

DOG PARK DESIGN

KEY TAKEAWAYS

- Review of other jurisdiction dog park design guidelines has proved that there is no universal consensus on the best type of surfacing. All surfacing types, such as natural turf, washed stone dust, wood mulch, and synthetic turf have positive and negative aspects related to use, maintenance, and cost to be considered. However, washed stone dust surfacing was determined to be FCPA's surfacing of choice, due to its minimal maintenance and high durability. For newly developed FCPA dog parks, natural turf can be considered if the enclosed dog area is larger than 3 acres.
- All FCPA dog parks have crusher fines/washed stone dust surfacing with the exception of Westgrove, Chandon and Blake Lane dog parks. The survey results indicated dissatisfaction with the condition of the surfacing in some of these parks. It was found that excessive slope and the absence of a containment edge within these dog parks was a contributing factor to the surface condition. Reducing the slope and adding a concrete or timber curb in these dog parks would help improve the surfacing condition by limiting the migration of the surface material.
- The standards and guidelines for dog park planning, siting, placement, and design have evolved since the construction of FCPA's first dog park. This study examined and analyzed industry trends, best design practices, public feedback, and County policy. This study report puts forth a revised and refreshed set of standards and guidelines to be consistently referenced for the planning of new FCPA dog parks. The report can also be used as a guide for privately owned publicly accessible dog parks, which are typically developed through rezoning applications and proffers.
- Designated areas for large dogs and smaller, younger, or older dogs were expressed as a need through public comments. Additionally, nearly all guidelines reviewed as part of this study recommended some variation of these separated areas. Designated areas are recommended as part of the design guidelines for new dog parks and should be included when the size of the park can accommodate.

ANALYSIS & FINDINGS

The design of a dog park has implications that affect user experience, safety, and long-term maintenance costs. The study evaluated survey response data, researched design best practices, and documented existing issues to determine a framework for both improving existing dog parks as well as guiding the design of future dog parks.

DESIGN BEST PRACTICES

The study reviewed other jurisdictions' guidelines, survey data, and accepted industry standards¹⁸ and identified the following design best practices:

Surfacing Type Comparison

A thorough review of other jurisdictions' practices found that there is no universal agreement on the best type of surfacing. Each type of surfacing has positive and negative implications related to use, maintenance, and cost. Ultimately, the surface type selected should be responsive to the planned size of the dog park, anticipated amount of usage, available construction budget, and frequency of maintenance intended. A summary table presenting the pros, cons, and typical use for each surface type is provided below in Figure 25.

SURFACING	PROS	CONS	COST	TYPICAL USE
Natural Turf (e.g., grass)	Soft/clean	Wears quickly/high maintenance	Medium	Dog parks larger than 3 acres
Crusher Fines ¹⁹ /Washed Stone Dust	Drains well/longevity	Can erode if not on level surface	Medium	Preferred choice for all dog parks
Wood Mulch	Easy to replace	Holds dog waste/poor drainage	Low	Not recommended for use in dog parks
Synthetic Turf	Less maintenance	Requires frequent cleaning/high cost to replace every couple of years	High	Smaller dog parks and dog runs if coupled with an irrigation system

Figure 25: Dog Park Surfacing Types Comparison Table

All existing FCPA dog parks are smaller than three acres and crusher fines/washed stone dust has been the surfacing type primarily used due to the material's longevity and modest replacement cost. The exceptions are Westgrove, Chandon, and Blake Lane dog parks which have either natural or turf surfacing. The grass has been worn down to the dirt surface in many areas of these dog parks due to the high volume of use. FCPA is working with the Westgrove PACK²⁰ Friends Group to evaluate a surface maintenance regime to help restore the grass. Chandon Dog Park should remain as natural surfacing for the foreseeable future but can be considered for crusher fines/washed stone dust surfacing should the existing surfacing cause maintainability

¹⁸ Guidelines and publications reviewed include:

American Kennel Club Dog Park Guidelines

Recommendations and Guidelines for Dog Park Site Selection, Design, Operations and Maintenance, City of Ann Arbor Parks & Recreation

The Anatomy of a Great Dog Park, Citylab, John Metcalfe, April 14, 2017

Dog Parks Design Standards and Process, DC Department of Parks and Recreation

Dog Parks 101, The Trust for Public Land – Center for City Park Excellence, 2019

¹⁹ Crusher fines is a finely-crushed stone mix that is often the byproduct of gravel operations.

