

Meetinghouse Farm Barn



Town of Barnstable
ADA Transition Plan

September 2021



Institute for Human Centered Design

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Background

The Meetinghouse Farm Barn is a two-story building located at 2135 Meetinghouse Way in West Barnstable. The Barn is part of Meetinghouse Farm, where there is also a greenhouse and garden plots. An informal path near the back of the barn on its west side leads into the Rhododendron Forest.

The downstairs of the Meetinghouse Farm Barn building is used for storage and is not open to the public. As a result, the first floor of the barn was not surveyed. IHCD team was told that the second floor is a potential site for agricultural classes and farming club meetings. The second floor and areas around the building were included in the survey.

A staircase on the northside of the building connects to the entry and egress door for the second floor. A garage door about 40" above the ground on the west side of barn also provides an inaccessible entry point to the second floor.

Key Accessibility Issues

Parking

Accessibility issues include lack of a van accessible parking space. (See Figure 2 for an example of an unpaved accessible parking space.)

Note: If there are areas where members of the public are allowed to park, an accessible parking space is required.

Exterior Access Routes

Accessibility issues include lack of an accessible route to the second-floor entry door on the north side (See Figure 3 for a possible route to the second floor.) and lack of an accessible route from the west side of the barn to the Rhododendron Forest pathway entry. There is also lack of an accessible route through the Rhododendron Forest.

Additional Accessibility Issues

- Lack of an accessible route to the bench by the entry to the path through the Rhododendron Forest.
- The threshold at the egress door from the second floor is higher than the maximum height allowed.
- The staircase to the second-floor entry and egress door has handrails on just one side. The one provided handrail is also mounted higher than the maximum height allowed and has a noncompliant cross section.

Order of Magnitude Cost Estimates

- Renovate and provide exterior accessible routes: \$5,760
- Provide a ramp to the second-floor entry door: \$7843
- Miscellaneous corrective actions (handrails, accessible parking, door threshold, etc.): \$2,880

Total: *\$16,483

***Note:** Cost for an accessible route through the Rhododendron Forest is not provided.

Best Practice and Inclusive Design

Best practice and inclusive design recommendations include elements that are not required in the standards but may create enhanced experiences for all users.

- Recommend providing a 36" by 48" firm, stable and slip-resistant area alongside the bench by the entry to the Rhododendron Forrest so that a person using a wheelchair or other mobility device is able to sit alongside someone seated on the bench with her/his shoulders aligned. See the diagram below for best practice recommendations for benches:

Figure 1: Illustrating recommended clear floor space at a bench.

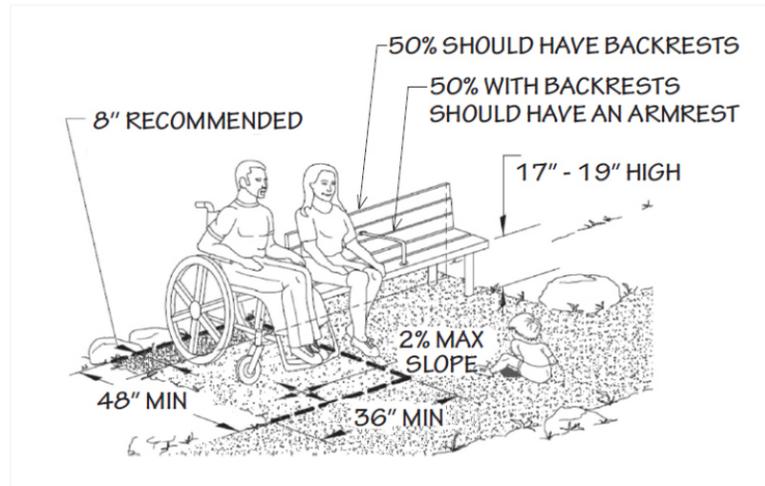


Figure 2: Illustration of one way to mark accessible parking spaces at unpaved parking areas.

