

DODSON & FLINKER

Landscape Architecture and Planning

Date: January 15, 2019

To: Lexington Planning Board
Lexington Town Office Building
1625 Massachusetts Avenue
Lexington, MA 02420

From: Peter Flinker, FASLA, AICP, President
Dodson & Flinker, Inc.

Re: Requirements for Accessibility for the Fairland Estates Balanced Housing Plan

Dear Board Members,

At the January 9th, 2019 meeting of the Planning Board, Dodson & Flinker and DeCelle-Burke-Sala & Associates presented information to the Board in response to earlier questions and suggestions raised by Board Members and neighborhood residents. Several additional questions were raised, including:

- What are the accessibility requirements for the sidewalk between the principal project area and Fairland Street, and is it possible to make this fully accessible?
- What are the accessibility requirements for the potential woodland path connecting the principal project area and Lincoln Street?

The United States Access Board Architectural Barriers Act (ABA) was enacted in 1968, and was among the first laws to address access to the built environment. It applies to federal buildings, such as post offices and courthouses, as well as non-federal facilities built with federal funding. The Americans with Disabilities Act (ADA) of 1990 expanded these requirements to all “places of public accommodation,” including publicly and privately owned residential, commercial and institutional facilities, including public streets, parks and recreation facilities. In addition, the Massachusetts Department of Public Safety regulates accessibility through the Architectural Access Board, with regulations promulgated under 521CMR.

Each of these regulations focuses on ensuring accessibility to public buildings from surrounding streets and parking areas. This has led to the familiar design for an accessible route that starts at the street or accessible parking space and leads to an accessible building entrance on a path that is either less than 1:20 slope or which includes a ramp with landings and railings at a maximum 1:12 slope. The regulations require the same standards be met when building outdoor gathering places or recreation facilities such as playgrounds, picnic areas, swimming pools, etc. As described below, however, the various regulations provide some flexibility when it

comes to sidewalks, paths and trails that do not provide access to public buildings or recreation facilities.

Accessibility Requirements for Sidewalks

The design of sidewalks is regulated by the Massachusetts Architectural Access Board under 521 CMR 22.00, which states that “*Walkways* shall include but not be limited to all *walks, sidewalks, overpasses, bridges, tunnels, underpasses, plazas, courts and other pedestrian pathways...*” This section describes minimum requirements, including 48 inch minimum width, a continuous firm and level surface, and good drainage. Intersections leading to a parking lot or crosswalk require a curb cut.

Under the same regulation the grade of walkways is limited to one-in-twenty (5%) slope, with steeper slope requiring an accessible ramp at a maximum grade of one-in-twelve, with landings and railings. However there is an exception under 22.3.1:

“Exception: *Sidewalks* on streets and ways shall be considered *walkways*, with the exception that if the slope of the natural topography exceeds one-in-20 (1:20) (5%) a *ramp* is not required.”

As described in a November 6, 2018 memo to the Planning Board from DeCelle-Burke-Sala, the existing slope leading into the property from Fairland Street averages about 11%, with some areas increasing to as much as 40%. The current plans have regraded this slope to provide a maximum grade for the roadway and adjoining sidewalk of 8%, or slightly less than one in twelve. We believe this will provide for safe vehicular and pedestrian access to the property from Fairland Street, and that based on the exception to 521 CMR 22.00 noted above, railings and landings are not required by the Architectural Access Board.

Accessibility Requirements for Trails

Under the Department of Justice’s 2010 ADA Standards for Accessible design, buildings and facilities that are open to the public must be served by accessible routes, but these standards do not apply to outdoor trails developed to provide access to the natural environment. The Massachusetts AAB regulations likewise lists recreational facilities, including picnic areas, campsites, playgrounds, beaches, parks and associates buildings, but does not cover trails.

In their Manual of Guidelines and Best Practices for Developing and Operating Universally Designed Interpreted Trail Experiences, Massachusetts Audubon reviews all of the accessibility regulations and concludes: “The distinction between access routes and accessible trails is important. Access routes are the necessary connection between accessible buildings or accessible facilities, and are regulated by the AAB; accessible trails are not regulated by the AAB.” (Mass Audubon’s All Persons Trails, p. 6. See:

<https://www.massaudubon.org/content/download/18419/265691/file/MassAudubonAPTGuidelines.pdf>)

Both the USDA National Forest Service has worked for many years to find appropriate applications of ADA and other regulations to trails through natural areas. The Forest Service's Accessibility Guidebook for Outdoor Recreation and Trails describes their understanding of the legal requirements and promotes a Universal Design approach, where "...all new and reconstructed facilities, programs, and associated elements are to be accessible to the greatest extent possible." (p. 7). (See: https://www.fs.fed.us/recreation/programs/accessibility/pubs/pdfpubs/pdf10072014/1223-2806P-AGORT-COL-08-20-13_Errata2Fixed_300dpi2.pdf). The Forest Service Trails Accessibility Guidelines (FSTAG) states that "a trail is not an outdoor recreation access route and is not subject to the requirements for outdoor recreation access routes..." (page 81). Their extensive trail planning guidelines therefore make universal accessibility the goal, but recognize that topography and other site conditions often make it physically impossible, or so damaging to the natural resources involved as to be unwise.

In Massachusetts, the Department of Conservation and Recreation uses the Forest Service Guidelines to address accessibility in their Trails Guidelines and Best Practices Manual. (See: <https://www.mass.gov/files/documents/2016/08/sg/dcrguidelines.pdf>)

Based on these trail planning resources, we believe that the proposed trail from the principal development area to Lincoln Street complies with both the requirements and spirit of ADA and Massachusetts 521 CMR. With an existing slope that averages 20% over much of its length, it would be impossible within the available width of the corridor to create a fully-accessible route. However we will make the path safe, useable and durable by winding the upper part to reduce the slope, and using short runs of steps on some of the steepest areas to make it easier to negotiate the slope. The resulting trail will be an asset to the neighborhood and a useful link in the town-wide trail system.