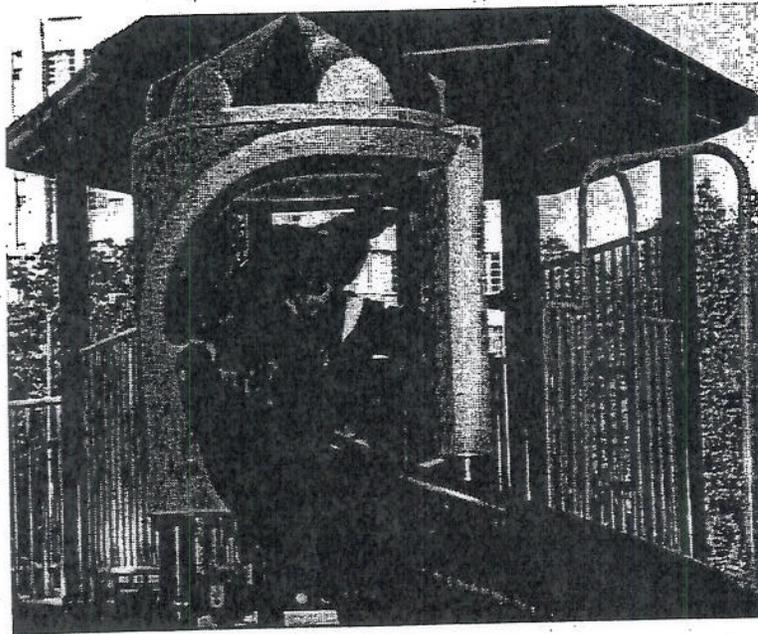


# **J.11 DPR Playground Design Standards and Guidelines for Properties**

# **Playground Design Standards and Guidelines**



**District of Columbia  
Department of Parks and Recreation  
Office of Planning and Design**

December 2003



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## **1.0 Standards and Legislation**

### **1.1 Existing National Guidelines and Standards**

Concerned by the high rate of playground-related injuries throughout the country, the Federal Consumer Product Safety Commission published its first set of playground-safety guidelines in 1981. These Playground and Equipment Guidelines and Standards, detailed in a document titled "A Handbook for Public Playground Safety" (CPSC, 1997), define overall safety on public playgrounds. A technical description of these guidelines was published shortly after by the American Society for Testing and Materials (ASTM) in the Standard Consumer Safety Performance Specifications for Playground Equipment for Public Use (ASTM F1487-01).

Copies of the "Handbook for Public Playground Safety" and of the "Standard Consumer Safety Performance Specifications for Playground Equipment for Public Use" can be obtained from the U.S. Consumer Product Safety Commission (USCPSC) and the American Society for Testing and Materials (ASTM). See Section 8.0 Resources for information on how to contact the USCPSC and the ASTM.

### **1.2 The American with Disabilities Act (ADA)**

The Americans with Disabilities Act (ADA) is a civil rights law that prohibits discrimination on the basis – amongst others – of disability. The law covers newly constructed and renovated public playgrounds and require them to be easily accessible to individuals with disabilities.

The United States Access Board has issued comprehensive guidelines – the Americans with Disabilities Act Accessibility Guidelines (ADAAG) - specifying the minimum level of accessibility required in the construction and renovation of public playgrounds. More information is available on the Access Board's web site ([www.access-board.gov](http://www.access-board.gov)).

### **1.3 Relevant Standards**

Relevant standards include:

- ASTM F1292, Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment.

- ASTM F1487-98 Standard Consumer Safety Performance Specifications for Playground Equipment for Public Use

- ASTM F1951-99 Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment

- ASTM F 2075, Standard Specification or Engineered Wood Fiber for Use as a Playground Safety Surface Under and Around Playground Equipment.

## ADAAG Chapter 15 Recreation Facilities. Section 15.6 Play Areas

Other standards are to be complied with as they apply to a specific project.

### 1.4 Compliance with Legal Requirements

The Playground and Equipment Standards developed by the USCPSC and the ASTM are voluntary recommendations. However, they have become universally considered as the minimum standards for playground safety and are now used by the Department of Justice to judge a playground's safety in court. As for the ADA, "these guidelines are adopted as enforceable standards by the Department of Justice, and all newly constructed and altered play areas covered by the ADA are required to comply" (A Guide to the ADA Accessibility guidelines for Play areas, U.S. Architectural and Transportation Barriers compliance Board, May 2001).

### 1.5 Compliance with DPR Landscaping Standards

New playground construction projects and playground renovation projects should also comply with the new Landscaping Standards established by the *Department of Parks and Recreation*. A copy of these standards and of the "Guide to the DPR Landscaping Standards," developed by *Green Spaces for DC* is available upon request. See Section 8.0 Resources, for information on how to contact these two Agencies.

### 1.6 DPR Playground Guidelines and Standards

In its efforts to provide quality and safe play environments to its children population, the DC Department of Parks and Recreation has also developed a set of Playground Guidelines and Standards based on the USCPSC and the ASTM Playground and Equipment Guidelines and Standards.

The intent of these present Guidelines and Standards is to help community groups and professionals develop and implement new playground construction projects or playground renovation projects on DPR-owned parcels that are better adapted to the specificity of the District's urban and social environment.

The document covers playground design, play equipment, safety surfacing and site management with regards to the available playground and equipment guidelines and standards. It goes without saying that subsequent changes in the ASTM and USCPSC standards should be taken into consideration and integrated to the DPR Playground Standards.

### **1.7 Applicability**

The present Playground Design Standards and Guidelines apply to all new playground construction projects and all playground renovation projects implemented on DPR – owned properties. Existing playgrounds and playgrounds built before the effective date of the Playground Design Standards and Guidelines are not subject to these requirements.

### **1.8 Effective Date**

The DPR Playground Standards and Guidelines shall take effect immediately.

## **2.0 DPR Playground Guidelines and Standards**

The following general points should be considered when designing a playground and choosing play equipment.

### **2.1 Compliance to Existing Standards and Guidelines**

Newly built playgrounds and renovated playgrounds should meet the USCPSC, ASTM requirements, as well as meet the specific standards and guidelines established by the Department of Parks and Recreation.

### **2.2 Accessibility and Integrated Design**

All new playgrounds installed on DPR-owned parcels and all playgrounds renovation projects should fully comply with the guidelines set forth by the American with Disabilities Act (ADA). In order to be compliant, playgrounds should be designed so children with physical disabilities have access to and can use at least 70% of the play activities.

The proposed design should address accessibility to the playground, to the play area, and to the play equipment. Play structures with more than 20 play events must have ramps, while smaller structures need only transfer points onto which children who have restricted mobility can pull themselves. See Section 5.0 Universal Accessibility.

Sensory and developmental disabilities should also be taken into consideration and play opportunities should be offered to children suffering from these disabilities. Parents and guardians with disabilities should also be offered easy access to the playground and the play area.

### **2.3 Existing Site Features and Existing Vegetation**

Efforts should be made to salvage and utilize existing site features. Examples of such features include fences, light standards, site furniture, paths, etc.

Existing vegetation should be preserved unless it is toxic, invasive, or pose a safety problem. No trees should be taken down to accommodate the implementation of the playground unless approved by the Director or his designee. Shrubs can be dug up and all efforts should be made to transplant them on the same site. Compliance to the DPR Landscaping Standards is required when addressing existing vegetation.

### **2.4 Age-appropriate Playground Design**

The DPR Playground Standards recognize two age groups for which a play area can be designed:

Preschoolers (children between 2 and 5 years old); and

School-age children (children between 6 and 12 years old).

These two age groups cannot overlap.

A play area can accommodate only one age group, and the age group for which the play area is designed shall be clearly identified. A playground can offer a play area for preschoolers and one for school-age children as long as the two play areas are easily distinguished from one another. Separation should be physical (a fence, a planting bed, site furniture, etc) but should not pose a tripping hazard.

*Note: At this time, there are no national guidelines that cover playgrounds for children under 2 and over 12. Play areas and play equipment intended for children 2 to 5 years old are not intended to accommodate children under 2 and may not be appropriate for toddlers.*

Play equipment and other play opportunities (such as a sand box) cannot be used as a means to separate two play areas. In addition, care should be taken so that the physical barrier does not become a play opportunity (for example a low wall or a pergola onto which children could be inclined to climb).

## **2.5 Play Opportunities**

Contingent on space availability and budget, a playground should offer a variety of play opportunities in order to fulfill the physical, social, and intellectual needs of children. In addition to physical activities like climbing and swinging, a playground should offer opportunities for fantasy play, exploratory play, and manipulative play. Unstructured open space should also be provided.

