommendations

The site selection process for this demonstration playground started with a transportation study, which established that the preferred locations are in Bronx Park, Prospect Park, or Flushing Meadow Park. Within these parks, 12 sites were then identified, analyzed, and evaluated against criteria established for this unique project. These criteria are location; accessibility; availability of parking; compatibility with the surrounding park area and with the adjacent community; availability of complementary activities; attractiveness, or "draw," of the existing park; present condition of the site; its size, shape, and topography; demand for facilities now on the site; and availability of sanitary facilities.

Each of the 12 sites was rated according to a point system, in terms of its ability to fulfill each of the criteria. (For a description of the point system, see the section following - Criteria and Point Value System.) One site -- 3B, in Flushing Meadow Park -- posted a score of 745, considerably higher than the scores for the other sites. It is a gently sloping grassy area adjacent to the Children's Farm, the Carousel, and the Zoo, and relatively near the Hall of Science Museum. It scores very high in all characteristics considered to be of prime importance -- accessibility, parking, and availability of complementary activities. Site 3A, also in Flushing Meadow Park, placed second with a total point score of 685. The higher rating for Site 3B is due to the more convenient location of parking. In conclusion, it is recommended that the site for the demonstration playground be located in Flushing Meadow Park on Site 3B.

SITE SELECTION CRITERIA



CRITERIA & POINT VALUE SYSTEM

It is recognized that with the many criteria to be considered and the variables in site characteristics, it is difficult to arrive at an objective evaluation of a site and then compare it to other sites. For this reason, a set of standard values and a point scoring system is used. It is purposely arranged into broad categories and approximate values because it was felt that further refinement would not necessarily establish with certainty the superiority of one location over another. Where scores are close, selection should be made on the basis of more detailed analysis.

Methodology

The criteria are ordered into groups that correspond generally to location, site characteristics, and surrounding area. In "Site Descriptions and Evaluations," alongside each criterion for a site, there is a description of the particular characteristic that, in turn, establishes a basis for the evaluation.

The chart "Point Values - Site Selection Criteria" shows each criterion rated in relation to all other criteria. Those considered most important are given the maximum value of 100, and those considered less important receive lesser values. Evaluations are established as "excellent," "very good," "good," "fair," and "poor." Point scores are assigned by dividing the maximum value of a criterion into four equal parts, with poor equal to zero, fair equal to one-quarter the maximum value,

good equal to one-half the maximum value, and so forth. The verbal evaluations are then assigned the appropriate numerical values, and the numbers are totalled to produce the score for the sites. The results of this analysis are shown on the chart "Summary Comparison of Sites."

Ranking of Criteria

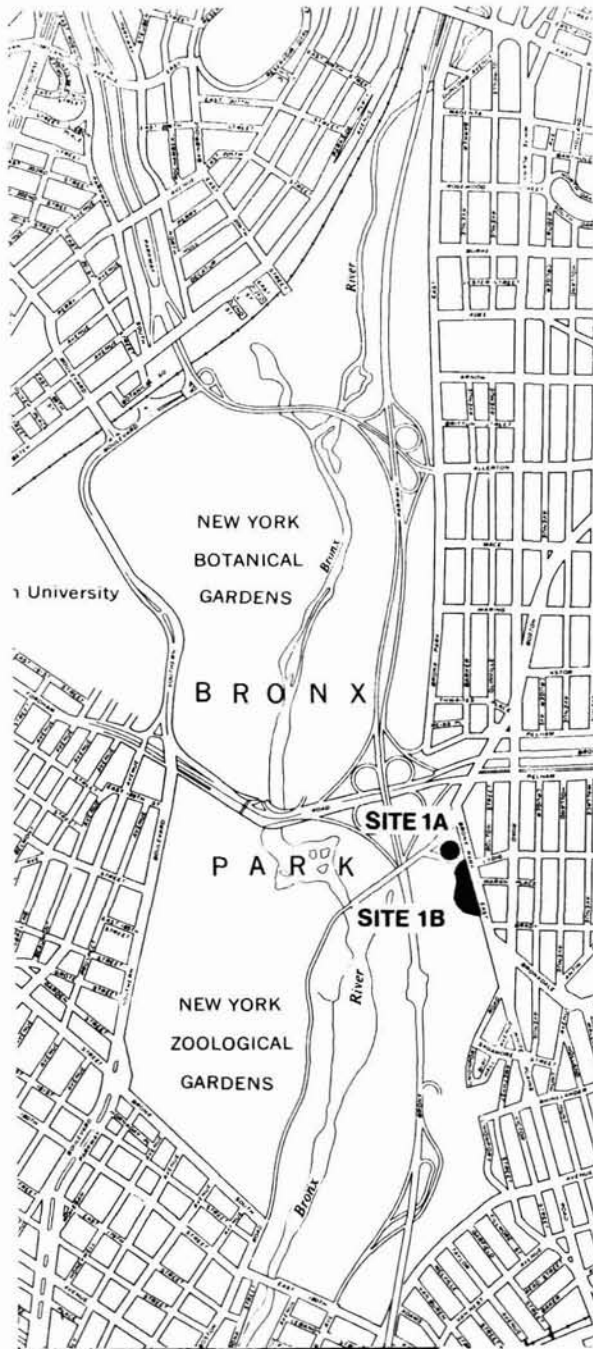
It is expected that children with limited physical capabilities and mobility will be coming to the playground with members of their family or friends or in larger groups. The principal modes of transportation are expected to be private car and special bus. Subways and public buses are expected to be used to a much lesser extent. The playground will have citywide appeal, and so it is expected that many families will be coming from some distance and staying the day. The facility will have greater attraction if there are nearby activities for all the members of the family. In view of the above considerations, the major criteria in evaluating a site are felt to be accessibility, parking, and complementary activities.

Second in importance are compatibility with surrounding area, site size and shape, and topography. One acre is considered the minimum area acceptable. Although a flat site presents fewer problems, topography that has gentle slopes and easy grades is considered as having interesting possibilities for imaginative development. Existing trees on a site are considered desirable.

Next in ranking of criteria are geographic location, "draw," and compatibility with the surrounding park and the community. Geographic location is not considered nearly so important as accessibility. However, it has significance in that given equal accessibility, a central location is more desirable. "Draw" is the ability to attract a large number of people from the widest area.

In some instances, the proposed location is an existing playground. In such cases it is assumed that the new facility would be able to serve those using the present facility as well as handicapped and able-bodied children from around the city. For this reason, the demand for the existing facility is considered of lesser importance.

Lowest in the classification of criteria are the present condition of the site and availability of sanitary facilities. The basis for this ranking is the expectation that any shortcomings in these categories can be remedied. A site in poor condition is rated higher than one in good condition because it is more logical and probably less costly to replace a poor facility than a good one. The convenience and necessity of sanitary facilities at a playground to be used by disabled children is not to be construed as being considered unimportant because it is ranked in the lowest classification of criteria. Since sanitary facilities will have to be specially adapted to meet the needs of the handicapped even an existing facility will require substantial alteration.



SITE DESCRIPTIONS AND EVALUATIONS

Site 1A At Bronx Park, south of Boston Road and west of Bronx Park East. Existing playground, .58 acre, circular.

	DESCRIPTION	EVALUATION
LOCATION	Near the geographic center of the Bronx.	Poor. Too far from other boroughs.
ACCESSIBILITY		
Automobile	Bronx River Parkway and Pelham Parkway are adjacent to site.	Excellent. Readily accessible from arterial highways.
Subway	IRT West Side and IRT East Side stop approx. two blocks from site.	Very good. Good subway transportation available.
Bus	BX 7, BX 12, BX 13 and BX 28 stop adjacent to or approx. two blocks from site.	Very good. Good bus transportation available.
DRAW	Regional park and recreation area.	Good. A separate area near Bronx Zoo. Has wide appeal and attracts people from all boroughs.
AREA CHARACTER	Regional park, mostly middle and lower middle class adjacent to park.	Fair. In a visually open & accessible area. Community may object to losing present facility.
SIZE/SHAPE	.58 acre, circular.	Poor. Too small.
TOPOGRAPHY	Flat, paved.	Good. No topographic constraints.
CONDITION	Existing playground in good condition. Facilities available are: swings, shower, and jungle gym.	Poor. Would result in the elimination of an existing operational facility.
SANITARY FACILITIES	Existing comfort station adjacent to site.	Very good. Sanitary facilities available adjacent to site.