²⁰ Pumphouse Association for Canine Kindness

or usability issues. Conversion of the natural surface to crusher fines/washed stone dust is recommended Blake Lane Dog Park.

Natural Turf

Studies and experience have indicated that natural turf (e.g., grass) requires a fair amount of maintenance and a large area (3 acres or larger) to not wear quickly. Complete or partial closures of a dog park would need to occur periodically to re-establish worn turf areas.

Crusher Fines/Washed Stone Dust

Crusher fines or washed stone dust are an appropriate surface choice for dog parks, as it has a moderate replacement cost, drains well, and holds up to heavy use. One of the negative aspects of crusher fines/washed stone dust is that it can create dust during heavy use and can migrate if the surfacing is not graded properly.

Synthetic Turf

Synthetic turf holds up to wear and tear but requires a subsurface drainage system with irrigation or a hose bib to wash off accumulated dog urine and waste. Additionally, synthetic turf is the most expensive of all the options and is most suitable for smaller dog parks or privately owned dog runs in urban or dense communities.

Wood Mulch Surfacing

Wood mulch surfacing is a relatively inexpensive surfacing type but poses several maintenance issues. The composition and color of wood mulch makes dog waste difficult to detect and remove. Additionally, wood mulch does not drain as well as the other surface types and holds odors.

Fencing

Design guidelines for other jurisdictions reviewed as part of this study recommended using galvanized or vinyl coated chain link fence between 4 and 6 feet in height around the perimeter of the dog park and separating designated dog areas when applicable. Additionally, a double-gated entry with a foyer area is a standard feature that allows for safe entry and exit so that dogs can be taken on or off their leash in a contained environment. This helps prevent unplanned escapes and allows for visitors to shift into and out of the dog park.

Designated Areas

Separate areas for large dogs and smaller, younger, or older dogs are consistently recommended in most of the guidelines reviewed. Designated areas separated by fencing reduce conflicts and give visitors an option for their dog to acclimate to the behavioral climate of the dog park.

Trash Receptacles and Waste Bag Dispensers

Trash receptacles and waste bag dispensers are a necessity in any dog park to facilitate the disposal of dog waste or general trash. The survey results showed that both features are considered critical elements for visitors when visiting a dog park. The placement of trash receptacles varied, with some jurisdictions placing them inside the dog area, while others placed them outside the fenced area. It should be noted that the placement of trash receptacles and dispensers inside the dog area increases the likelihood of users disposing of waste but also creates challenges for maintenance employees to empty the trash or restock the bags. Many of the dog parks that were researched also provide recycling bins, as bottled water or drinks are often brought to dog parks.

Most of the studies reviewed recommend the provision of waste bag dispensers. Dog park visitors do not always pack their own waste bags and providing a dispenser reduces the possibility of a visitor leaving dog waste. Waste bag dispensers are typically placed near the entrance inside the dog park for ease of access. If the dog park has designated areas, separate dispensers are typically located within each area.

Site Furniture & Amenities

Research of site furniture and amenities found that most guidelines recommend seating options, a drinking water source, shade structures or trees, and an informational kiosk. Additionally, the survey results indicated that water and shade were of high importance for visitors visiting FCPA dog parks. Dog agility equipment or play amenities were recommended in some guidelines and were typically observed only in smaller private dog parks.