Examples of manipulative pieces of equipment include steering wheels, activity panels, binoculars, and levers. Opportunities to wheel toys and play in sandboxes can also be provided. Examples of piece of equipment providing fantasy play experience include windows, counters, and storefront panels. Unstructured open space can simply be an area covered with grass.

## **2.6 Protection from Sun Exposure**

Shelter from the mid-day sun should be provided. Trees should be planted to provide shade, but independent shade structures and equipment are also an appropriate solution if there is not enough space to plant shade trees. Permanent shade structures should be stable, and erected outside the play area. Movable and non-permanent structures are not appropriate in a public playground. Fabric shade canopy are not appropriate for use in an unsupervised public playground. Roofs on a structure are also a way to provide limited shaded areas.

Where engineered wood fibers are used as a safety surfacing material, sun should be provided for part of the day to allow the top layer of the surface to dry and avoid fungi growth due to excess moisture.

All slides, plastic or metal, should be oriented away from the afternoon sun whenever possible.

## 2.7 Site Organization

Circulation patterns are an important organizing element of the playground design. The layout of the play area within the playground and the layout of the play apparatus within the play area will determine the general circulation patterns on the site.

*Site organization.* Accesses to playground, to play equipment, and to site furniture should be laid out so as not to create conflicts between users. For example, a child should not have to pass through a swing set to access different parts of the play area.

*Circulation Patterns.* Moving and rotating play equipment should be located away from high traffic areas. This is especially important for equipment like swing sets. Exit area of slides should also be located away from high traffic areas.

## 2.8 Site Furniture

Site furniture, such as benches and trash receptacles, cannot be installed within the limits of the play area. Lack of space in an existing playground does not justify non-compliance to this requirement.

Site furniture can be installed in the circulation zones located outside the play area, as long as it does not interfere with the circulation of the different users of the playground. A clearance of 6 feet is required between any type of site furniture and the play area.

*Benches.* Sufficient seating opportunities should be provided within the playground area. Seating should be in close proximity to the play area in order to provide as much as possible direct eye contact with a child using the play equipment. Seating should also be planned so as to promote socialization. A distance of at least 6' should be provided between a bench and the limit of the play area. Benches should conform to the DPR Landscaping Standards.

*Trash Receptacles.* At least one trash receptacle should be provided per playground. Trash receptacles should not be installed in close proximity to the benches. Maintenance is also a factor in determining the location of a trash receptacle: it should be readily accessible to the maintenance crews. Trash receptacles should conform to the DPR Landscaping Standards.

*Drinking Fountains.* A drinking fountain can be installed in the vicinity of the playground. Drinking fountains are best installed just outside the limits of the

playground. Only freeze-resistant drinking fountains should be installed. All drinking fountains should conform to the DPR Landscaping Standards.

**Lighting.** It is the policy of the Department of Parks and Recreation not to light its playgrounds at night so as to not promote its use after dark.

**Bicycle Racks.** Bicycle racks can be provided for users of school-age play areas. Choice of bicycle racks should be submitted to the Director or his designee for review and approval. Bicycle racks should be installed outside the limits of the playground.

## **2.9 Fencing, Gates, and Boundaries**

All playgrounds should be clearly delimited and enclosed by means of a physical barrier: a fence, a low wall, or, in certain cases, a hedge. Care should be taken so the physical barrier does not become a play opportunity (for example a low wall onto which children could be inclined to climb). Existing and proposed barrier should not screen any view from outside or within the site.

**Gates.** At least two accesses to the playground should be provided for safety purposes. Gates should be provided at each access although gates are not required for a school-age playground when no direct access from the playground to a sidewalk or street is provided, and when the playground is not located near a major street/highway.

**Fencing.** New proposed fencing is to be black vinyl-coated commercial chain link fence, black wrought iron fence (painted on site), or black ornamental iron fence. A top rail is to be installed on all ornamental and wrought iron fence. Chain link selvage (top and bottom) should be twisted and bent so as to present no sharp edges. Simulated wrought iron fence systems made of aluminum are not appropriate for use in unsupervised public areas. The fence should be of a minimum of 3' in height and of a maximum of 4' in height. 6' high fences will be considered on a case-by-case basis. All fencing should conform to the DPR Landscaping Standards.

**Walls.** Walls may be of poured concrete, masonry, bricks or stones built according to standard construction techniques. Walls can be 3' to 4' in height.

**Hedges.** In some instances, plant material can be used as a physical barrier. Hedges should be kept at a maximum height of 4 feet. Location and size of plants at maturity should not create hiding opportunities or create enclosed areas where illegal activities could take place. Plant materials should conform to the DPR Landscaping Standards.

## 2.10 Vegetation

Landscaping should be an integral part of the overall design of the playground. This includes, whenever possible, the use of trees to provide shade, shrubs and flowerbeds to provide multi-sensory experiences, and grass as one of the three types of surfaces that should be provided as part of the overall play experience.

Toxicity of plant material will ultimately guide the choice of plant material. Toxic plant material may not be installed on any DPR owned parcels. Plants with thorns or prickly leaves should also be avoided. Be sure to prune lower branches of trees to seven feet from the ground to prevent eye injuries. Landscaping of playgrounds should comply with the DPR Landscaping Standards.

## 2.11 Utility Corridors

Playgrounds are not to be implemented under or over power lines. Play structures (and their protective surfacing) are not to be installed over any utility corridor such as gas lines. Miss Utility should be called to locate utility corridors.

## 2.12 Signs

*Warning Signs.* The ASTM Standards require that a warning sign be installed on playgrounds. Signs installed on playgrounds must conform to the playground signs standard as specified in the DPR Sign Standard Manual.

*Age-appropriateness Signs.* The age group for which the play area is designed should be clearly identified by means of a sign indicating the age-appropriate areas. The two age groups recognized by DPR are: 2-5 year olds and 6-12 year olds. Play equipment specifically intended for children 10-12 should be identified in the same manner. Playgrounds should not be intended for children under 2.

*Installation.* Signs should be posted at each access to the playground. Signs can be installed on posts or directly on the fence. Signs should not be installed on gates, or on fence where the vegetation will ultimately conceal them.

## 2.13 Safety Surfaces

Installation of an approved protective surfacing material is required under and around play equipment, within the limits of the fall zones. The only exception to this requirement is for those equipments that require a child to be standing or sitting at ground level during play. Examples of such play equipment are sand boxes, activity panels, play houses and/or any other equipment used for play that has no elevated designated play surface (such as a counter). Activity panels on which a child could *possibly* climb require an adequate protective surface. See Section 4.0 Safety Surfaces.

Except for Unitary Shock Absorbing Material, safety surfaces should be contained by means of a timber or concrete border. See Section 4.4 Containment of Safety Surfacing Material.

## 2.14 Vandalism

*Signs.* Signs should be vandal resistant.

*Fences.* Fences should be open rather than solid, and provide for maximum potential for surveillance.

*Rocks and Stones.* Refer to the DPR Landscaping Standards. Rocks should not be considered as play equipment and should not be intended as such.

*Flat surfaces.* Avoid providing flat surfaces that invite graffiti. It is also hard to remove graffiti from porous surfaces so they should be avoided.

*Supervision.* Sight lines should be kept clear as much as possible to allow adequate supervision. Layout of playground and of play equipment should not create enclosed spaces.

## 3.0 Play Equipment Standards and Guidelines

### 3.1 Compliance to the Standards

All new play equipment installed on DPR playgrounds should meet the USCPSC and ASTM standards and guidelines, as well as meet the specific standards and guidelines established by the Department of Parks and Recreation. A written statement certifying that the play equipment conforms to the U.S.CPSC and ASTM Standards and Guidelines requirements is to be provided prior to its installation. Copies of the correspondence are to be forwarded to the Risk Manager and to the Chief of Maintenance. This requirement also applies to all playground renovation projects.

In addition, all new play equipment installed on DPR playgrounds should be compliant to the American with Disabilities Act. This requirement applies to all playground renovation projects. See Section 5.0 Accessibility.

### 3.2 Manufactured Equipment

Only manufactured equipment backed by a recognized manufacturer's guaranties, warranties and insurances, and that adheres to DPR standards and requirements can be installed on DPR-owned parcels. DPR does not favor any particular manufacturer but products should be approved by DPR Director or his designee before they can be specified for a playground project.