PARKING	Parking available across Bronx Park East approx. 200' from site. Parking also available across Bronx River Parkway (approx. 600' from site, through underpass).	Very good. Parking available nearby.	AREA CHARACTER	Regional park, mostly middle & lower middle class adjacent to park.	Very good. In a visually open & accessible area. Not tied to any community group.
COMPATIBILITY OF PROPOSED FACILITY WITH SURROUNDING AREA	Functionally similar to existing facilities in the park. Residential area across Bronx Park East.	Very good. Compatible with adjacent recreational activities.	SIZE/SHAPE	2.6 acres, irregular.	Good. Adequate size and shape.
COMPLEMENTARY FACILITIES	Other facilities in immediate area are athletic fields, tennis courts, handball courts. Children's Farm adjacent to Bronx Zoo parking.	Very good. Other recreational activities available nearby.	TOPOGRAPHY	Rough, hilly terrain. Rock outcrop on part of site.	Poor. Difficult for handicapped to use.
DEMAND FOR EXISTING FACILITIES	Considerable demand for existing playground.	Poor. Existing facility required for continued use.	CONDITION	Undeveloped natural area.	Fair. Difficult to develop.
			SANITARY FACILITIES	Existing comfort station adjacent to site.	Very good. Sanitary facilities available adjacent to site.
			PARKING	Parking available across Bronx Park East (approx. 200' from site). Parking also available across Bronx River Parkway (approx. 600' from site, through underpass).	Very good. Parking available nearby.
Site 1B At Bronx Park, south of Boston Road and east of Bronx Park East. Natural area, 2.6 acres.			COMPATIBILITY OF PROPOSED FACILITY WITH SURROUNDING AREA	Functionally similar to existing facilities in the park. Residential area across Bronx Park East.	Very good. Compatible with adjacent recreational activities.
LOCATION	Near the geographic center of the Bronx.	Poor. Too far from other boroughs.	COMPLEMENTARY ACTIVITIES	Other facilities in immediate area are athletic fields, tennis courts, handball courts, and existing playground. Children's Farm adjacent to Bronx Zoo parking.	Very good. Other recreational activities available nearby.
ACCESSIBILITY			DEMAND FOR EXISTING FACILITIES	Natural area. Not presently used.	Very good. No conflicting requirements to prevent development.
Automobile	Bronx River Parkway and Pelham Parkway are adjacent to site.	Excellent. Readily accessible from arterial highways.			
Subway	IRT West Side and IRT East Side stop approx. two blocks from site.	Very good. Good subway transportation available.			
Bus	BX 7, BX 12, BX 13 and BX 28 stop adjacent to or approx. two blocks from site.	Very good. Good bus transportation available.			
DRAW	Regional park and recreation area.	Good. A separate area near Bronx Park Zoo. Has wide appeal and attracts people from all boroughs.			



Site 2A At Prospect Park, north of Lincoln Road and west of Ocean Avenue. Existing playground. .4 acre.

	DESCRIPTION	EVALUATION
LOCATION	Near the center of Brooklyn.	Fair. Distant from the Bronx and northeastern Queens. Convenient to Manhattan and Staten Island.
ACCESSIBILITY		
Automobile	Prospect Expressway ends approx. 1 - 1/2 miles from site. Eastern Parkway is approx. 3/4 mile, and Flatbush Avenue is four blocks from site. Borders on Ocean Avenue and Lincoln Road major collector streets.	Fair. No direct access from major arterial highways.
Subway	IND and BMT stop within four blocks. IRT stops within eight blocks.	Very good. Good subway transportation available.
Bus	B 49 and B 33 stop adjacent to playground. B 41 stops approx. two blocks from site.	Very good. Bus transportation available.
DRAW	Regional park and recreation area.	Excellent. Has wide appeal and attracts people from all boroughs.
AREA CHARACTER	Regional park. Racially mixed, lower middle and middle class area to the east of park.	Poor. Area separated by roads. Community may object to losing present facility.
SIZE/SHAPE	.4 acre, semicircular.	Poor. Too small.
TOPOGRAPHY	Flat, paved.	Good. No topographic constraints.
CONDITION	Existing playground in fair condition. Facilities available are: swings, shower basin, slides, seesaws, jungle gym and sand pit.	Poor. Would result in the elimination of an existing operational facility.

SANITARY FACILITIES	Existing comfort station adjacent to site.	Very good. Sanitary facilities available adjacent to site.	Subway	IND and BMT stop within four blocks. IRT stops within eight blocks.	Very good. Good subway transportation available.
PARKING	Parking available across East Lake Drive and Lincoln Road approx. 1,000' from site. Intervening vehicular traffic.	Fair. Parking is inconvenient and requires road crossings by pedestrians.	Bus	B 49 and B 33 stop adjacent to playground. B 41 stops approx. two blocks from site.	Very good. Bus transportation available.
COMPATIBILITY OF PROPOSED FACILITY WITH SURROUNDING AREA	Functionally similar to existing facilities in park. Residential area across Ocean Avenue.	Fair. Compatible with park activities, but it is not contiguous to most of them. Limited relationship to adjacent residential area.	DRAW	Regional park and recreation area.	Excellent. Has wide appeal and attracts people from all boroughs.
COMPLEMENTARY FACILITIES	Other facilities in the park are zoo, lake, bicycle path and existing playground.	Good. Other recreational activities, except for existing playground, are not contiguous to site.	AREA CHARACTER	Regional park, neutral character. Racially mixed, lower middle and middle class area to the east of park.	Very good. In a visually open and accessible area. Community probably not "possessive" of this area.
DEMAND FOR EXISTING FACILITIES	There is light demand for the existing playground.	Good. Limited demand for existing facility.	SIZE/SHAPE	Two acres, nearly rectangular.	Very good. Good size and configuration.
			TOPOGRAPHY	Flat, with some variation in grade.	Excellent. Optimum topographic conditions.
			CONDITION	Open natural area, with good existing trees.	Very good. No destruction of existing facility necessary.
Site 2B At Prospect Park, south of Lincoln Road and west of Ocean Avenue. Open natural area, two acres.					
LOCATION	Near the center of Brooklyn.	Fair. Distant from the Bronx and northeastern Queens. Convenient to Manhattan and Staten Island.	SANITARY FACILITIES	Existing comfort station available at Site 2A approx. 100' from site. Intervening vehicular traffic.	Fair. Sanitary facilities available nearby, but require crossing of busy signal controlled intersection.
ACCESSIBILITY			PARKING	Parking available across East Lake Drive, approx. 600' from site. Intervening vehicular traffic.	Fair. Parking is inconvenient and requires road crossing by pedestrians.
Automobile	Prospect Expressway ends approx. 1 - 1/2 miles from site. Eastern Parkway is approx. 3/4 mile and Flatbush Avenue is four blocks from site. Borders on Ocean Avenue and Lincoln Road, major collector streets.	Fair. No direct access from major arterial highways.	COMPATIBILITY OF PROPOSED FACILITY WITH SURROUNDING AREA	Functionally similar to existing facilities in park. Residential area across Ocean Avenue.	Fair. Compatible to park activities, but it is not contiguous to most of them. Limited relationship to adjacent residential area.

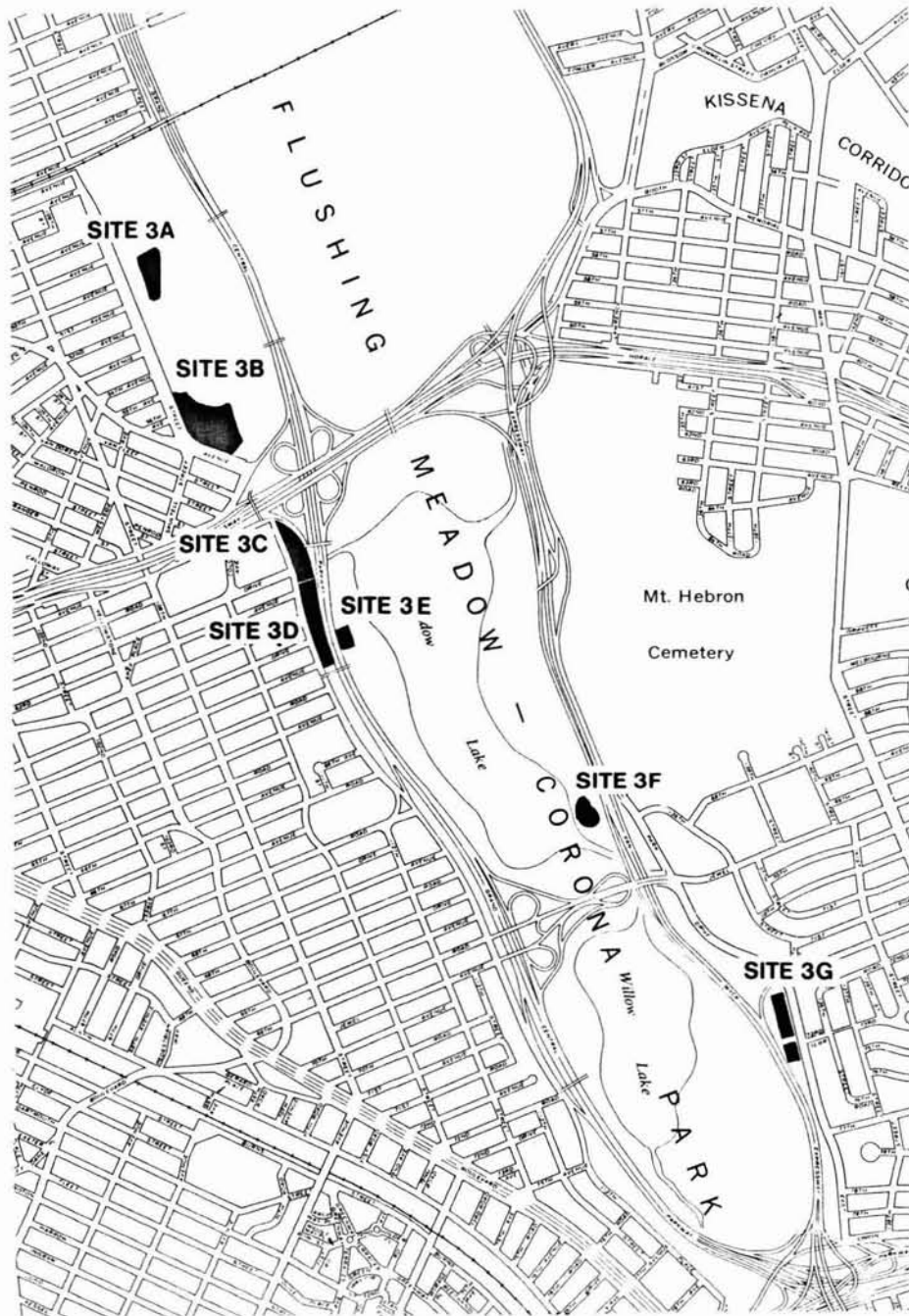
COMPLEMENTARY FACILITIES	Other facilities in the park are zoo, lake, bicycle path and existing playground.	Good. Other recreational activities, except for existing playground, are not contiguous to site.
DEMAND FOR EXISTING FACILITIES	Natural area, not presently used.	Very good. No conflicting requirements to prevent development.