Parking & Pedestrian Connectivity

In the studies and guidelines reviewed, parking recommendations varied depending upon the locational context of the dog park. Dog parks located in more densely populated or urban areas do not always have dedicated parking areas, as these areas are typically much more walkable and often have public transportation options²¹. Dog parks located in less dense or rural areas typically have parking spaces in an amount sufficient to accommodate dog park visitors so that they are less inclined to park in surrounding neighborhoods.

Nearly all guidelines reviewed recommended providing an ADA (American Disabilities Act) accessible route from reserved spaces in the parking area and/or public walkways to the dog park. Several studies recommended bike racks to support additional means of accessing the park.

Signage

Most guidelines suggested the provision of signage with clearly displayed rules and

²¹ Fairfax Connector Buses only permit service animals and small animals if transported in a secure container.

hours, which should be placed at dog park entrances. Additionally, it was found that informational kiosks were typically placed outside of the dog area to post volunteer opportunities, dog related events, and/or local dog-oriented businesses. While examining other jurisdictions’ dog parks, it was found that signs were most effective when placed in highly visible areas with clear and consistent language. Dog parks that had a variety of sign types and locations placed sporadically throughout the park were found to be less effective in communicating critical information.

Cost Considerations

The construction of a new dog park can cost between \$50,000 and \$500,000 depending upon the size, complexity, and amenities offered within the park. Costs typically include construction procurement, permitting/site plan review fees, and administrative work. Ongoing costs for the maintenance and operation of the dog park should also be considered and these are discussed.

WHAT WE ALSO HEARD

The survey results indicate the relative importance of design elements to dog park users (see Figure 26). Pet waste bag stations, trash receptacles, and the availability of space for dogs ranked as primary importance to users. Shade, drinking fountains, and the availability of parking were also considered important design elements.

How important are each of these features when deciding whether to take your dog to a new dog park?