**3.3 Materials.** DPR encourages the use of composite (metal and plastic) and all-metal play equipment. All-molded-plastic play structures such as the ones intended for early childhood are not appropriate for use on DPR playgrounds. Play equipment containing wood components will be considered on a case-by-case basis. Components containing fabric are not to be installed on any DPR playgrounds.

*Metals.* All metallic parts and hardware should be resistant to corrosion.

*Plastics.* Plastic components should be roto-molded low-density polyethylene or high-density compression-molded polyethylene. Other type of plastic will be considered on a case-by-case basis.

*Post-Consumer Recycled Plastics.* Most post-consumer recycled plastic does not have the structural strength of wood or metal. Structural pieces made out of post-consumer recycled plastic timber are not to be used on any play apparatus or play structure. Non-structural components made of post-consumer recycled plastic timber will be considered on a case-by-case basis. Post-consumer recycled plastic roofs are not to be installed on a play structure. Post-consumer recycled plastic benches are not to be installed as part of a new playground construction project or playground renovation project.

*Wood.* All wood used shall be non-arsenic pressure treated. Creosote, pentachlorophenol (PCP) and tributyl tin oxide are not to be used for wooden playground equipment,

borders, or site furniture. All wood should meet the requirements of DPR Landscaping Standards.

### 3.4 Safety Surfaces Requirements

All play apparatus are required to be installed over an approved safety surface. See Section 4.0 Safety Surfaces.

*Exceptions.* Play equipment that requires a child to be standing or sitting at ground level during play is not expected to follow the recommendations for resilient surfacing set forth by the USCPSC. Such equipment includes sand boxes, some activity panels, some play houses and any other equipment that has no elevated designated playing surface or on which a child cannot *possibly* climb. However, they must follow the fall zones and circulation zones clearance requirements.

### 3.5 Height Limitations of Play Equipment

*Platforms.* Platforms height of equipment for pre-school age children should not exceed 4' and platforms height of equipment for school age children should be limited to 6'.

*Slides.* Entrances of slides intended for children 2-5 are to be of a maximum height of 4'. Entrances of slides intended for children 6-12 are to be of a maximum height of 6'. Slides can be installed free standing or attached to a structure. All slides should meet the recommendations of the USCPSC and ASTM standards and guidelines.

*Structures and Play Apparatus.* In addition, on DPR-owned playgrounds, the fall height – the highest designated play surface- of a play apparatus should not exceed 8', which corresponds to the critical height of 12" depth of (uncompressed) engineered wood fibers. This applies to the pivot point of swing sets as well.

### 3.6 Fall Height of Play Equipment

Following is a chart published by the USCPSC to help determine the fall height of specific play equipment.

#### Fall Heights of Various Play Apparatus

##### *Type of Equipment*

##### *The Fall height is...*

*.Climbers and horizontal ladders  
.Overhead play components  
.Elevated platforms*

*...the maximum height of the play apparatus  
...the maximum height of the component  
...the height of the platform if surrounded by a  
protective barrier*

*.Seesaws*

*...the height of the guardrail if platform is  
surrounded by a guardrail  
...the maximum height of any attainable part of the  
seesaw*

*.Spring Rockers*

*...the maximum height above ground of the seat or*

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*designated play surface*

*.Composite Play Structure*

*...the maximum height of any attainable part of the play structure, including roofs*

*.Swing Sets*

*...the height of the pivot point where the swings' suspending elements connect to the supporting structure*

### **3.7 Equipment Choices for Children 2-5 years old**

Choice of play equipment should be submitted to the Director or his designee for review and approval.

Play equipment should be specifically intended for use by children 2 to 5 years old. Appropriate equipment for this age group should offer both single and multi-child use. Examples of single-user equipment include: spring rockers, tot swings, slides, crawl tubes, climbers, ladders, activity panels. Examples of multi-users equipment include: multi-users spring rocker (2 or 4 children), seesaws, activity panels, playhouses or semi-enclosed structures to promote fantasy play and socializing.

Some play equipment may not be appropriate for this age group and should not be installed in tot lots. Examples of such equipment include, but are not limited to, double slides, sliding poles, some climbing walls, freestanding climbers and rails.

### **3.8 Equipment Choices for Children 6 to 12 years old**

Choice of equipment should be submitted to the Director or his designee for review and approval.

Playgrounds should encourage social growth by offering single and multi-users play equipment. Play equipment should be specifically intended for use by children 6 to 12 years old. Appropriate equipment for this age group include, but is not limited to: climbers and ladders, net climbers, slides, swings, sliding poles, seesaws, rails, rotating equipment, and climbing walls.

### **3.9 Requirements for Specific Components**

**Posts.** Posts should be galvanized steel or aluminum. Aluminum posts with recycled polyethylene inserts are also acceptable. Posts on play structures intended for school age children should have an outside diameter of 3 ½ inches to 5 inches. Posts on play structures intended for pre-school age children should have an outside diameter of no more than 3 ½ inches.

Posts should not exceed upper attachment system or protective barrier by more than 4 inches except when supporting a roof.

**Roofs.** It is recommended that at least one roof be installed on a new proposed composite play structure. Roof should be installed over the highest platform of the play structure. Roofs made of post-consumer recycled plastic, fabri, and wood are not to be installed on any play apparatus.

**Protective Barriers, Guardrails, and Play Panels.** There should be no more than one pipe barrier (offering no play activity) or guardrail on a platform, and no more than two in total on a composite play structure. In addition, there should be at least one play panel on a platform. Layout of play panels should not create enclosed spaces. See Section 3.11 Restrictions.

### 3.10 Other Play Opportunities

**Sand boxes.** DPR does not encourage the installation of sand boxes on its playgrounds. If a sand box is still desired, it should not be installed adjacent to the safety surface.

Sand boxes are not expected to follow the USCPSC's recommendations for resilient surfacing. However, this site element must follow the fall zones and circulation zones clearance requirements. Sand boxes should be located in a way that will not promote cross-contamination with the different materials used as safety surfaces. This implies that a sand box should not be adjacent or in close proximity to the play area.

Play sand should pack well when moist – a mixture of coarse sand, with particles no larger than 1/16 of an inch, is recommended. Sand should have been washed and should be free of debris and organic matter. Sand should come from a reliable source. Sand is not an appropriate safety surfacing material.

**Climbing walls.** All climbing walls, whether attached to a play structure or free-standing, are to be reviewed and approved by DPR Director or his designee prior to their installation on a playground. Specifications should be submitted to DPR for review and approval. A clearance of 9' should be provided on each climbing face of a free-standing climbing wall. A clearance of 6' is required on each side of the structure.

### 3.11 Restrictions.

**Play Equipment.** The following play equipments are not to be installed as part of a new playground construction project or a playground renovation project on DPR owned parcels:

- . Tire swings
- . Tire climber
- . Tire bridge
- . Free standing tube slides
- . Traditional merry-go-rounds
- . Traditional seesaws
- . Free standing crawl tubes longer than 4'

Any equipment that does not meet the USCPSC, ASTM and DPR Standards and Guidelines

**Play Components.** The following play components are not to be installed as part of a composite play structure:

- Tire climber
- Tire bridge
- Mirror panel
- Bubble panel
- Panel or component with plexi-glass, polycarbonate plastic or other plastic windows
- Any panel that can support graffiti
- Phone panel
- Plastic talk tubes
- Crawl tubes longer than 4'
- Sand table if not installed in a sand box
- Tube slide
- Water play activity if not installed as part of a water park.

In addition, the following components are not to be installed...

...on a pipe barrier: open steering wheels

...on a deck above ground level: tic-tac-toe-type panels; bench panel; any play panel with horizontal railing; any play panel on which a child could climb.

**Swings.** Swings should not be attached to other pieces of playground equipment. There should be no more than two swing seats per bay. In addition, there should be no more than two bays per swing sets. Use of S-hooks should be avoided. Instead no-snag shackles and double clevis links should be used. Bucket seats (intended for children 2-5 years old) and belt seats (intended for children 6-12 years old) are not to be installed on the same bays or double bays, i.e. on the same swing structure. However, bucket seats and belt seats can be installed along with a seat intended for children with disabilities.

## 4.0 Safety Surfaces

### 4.1 Design Guidelines for Safety Surfaces

#### 4.1.1 Fall Zones

The minimum fall zone called for by the ASTM extends a minimum of 6' in all directions from the edge:

- ... of a play structure;
- ... of a stationary play equipment;
- ... and of the exit of a slide with an entrance height of 4' or lower.