AREA CHARACTER	Regional park, neutral character. Racially mixed, lower middle class area to the east of park.	Poor. A visually separate area. Community is probably very "possessive" of this adventure playground.
SIZE/SHAPE	.4 acre, irregular.	Poor. Too small.
TOPOGRAPHY	Flat, paved.	Good. No topographic constraints.

Site 2C At Prospect Park, south of Lincoln Road and west of Ocean Avenue. Existing playground, .4 acre.

	DESCRIPTION	EVALUATION
LOCATION	Near the center of Brooklyn.	Fair. Distant from the Bronx and northeastern Queens. Convenient to Manhattan and Staten Island.
ACCESSIBILITY		
Automobile	Prospect Expressway ends approx. 1 - 1/2 miles from site. Eastern Parkway is approx. 3/4 mile, and Flatbush Avenue four blocks from site. Borders on Ocean Avenue and Lincoln Road, major collector streets.	Fair. No direct access from major arterial highways.
Subway	IND and BMT stop within four blocks. IRT stops within eight blocks.	Very good. Good subway transportation available.
Bus	B 49 and B 33 stop adjacent to playground. B 41 stops approx. two blocks from site.	Very good. Bus transportation available.
DRAW	Regional park and recreation area.	Excellent. Has wide appeal and attracts people from all boroughs.

CONDITION	Existing playground, recently constructed. Existing trees. Facilities available are playhouse, swings, tot tables, sand pit with wood climber.	Poor. Would result in the elimination of a new, operational facility.
SANITARY FACILITIES	Existing comfort station at site 2A, approx. 650' from site. Intervening vehicular traffic.	Fair. Sanitary facilities available nearby, but require crossing of busy signal controlled intersection.
PARKING	Parking available across East Lake Drive, approx. 350' from site.	Fair. Parking is inconvenient and requires road crossing by pedestrians.
COMPATIBILITY OF PROPOSED FACILITY WITH SURROUNDING AREA	Functionally similar to existing facilities in park. Residential area across Ocean Avenue	Fair. Compatible to park activities but it is not contiguous to most of them. Limited relationship to adjacent residential area.
COMPLEMENTARY FACILITIES	Other facilities in the park are zoo, lake, bicycle path and existing playground.	Good. Other recreational activities, except for existing playground, are not contiguous to site.
DEMAND FOR EXISTING FACILITIES	Existing playground is well used by local residents.	Poor. Serious conflicting requirement for existing recreational use.



Site 3A At Flushing Meadows Park, north of Terrace On The Park, west of the Zoo. Natural area, 2.5 acres.

	DESCRIPTION	EVALUATION
LOCATION	Near geographic center of Brooklyn, Queens, Manhattan and the Bronx.	Very good. Centrally located, except in relation to Staten Island.
ACCESSIBILITY		
Automobile	Grand Central Parkway, Long Island Expressway and Van Wyck Expressway are close to site.	Excellent. Readily accessible from arterial highways.
Subway	IRT Flushing line stops approx. nine blocks from site.	Poor. Too far from subway link
Bus	Q 23 stops approx. two blocks from site. Q 48 stops approx. nine blocks from site.	Fair. Local bus routes, serving small, low density areas.
DRAW	Regional park and recreation area.	Excellent. Has wide appeal and attracts people from all boroughs.
AREA CHARACTER	Regional park. Neutral character.	Excellent. A visually open and accessible area. Not tied to any community group.
SIZE/SHAPE	2.5 acres, nearly rectangular.	Very good. Good size and configuration.
TOPOGRAPHY	Flat, neutral area.	Excellent. Optimum topographic conditions.
CONDITION	Open natural area. Good existing trees.	Very good. No destruction of existing facility necessary.
SANITARY FACILITIES	Existing comfort station in zoo approx. 850' from site. No intervening vehicular traffic.	Fair. Sanitary facilities available at some distance.

PARKING	Parking available approx. 960' from site. Possible to provide a new parking facility approx. 200' from site. No intervening vehicular traffic.	Fair. Parking facilities available nearby. Possible additional site available.
COMPATIBILITY OF PROPOSED FACILITY WITH SURROUNDING AREA	Functionally similar to existing facilities.	Excellent. Compatible with existing children's recreational activities.
COMPLEMENTARY ACTIVITIES	Other facilities in immediate area are zoo, Hall of Science, children's farm, athletic fields.	Excellent. Other recreational activities available adjacent and near to site.
DEMAND FOR EXISTING FACILITIES	No facility presently existing on site.	Excellent. No conflicting requirements to prevent development.

DRAW	Regional park and recreation area.	Excellent. Has wide appeal and attracts people from all boroughs.
AREA CHARACTER	Regional park. Neutral character.	Excellent. A visually open and accessible area. Not tied to any community group.
SIZE/SHAPE	4.27 acres, irregular.	Very good. Very good size and configuration.
TOPOGRAPHY	Slightly sloping and rolling terrain rising approximately 8' in elevation from east to west.	Very good. Favorable topographic conditions.
CONDITION	Open natural area. Some existing small trees.	Very good. No destruction of existing facility necessary.

Site 3B At Flushing Meadows Park, south of Terrace On The Park and the Children's Farm. Natural area, 4.27 acres bordering on 111 St. and Corona Avenue.

	DESCRIPTION	EVALUATION
LOCATION	Near geographic center of Brooklyn, Queens, Manhattan and the Bronx.	Very good. Centrally located, except in relation to Staten Island.
ACCESSIBILITY		
Automobile	Grand Central Parkway, Long Island Expressway and Van Wyck Expressway are close to site.	Excellent. Readily accessible from arterial highways.
Subway	IRT Flushing line stops approximately 15 blocks from site.	Poor. Too far to walk from subway.
Bus	Q 23 stops approx. two blocks from site. Q 48 stops approx. 15 blocks from site. B 58 stops within one block from site.	Fair. Two bus routes pass nearby but do not serve a large area of the city.

SANITARY FACILITIES	Existing (nonoperational) comfort station in parking area approx. 480' from site. Existing comfort station in zoo area approx. 2,500' from site.	Good. Sanitary facilities available nearby.
PARKING	Public parking available adjacent to site. No intervening vehicular traffic.	Excellent. Parking available nearby.
COMPATIBILITY OF PROPOSED FACILITY WITH SURROUNDING AREA	Functionally similar to existing facilities.	Excellent. Compatible with existing children's recreational activities.
COMPLEMENTARY ACTIVITIES	Other facilities in immediate area are zoo, Hall of Science, children's farm, athletic fields.	Excellent. Other recreational activities available adjacent and near to site.

DEMAND FOR EXISTING FACILITIES	No facility presently existing on site.	Excellent. No conflicting requirements to prevent development.	Subway	IRT Flushing line stops approx. 20 blocks from site.	Poor. Too far to walk, and also requires cross-over of L.I. Expressway on pedestrian bridge.
			Bus	Q 23 stops approx. 2 blocks from site. Q 48 stops approx. 20 blocks from site.	Poor. Local bus routes serving small, low density areas.
			DRAW	Neighborhood park.	Poor. Has no regional draw. Attracts local residents only
			AREA CHARACTER	Middle class, evenly divided between older families and families with younger children.	Poor. In a residential neighborhood. Community would strongly oppose traffic this facility would introduce.
			SIZE/SHAPE	2.0 acres, rectangular, long and narrow.	Fair. Adequate size for redevelopment.
			TOPOGRAPHY	Flat, paved.	Good. No topographic constraints.
			CONDITION	Existing playground in fair condition. Facilities available are soft ball diamond, paddle ball courts, slides, seesaws, jungle gym and swings.	Fair. Equipment is in fair condition and usable, can be readily removed or re-located. No serious obstacles to conversion.
Site 3C	At southwest corner of intersection of Long Island Expressway and Grand Central Parkway. Existing neighborhood playground, two acres.				
LOCATION	Near geographic center of Brooklyn, Queens, Manhattan and the Bronx.	Very good. Centrally located, except in relation to Staten Island.	SANITARY FACILITIES	Existing comfort station on site.	Excellent. Sanitary facilities available on site.
ACCESSIBILITY			PARKING	Limited street parking only.	Poor. Insufficient and inadequate parking facilities.
Automobile	Grand Central Parkway, Long Island Expressway and Van Wyck Expressway are close to site.	Excellent. Readily accessible from arterial highways.	COMPATIBILITY OF PROPOSED FACILITY WITH SURROUNDING AREA	Residential area to the west, Grand Central Parkway to the east and north.	Poor. Noise and fumes from adjacent arterial highways are objectionable.