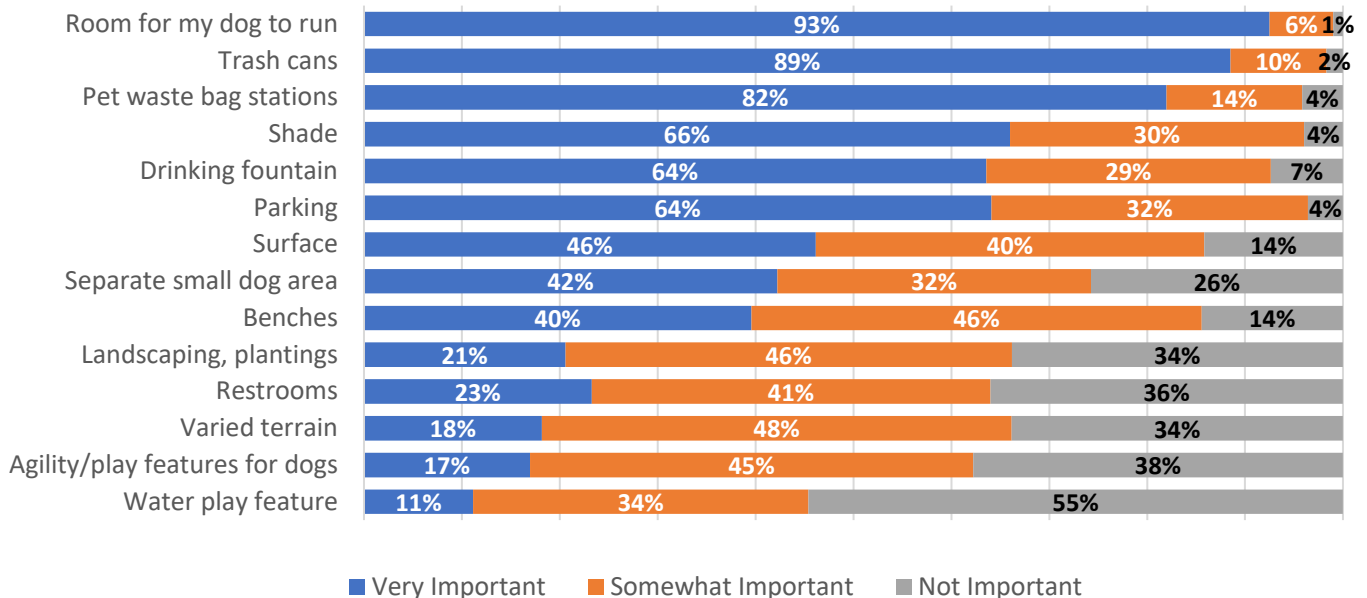


Figure 26: Survey: How important are each of these features when deciding whether to take your dog to a new dog park?
 Note: Percentages for some features in the above chart may not add to 100% due to rounding error.

The survey showed that visitors were least satisfied with the surface condition at Blake Lane (38% satisfied), Chandon (44% satisfied), and Dulles Station Community dog parks (44% satisfied), as displayed in Figure 27. Similar levels of satisfaction with the surfacing conditions at Baron Cameron, Rock Hill, and South Run dog parks were observed as well; in each of these parks, only 45% of visitors were satisfied. Frequency of use, maintenance regime, and the original design all attribute to the condition of the surface. In many existing FCPA dog parks, including Blake Lane, Chandon, and Dulles Station Community parks, it was found that excessive slope and the absence of a containment edge within the dog park was a contributing factor to the surface condition.

% Satisfied - Dog Park Surface Condition

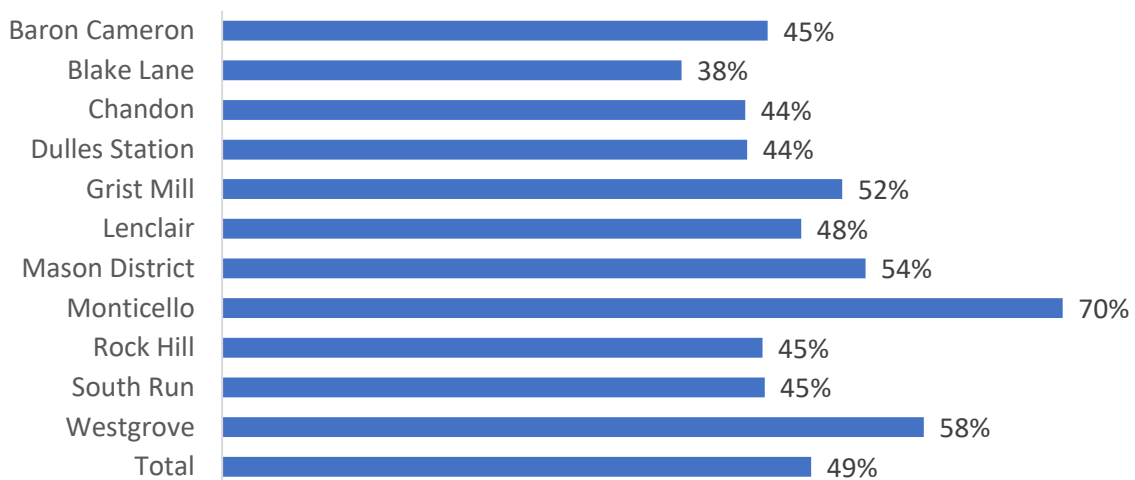


Figure 27: Survey: Percent Satisfied with Dog Park Surface Condition

Note: Respondents were asked to evaluate their satisfaction with FCPA dog park surface conditions on a 5-point scale, ranging from 1 “very unsatisfied” to 5 or “very satisfied”. The percentages shown here reflect the percentage of who indicated they were either “somewhat satisfied” or “very satisfied” with surface conditions.

RECOMMENDATIONS

The following FCPA dog park design guidelines are recommended and were informed by the previous analysis and findings of best practices conducted as part of this study. These design guideline recommendations are intended for the design of future FCPA dog parks and as a resource for the development of privately owned publicly accessible dog parks in the County.

SIZE AND LOCATION

The dog park size and location should adhere to the siting standards put forth in the planning section of this report.