USCPSC and ASTM require the minimum distance between two stationary separate play apparatus to be 6'. USCPSC and ASTM require the minimum distance between two stationary separate play apparatus to be 9' if at least one of the apparatus designated play surface exceeds 30 inches in height.

The fall zone of a rocker onto which the user is intended to stand shall be no less than 7' from its perimeter.

#### Fall Zones in Front of Slides Exits

In front of exit areas of slides with an entrance height above 4', the following fall zone is required:

| Entrance height of Slide | Minimum Fall Zone |
|--------------------------|-------------------|
| 4'                       | 6'                |
| 5'                       | 7'                |
| 6'                       | 8'                |
| 7'                       | 9'                |
| 8'                       | 10'               |

#### Fall Zones in Front of Swing Sets

Swing sets require a larger fall zone, which must extend a distance equal to two times the height of the pivot, in front of and behind the swing set. The fall zone must also extend 6' in all directions from the sides of the structure's posts.

**Overlapping Fall Zones.** In general, the fall zones of two stationary independent play apparatus can overlap. However, the minimum distance as specified by the USCPSC and the ASTM (see 4.1.1 Fall Zones, above) shall be provided between the two play apparatus. Between some pieces of equipment, more clearance space might be desirable.

The fall zones of two moving independent play apparatus, and the fall zones of a stationary play apparatus and a moving play apparatus cannot overlap.

No fall zones of any apparatus can overlap the front and back fall zones of a swing set and/or the fall zone of the exit area of a slide. In these cases, a circulation zone must be provided. See Section 4.1.2 Circulation Zones/Non-encroachment Zones.

**Materials.** Fall zones must be covered with an approved protective surfacing material. See Section 4.3 Surfacing Materials.

#### 4.1.2 Circulation Zones/Non-encroachment Zones

A 6-foot minimum circulation zone, also called non-encroachment zone, should be maintained along the perimeter of the play area if there is sufficient available space. A 6-foot minimum circulation zone is required between any site element – for example a bench, a tree, a trash receptacle, or a fence – and the play area.

A 6-foot minimum non-encroachment zone is required in front of swing sets, in front of exit areas of slides, between a moving and a non-moving play apparatus, and between two moving play apparatus, in addition to the required fall zones. Ideally, a 6-foot minimum circulation zone should be provided in the back of swing sets. This becomes a requirement if the swing set can be approached from the back as well.

It is recommended to provide a circulation zone around popular apparatus, and where overcrowding might occur.

**Materials.** The surface of circulation zones located **outside the play area** should be of a different surfacing material than the safety surface of the play area. Adequate materials include concrete, asphalt, other paved surfaces, grass, or any other suitable materials. Sand, wood chips, crushed stones, and pea gravel are not to be used as surfacing material in circulation zones located outside the play area as cross-contamination will eventually occur and affect the performance of the safety surfacing materials(s).

The surface of non-encroachment zones, located **within the play area** – for example the non-encroachment zone between a swing set and a play structure – should be of the same safety surface used for the fall zones, or any other suitable safety surfacing material. See Section 4.2 Performance Requirements of Safety Surfacing Materials.

#### 4.2 Performance Requirements for Safety Surfacing Materials

**General.** All safety surfaces installed as part of a playground project located on DPR-owned parcels shall meet or exceed the Americans with Disabilities Act requirements, and the current standard ASTM F1951-99 Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment. Proof of certification of conformance shall be provided to DPR representative prior to commencing work.

**Shock Absorbency Properties.** Safety surfaces used within the fall zones are to meet the ASTM F1292, Standard Specification for Impact Attenuation of Surface Systems Under

and Around Playground Equipment. In addition, Engineered Wood Fibers should meet ASTM F 2075, Standard Specification or Engineered Wood Fiber for Use as a Playground Safety Surface Under and Around Playground Equipment.

**Critical Height.** The surfacing material used under and around a particular piece of playground equipment should have a Critical Height value of at least the height of the highest accessible part of the play equipment. See also Section 3.5 Height Limitations of Play Equipment.

#### 4.3 Surfacing Materials

Selection of the proper safety surface material involves factors specific to a particular playground. Examples of such factors are environmental conditions (temperature extremes, soil conditions and drainage), characteristics of users (age and developmental stage), equipment characteristics, accessibility, budget, and maintenance requirements.

Safety surfacing materials are available in two basic types:

- . Loose impact absorbing surfaces (LIAS)
- . Unitary synthetic surfacing materials

##### 4.3.1 Loose-impact Absorbing Materials (LIAS)

Engineered Wood Fibers is the only acceptable loose-fill material for use as a loose impact absorbent surface (LIAS) on DPR playgrounds.

Material is to be 100% natural and should contain no chemicals, artificial products, or metals. Source of material should be clearly identified. Test data from the manufacturer identifying the Critical Height of the material should be submitted to DPR for review prior to installation.

**Required Depth of Material and Finished Grade.** A minimum depth of 12" after compaction and settlement of material is required throughout the play area. The finish grade of the Engineered Wood Fiber Safety Surface shall be 3" lower (after settlement of material) than the top of the timber border to avoid loss of loose-fill material. In addition, the finish grade of the Engineered Wood Fiber Safety Surface shall not be lower than the required finish grade as indicated on some posts of the existing/proposed play structure.

**Installation.** Safety surfacing material shall be installed by the manufacturer's certified installer and in accordance with the manufacturer's specifications. LIAS are not to be installed over an existing or proposed hard surface such as, but not limited to, asphalt or concrete. Installation of a drainage system is recommended for most sites.

**Drainage.** Bottom of excavation should be graded so as to prevent water accumulation in the play area. When needed, an appropriate and complete drainage system shall be

installed as per the manufacturer's specifications. The finish grade of the safety surface shall be leveled throughout the whole play area and the height of the timber borders should be adjusted to accommodate this requirement. The finish grade of the safety surface should have a maximum slope of 2%.

**Wear Mats.** When using Loose-impact absorbing surfacing material, sub-surface Wear Mats or surface Mats should be installed under swings, around rotating equipment, and at slide exits to prevent early loss of loose-fill material. Mats should be anchored permanently. Installation of mats should not create a tripping hazard. For that reason, sub-surface wear mats are to be favored over surface mats.

#### 4.3.2 Unitary Synthetic Materials

Unitary synthetic materials include Poured-in-place rubberized surfacing and Rubber tiles. Material must be polyurethane and contain no latex. Polyurethane should have been formulated for its use as a safety surface. Source of material should be clearly identified.

**Required Thickness of Safety Surface Material.** Thickness of the unitary synthetic material is determined by the fall height of the play equipment. However, a minimum thickness of 3.5 inches is required. Test data from the manufacturer identifying the Critical Height of the material should be submitted to DPR for review prior to installation.

**Installation.** Poured-in-place rubberized surfaces and rubber tiles surfaces shall be installed by the manufacturer's certified installer and in accordance with the manufacturer's specifications. Poured-in-place surfaces should be installed over existing or proposed asphalt or concrete surfaces. Poured-in-place rubberized surfaces can also be installed over compacted crushed stone, although this method of installation is not encouraged. Rubber tiles should only be installed over asphalt and concrete surfaces.

**Drainage.** Unitary safety surfaces should drain evenly away from play area so as to keep the surface from puddling.

#### 4.3.3 Unacceptable Safety Surfacing Materials

**Loose-impact and Unitary safety surfacing materials.** Wood chips, fine and coarse sand, fine gravel, pea gravel, shredded rubber, grass, dirt, crushed stones, asphalt, and concrete, are not to be used as protective surfacing materials on any DPR-owned property.

**Second hand rubber tiles.** Second hand tiles – salvaged rubber tiles - are not to be installed as part of a playground project, due to the uncertainty of their impact absorbency and longevity.

All safety surfaces must be approved by DPR's Director or his designee prior to their installation on a playground. This includes safety surface materials newly introduced on the market.

#### 4.3.4 Composite Safety Surface

Loose impact absorbing materials (LIAS) can be used along with Unitary synthetic materials. Wheelchair accessibility between the loose-fill surface and the unitary surface should be addressed. Due to a problem with differential expansion, it is best not to install poured-in-place surfaces and rubber tiles surfaces side by side.

#### 4.4 Containment of Safety Surfaces.

*Unitary synthetic materials.* Poured-in-place rubberized surfaces and rubber tiles surfaces do not require a means of containment, although a metallic or plastic edging, installed flush with grade level, is highly recommended between these type of surfaces and non-paved areas.

*Loose-impact absorbing surfacing material* should be efficiently and permanently contained within the play area so as to avoid cross-contamination and loss of material over time, resulting in a non-compliant safety surface and higher maintenance costs.