COMPLEMENTARY ACTIVITIES	None easily accessible in immediate area. Flushing Meadows Lake and athletic fields across Grand Central Parkway, accessible by way of a pedestrian bridge.	Poor. No easily accessible complementary activities.	AREA CHARACTER	Middle class, evenly divided between older families and families with younger children.	Poor. In a residential neighborhood. Community would strongly oppose traffic the facility would introduce.
DEMAND FOR EXISTING FACILITIES	Considerable demand for playground by local residents. High level of usage afternoons and weekends.	Poor. Existing facility required for use by local residents.	SIZE/SHAPE	2 acres, rectangular.	Good. Adequate size and shape. Limited by existing leaching field on part of area, adjacent to existing playground.
Site 3D Near southwest corner of intersection of Long Island Expressway and Grand Central Parkway. Directly south of Site C. Open natural area, two acres.			TOPOGRAPHY	Flat, natural area.	Very good. No topographic constraints.
	DESCRIPTION	EVALUATION	CONDITION	Open, natural area with small trees. Leaching field covering part of the area.	Fair. Leaching field restricts use of the area.
LOCATION	Near geographic center of Brooklyn, Queens, Manhattan and the Bronx.	Very good. Centrally located, except in relation to Staten Island.	SANITARY FACILITIES	Comfort stations available at Site C, approx. 250' away. No intervening vehicular traffic.	Good. Sanitary facilities available nearby.
ACCESSIBILITY			PARKING	Limited street parking only.	Poor. Insufficient and inadequate parking facilities.
Automobile	Grand Central Parkway, Long Island Expressway and Van Wyck Expressway are close to site.	Excellent. Readily accessible from arterial highways.	COMPATIBILITY OF PROPOSED FACILITY WITH SURROUNDING AREA	Residential buildings to the west, Grand Central Parkway to the east. Existing neighborhood playground to the north.	Fair. Compatible with existing playground, but noise and fumes from arterial highway are objectionable.
Subway	IRT Flushing line stops approx. 20 blocks from site.	Poor. Too far to walk, and also requires crossover of Long Island Expressway on pedestrian bridge.	COMPLEMENTARY ACTIVITIES	Existing neighborhood playground adjacent to site. Flushing Meadows Lake and athletic field across Grand Central Parkway accessible by way of pedestrian bridge.	Poor. Main complementary activities not easily accessible.
Bus	Q 23 stops approx. 2 blocks from site. Q 48 stops approx. 20 blocks from site.	Poor. Local bus routes serving small, low density areas.	DEMAND FOR EXISTING FACILITIES	Open natural area, not presently used.	Very good. No conflicting requirements (except leaching field) to prevent development.
DRAW	Open, natural area. No current use. Adjacent to neighborhood playground.	Poor. Not presently used. Would not have wide draw when developed.			

Site 3E At 64th Avenue, between Grand Central Parkway and Meadow Lake. Existing playground, .75 acre.

LOCATION Near geographic center of Brooklyn, Queens, Manhattan and the Bronx. Very good. Centrally located, except in relation to Staten Island

ACCESSIBILITY

Automobile Readily accessible from Grand Central Parkway and near the Long Island Expressway and Van Wyck Expressway. Very good. Accessible from arterial highways, but access from L.I. Expressway and Van Wyck Expressway complicated.

Subway None. Poor. No subway transportation available.

Bus Q 23 stops approx 3 blocks from site. Poor. Serves small, low density area and requires Grand Central Parkway crossover.

DRAW Regional park and recreation area, but draws mostly local residents. Good. Would have an excellent draw, but it is limited by the difficult pedestrian and automobile access.

AREA CHARACTER Regional park. Neutral character. Excellent. Not tied to any community group.

SIZE/SHAPE .75 acre, rectangular. Fair. Small but adequate.

TOPOGRAPHY Flat, paved. Good. No topographic constraints.

CONDITION Existing playground, in fair condition. Facilities available are softball diamond, paddle ball courts, slides, seesaws, jungle gym and swings. Poor. Would result in the elimination of an existing, operational facility.

SANITARY FACILITIES

Existing comfort station on site.

Excellent. Sanitary facilities available on site.

PARKING

No parking available on site. Parking available approx. 1,650' from site.

Poor. Parking is too far from site.

COMPATIBILITY OF PROPOSED FACILITY WITH SURROUNDING AREA

Functionally similar to existing park facilities.

Very good. Compatible with existing recreational facilities. Noise and fumes from adjacent arterial highway are objectionable.

COMPLEMENTARY ACTIVITIES

Other facilities in immediate area are athletic fields, Meadow Lake and bicycle path.

Very good. Other recreational facilities available adjacent to site.

DEMAND FOR EXISTING FACILITIES

Limited demand because of its proximity to Site C and its physical separation from neighborhood by Grand Central Parkway.

Good. Facility is not intensively used.

Site 3F At 136th Street, between Van Wyck Expressway and Meadow Lake. Existing playground, 1.14 acre.

LOCATION

Near geographic center of Brooklyn, Queens, Manhattan and the Bronx.

Very good. Centrally located, except in relation to Staten Island.

ACCESSIBILITY

Automobile

Readily accessible from Van Wyck Expressway, and near the Grand Central Parkway.

Very good.

Subway

None.

Poor. Inaccessible by subway.

Bus	None.	Poor. Inaccessible by bus.
DRAW	Regional park and recreation area, but draws mostly local residents.	Good. Would have an excellent draw, but is limited by the difficult pedestrian and automobile access.
AREA CHARACTER	Regional park. Neutral character.	Excellent. Not tied to any community group.
SIZE/SHAPE	1.14 acre, irregular.	Good. Adequate size and shape.
TOPOGRAPHY	Flat, paved.	Good. No topographic constraints.
CONDITION	Existing playground, in fair condition, but declining. Facilities available are picnic tables, slides, swings, jungle gym, basketball courts, and spray pool.	Good. Would result in elimination of existing declining facility which is in need of repair and rehabilitation.
SANITARY FACILITIES	Existing comfort station on site.	Excellent. Sanitary facilities available on site.
PARKING	Limited parking available on shoulder of paved road adjacent to site. Parking lot available approx. 2,100' from site.	Poor. Shoulder parking inadequate. Parking lot is too far from site.
COMPATIBILITY OF PROPOSED FACILITY WITH SURROUNDING AREA	Functionally similar to existing park facilities.	Very good. Compatible with existing recreational facilities. Noise and fumes from adjacent arterial highway are objectionable.
COMPLEMENTARY ACTIVITIES	Other facilities in immediate area are model airplane flying, Meadow Lake, athletic fields.	Very good. Other recreational activities available adjacent and near to site.

DEMAND FOR EXISTING FACILITIES	Existing facility is crowded on weekends, but is lightly used during the week.	Fair. Possible conflict with weekend users.
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Site 3G At 73rd Terrace, between Park Drive East and Van Wyck Expressway. Existing playground, one acre.

	DESCRIPTION	EVALUATION
LOCATION	Near geographic center of Brooklyn, Queens, Manhattan and the Bronx.	Very good. Centrally located, except in relation to Staten Island.
ACCESSIBILITY		
Automobile	Readily accessible from Van Wyck Expressway, and near the Grand Central Parkway.	Very good.
Subway	None.	Poor. Inaccessible by subway.
Bus	Q 44 and Q 44VP stop near site.	Good. Accessible by two bus lines.
DRAW	Neighborhood park.	Poor. Does not have a wide draw.
AREA CHARACTER	Upper middle class, evenly divided between older families and families with younger children.	Poor. In a residential neighborhood. Community would strongly oppose traffic this facility would introduce.
SIZE/SHAPE	1 acre, long and narrow, rectangular. Consists of two parts, .67 and .39 acre respectively.	Poor. Each part alone is inadequate. Combining both parts not practical. Shape is restrictive.

TOPOGRAPHY	Each part is flat and paved, but they are separated by path at higher level. Large, depressed wading pool.	Poor. May require change of existing grade to combine the two parts.
CONDITION	Existing playground, in good condition.	Poor. would result elimination of an existing operational facility.
SANITARY FACILITIES	Existing comfort station on site.	Excellent. Sanitary facilities on site.
PARKING	Limited street parking only.	Poor. Insufficient and inadequate parking facilities.
COMPATIBILITY OF PROPOSED FACILITY WITH SURROUNDING AREA	Low density residential area to the east, Van Wyck Expressway to the west	Poor. Noise and fumes from adjacent arterial highway are objectionable.
COMPLEMENTARY ACTIVITIES	None easily accessible.	Poor. No easily accessible complementary activities.
DEMAND FOR EXISTING FACILITIES	Existing facility is inadequately used.	Good. Minimal demand for existing facility.

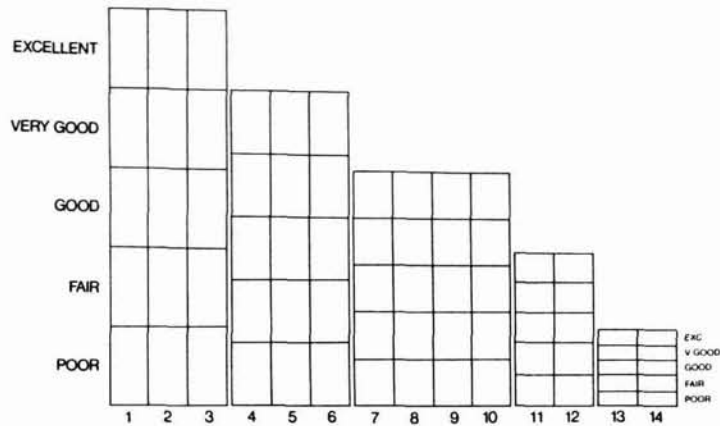
SUMMARY COMPARISON OF SITES

Criteria	1A Bronx Park		1B Bronx Park		2A Prospect Pk.		2B Prospect Pk.		2C Prospect Pk.	
	Evaluation	Pts	Evaluation	Pts	Evaluation	Pts	Evaluation	Pts	Evaluation	Pts
1. Location	Poor	0	Poor	0	Fair	15	Fair	15	Fair	15
2. Accessibility										
a. Auto	Very Good	75	Very Good	75	Fair	25	Fair	25	Fair	25
b. Subway	Very Good	45	Very Good	45	Very Good	45	Very Good	45	Very Good	45
c. Bus	Very Good	45	Very Good	45	Very Good	45	Very Good	45	Very Good	45
3. Draw	Good	30	Good	30	Excellent	60	Excellent	60	Excellent	60
4. Area Character	Fair	15	Very Good	45	Poor	0	Very Good	45	Poor	0
5. Size/Shape	Poor	0	Good	40	Poor	0	Very Good	60	Poor	0
6. Topography	Good	40	Good	40	Good	40	Excellent	80	Good	40
7. Condition	Poor	0	Fair	5	Poor	0	Very Good	15	Poor	0
8. Sanitary Facilities	Very good	15	Very Good	15	Very Good	15	Fair	5	Fair	5
9. Parking	Very Good	75	Very Good	75	Fair	25	Fair	25	Fair	25
10. Compatibility of Prop. Fac. with Surrounding Area	Very Good	60	Very Good	60	Fair	20	Fair	20	Fair	20
11. Complementary Facilities	Very Good	75	Very Good	75	Good	50	Good	50	Good	50
12. Demand for Existing Facilities	Poor	0	Very Good	30	Good	20	Very Good	30	Poor	0
TOTAL POINTS		475		580		360		520		330

