

# Community Garden ADA (Americans with Disabilities Act) Guidelines

Accessibility Guidelines for Gardens on Metro Owned or Leased Property

#### **Part I: Introduction**

Gardening is widely known as a healthful activity for the body, mind and spirit. It provides an enjoyable and leisurely activity for a growing number of people in the United States. This growing population includes many elderly and disabled individuals. Anyone can enjoy the benefits of gardening by choosing the proper garden design that encourages an accessible, safe and comfortable gardening experience.

# Metro Process for Approving Construction on School Property:

A school garden is considered to be an addition to school property. This is important to keep in mind because if any addition is made to school property the principal must be notified as well as Planning and Construction for Metro Nashville Public Schools. After your principal gives approval for a project, Planning and Construction should be notified. The Director of Planning and Construction should be the point of contact for getting approval from MNPS to make changes to school property. As a best practice, drafting a master plan before you approach Planning and Construction is helpful for the sustainability of the garden. Even if funding and resources are not available at the time of groundbreaking, a master plan can be approved so that small additions to the garden do not have to go through the planning process each time there is an addition.

After Planning and Construction is contacted, a member of their staff will make a site visit to give approval or make suggestions. These suggestions could be based on the site location, underground utilities, water access and universal access to the garden.

Director of Planning and Construction:

615-259-8530

# A Note on the Metro ADA Process and Language in this Document:

The ADA guidelines mentioned in this document are not all inclusive. There may be other ADA guidelines and or regulations that need to be considered and complied with prior to construction of a community garden. Items such as restrooms, parking, etc., are not addressed in this document. If any element that is not directly addressed in this document is to be included in a project, ADA requirements for those items will apply. See the following link for detailed guidelines that may not be mentioned in this document: <a href="http://www.access-board.gov/outdoor/outdoor-rec-rpt.htm">http://www.access-board.gov/outdoor/outdoor-rec-rpt.htm</a>
All construction activities conducted on Metropolitan Government owned or leased properties must be reviewed and approved by the ADA Compliance Division of the Department of General Services prior to any construction activity.

## Part II: Required Accessible Features and Recommendations

**Raised Beds:** At least one bed must be 24 to 30in. in height and 48 in. in width.

# **Recommendations:**

Alternatives to raised beds include large pots, table beds and vertical gardening. Large pots offer the same opportunities for gardening, but are many times circular and have the advantage of being transportable. Table beds are elevated and offer a shallow bed of 6 to 12 in. at a raised height. Vertical gardening includes climbing plants, whose height reduces the

need for bending. Many plants naturally grow upwards and if trained properly can use walls, trellises and fences to help. Hanging baskets, which can be set to any height, also provide a vertical element to gardening without the need for a bed on the ground.

- Table Beds: If using a table bed for allowing accessibility it must be 27 to 34 in height and 48in. in width. Also, if children are using the table the height requirement to allow knee clearance should be 24 to 30 inches in height.
- Adaptive tools are not required but recommended.
- If special accommodations are requested they must be followed.
- When using a contractor to build any element of the garden we recommend they have a copy of these guidelines. Never assume they will work according to ADA guidelines.

# **Part III: Outdoor Accessible Guidelines**

It is important to note that these guidelines are available to help guide the construction process for a garden on Metro owned or leased property. When addressing the outdoor furniture section, please keep in mind that these guidelines only apply **IF** outdoor furniture exists **AND** it is physically **FIXED** (unmovable) to the outdoor space.

## **Outdoor Recreation Access Routes:**

These rules apply to paths of access to the garden and pathways through the garden.

**16.3.1 Surface.** The surface of the outdoor recreation access route shall be firm and stable. (Grass is considered to be a firm and stable surface)

**16.3.2** Clear Tread Width. The clear tread width of outdoor recreation access routes shall be 36 inches (915 mm) minimum.

EXCEPTION: The minimum width shall be permitted to be no less than 32 inches (815 mm) minimum for a distance of 24 inches (610 mm) maximum where at least one of the conditions in 16.1.1 applies.