*Materials.* Wood and concrete are two approved materials for the construction of borders. Recycled plastic timber and modular plastic edging are not to be used as part of a playground projects on DPR properties. All other materials will be reviewed on a case-by-case basis.

*Timber Borders.* All lumber for the construction and repair of the borders should be first quality non-arsenic pressure treated lumber, rated for ground contact. Exposed edges are to be rounded or beveled and the timbers are to be sanded down to ensure a smooth surface free of splinters.

*Concrete Borders.* Concrete borders are not to be reinforced. Exposed edges are to be rounded.

## 5.0 Universal Accessibility

The concept of universal accessibility should be integrated in the playground design and should address considerations such as access and circulation, and layout and selection of play equipment. In essence, children with physical disabilities should have access to *similar* play opportunities than children without disabilities. For a playground to be considered accessible, at least 70% of all play activities should be accessible. Making a playground accessible for children with disabilities should not create safety hazards for children without disabilities.

### 5.1 Applicability

All new playground construction projects and all playground renovation projects should comply with the most current ADA Standards requirements.

### 5.2 Accessibility

**To the Playground.** Wide gates, openings in fences, and pathways should be provided for wheelchairs accessibility. Width requirements for gates and paths vary with the size of the play area. Playgrounds that are smaller than 1,000 square feet may have ground-level accessible routes that have a 48-inch clear width. Playgrounds 1,000 square feet and larger require 60 inches wide paths. The minimum dimensions of accessible routes are determined in the final guidelines published by the U.S. Access Board. See Section 8.0 Resources for information on how to contact the U.S. Access Board.

Cuts at curbs and retainers should also be provided. In general the recommended width for openings varies between 48 inches and 60 inches.

**To the Play Area.** Easy access should be provided from the main access of the playground onto the play area and its safety surface(s).

Changes in levels at curbs and borders should be addressed. Access between loose-impact absorbing surfaces and unitary synthetic surface should also be addressed.

**To the Play Equipment.** Access to the play equipment and to at least one of each type of ground-level play activities offered (such as climbing, sliding, rocking, etc.) should be provided. Compliant to the ADA Standards requirements, an accessible route of travel should link entrances to accessible elevated play components (transfer points), ground-level play components, and some free-standing play equipment.

The ADA guidelines allow two methods of providing access to elevated play components: ramps and transfer systems. ADA design specifications are given for each type. Ramp access is required where play structures with 20 or more *elevated play components* are installed.

Play activities or play components that can be reached by transfer system or ramp need to exit over an accessible safety surface. Unitary synthetic material, loose-impact absorbing material, or a combination of the two types of materials can be used. Safety surface materials should comply with the ADA Standards requirements. See Section 4.0 Safety Surfaces.

### **5.3 Enhancing Accessibility to Play Opportunities**

The ADA guidelines determine the minimum amount of accessible components required for a playground to be considered compliant to the standards. Minimum requirements are based on the number of components provided for a play area and on the number of elevated play components provided.

Additional designs and features can be added to further enhance accessibility. For example, placing as many activities as possible at ground level provides for an increased accessibility to children with limited mobility. Overhead components that are required to have their entry and exit points connected by an accessible route can be lowered to accommodate children with disabilities. Other play equipment can be elevated: for example sand boxes can be replaced by sand tables. However, this should not create safety hazards for children without disabilities.

### **5.4 Accessible Surfaces**

For wheelchair access, surfaces are required to be "firm, stable, and slip resistant" as specified in ADAAG and are required to meet the ASTM standard F1951-99. Accessible surfaces within the use zones - and circulation zones within the play area - are also required to be impact attenuating in compliance with ASTM F 1292-99 requirements. See Section 4.0 Safety Surfaces.

### **5.5 Overhead Clearance**

Objects, such as trees and posts, may not protrude below the height of 80 inches, measured above the accessible route surface. This requirement applies only to the area corresponding to the width of the accessible route. It does not apply to the entire play area. However, tree branches extending over the fall zones should be pruned back to the limit of the play area. Exceptions to this requirement should be reviewed and approved by DPR Director or his designee.

## 6.0 Playground Renovation

Consideration should be given to playground renovation as a mean to provide a safe play environment to children.

Playground renovation projects are to comply to the same standards of performance a new playground construction projects. A playground renovation project should address play equipment, equipment layout, safety surfaces, site furniture, plant materials, and any other site element.

The DPR Playground Guideline and Standards can be used to inspect an existing playground and determine if modifications can be made to the existing play equipment. However, some equipment cannot be effectively repaired or modified.

A complete audit from an independent playground safety inspector shall be conducted to determine the extent to which existing play equipment can be salvaged. Recommendations should be submitted to DPR Director or his designee.

## 7.0 Resources

### **DC Department of Parks and Recreation**

3149 16<sup>th</sup> Street, NW  
Washington, DC 20010  
(202) 673-7647  
(202) 673-6759 (fax)

### **Green Spaces for DC**

4301 Connecticut Ave., NW Suite 250  
Washington, DC 20008  
(202) 282-1240  
[bgoodinson@greenspacesfordc.org](mailto:bgoodinson@greenspacesfordc.org)

### **U.S. Consumer Product Safety Commission (CPSC)**

Since 1981, the U.S. Consumer Product Safety Commission (CPSC) publishes, in its **Handbook for Public Playground Safety (1981)**, a set of guidelines designed to reduce the number and severity of accidents on public playgrounds.

### **U.S. Consumer Product Safety Commission (CPSC)**

Washington, DC 20207  
800-638-2772  
[www.cpsc.gov](http://www.cpsc.gov)

### **American Society for Testing and Materials (ASTM)**

The American Society for Testing and Materials (ASTM) has developed safety and performance specifications establishing nationally recognized standard for public playground equipment, the **Standard Consumer Safety Performance Specification for Playground Equipment for Public Use**, to address injuries identified by the U.S. Consumer Product Safety Commission (CPSC). The standard is published as F 1487 – 01.

### **American Society for Testing & Materials (ASTM)**

100 Barr Harbor Dr.  
West Conshohocken, PA 19428-2959  
(610) 832-9585  
[www.astm.org](http://www.astm.org)

### **National Program for Playground Safety (NPPS)**

The National Program for Playground Safety (NPPS) was established in 1995 by the University of Northern Iowa. *“Through its efforts to help address America's playground safety issues, NPPS hopes to see a decline in the nearly 200,000 annual playground-related injuries suffered by America's youth”*. NPPS publishes a quarterly newsletter.

National Program for Playground Safety (NPPS)  
School of Health, Physical Education and Leisure Services  
University of Northern Iowa  
Cedar Falls, IA 50614-0618  
800-554-PLAY  
E-mail: [playground-safety@uni.edu](mailto:playground-safety@uni.edu)  
[www.uni.edu/playground](http://www.uni.edu/playground)

**National Playground Safety Institute (NPSI)**

The National Playground Safety Institute (NPSI) is sponsored by the National Recreation and Park Association (NRPA). Its mission is to promote children's right to play in a safe environment and to promote the importance of play in their development.

National Recreation and Park Association  
22377 Belmont Ridge Road  
Ashburn, Virginia 20148  
(703) 858-2148

**International Playground Equipment Manufacturers Association (IPEMA)**

International Playground Equipment Manufacturers Association (IPEMA)  
8300 Colesville Road, Suite 250  
Silver Spring, MD 20910  
(800) 395-5550  
(301) 495-3330 (fax)  
[www.ipema.org](http://www.ipema.org)

**U.S. Access Board (U.S. Architectural and Transportation Barriers Compliance Board)**

The US Access Board issues regulations with regards to the accessibility of recreation areas, such as playgrounds to people with disabilities.

1331 F Street, NW, Suite 1000  
Washington, DC 20004  
(800) 872-2253  
(800) 993-2822 (TTY)  
[pubs@access-board.gov](mailto:pubs@access-board.gov)

## 8.0 Definitions and Acronyms

ADA: Americans with Disabilities Act.

ADAAG: Americans with Disabilities Act Accessibility Guidelines

ASTM: American Society for Testing and Materials

**Circulation Zone/Non-encroachment Zones:** Additional clearance space maintained around the fall zone, and between the play area and the limits of the playground, that allows users to move freely without incurring the risk of being struck by a moving piece of equipment or other users.

**Composite play structure:** Integral unit that provides more than one play activity.

**Critical height of surfacing materials:** The term refers to the shock absorbing performance of a protective surface material. The Critical Height of a specific surfacing material is established as the fall height (from a play apparatus) below which a life-threatening head injury would not be expected to occur.