3A Flushing Meadows		3B Flushing Meadows		3C Flushing Meadows		3D Flushing Meadows		3E Flushing Meadows		3F Flushing Meadows		3G Flushing Meadows	
Evaluation	Pts	Evaluation	Pts	Evaluation	Pts	Evaluation	Pts	Evaluation	Pts	Evaluation	Pts	Evaluation	Pts
Very Good	45	Very Good	45	Very Good	45	Very Good	45	Very Good	45	Very Good	45	Very Good	45
Excellent	100	Excellent	100	Excellent	100	Excellent	100	Very Good	75	Very Good	75	Very Good	75
Poor	0	Poor	0	Poor	0	Poor	0	Poor	0	Poor	0	Poor	0
Fair	15	Fair	15	Poor	0	Poor	0	Poor	0	Poor	0	Good	30
Excellent	60	Excellent	60	Excellent	60	Poor	0	Good	30	Good	30	Poor	0
Excellent	60	Excellent	60	Poor	0	Poor	0	Excellent	60	Excellent	60	Poor	0
Very Good	60	Very Good	60	Fair	20	Good	40	Fair	20	Good	40	Poor	0
Excellent	80	Very Good	60	Good	40	Very Good	60	Good	40	Good	40	Poor	0
Very Good	15	Very Good	15	Fair	5	Fair	5	Poor	0	Good	10	Poor	0
Fair	5	Good	10	Excellent	20	Good	10	Excellent	20	Excellent	20	Excellent	20
Fair	25	Excellent	100	Poor	0	Poor	0	Poor	0	Poor	0	Poor	0
Excellent	80	Excellent	80	Poor	0	Fair	20	Very Good	60	Very Good	60	Poor	0
Excellent	100	Excellent	100	Poor	0	Poor	0	Very Good	75	Very Good	75	Poor	0
Excellent	40	Excellent	40	Poor	0	Very Good	30	Good	20	Fair	10	Good	20
	685		745		290		310		445		465		190

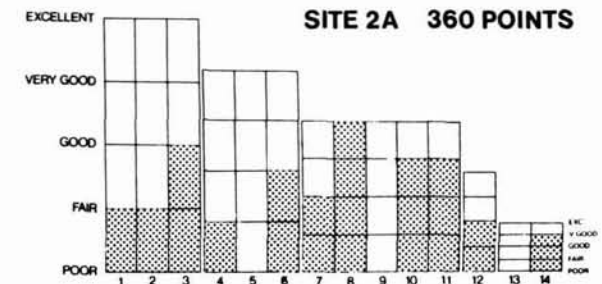
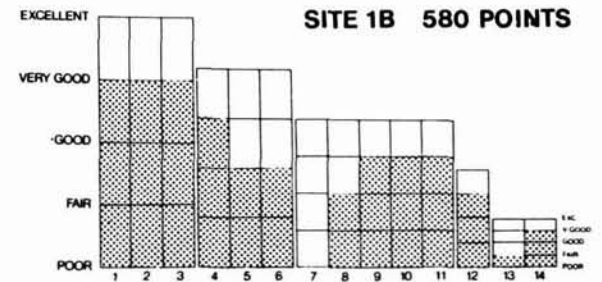
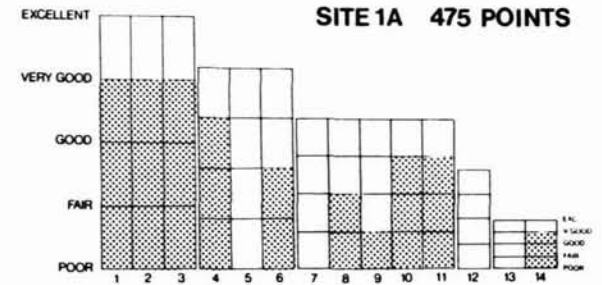
GRAPHIC COMPARISON OF SITES

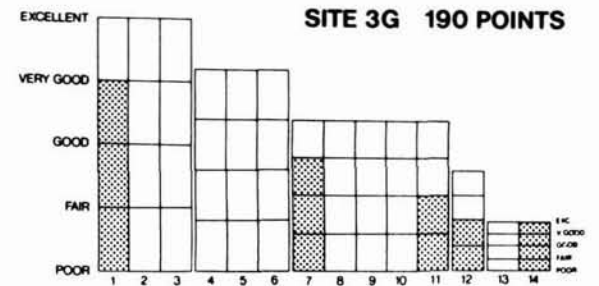
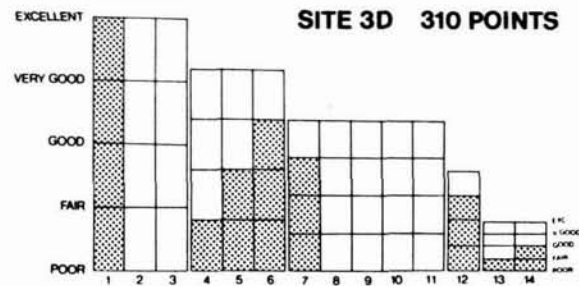
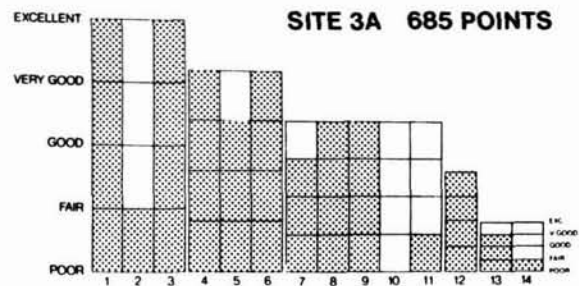
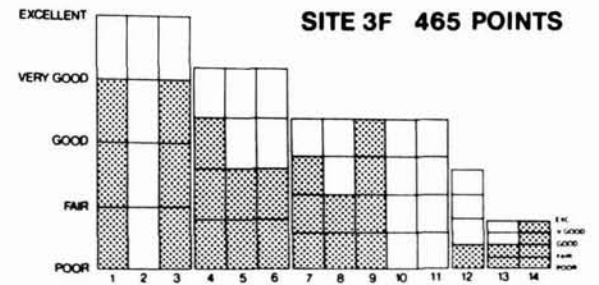
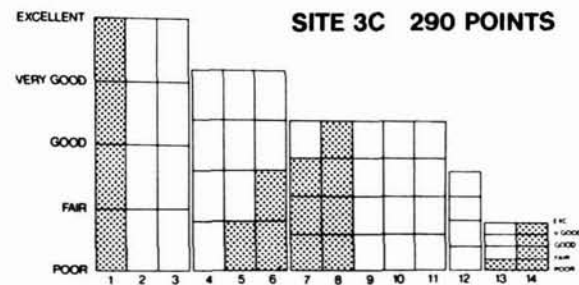
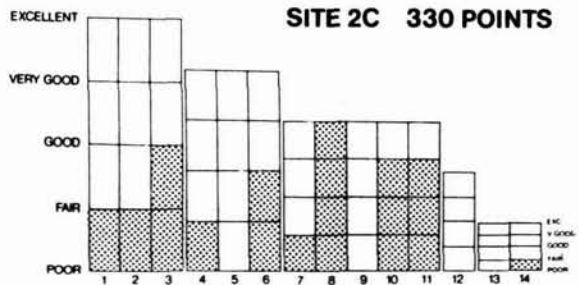
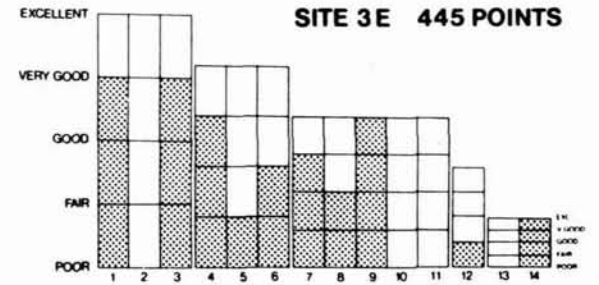
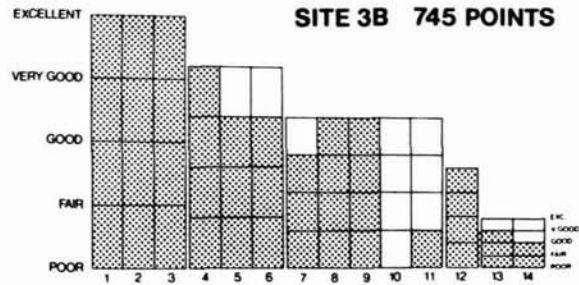
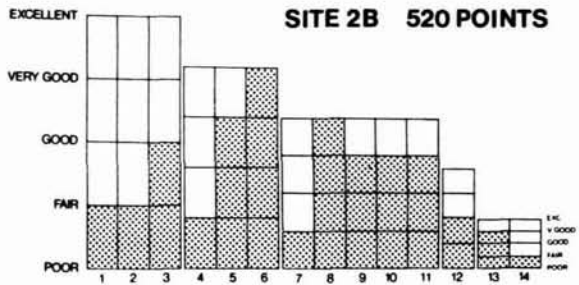
Criteria used in evaluating the sites are shown in descending order of importance.