DESIGNATED AREAS

Separate areas for large and small dogs (designated areas) should be provided when space and funding permit. These designated areas can accommodate smaller dogs that are uncomfortable in the larger portion of the park. Designated areas also provide opportunity for maintenance and operations tasks in one area of the dog park while keeping the other area(s) open.

PARKING AND PEDESTRIAN CONNECTIVITY

Sufficient parking, convenient to the site, should be provided such that the dog park visitor parking does not overflow onto surrounding neighborhood streets. In lower density neighborhoods (as shown on Figure 18), 10 to 20 parking spaces should be dedicated to dog park use. In higher density neighborhoods, which are generally more walkable and may have on-street parking spaces, a dedicated parking lot may not be necessary. The parking need for all dog parks in both lower and higher density neighborhoods should be determined and provided as part of the park master planning process.

Accessible pathways that comply with ADA regulations should connect the dog park to parking areas and any existing public sidewalks if possible. Pedestrian connections should be made to existing trail networks wherever possible. In addition, while pedestrian connections to FCPA parks are typically provided by FCDOT (Fairfax County Department of Transportation)/VDOT (Virginia Department of Transportation), FCPA should work with these agencies when establishing new dog parks to ensure that there are safe, comfortable, and convenient crossings for pedestrians.

SURFACING MATERIAL

The type of surfacing to be used within a dog park is very much dependent upon the size, context, budget, and maintenance regime of the dog park as described in the Analysis and Findings Section. Each type of surfacing has advantages and disadvantages depending on the context of its use. Below are the surfacing recommendations for FCPA dog parks.

Natural Turf

Given the maintenance demands and size requirements, natural turf is not recommended as the primary surface within FCPA dog parks. Natural turf can be considered for newly proposed dog parks if the area is larger than three acres and if an appropriate maintenance regime is shown as feasible.

Crusher Fines/Washed Stone Dust

This type of surfacing is the preferred choice for FCPA dog parks. The composition of stone for the crusher fines or washed stone dust should be between #4 and #200 as shown in the construction specifications table.

Synthetic Turf

Synthetic turf is only appropriate for privately owned smaller dog parks or dog runs in urban or dense communities. Synthetic turf can be considered for partial sections of a new FCPA dog park but is not recommended as the primary surfacing for the entire dog park.

Wood Mulch Surfacing

This type of surfacing is not recommended for FCPA dog parks due to the maintenance issues it poses.

CRUSHER FINES/WASHED STONE DUST COMPOSITION	
SIEVE SIZE	% PASSING
No. 4	95-100
No. 8	75-80
No. 16	55-65
No. 30	40-50
No. 50	25-35
No. 100	20-25
No. 200	5-15

Figure 28: Crusher Fines/Washed Stone Dust Composition

SURFACING DESIGN

The design of the dog areas, entryways, and pathways have a direct correlation with the longevity of the chosen surface material and the overall accessibility of the dog park. The following surface design elements are recommended.

Entrance Surfacing

The surface within and directly outside double gated entryways should be concrete for ease of maintenance, dog safety, and ADA accessibility. A 10'x 10' minimum entry corral with two gates is recommended. If amenities are located within the entry corral the size should be large enough to accommodate ADA accessibility standards and space for dogs and people to maneuver. An ADA accessible pathway should lead to the entrance and connect to a public sidewalk and/or ADA parking spaces.

Pathways and Alternative Surfaces within Dog Parks

A concrete, asphalt, or poured-in-place rubber pathway that forms a loop or multiple loops within a dog park provides enhanced accessibility, allows owners to interact with and monitor their dogs more closely. It also adds additional interest to the park. Pathways and walking loops should be provided if there is sufficient space and funding.

Surfacing Edge and Containment

A concrete or timber curb that is a minimum of 6 inches in height from finished grade inside the dog park and a minimum of 8 inches in width should encompass the surfacing of the dog park to minimize material migration. Weeps (drainage holes)

incorporated within the curb should be placed where appropriate to facilitate surface drainage.