**Elevated play component:** A play component that can be accessed from an elevated platform or at grade level. Examples of such play components include climbers and horizontal ladders.

**Fall height of play equipment:** the fall height of a play apparatus is the height of the highest designated play surface on the apparatus or the height of the highest surface on which a child could possibly climb, whichever is higher.

**Fall zone:** Clearance space under and around play equipment. Fall zones are also called Use zones. Fall zones extend generally 6' from the outer limit of the apparatus and are required to be covered with a safety surface material.

**Free-standing play equipment:** Play equipment that provides only one play activity. Examples of such equipment are spring rockers, swings, and stand-alone climbers. A free-standing play equipment can be stationary or moving. Stationary equipment does not move and/or does not have any components that move during the use of the equipment. Moving equipment includes, but is not limited to, swing sets and rotating play apparatus. Spring rockers are not considered moving play equipment.

**Ground-level play component:** A play component that is approached and exited at the ground level.

**Play area:** Area located within a playground, where the play equipment is installed, and generally delimited by the safety surface(s).

Play component: Element used for play that is part of a composite play structure. There are two types of play components: ground-level play components and elevated play components. *Ground-level play components* are those approached and exited at ground level. Examples of such equipment activity panels installed under decks and climbers. *Elevated play components* are approached above grade. Examples of elevated play components are slides, activity panels installed on decks, and fire poles.

Play apparatus/play equipment: Any composite play structure or free-standing play equipment, intended for play. All play equipments are required to be installed over an approved safety surface.

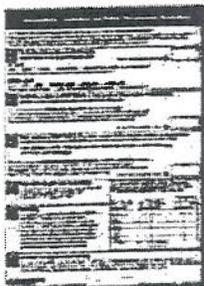
Playground: Improved outdoor area designed and equipped for use by children to play. A playground includes a play area, sitting area, accesses and pathways, fencing, signs, and any other related features.

USCPSC: U.S. Consumer Product Safety Commission

## 9.0 Appendix

### Appendix A

Accessibility Guidelines for Public Playground Worksheet from Playworld Systems. This chart was reproduced with the permission of Playworld Systems.



| NAME                         | ADDRESS                         | Wooded Areas | Baseball - 60 | Baseball - 90 | Softball | Large Multipurpose Field | Small Multipurpose Field | Football Field | Soccer Field | Basketball Court | Tennis Court | Volleyball | Playground (play equipment on site) | Swimming Pool | ACREAGE (land area only - all building footprints removed) |
|------------------------------|---------------------------------|--------------|---------------|---------------|----------|--------------------------|--------------------------|----------------|--------------|------------------|--------------|------------|-------------------------------------|---------------|--|
| Anacostia Fitness Center     | 1800 Anacostia Drive, SE        |              |               |               |          |                          |                          |                |              |                  |              |            | YES                                 | YES           | 13.75  |
| Arboretum                    | 2412 Rand Pl, NE                |              |               |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 |               | 2.39   |
| Bald Eagle                   | 1801 MLK Jr Ave., SW            | YES          |               |               |          |                          | YES                      |                |              | YES              | YES          |            |                                     |               | 4.35   |
| Banneker                     | 2500 Georgia Ave., NW           |              | YES           |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 | YES           | 12.01  |
| Barry Farm                   | 1230 Summer Rd., SE             | YES          |               |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 | YES           | 7.63   |
| Benning Park                 | 51st & Fitch Sts., SE           |              | YES           |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 | YES           | 8.50   |
| Benning Stoddert             | 100 Stoddert Place, SE          | YES          |               |               |          |                          |                          |                |              | YES              | YES          |            |                                     |               | 13.25  |
| Brentwood                    | 2311 14th St., NE               |              |               |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 |               | 1.26   |
| Chevy Chase Community Center | 5601 Connecticut Ave., NW       |              |               |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 |               | 0.86   |
| Chevy Chase Rec Center       | 5500 41st St, NW                |              |               |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 |               | 3.59   |
| Congress Heights             | 100 Randle Pl, SE               |              |               |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 |               | 4.24   |
| DC Therapeutic               | 3030 G St., SE                  |              | YES           |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 | INDOOR        | 4.53   |
| Deanwood                     | 49th St & Quarles St, NE        |              |               |               |          |                          |                          |                |              |                  |              |            | YES                                 |               | 5.36   |
| Douglass                     | 2100 Stanton Terr., SE          |              |               |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 | YES           | 5.26   |
| Dwight A. Moseley            | 1800 Perry Sts., NE             |              | YES           |               |          |                          |                          |                |              | YES              | YES          |            |                                     | YES           | 8.81   |
| Edgewood                     | 320 Everts St., NE              |              | YES           |               |          |                          |                          |                |              | YES              | YES          |            |                                     |               | 5.63   |
| Emery                        | 5108 Georgia Ave., NW           | YES          |               |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 |               | 9.46   |
| Fort Davis                   | 1400 41st St., SE               | YES          |               |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 |               | 4.46   |
| Fort Greble                  | M L K Jr. Ave. & Elmira St., SW |              | YES           |               |          |                          |                          | YES            |              |                  |              |            |                                     |               | 6.10   |
| Fort Lincoln                 | 3100 Ft. Lincoln Dr., NE        | YES          |               |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 | YES           | 17.01  |
| Fort Stanton                 | 1812 Erie St., SE               | YES          |               |               |          | YES                      |                          |                |              | YES              | YES          |            | YES                                 | YES           | 10.82  |
| Fort Stevens                 | 1327 Van Buren St., NW          | YES          |               |               |          |                          |                          |                | YES          | YES              | YES          |            |                                     |               | 8.80   |
| Francis                      | 24th & N St, NW                 |              |               |               |          |                          |                          |                |              |                  |              |            |                                     |               | 14.69  |
| Friendship                   | 4500 Van Ness St., NW           |              | YES           |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 | YES           | 11.05  |
| Georgetown                   | 1555 34th St., NW               |              |               |               |          |                          |                          |                | YES          | YES              | YES          |            |                                     | YES           | 2.58   |
| Guy Mason                    | 3600 Calvert St., NW            |              | YES           |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 |               | 4.49   |
| Hamilton                     | 1340 Hamilton St, NW            |              |               |               |          |                          |                          |                |              | YES              |              |            | YES                                 |               | 1.73   |
| Hardy                        | 4470 Q St., NW                  |              |               |               |          |                          |                          |                | YES          |                  | YES          |            | YES                                 |               | 4.76   |
| Harrison                     | 1330 V Streets, NW              |              | YES           |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 |               | 1.34   |
| Harry Thomas                 | 1801 Lincoln Rd, NE             |              |               |               |          |                          |                          |                |              |                  |              |            |                                     |               | 4.49   |
| Hearst                       | 3600 Tilden Sts., NW            | YES          |               |               |          | YES                      |                          |                |              | YES              | YES          |            | YES                                 | YES           | 6.45   |
| Hillcrest                    | 32nd & Denver Sts., SE          | YES          |               |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 | YES           | 16.93  |
| Joe Cole                     | 1200 Morse St., NE              |              |               |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 |               | 1.51   |
| Joy Evans                    | 555 L St. SE                    |              |               |               |          |                          |                          |                |              |                  |              |            | YES                                 |               | 0.79   |
| Kalorama                     | 1875 Columbia Rd., NW           |              |               |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 |               | 3.11   |
| Kenilworth-Parkside          | 4300 Anacostia Ave., NE         | YES          |               |               |          | YES                      |                          |                | YES          | YES              | YES          |            | YES                                 | YES           | 29.62  |
| Kennedy                      | 1401 7th St., NW                |              | YES           |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 | YES           | 3.74   |
| King-Greenleaf               | 201 N St., SW                   |              |               |               |          | YES                      |                          |                |              | YES              | YES          |            | YES                                 | YES           | 7.40   |
| Lafayette                    | 33rd & Patterson Sts., NW       |              |               |               |          | YES                      |                          |                |              | YES              | YES          |            | YES                                 | YES           | 9.28   |
| Lamond                       | Kansas Ave. & Tuckerman St., NW |              | YES           |               |          |                          |                          |                |              | YES              | YES          |            | YES                                 |               | 2.57   |