16.3.3 Openings. Openings in the surfaces of outdoor recreation access routes shall be of a size that does not permit passage of a ½ inch (13 mm) diameter sphere. Elongated openings shall be placed so that the long dimension is perpendicular or diagonal to the dominant direction of travel. EXCEPTION: Openings are permitted to run parallel to the dominant direction of travel so long as, the opening does not permit passage of a 1/4 inch (6.5 mm) diameter sphere.

16.3.4 Protruding Objects. Protruding objects on outdoor recreation access routes shall comply with ADAAG 4.4

16.3.5 Tread Obstacles. Where tread obstacles exists, obstacles on the outdoor recreation access route shall be 1 inch (25 mm) high maximum.

EXCEPTION: Tread obstacles of 2 inches (50 mm) high maximum shall be permitted where beveled with a slope no greater than 1:2 and where at least one of the conditions in 16.1.1 applies.

16.3.6 Passing Space. Where the clear tread width of outdoor recreation access route is less than 60 inches (1525 mm), passing spaces shall be provided at intervals of 200 feet (61 m) maximum. Passing spaces shall be either 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum space, or an intersection of two walking surfaces which provide a T-shaped space complying with ADAAG 4.2.3 provided that the arms and stem of the T-shaped space extend at least 48 inches (1220 mm) beyond the intersection.

EXCEPTION: Passing spaces shall be permitted at intervals of up to 300 feet (91 m) maximum where at least one of the conditions in 16.1.1 applies.

16.3.7 Slopes. Slopes shall comply with 16.3.7.1 and 16.3.7.2.

**16.3.7.1** Cross Slope. The cross slope of outdoor recreation access routes shall be 1:33 maximum.

*EXCEPTION:* Cross slopes of 1:20 maximum shall be permitted to ensure proper drainage.

- **16.3.7.2 Running slope.** Running slope of trail segments shall comply with one or more of the provisions of this section.
- 16.3.7.2.1 Running slope shall be 1:20 or less for any distance.
- 16.3.7.2.2 Running slope shall be 1:12 maximum for 50 feet maximum. Resting intervals complying with 16.2.8 shall be provided at distances no greater than 50 feet apart.
- 16.3.7.2.3 Running slope shall be 1:10 maximum for 30 feet (9150 mm) maximum. Resting intervals complying with 16.2.8 shall be provided at distances no greater than 30 feet (9150 mm) apart.
- 16.3.8 Resting Intervals. Resting interval shall be 60 inches (1525 mm) minimum in length, shall have a width at least as wide as the widest portion of the trail segment leading to the resting interval, and have a slope not exceeding 1:33 in any direction. EXCEPTION: Where the surface conditions require slopes greater than 1:33 for proper drainage, a 1:20 slope is permitted.
- **16.3.9** Edge Protection. Where edge protection is provided, the edge protection shall have a height of 3 inches (75 mm) minimum.

# **Part IV: Outdoor Furniture**

16.5 Fixed Picnic Tables 16.5.1 Minimum Number.

- 16.5.1.1 Single Picnic Tables. Where one fixed picnic table is provided in a picnic area, the picnic table shall comply with 16.5.4 through 16.5.6, and shall be connected to an outdoor recreation access route complying with 16.3.
- 16.5.1.2 Multiple Picnic Tables. Where two or more fixed picnic tables are provided in a picnic area, at least 50 percent, but never less than two, shall comply with 16.5.4 through 16.5.6. In addition, at least 40 percent, but never less than two, of the accessible picnic tables shall be connected to an outdoor recreation access route complying with 16.3.
- **16.5.2** Dispersal. Accessible picnic tables shall be dispersed among the types of picnic areas provided. This provision shall not require an increase in the total number of accessible picnic tables required in 16.5.1
- 16.5.3. Number of Wheelchair Seating Spaces. An accessible picnic table shall have at least one seating space. Where the table top perimeter exceeds 24 linear feet, the number of wheelchair seating spaces shall comply with the following table:

**TABLE 16.5.3** 

Top Linear Feet	per of Wheelchair Spaces
- 44 lf	ces
- 64 If	ces
- 84 lf	ces
- 104 If	ces

16.5.4 Wheelchair Seating Space Size. The seating space shall contain knee space at least 27 inches (685 mm) high, 30 inches (760 mm) wide, and 19 inches (485 mm) deep. Toe clearance 9 inches (230 mm) minimum in height shall extend

an additional 5 inches minimum from the knee clearance. (Figure to be developed). Clear floor or ground space complying with ADAAG 4.2.4.1 and 4.2.4.2 shall be provided at each seating space required to be accessible.