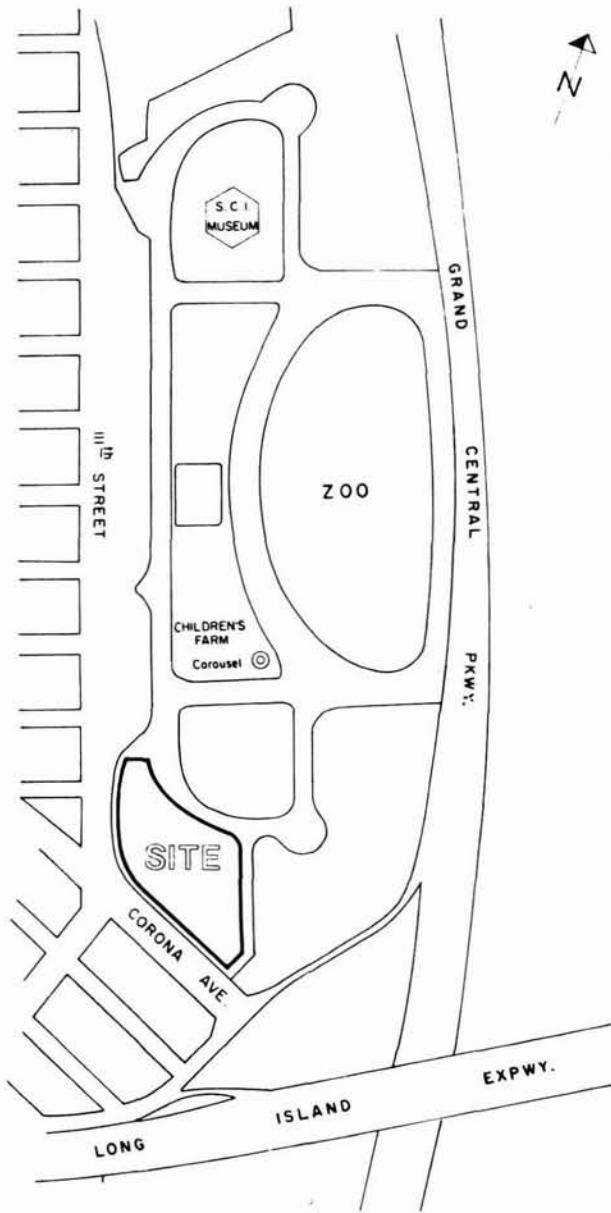
1. Accessibility by Automobile
2. Parking
3. Complementary Facilities
4. Compatibility of Proposed Facility with Surrounding Area
5. Size/Shape
6. Topography
7. Location
8. Draw
9. Area Character
10. Accessibility by Subway
11. Accessibility by Bus
12. Demand for Existing Facilities
13. Condition
14. Sanitary Facilities

The shaded portion of each graph indicates the evaluation of that site. Site 3B ranked highest.





FLUSHING MEADOW PARK



CITY OF NEW YORK
PRESIDENT OF THE BOROUGH OF QUEENS
BOROUGH HALL
KEW GARDENS, N. Y. 11424
OFFICE OF THE PRESIDENT

DONALD R. MANES
PRESIDENT

Claire Shulman
Director
Community Boards of Queens

Community Board No. 4

Steven R. Trimboli
Chairman

December 1st, 1975

Mr. Saul Nimowitz
City Planning Commission
2 Lafayette Street
New York, N.Y. 10007
2nd Floor

Dear Sir:

Community Planning Board #4 unanimously approves of the proposed playground to be constructed at 111th Street and Corona Avenue in Flushing Meadow Park, for handicapped as well as able-bodied children, as presented to us in its initial stages.

Any assistance that the Planning Board can provide will be most happily extended.

Thank you again and we know that it will be a success.

Very truly yours,

Steven R. Trimboli
Steven R. Trimboli
Chairman

cc: Commissioner Joseph Davidson - Dept. of Recreation
Mr. Paul Bonfilio - City Planning Commission
Mr. Anthony Quandamatteo - Parks Committee Chairman
Mrs. Claire Shulman - Director
Ms. Mary Powell - Coordinator

SRT:mk

SITE SELECTED FOR PLAYGROUND

Partial view of site selected for playground in
Flushing Meadow Park. (Site 3B)



APPENDIX A

**PUBLIC AND PRIVATE
ORGANIZATIONS CONSULTED**

1. American Diabetes Association
New York, N.Y.
2. American Heart Association
New York, N.Y.
3. The Arthritis Foundation
New York, N.Y.
4. Association for the Help of
Retarded Children
New York, N.Y.
5. Association for the Advancement
of Blind and Retarded
Jamaica, N.Y.
6. Beaumont School and Camp
Liberty, N.Y.
7. Center for Deafness Research
New York University
New York, N.Y.
8. City of New York Board of Education
Bureau for the Education of the
Physically Handicapped
New York, N.Y.
9. City of New York, Department
of Health
Bureau for Handicapped Children
New York, N.Y.
10. City of New York
Department of Mental Health and
Mental Retardation Services
New York, N.Y.
11. Congress of People with Disabilities
New York, N.Y.
12. Downstate Medical Center
Brooklyn, N.Y.
13. Epilepsy Foundation of America
New York, N.Y.
14. The Hospital for Special Surgery
New York, N.Y.
15. Lexington School for the Deaf
Jackson Heights, N.Y.
16. Muscular Dystrophy Association
New York, N.Y.
17. National Hemophilia Foundation
Metropolitan Chapter
New York, N.Y.
18. New York Diabetes Association
New York, N.Y.
19. New York Institute for Child
Development
New York, N.Y.
20. New York Philanthropic League
New York, N.Y.
21. New York Society for Physical Medicine
New York, N.Y.
22. New York State Association for Brain
Injured Children
New York, N.Y.
23. New York State Department of Mental
Hygiene
Manhattan Development Center
New York, N.Y.
24. New York University Medical Center
Institute of Rehabilitation Medicine
New York, N.Y.
25. Queens New York Association for
Brain Injured Children
Bayside, Queens, N.Y.
26. Roberto Clemente State Park
Program for the Handicapped
Bronx, N.Y.
27. Rockland County Center for the
Physically Handicapped, Inc.
New City, N.Y.
28. Rugby E. Flatbush "Y"
Program for the Mentally Retarded
Brooklyn, N.Y.
29. Spina Bifida Association of Greater
New York
Brooklyn, N.Y.
30. United Cerebral Palsy of Nassau County
St. James, N.Y.
31. United Cerebral Palsy of New York City
New York, N.Y.
32. United Cerebral Palsy of Queens
Jamaica, N.Y.

APPENDIX B

INDIVIDUALS CONSULTED

1. Arnold Marcus S.; Director
City of New York, Board of Education
Bureau for the Education of the
Physically Handicapped
Brooklyn, N.Y.
2. Ashton, Ellen; Recreation Director
Manhattan Developmental Center
New York State Department of
Mental Hygiene
New York, N.Y.
3. Ashkenas, E; Parent, Chairman,
Public School Committee,
Manhattan Division
Association for Help of Retarded
Children
New York, N.Y.
4. Axelson, Ethel; Supervisor, Children's
Service Therapeutic Recreation;
New York University Medical Center,
Institute of Rehabilitation Medicine
New York, N.Y.
5. Bartlett, Robert; Chairman,
Physical Therapy Program
Downstate Medical Center
Brooklyn, N.Y.
6. Balter, William; Physical Education
Therapist
Rugby E. Flatbush "Y"
Brooklyn, N.Y.
7. Bernard, Martha
New York State Association for
Brain Injured Children
New York, N.Y.
8. Bluestone, Seymour; M.D.
President, New York Society for
Physical Medicine
New York, N.Y.
Chairman, Department of Physical
Medicine, Montefiore Hospital
Bronx, N.Y.
9. Born, Dorothy; Coordinator of
Medical Information
American Diabetes Association
New York, N.Y.
10. Burday, Jerry; Ph.D., Executive Director
Beaumont School and Camp
Liberty, N.Y.
11. Carnevali, Marrienne; Parent
Fresh Meadows, N.Y.
12. Crechio, Patricia; Parent
Forest Hills, N.Y.
13. Davis, Irma H.; Director
Therapeutic Recreation
New York University Medical Center
New York, N.Y.
14. Fay, Anna; Chairperson
Congress of People with Disabilities
15. Glass, Nancy; Assistant Director
Children's Services
United Cerebral Palsy of Queens
Jamaica, N.Y.
16. Goldman, Mary; Social Worker
Epilepsy Foundation of America
New York, N.Y.
17. Goodwin, Katzen D., Executive Director
Rockland County Center for the
Physically Handicapped
New City, N.Y.
18. Gordon, Ronnie; Associate Professor
Clinical Rehabilitation Medicine
New York University Medical Center
Institute of Rehabilitation Medicine
New York, N.Y.
19. Gullo, Sal; Director, Day Camp
United Cerebral Palsy of Nassau County
St. James, N.Y.
20. Hansen, Laura; Community Education
Director
Lexington School for the Deaf
Jackson Heights, N.Y.
21. Heffron, Joel S.; Parent
New York, N.Y.
22. Jackson, Jetta H.; Coordinator of
Special School Programs, City of New
York Dept. of Health, Bureau for
Handicapped Children
New York, N.Y.
23. Jenkins, Lillian J.; C.S.W., Senior
Consultant, City of New York,
Department of Mental Health and
Mental Retardation Services
New York, N.Y.
24. Johnson, Shirley; Patient Service
Coordinator
Muscular Dystrophy Association
New York, N.Y.