FENCING

Dog parks should be fully enclosed with a 6-foot height black vinyl 6-gauge chain-link fence except where existing features of the site provide the same level of enclosure as that provided by a fence. Posts should be embedded in footings securely to frost depth and the chain link portions adequately anchored to ensure that no dog may escape.

The dog park should be equipped with a minimum 10' x 10' double-gated entry corral to keep dogs from escaping and to facilitate access for individuals with disabilities. If the dog park has separate designated areas, entrances to these separate areas should be located within the entry corral. Placing gates in the corners of the fenced area is not recommended, as this allows new dogs entering the park to easily be cornered by other dogs as they rush to greet each other. Gates should be equipped with a page latch and lock for durability. A separate lockable 8-foot-wide gate is recommended for maintenance access in designated dog areas.

Other types of fencing and barriers may be considered on a case-by-case basis. Other types of barriers include walls, transparent polycarbonate sound-reducing panels, and architectural welded wire mesh fencing.

PERIMETER LANDSCAPING/BUFFERS

If the budget and site permit, and if it is necessary to buffer the dog park, vegetation should be planted on the outside of the fence to enhance the aesthetic quality of the site and to assist in mitigating noise associated with the dog park. Plant material that is native, low maintenance, and not dangerous (low toxicity, no thorns, etc.) to dogs is recommended. Small rain gardens, bio-swales, or curbs surrounding the perimeter of the dog park are encouraged for capturing and treating runoff whenever feasible.

SHADE

Shade is critical for the wellbeing of dogs and visitors within a dog park. Dog parks should offer shaded areas using trees and/or shade structures to allow visitors and dogs to retreat from the sun. A maintenance regime should be established for shade shelters if present. Rigid shade structures, such as pergolas and arbors, require less maintenance and upkeep than shade sail structures.

DRINKING FOUNTAIN

A source of drinking water for dogs and visitors is highly desirable within or adjacent to the dog park area and is recommended if a connection to a water line is possible. The drinking fountain should be ADA compliant and frost free. A hose bib is also recommended for maintenance needs. Both the hose bib and the fountain should be placed on an accessible concrete pad that freely drains.

TRASH RECEPTACLES AND WASTE BAG DISPENSERS

Trash receptacles should be located within the entry corral area or immediately adjacent to the outside of the dog park fence near the entrance to encourage waste disposal and to facilitate ease of emptying. Receptacles should have self-closing lids to prevent insects, rodents, and odor. Pet waste bag dispensers mounted at ADA height should be located within each designated dog area in close proximity to the entrance(s). Pet waste stations/bags should also be placed near the primary dog park entrance, at the intersections of walking paths, and near parking lots that serve the dog park.

SITE FURNISHINGS

Dog parks should incorporate several benches and/or tables located in accessible areas for people to rest or socialize. Benches should be strategically located within the dog park and outside the fenced perimeter of the dog park to allow for a comfortable visitor experience. Selected benches and/or tables should be treated, or powder coated metal to limit deterioration. Benches and tables should be surface-mounted to a concrete pad whenever possible.

RESTROOMS

Permanent restroom facilities should be considered during the planning and design of a new dog park if the inclusion of the restroom is found to support other park uses. A dog park alone does not warrant a permanent restroom as most dog park visitors utilize the facility for a short period of time and the development and maintenance costs of such a facility are considerable.

AGILITY EQUIPMENT

Agility equipment provides dogs with engaging activities, opportunities for physical fitness, and enhanced communication with the owner. These amenities may be included if desired by the community and there is a maintenance plan that details care and replacement costs.

SIGNAGE

FCPA Dog Park Rules, including codes of behavior, hours, and requirements for entry, should be posted in clear view and near the entry. A community kiosk and bulletin board should be provided outside of the fenced dog area to provide a place to post local community information related to pet services, meetups, and events as permitted.