- **16.5.5 Table Clearance.** A 36 inches (915 mm) minimum clear floor or ground space surrounding the useable portion of the table, measured from the seat shall be provided.
- **16.5.6 Surface.** The surface of clear spaces required by 16.5.4 and 16.5.5 shall be stable and firm. *EXCEPTION:* The provisions of 16.5.6 shall not apply where at least one of the conditions in 16.1.1 applies.
- **16.5.7 Slope.** The slope of clear spaces required by 16.5.4 and 16.5.5 shall not exceed 1:50 in any direction. *EXCEPTIONS:* 1. Where surface conditions require slopes greater than 1:50 for proper drainage, a 1:33 maximum slope is allowed. 2. The provisions of 16.5.7 shall not apply where at least one of the conditions in 16.1.1 applies
- **16.5.5 Table Clearance.** A 36 inches (915 mm) minimum clear floor or ground space surrounding the useable portion of the table, measured from the seat shall be provided.
- 16.5.6 Surface. The surface of clear spaces required by 16.5.4 and 16.5.5 shall be stable and firm.

EXCEPTION: The provisions of 16.5.6 shall not apply where at least one of the conditions in 16.1.1 applies.

- **16.5.7 Slope.** The slope of clear spaces required by 16.5.4 and 16.5.5 shall not exceed 1:50 in any direction. *EXCEPTIONS:*
- 1. Where surface conditions require slopes greater than 1:50 for proper

drainage, a 1:33 maximum slope is allowed. 2. The provisions of 16.5.7 shall not apply where at least one of the conditions in 16.1.1 applies.

# **Fixed Trash/Recycling Containers:**

#### 16.8 Trash and Recycling Containers

**16.8.1** Trash and Recycling Containers. Each trash or recycling containers provided shall comply with 16.8.2 through 16.8.5 and shall be connected by an outdoor recreation access route complying 16.3.

EXCEPTION: 50 percent of the bins in multi-bin containers are exempt from this provision.

**16.8.2 Clear Floor or Ground Space.** Clear space shall comply with ADAAG 4.2.4.1 and 4.2.2.2.

**16.8.3 Surface.** The surface of the clear space required by 16.8.2 shall be stable and firm.

EXCEPTION: The provisions of 16.8.3 do not apply where at least one of the conditions in 16.1.1 applies.

**16.8.4 Slopes.** Clear spaces required by 16.8.2 shall have slopes no greater than 1:50 in all directions.

EXCEPTIONS: 1. Where surface conditions require slopes greater than 1:50 for proper drainage, a 1:33 maximum slope is allowed. 2. The provisions of 16.8.4 shall not apply where at least one of the conditions in 16.1.1 applies.

**16.8.5** Controls and Operating Mechanisms. Controls and operating mechanisms shall comply with ADAAG 4.27.3 and 4.27.4. *EXCEPTION:* The requirements of 4.27.4 do not apply to hinged lids and controls designed for large animal exclusion.

#### **Fixed Benches:**

#### 16.12 Benches

#### 16.12.1 Minimum Number.

16.12.2.1 Single Bench. Where one fixed bench is provided in an area, the bench shall comply with 16.12.3 through 16.12.8. 16.12.2.2 Multiple benches. Where fixed benches are provided in an area, at least 50 percent shall comply with 16.12.2, through 16.12.7. Of those required to be accessible by 16.12.2.2, at least 50% shall also comply with 16.12.8