| NAME                  | ADDRESS                        | Wooded Areas | Baseball- 60 | Baseball- 90 | Softball  | Large Multipurpose Field | Small Multipurpose Field | Football Field | Soccer Field | Basketball Court | Tennis Court | Volleyball | Playground (play equipment on site) | Swimming Pool | ACREAGE (land area only - all building footprints removed) |
|-----------------------|--------------------------------|--------------|--------------|--------------|-----------|--------------------------|--------------------------|----------------|--------------|------------------|--------------|------------|-------------------------------------|---------------|--|
| Langdon Park          | 2901 20th St., NE              | YES          |              | YES          |           | YES                      | YES                      |                |              | YES              | YES          | YES        | YES                                 | YES           | 19.83  |
| Macomb                | 3409 Macomb St., NW            |              | YES          |              |           |                          | YES                      |                |              | YES              | YES          | YES        | YES                                 |               | 1.29   |
| Marie Reed            | 2200 Champlain St, NW          |              |              |              |           |                          |                          |                |              | YES              |              |            | YES                                 |               | 1.50   |
| New York Ave Daycare  | 1301 New Jersey Ave, NW        |              |              |              |           |                          |                          |                |              | YES              |              |            | YES                                 |               | 2.33   |
| North Michigan Park   | 1333 Emerson St., NE           | YES          | YES          | YES          |           |                          | YES                      |                |              | YES              | YES          | YES        | YES                                 |               | 16.30  |
| Palisades             | 5200 Sherrier Place, NW        | YES          |              | YES          |           | YES                      |                          |                |              | YES              | YES          | YES        | YES                                 |               | 13.75  |
| Parkview              | 693 Otis Pl., NW               |              | YES          |              |           |                          | YES                      |                |              | YES              |              | YES        | YES                                 |               | 1.44   |
| Payne                 | 303 15th St., SE               |              |              |              |           |                          |                          |                |              |                  |              |            | YES                                 |               | 0.44   |
| Petworth              | 801 Taylor St., NW             |              |              |              |           |                          | YES                      |                |              | YES              |              | YES        | YES                                 |               | 1.07   |
| Randall               | 820 South Capitol St., SW      |              | YES          | YES          |           |                          | YES                      |                |              | YES              | YES          | YES        | YES                                 |               | 8.64   |
| Raymond               | 915 Spring Rd., NW             |              |              | YES          |           |                          | YES                      |                |              | YES              | YES          | YES        | YES                                 |               | 2.52   |
| Ridge                 | 800 Ridge Rd., SE              | YES          | YES          |              |           |                          | YES                      |                |              | YES              |              | YES        | YES                                 |               | 10.82  |
| Riggs LaSalle         | Riggs Rd and Nicholson St NE   |              |              | YES          |           |                          | YES                      |                |              | YES              | YES          | YES        | YES                                 |               | 4.78   |
| Rose Park             | 26th & O Sts., NW              |              |              |              |           |                          | YES                      |                |              | YES              | YES          | YES        | YES                                 |               | 2.61   |
| Rosedale              | 1700 Gales St., NE             |              | YES          | YES          |           |                          |                          |                | YES          | YES              | YES          | YES        | YES                                 |               | 4.79   |
| Rudolph               | 5200 2nd St., NW               |              | YES          | YES          |           |                          |                          |                |              | YES              | YES          | YES        | YES                                 |               | 4.61   |
| Rumsey Aquatic Center | 7th St. & N. Carolina Ave., NE |              |              |              |           |                          |                          |                |              | YES              | YES          | YES        |                                     | INDOOR        | 1.15   |
| Shaw                  | Rhode Island Ave & 11th St, NW |              |              |              |           |                          | YES                      |                |              | YES              | YES          | YES        |                                     |               | 2.98   |
| Sherwood              | 1000 G St., NE                 |              |              |              |           |                          | YES                      |                |              | YES              |              | YES        | YES                                 |               | 1.95   |
| Stead                 | 1625 P St., NW                 |              | YES          |              |           |                          | YES                      |                |              | YES              |              | YES        | YES                                 |               | 1.58   |
| Stoddert              | 4001 Calvert St., NW           |              | YES          |              | YES       |                          | YES                      |                |              | YES              |              | YES        | YES                                 |               | 7.05   |
| Takoma Aquatic Center | 3rd & Van Buren Sts, NW        |              | YES          | YES          | YES       |                          | YES                      |                |              | YES              | YES          | YES        | YES                                 | INDOOR        | 21.07  |
| Trinidad              | 1310 Childress St., NE         |              |              | YES          |           |                          | YES                      |                |              | YES              | YES          | YES        | YES                                 |               | 5.27   |
| Turkey Thicket        | 1150 Michigan Ave., NE         |              |              | YES          | YES       |                          | YES                      |                | YES          | YES              | YES          | YES        | YES                                 |               | 10.75  |
| Upshur                | 4300 Arkansas Ave., NE         | YES          | YES          |              |           |                          | YES                      |                |              | YES              | YES          | YES        | YES                                 |               | 7.37   |
| Virginia Avenue       | 1001 Virginia Ave, SE          |              |              |              |           |                          | YES                      |                |              | YES              | YES          | YES        | YES                                 |               | 2.61   |
| Watkins               | 420 12th St., SE               |              | YES          |              |           |                          | YES                      |                |              | YES              | YES          | YES        | YES                                 |               | 3.17   |
| <b>66</b>             |                                | <b>16</b>    | <b>25</b>    | <b>27</b>    | <b>11</b> | <b>7</b>                 | <b>38</b>                | <b>2</b>       | <b>10</b>    | <b>48</b>        | <b>36</b>    | <b>11</b>  | <b>58</b>                           | <b>22</b>     | <b>446.26</b>  |

# **J.13 Subcontracting Plan**

# SUBCONTRACT I

| PRIME CONTRACTOR I  |   |
|---|---|
| Company: _____<br>Street Address: _____<br>City & Zip Code: : _____<br>Phone Number: _____ Fax: _____<br>Email Address: _____ | Solicitation Number: _____<br>Contractor's Tax ID Number: _____<br>Caption of Plan: _____<br>_____  |
| Project Name: _____<br>Address: _____<br>_____<br>Project Descriptions: _____<br>_____<br>_____                               | Duration of the Plan: From _____ to _____<br>Total Prime Contract Value: \$ _____<br>Amount of Contract (excluding the cost of materials, goods, supplies and equipment) \$ _____<br>Amount of all Subcontracts: \$ _____<br>LSDBE Total: \$ _____ equals _____ %<br><div style="text-align: center;">                         LSDBE Subcontract Value <span style="margin-left: 100px;">Percentage Set Aside</span> </div> |

(List each subcontractor at any tier that will be awarded a subcontract to meet your total set aside goal.)

| SUBCONTRACTOR INFORMATION (use continuation sheet for additional subcontractors)   |                         |              |  |                     |
|--|-------------------------|--------------|--|---------------------|
| Name   | Address & Telephone No. | Type of Work | NIGP Code(s)   | Description of Work |
|  |                         |              |  |                     |
| Total Amount Set Aside: \$ _____<br>Percentage of Total Set Aside Amount : _____ %    Tier: _____<br><span style="margin-left: 100px;">1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup></span><br>LSDBE Certification Number: _____<br>Certification Status: <input type="checkbox"/> SBE: <input type="checkbox"/> LBE: <input type="checkbox"/> DBE: <input type="checkbox"/> DZE: <input type="checkbox"/> ROB: <input type="checkbox"/> LRB:<br>(check all that apply) |                         |              | Point of Contact: _____<br><span style="margin-left: 100px;">Name (Print)</span><br>Contact Telephone Number: _____<br>Fax Number: _____<br>Email Address: _____ |                     |

### CERTIFICATIONS

The prime contractor shall attach a notarized statement including the following:

- a. A description of the efforts the prime contractor will make to ensure that LBEs, DBEs, ROBs, SBEs, LRBs, or DZEs will have an equitable opportunity to compete for subcontracts;
- b. In all subcontracts that offer further subcontracting opportunities, assurances that the prime contractor will include a statement, approved by the contracting officer, that the subcontractor will adopt a subcontracting plan similar to the subcontracting plan required by the contract;
- c. Assurances that the prime contractor will cooperate in any studies or surveys that may be required by the contracting officer, and submit periodic reports, as requested by the contracting officer, to allow the District to determine the extent of compliance by the prime contractor with the subcontracting plan;
- d. Listing of the type of records the prime contractor will maintain to demonstrate procedures adopted to comply with the requirements set forth in the subcontracting plan, and include assurances that the prime contractor will make such records available for review upon the District's request; and
- e. A description of the prime contractor's recent efforts to locate LBEs, DBEs, SBEs, DZEs, LRBs, and ROBs, and to award subcontracts to them.