-
25. Kozusko, Ronald; Public Information
The Arthritis Foundation
New York, N.Y.
26. Levine, Helen
Director, Patient Education
New York Diabetes Association
New York, N.Y.
27. Madover, Howard; Coordinator of
Resource Development
Manhattan Developmental Center
New York State Department of Mental
Hygiene
New York, N.Y.
28. Marx, Marion; R.P.T., Physical Therapist
United Cerebral Palsy of New York, Inc.
New York, N.Y.
29. Maxon, Matthew; Ass't. Director
Division of Education & Programs
American Heart Association
New York, N.Y.
30. McGuire, Andrea, Director, Program for
the Handicapped
Roberto Clemente State Park
Bronx, N.Y.
31. Muller, Keith, Coordinator of
Social Services
Center for Deafness Research
New York University
New York, N.Y.
32. Potsic, Stephen R.; M.D., M.P.H.
Director, City of New York,
Department of Health
Bureau for Handicapped Children
New York, N.Y.
33. Priola, Mary; Parent
Brooklyn, N.Y.
34. Reiss, Philip, P.H.D.; Educational
Consultant
Association for the Advancement of
Blind and Retarded, Inc.
Jamaica, N.Y.
35. Rogoff, Bernard, M.D. Rheumatologist
Hospital for Special Surgery
New York, N.Y.
36. Rosen, Martha; Executive Director
Association for the Advancement of
Blind and Retarded, Inc.
Jamaica, N.Y.
37. Samuel, Susan, Executive Director
New York Philanthropic League
New York, N.Y.
38. Schattner, Regina; Education
Department, Association for Help of
Retarded Children
New York, N.Y.
39. Schwartz, Susan; Parent
Brooklyn, N.Y.
40. Segal, Bernard, Executive Vice-President
National Hemophilia Foundation,
Metropolitan Chapter
New York, N.Y.
41. Shepard, Joan A., Parent
Elmhurst, N.Y.
42. Spindel, Esther; Executive Director
Queens New York Association for
Brain Injured Children
Bayside, Queens, N.Y.
43. Vachss, Maureen; Coordinator of
Parent Project
Center for Deafness Research
New York University
New York, N.Y.
44. Walsh, Richard J.; Chairman of
Board of Trustees
New York Institute for Child
Development, Inc.
New York, N.Y.
45. Watson, Kipp; Secretary
Congress of People with Disabilities
New York, N.Y.
46. Weider, Daniel; Executive Director
United Cerebral Palsy of Queens, Inc.
Jamaica, N.Y.
47. Young, Sarah; Occupational Therapist
Center for Deafness Research
New York University
New York, N.Y.
48. Zimmerman, Gloria; Parent, President of
Spina Bifida Association of Greater N.Y.
Brooklyn, N.Y.
-

APPENDIX C



APPENDIX C
OVERVIEW SURVEY

CITY PLANNING COMMISSION

2 LAFAYETTE STREET, NEW YORK, N.Y. 10007

April 11, 1975

Dear

Re: Demonstration Playground for Integrated Play Amongst Handicapped and Able-Bodied Children

The Mayor has approved funds for the first public park that will be designed for integrating handicapped and able-bodied children. Since this will be the first public facility of its kind it will serve as a demonstrative working model for future park designs.

In order to maximize the most creative approach for this park, we are anticipating to run a design competition. Currently, we are doing some basic research to set up program guidelines and performance standards for the competition. Our schedule calls for completing our research by June 1. A site selection process for the actual park location is being done concurrently.

Listed below are items that we would like to get your reaction to.

USER GROUPS

The user groups would consist of non-institutionalized: blind, deaf, cardiacs, amputees, cerebral palsy, muscular dystrophy, rheumatoid arthritis, diabetics, brain-injured, mentally retarded, as well as able-bodied children. Emotionally disturbed would not be included.

For design purposes, handicaps would be classified by mobility dysfunction into groups consisting of: wheel-chair bound, crutches, braces, walkers, visual impairment, hearing impairment, mental impairment and generally lower physical tolerant groups.

ASSUMPTIONS

1. Special physical adaptation would be necessary for most of the mobility dysfunctions.
2. Less active play would be required for the low tolerance groups such as cardiacs, and diabetics. Shading would be emphasized to prevent dehydration from over exposure.
3. Special monitoring and possibly enclosure would be necessary for the mentally impaired.

CHAIRMAN: JOHN E. ZUCCOTTI / VICE-CHAIRMAN: MARTIN CALLENT
COMMISSIONERS: GERALD R. COLEMAN / ALEXANDER COOPER / GORDON J. DAVIS / SYLVIA DEUTSCH / CHESTER RAPKIN
EXECUTIVE DIRECTOR: CHARLES M. SMITH JR.

-2-

ACTIVITIES

Individual play activities would consist of: water play, sand play, rocking (movement), climbing, and perhaps sound (especially for the blind). Group activities would depend on the site size, but might consist of basketball and track.

Due to the fact that this playground will be a first of its kind, many items are still unknown. In light of this, we would like to have your specific reaction to the following?

A. USER GROUPS

1. Do you agree that the user groups mentioned will use the park?
2. Would you add any group?
3. Would you eliminate any groups?
4. Which handicapped groups do you feel are the largest in N.Y.C.? (Rank them from largest to smallest).
5. Which mobility dysfunction groups do you feel are the largest in N.Y.C.? (Rank them if you could).

B. ASSUMPTIONS

1. Do you agree with the three assumptions?
2. What others would you add?

C. ACTIVITIES

1. Do you agree with the list of activities?
2. Would you add any?
3. Would you eliminate any?

We would appreciate having your reply by April 28, so that we may include your thinking in our program research. If you would like to discuss this further with me, I can be reached at 566-4956/7, 0105.

Sincerely,

David Mayerfeld
Urban Designer
Special Projects for the Handicapped

Association for the Advancement of Blind and Retarded, Inc. (AABR)

[Formerly - ASSOCIATION for the ADVANCEMENT of BLIND CHILDREN, Inc. (AABC)]

184-08 HILLSIDE AVENUE JAMAICA, N.Y. 11432
(212) 823-2222

AABR is a tax exempt association --
contributions and bequests -- tax deductible.

DIRECT SERVICES to the BLIND and SEVERELY RETARDED

RECEIVED

April 21, 1975

April 30, 1975

Mr. David Mayerfeld, Urban Designer
Special Projects for the Handicapped
City Planning Commission
2 Lafayette Street
New York, N.Y. 10007

Dear Mr. Mayerfeld:

Mrs. Rosen asked me to respond to your inquiry concerning the design of a public park designed for integrating handicapped and able-bodied children.

A: USER GROUPS

1. The groups listed are most likely to use the park if its location makes it accessible.
2. & 3. I would neither add nor delete any groups.
4. I would rank the incidence as follows: brain-injured; mentally retarded; cerebral palsied; blind; deaf; other physically handicapped.
5. I would rank the incidence of mobility dysfunctions as follows:
 1. low physical tolerance;
 2. visual impairment;
 3. hearing impairment;
 4. crutches, braces and walkers;
 5. wheel-chair bound.

These estimates of incidence are highly impressionistic. The Department of Health might have hard data in this area.

B. ASSUMPTIONS

1. I agree with the first two assumptions. However, the third assumption could be modified. Within this sort of facility, a special "enclosure"

MARTHA ROSEN
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Assoc. Exec. Dir. &
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Association for the Advancement of Blind and Retarded, Inc. (AABR)

[Formerly - ASSOCIATION for the ADVANCEMENT of BLIND CHILDREN, Inc. (AABC)]

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DIRECT SERVICES to the BLIND and SEVERELY RETARDED

Mr. David Mayerfeld,
City Planning Commission

-2-

April 21, 1975

limited to any one group appears to be contradictory to the aim of integration. Special monitoring should be provided for all users of the park who might need it.

2. I would add the following:

a) Facilities should be designed and publicized in a way which would encourage maximum physical integration and social interaction of handicapped and non-handicapped children.

b) The facility should be designed and publicized in a way that avoids stigmatizing handicapped children.

C. ACTIVITIES

1. The basic list of activities is a good one.
2. I would suggest more areas encouraging group (large and small) activities and multi-sensory exploration (such as the Brooklyn Botanic Gardens "Fragrance Garden").
3. I would not eliminate any of the activities listed.

It is encouraging to know that New York City is planning such an exciting and innovative facility. Please contact AABR if there is anything else we can do to assist in the realization of this project.

Best Wishes for success.

Very truly yours,

Philip Reiss

Philip Reiss, Ph.D.
Educ'l. Cons.

PR:hb

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APPENDIX E

April 15, 1975

Mr. David Meyerfeld
Urban Designer
Special Projects for the Handicapped

Dear Mr. Meyerfeld:

This is in response to your letter of April 11. Let me begin by saying that I very much appreciate the opportunity to present my thoughts on this very special park project. I apologize that I have not kept strictly to the format of your letter. Also, that not being a social service professional, I do not have the information to respond knowledgeably to some of the questions.

I feel that I can best reply from the viewpoint of the parents of a particular handicapped child. My daughter is 7 years old. She was born with the congenital defect, Spina Bifida, or open spine. As is quite common to children with this defect, my daughter ambulates with long leg braces and crutches, but needs a wheelchair if any distance is involved. Because of neurological impairment she cannot be toilet-trained, and so must be diapered, as is also common with this defect. My daughter is a second grade pupil in a Health Unit for the physically handicapped at a Queens public school.

Reflecting on my daughter's needs and preferences, I would make the following observations and suggestions for the proposed park and playground project:

Integration with and equal acceptance with the able-bodied is the undeniable goal in all areas of society. Insofar as safety and most complete utilization of facilities by the handicapped are concerned, however, I wonder if it wouldn't be preferable to *sub* some activities for primary use by all the handicapped groups, not just the "mentally impaired."