- (armrest). At least 40 percent of fixed benches required to comply with 16.12.2.2 shall be connected to an outdoor recreation access route complying with 16.3. *EXCEPTION:* The requirements of 16.12.1 do not apply to benches provided in assembly areas covered by ADAAG 4.1.3(19).
- **16.12.2** Dispersal. Accessible benches shall be dispersed among the types provided. This provision does not require an increase in the total number of accessible benches required in 16.6.1.
- **16.12.3 Height.** The front edge of the seat shall have a height between 17 inches (430 mm) minimum to19 inches (485 mm) maximum above the ground or floor space.
- 16.12.4 Clear Floor or Ground Space. At least one clear floor or ground space complying with ADAAG 4.2.4 shall be provided at one end of the bench and the space shall not overlap with other clear space requirements. The clear space shall be positioned to allow wheelchair users to be seated shoulder-to-shoulder with an individual seated on the bench.
- **16.12.5** Back Support. Back support shall be provided the full length of the bench.
- **16.12.6 Surface Conditions.** The surface conditions of the clear space required by 16.12.5 shall be firm and stable. *EXCEPTION:* The provisions of 16.12.6 do not apply where at least one of the conditions in 16.1.1 applies.
- **16.12.7 Slope.** The clear space required by 16.12.5 shall have a slope which does not exceed 1:50 in any direction.
- EXCEPTIONS: 1. Where surface conditions require slopes greater than 1:50 for proper drainage, a 1:33 maximum slope is allowed. 2. The provisions of 16.12.7 do not apply where at least one of the conditions in 16.1.1 applies.
- **16.12.8** Armrest. Where required by 16.12.2, at least one armrest shall be provided on the bench and shall comply with ADAAG 4.26.3.
- 16.13 Utility Sinks

- 16.13.1 Utility Sinks (Deep). Where utility sinks are provided, at least 5 percent, but not less than one of each type provided, in each accessible room or space shall comply with 16.13.2 through 16.13.7 and shall be connected by an outdoor recreation access route complying with 16.3.
- 16.13.2 Clear Floor or Ground Space. Clear space complying with ADAAG 4.2.4 for a parallel approach shall be provided.
- 16.13.3 Slope. The clear space required by 16.13.2 shall have a slope which does not exceed 1:50 in any direction.
- EXCEPTION: 1. Where surface conditions require slopes greater than 1:50 for proper drainage, a 1:33 maximum slope is allowed.
- 16.13.4 Surface. The surface of clear space required by 16.13.2 shall be stable and firm.
- 16.13.5 Height. The counter or rim shall be 34 inches (865 mm) maximum above the ground or floor surface.
- 16.13.6 Depth. The bottom of the bowl shall be 15 inches (380 mm) minimum above the ground or floor surface.
- *16.13.7 Controls.* Controls and operating mechanisms shall comply with ADAAG 4.27.3 and 4.27.4.

## **Utilities:**

- **16.16.1 Utilities.** Electric, water, sewage and other similar type utilities serving accessible elements, shall comply with 16.16.2 through 16.16.5.
- **16.16.2** Controls and Operating Mechanisms. Controls and operating mechanisms shall comply with ADAAG 4.27. EXCEPTIONS: 1. ADAAG 4.27.3 and 4.27.4 do not apply to sewage hookups. 2. ADAAG 4.27.4 does not apply to hand pumps.
- 16.16.3 Water Spouts. Fixed water spouts shall be located 28 inches (710 mm) minimum to 36 inches (915 mm) maximum above the ground or floor surface and shall be centered at the

edge of a 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum clear space.

**16.16.4 Slopes.** Clear spaces required 16.16.2 and 16.16.3 shall have a 1:50 maximum slope in any direction. *EXCEPTION:* 

1. Where surface conditions require a slope greater than 1:50 for proper drainage, a 1:33 maximum slope is allowed.

**16.16.5** Surface. The surface of the clear space required by 16.16.2 and 16.16.3 shall be stable and firm.

#### **Part V: Additional Information**

-The Metro Nashville ADA Board: (615) 862-8744

-The Metro Nashville Public School ADA Coordinator: **(615) 259-8531** 

#### **OR Refer to The Following Resources:**

http://www.inthecountrygardenandgifts.com/jspece/gardening/accessible.html

http://www.access-board.gov/outdoor/outdoor-rec-rpt.htm

#### **Book:**

**Janeen R. Adil:** Accessible gardening for people with physical disabilities: a guide to methods, tools, and plants.1994.

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