| PERSON PREPARING THE SUBCONTRACTING PLAN  |   |
|---|---|
| Name: _____<br><span style="margin-left: 100px;">(Print)</span><br>Telephone Number: (    ) _____ - _____<br>Fax Number: (    ) _____ - _____<br>Email Address: _____ | Signature: _____<br>Title: _____<br>Date: _____ |

### FOR CONTRACTING OFFICER USE ONLY

|   |                        |             |
|---|------------------------|-------------|
| Date Plan Received by Contracting Officer: _____                                    |                        |             |
| Report: <input type="checkbox"/> Acceptable <input type="checkbox"/> Not Acceptable | Contract Number: _____ |             |
| Name & Title of Contracting Officer: _____  | Signature: _____       | Date: _____ |

(List each subcontractor that will be awarded a subcontract to meet your total set aside goal.)

| SUBCONTRACTOR INFORMATION: (use continuation sheet for additional subcontracts)  |                         |              |  |                     |      |      |      |      |  |  |
|--|-------------------------|--------------|--|---------------------|------|------|------|------|--|--|
| Name   | Address & Telephone No. | Type of Work | NIGP Code(s)   | Description of Work |      |      |      |      |  |  |
|  |                         |              |  |                     |      |      |      |      |  |  |
| Total Amount Set Aside: \$ _____<br>Percentage of Total Set Aside Amount : _____ % Tier : _____<br><small>1<sup>st</sup>, 2<sup>nd</sup>, 3rd</small>  |                         |              | Point of Contact: _____<br><small>Name (Print)</small><br>Contact Telephone Number: _____<br>Fax Number: _____<br>Email Address: _____ |                     |      |      |      |      |  |  |
| LSDBE Certification Number: _____<br>Certification Status: (check all that apply) <table border="1"> <tr> <td>SBE:</td> <td>LBE:</td> <td>DBE:</td> <td>DZE:</td> <td>ROB:</td> <td>LRB:</td> </tr> </table> |                         |              | SBE:   | LBE:                | DBE: | DZE: | ROB: | LRB: |  |  |
| SBE:   | LBE:                    | DBE:         | DZE:   | ROB:                | LRB: |      |      |      |  |  |

| SUBCONTRACTOR INFORMATION:   |                         |              |  |                     |      |      |      |      |  |  |
|--|-------------------------|--------------|--|---------------------|------|------|------|------|--|--|
| Name   | Address & Telephone No. | Type of Work | NIGP Code(s)   | Description of Work |      |      |      |      |  |  |
|  |                         |              |  |                     |      |      |      |      |  |  |
| Total Amount Set Aside: \$ _____<br>Percentage of Total Set Aside Amount : _____ % Tier : _____<br><small>1<sup>st</sup>, 2<sup>nd</sup>, 3rd</small>  |                         |              | Point of Contact: _____<br><small>Name (Print)</small><br>Contact Telephone Number: _____<br>Fax Number: _____<br>Email Address: _____ |                     |      |      |      |      |  |  |
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| SBE:   | LBE:                    | DBE:         | DZE:   | ROB:                | LRB: |      |      |      |  |  |

| SUBCONTRACTOR INFORMATION:   |                         |              |  |                     |      |      |      |      |  |  |
|--|-------------------------|--------------|--|---------------------|------|------|------|------|--|--|
| Name   | Address & Telephone No. | Type of Work | NIGP Code(s)   | Description of Work |      |      |      |      |  |  |
|  |                         |              |  |                     |      |      |      |      |  |  |
| Total Amount Set Aside: \$ _____<br>Percentage of Total Set Aside Amount : _____ % Tier : _____<br><small>1<sup>st</sup>, 2<sup>nd</sup>, 3rd</small>  |                         |              | Point of Contact: _____<br><small>Name (Print)</small><br>Contact Telephone Number: _____<br>Fax Number: _____<br>Email Address: _____ |                     |      |      |      |      |  |  |
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| SBE:   | LBE:                    | DBE:         | DZE:   | ROB:                | LRB: |      |      |      |  |  |

| SUBCONTRACTOR INFORMATION:   |                         |              |  |                     |      |      |      |      |  |  |
|--|-------------------------|--------------|--|---------------------|------|------|------|------|--|--|
| Name   | Address & Telephone No. | Type of Work | NIGP Code(s)   | Description of Work |      |      |      |      |  |  |
|  |                         |              |  |                     |      |      |      |      |  |  |
| Total Amount Set Aside: \$ _____<br>Percentage of Total Set Aside Amount : _____ % Tier : _____<br><small>1<sup>st</sup>, 2<sup>nd</sup>, 3rd</small>  |                         |              | Point of Contact: _____<br><small>Name (Print)</small><br>Contact Telephone Number: _____<br>Fax Number: _____<br>Email Address: _____ |                     |      |      |      |      |  |  |
| LSDBE Certification Number: _____<br>Certification Status: (check all that apply) <table border="1"> <tr> <td>SBE:</td> <td>LBE:</td> <td>DBE:</td> <td>DZE:</td> <td>ROB:</td> <td>LRB:</td> </tr> </table> |                         |              | SBE:   | LBE:                | DBE: | DZE: | ROB: | LRB: |  |  |
| SBE:   | LBE:                    | DBE:         | DZE:   | ROB:                | LRB: |      |      |      |  |  |

| SUBCONTRACTOR INFORMATION:   |                         |              |  |                     |      |      |      |      |  |  |
|--|-------------------------|--------------|--|---------------------|------|------|------|------|--|--|
| Name   | Address & Telephone No. | Type of Work | NIGP Code(s)   | Description of Work |      |      |      |      |  |  |
|  |                         |              |  |                     |      |      |      |      |  |  |
| Total Amount Set Aside: \$ _____<br>Percentage of Total Set Aside Amount : _____ % Tier : _____<br><small>1<sup>st</sup>, 2<sup>nd</sup>, 3rd</small>  |                         |              | Point of Contact: _____<br><small>Name (Print)</small><br>Contact Telephone Number: _____<br>Fax Number: _____<br>Email Address: _____ |                     |      |      |      |      |  |  |
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| SBE:   | LBE:                    | DBE:         | DZE:   | ROB:                | LRB: |      |      |      |  |  |

| Services             | 2006 |     |     | 2007 |     |     |     |     |     |     |     |     | Total Visits |
|----------------------|------|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|--------------|
|                      | Oct  | Nov | Dec | Jan  | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |              |
| Service Visits (mow) | 2    | 2   | 1   | 0    | 0   | 2   | 4   | 4   | 4   | 3   | 2   | 2   | 26           |
| Mowing               | 0    | 0   | 0   | 0    | 0   | 2   | 4   | 4   | 4   | 3   | 2   | 1   | 20           |
| Leaves               | 2    | 2   | 1   | 0    | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1   | 6            |
| Mulching             |      |     |     |      |     |     |     |     |     |     |     |     |              |
| Restoration          |      |     |     |      |     |     |     |     |     |     |     |     |              |
| Engineered Fibers    |      |     |     |      |     |     |     |     |     |     |     |     |              |
|                      |      |     |     |      |     |     |     |     |     |     |     |     |              |
|                      |      |     |     |      |     |     |     |     |     |     |     |     |              |

| Costs     | 2006    |         |         | 2007 |     |         |         |         |     |     |     |     | Total Cost |
|-----------|---------|---------|---------|------|-----|---------|---------|---------|-----|-----|-----|-----|------------|
|           | Oct     | Nov     | Dec     | Jan  | Feb | Mar     | Apr     | May     | Jun | Jul | Aug | Sep |            |
| CLIN 0001 | \$4,000 | \$4,000 | \$2,000 | \$0  | \$0 | \$4,000 | \$8,000 | \$8,000 |     |     |     |     | \$30,000   |
| CLIN 0002 |         |         |         |      |     |         |         |         |     |     |     |     |            |
| CLIN 0003 |         |         |         |      |     |         |         |         |     |     |     |     |            |
| CLIN 0004 |         |         |         |      |     |         |         |         |     |     |     |     |            |
| CLIN 0005 |         |         |         |      |     |         |         |         |     |     |     |     |            |
| CLIN 0006 |         |         |         |      |     |         |         |         |     |     |     |     |            |
| CLIN 0007 |         |         |         |      |     |         |         |         |     |     |     |     |            |
| CLIN 0008 |         |         |         |      |     |         |         |         |     |     |     |     |            |

Service Cost per Visit      \$2,000      x      # of visits      =      Total