From the safety standpoint, I believe that matting will be an essential requirement. Providing shaded areas is an excellent idea. Hopefully there will be grassy areas for resting and perhaps picnic facilities conveniently located. Water fountains that are easy to manipulate and at a level for use by the wheelchair confined are a particular need.

Restroom facilities would also be best designed with special needs in mind. Guard rails would be important, as would be sinks designed to accommodate wheelchairs. Moreover, for those who require it, tables screened for privacy in diaper changing would be a blessing!

It is hoped that the park area will be readily accessible to those who come as families in private care, as well as to groups in school buses, or those who are able to use public transportation, those being a relatively limited number.

As to the activities to be included, in addition to those mentioned in your letter, swings would seem basic, but with back endside supports, with seats wide enough to accommodate larger children in braces, and low enough for children to get into with minimal assistance.

Horseshoes and shuffleboard could be group game possibilities. Play houses, roundabouts and "monkey-bars" are fun and usable. A stage area for puppet shows and other children's entertainments could bring together the able-bodied and handicapped. So too could a zoo farm, but unlike those at Central Park, Flushing Meadow and Bronx Zoo, there would be ramps, paved walkways and sufficient room for wheelchairs to maneuver.

I do hope that some of my observations are pertinent to your research. I appreciate having had the opportunity to offer them. Thank you very much.

Sincerely,
Joan A. Shepard
Joan A. Shepard

APPENDIX F



MUSCULAR DYSTROPHY ASSOCIATION, INC.

Active Member, National Health Council

Please Reply To: 501 MADISON AVENUE, ROOM 904, NEW YORK, N. Y. 10022, (212) 758-7710 479410

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---	---

June 17, 1975

David Mayerfeld
Urban Designer
Special Projects for the Handicapped
City Planning Commission
2 Lafayette Street
New York, New York 10007

Dear Mr. Mayerfeld:

Thank you for asking our advice for the project you are involved in concerning an Integrated-Handicapped Playground. Our Manhattan Chapter Patient and Community Service Committee was pleased that the city is thinking in terms of designing such playgrounds for they feel such playgrounds are desperately needed. Two of the Committee members work with very young handicapped children in the public school system. One is a physical therapist and the other is a teacher. They readily assisted me in answering your questionnaires and are willing to help in any way they can if further information is required.

We thought it might be interesting for you to know the response we received when we asked our little children twelve years of age and under where they would like MDA to take them for their summer outings. They said they wanted to go to Jungle Habitat, on a boat ride, to a picnic out-of-doors, to the park, the botanical gardens, the beach, a baseball park, to an auto race, a trip to Playland in Rye, N.Y., to a puppet show and to a music concert. We have found that they enjoy things that move rapidly, such as airplanes. They identify with powerful cartoon figures such as superman. Their hero is Evil Knivel. They love outer space because they dream that they would be able to walk if they were on the moon.

Attached are our answers to your questionnaires. Please feel free to telephone me should you have any further questions.

Sincerely,
Shirley Johnson
(Miss) Shirley Johnson
Patient Service Coordinator

MDA sponsors basic and applied research into neuromuscular disorders, including the muscular dystrophies, the myositides, amyotrophic lateral sclerosis (ALS) and other spinal muscular atrophies, and provides services to those afflicted by these diseases.

QUESTIONNAIRE #1

- A.
1. Yes, especially if the park is located so that there is no transportation problems.
 2. Unable to answer.
 3. Unable to answer.
 4. Unable to answer.
 5. Unable to answer.
- B.
1. Yes.
 2. Ambulatory MD children may fall frequently. After they have fallen, they find it difficult to get up. Sharp objects and concrete floors should be avoided.
 3. Wheelchairs will tip if they are not properly pushed up sharp inclines, therefore, inclines should be long with slow elevation. Grounds should be fairly smooth so that one of the front wheels won't drop into a crevice tipping the chair.
- C.
1. Yes.
 2. We would like to have tunnels for the children to crawl through, steps for the children to crawl up and down, pull-up bars at wheelchair level, swings with a special harness to hold the children upright, low basketball loop, a maze through which the children could crawl or walk.
 3. No.

QUESTIONNAIRE #2.

1. Enclosed literature describes the manifestations of the diseases MDA covers and which affects children.
2. Unless born very involved so that they are never able to walk, most MD children walk till around 6 years of age at which time they may go into braces to keep from falling. Frequently at the age of 10, they are confined to a wheelchair. Generally speaking, they are unable to grasp too well and many may have limited arm movement. They can usually walk unassisted but have difficulty in getting up.
3. We feel that any type of play involving the senses is good. We like them to develop their visual perception, their hearing and especially their sense of touch. They love to feel animals, leave

2.

flowers, etc. They have a problem in that everything is always running away from them or falling out of their hands. They also enjoy the sense of smell. They love smelling the trees, flowers, and the various odors of mother nature. They love to watch things grow.

4. We have found that our children love to play ball, they love relating to animals, playing in sandboxes, sitting on little plastic animals or on little chairs. They also love water sprinklers and showers.
5. We would like to see little tables that a wheelchair could fit under and have checker boards and games painted right onto the tops so the children could play games. We think little picnic tables for them to eat at would be nice. Also chairs for adults should be located by the tables and chairs for the children. It is sometimes difficult to lift the children out of sandboxes; therefore, if the sandbox could be raised so the wheelchair could fit under it it would solve many problems. Another suggestion may be to have some type of enclosure so the children could be held upright in the sandbox while he plays. This is especially important for the "floppy" child. We also thought that children would love a pendulum type of object to watch and play with. Perhaps the pendulum could draw pictures on paper or in the sand. We would like to see a blackboard-type object for the children to write and draw on. All little children love little houses that they can crawl through and explore.
6. Most of our children can crawl and walk without assistance but need assistance to get up. However, if born with a condition with a great deal of involvement they need assistance to do everything for their muscles are totally weak. With our stronger children, they should be given assistance only when they ask for it. Most people are able to assist MD children. No special training is required in most cases.
7. Our children are only physically weak. In most other ways, they enjoy good health and a normal life.
8. Our children have no special emotional problems. They do find life frustrating because they are dependent and unable to do things for themselves. They relate to normal children well except they are unable to defend themselves if with aggressive children.
9. Surfaces should be soft so that if the child falls he won't hurt himself. Objects with sharp corners or that could hurt a falling child should be avoided. Water fountains should be low for children in wheelchairs.
10. Bathrooms should have no steps, wide doors, low sinks and toilets of varying heights. Commodes on wheels that can be pushed over the toilet is very useful. There should be a diaper room with a table suitable for changing a child. Some of our bigger children need two to take to them to the bathroom.



united cerebral palsy of new york city, inc.

122 east 23rd street/new york, n.y. 10010 / (212) 677-7400

April 17, 1975

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Mr. David Mayerfeld
Urban Designer
Special Projects for the Handicapped
CITY PLANNING COMMISSION
2 Lafayette Street
New York, N.Y. 10007

Dear David:

Thanks for your recent letter about the playground for
handicapped children. My reactions are as follows:

User groups

I agree that the user groups mentioned will probably make
use of the park. I would add spina bifida (meningo-myelocoele)
as another group in the mobility dysfunction category. I
would rank the groups by size as follows: Cerebral Palsy,
spina bifida, rheumatoid arthritis, muscular dystrophy,
and amputees due to birth defects. My grouping order may
not be entirely correct, it is just an educated guess.

Assumptions

Your listed assumptions appear to be correct in my judgement.
I would add another: Playground surfaces must be smooth
enough to avoid skin breakdown of those children who will
be crawling or scooting on their buttocks.

activities

Your list seemed good but incomplete. I would add the
following activity structures.

- a) Swings of assorted sizes, with back & arm supports.

Mr. David Mayerfeld, April 17, 1975, page 2

Activities

- b) Sliding surface with ramp access that has hand rails.
- c) Playhouse structure with several play levels,
one of which should be at the proper height for
easy transfer from wheel chairs. The playhouse levels
should be connected to each other by climbable
structures.
- d) For group activities - volleyball & basketball areas
could be interchangeable. Basketball hoops and
volleyball nets need to have adjustable
height levels.

I'd like to congratulate you on the logical and intelligent
procedures you are following in the planning of this project.
Communicating by letter seems more efficient than most
long-winded meetings, and I admire the way you are pulling
together suggestions from different sources. It is a
pleasure working with you.

Sincerely,

Marion Marx

Marion Marx, F.P.T.
Physical Therapist
United Cerebral Palsy
of New York City, Inc.

MM:MH

Parks, Recreation and Cultural Affairs

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A Playground for all Children

FILE COPY

USER GROUPS AND SITE SELECTION

was conceived and developed within the Special Projects
Unit of the Transportation Division

Saul Nimowitz, Unit Director and Project Director
David Mayerfeld, Research Coordinator
Mona Levine, Project Planner

Site Analysis: Eli Rabineau, Director of Public Facilities
Sam Voyages, Assistant Architect

Editing: William West, Mona Levine

Photography: George de Vincent

Many thanks to all of the persons listed in the appendices who provided invaluable assistance to this project by sharing their special knowledge.

Graphics: Phil Sacks, Director, Stanley Shabronsky,
Barbara Bartlett, Henry Nicholas, Zygmund Apel,
Hedy Klein, Leo Lawrence, Norman Shilepsky,
Vitaly Sorokine, Edward Whitman

Manuscript: Patricia Matthews

We wish to acknowledge the assistance of Larry Allison,
Aaron Block, Barbara Beuhler, Eunice Fiorito, Jonathan Merrill,
Marvin Roth, Elaine Solomon and Rona Ellen Weitz.

Michael J. Pittas suggested the structure of an architectural competition as the best means for designing the playground.



September 1978
HUD-PDR-331-1