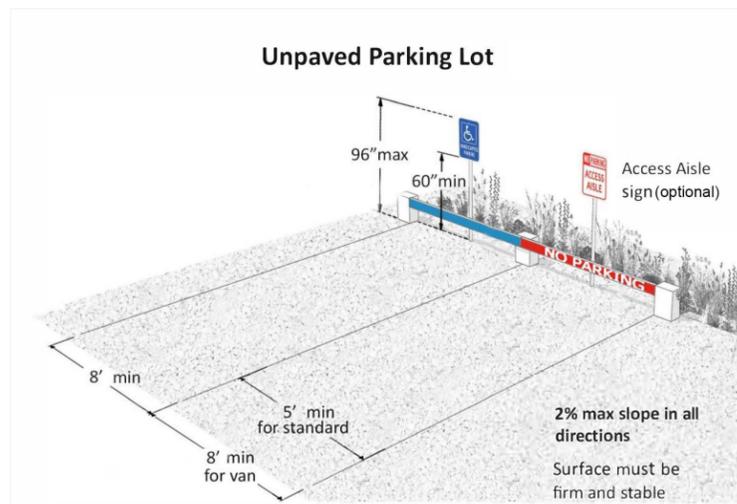


Figure 3: The blue line shows the approximate orientation of a ramp running from an area near where an accessible parking space could be located along the north side of the building to the second-floor entry door.



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ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
Approach and Entrance												
Exterior Access Route												
1	Path Through the Rhododendron Forest	Ext.		Exterior Access Route	Walkway		Cross slope > 1:50 (2.00%) Running slope > 1:20 (5%) Surface is not stable, firm, and slip-resistant Accessible route not provided	6% 13.2% - -	Reduce cross slope to be no steeper than 1:50 (2.00%). Reduce running slope to be no steeper than 1:20 (5%). Repair surface. Ensure an accessible route is provided. (Cost to provide an accessible route through the Rhododendron Forest not provided.)	1	-	\$0
2	Route From Barn to Start of Rhododendron Forest Path	Ext.		Exterior Access Route	Exterior		Accessible route not provided	-	Ensure an accessible route is provided. Cost based on a 4' wide min. x 45' long stone dust path from the north side of the building to the entry point of the Rhododendron Forest path by the bench and sign.	1	2880	\$2880
3	Stairs to Second Floor - North Side	Ext.		Exterior Access Route	Exterior		Accessible route not provided	-	Ensure an accessible route is provided to the landing for the stairs to the second floor entry door. Ensure route has a 1:20 (5%) max. running and 1:50 (2%) max. cross slope. (Cost based on a 4' wide min. x 45' long stone dust path from the parking area to the stair landing.)	1	2880	\$2880
Off-Street Parking Lot or Garage												
4	Parking at Barn	Ext.		Off-Street Parking Lot or Garage	N/A		Total # of parking Total # of designated accessible parking spaces Total # of designated van accessible spaces Access aisle not provided Sign not provided	1 - - -	Provide a van accessible parking space and a marked access aisle each at least 96" wide. Provide a sign with the International Symbol of Accessibility (ISA) and the words "Van Accessible" with the bottom of the sign 60" min. above the ground and the top 96" max. above the ground. (See the narrative report for an example of how to designate parking in an unpaved area.)	1	1850	\$1850
Entrance												
5	Route to Stairs to Second Floor - North Side	Ext.		Entrance	Main Entrance		Entrance not on an accessible route	-	Provide a compliant exterior ramp with handrails, edge protection and landings running along the north side of the structure and connecting with the second floor entry door. See Figure 1 in the narrative report. (Cost based on a 30' straight pressure-treat wood ramp.)	1	7843	\$7843

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ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
Emergency Exit												
6	Second Floor Egress Door Threshold	2		Emergency Exit	N/A		Threshold > 1/2" high	2"	Alter the threshold to be 1/2" high max.	1	150	\$150
Access to Goods and Services												
Stairways												
7	Stairs to Second Floor	Ext.		Stairways	Egress		Handrail height < 34" or > 38" Handrail not provided on both sides Handrails have non-compliant cross section	-47" - -	Alter so the handrails are 34"- 38" high above the floor. Provide handrail on both sides with 1 1/4" - 2" circular cross section. (Cost based on two 10' long wooden handrails mounted between 34" and 38" high.)	1	880	\$880
Exterior Benches												
8	Lawn Behind Barn	Ext.		Exterior Benches	N/A		No accessible route to one bench in area	-	Provide an accessible route to at least one bench in each area where benches are provided. (Cost included in the cost for the 45' stone dust path to the Rhododendron Forest entry point.)	1	-	\$0