

Centerville Playground



Town of Barnstable
ADA Transition Plan

August 2021



Institute for Human Centered Design

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Background

Centerville Playground and Field are located at 524 Main Street in Centerville. Park amenities include benches and play components.

The Centerville Recreation Building is located uphill and due north of the playground. It has parking lots on its east and west sides, with the lot closest to the path to the playground on the west side of the building. For more information about the parking at this location see the Centerville Recreation Building narrative report and survey catalog.

Note: IHCD team has been informed that the Town of Barnstable is planning to demolish and rebuild the Centerville Playground, and that more than \$800,000 have been approved by the Centerville Planning Commission (CPC) to complete that work. As a result, while accessibility issues with the existing playground are referenced in this narrative report and in the accompanying survey catalog, costs to remedy the issues are not included.

Key Accessibility Issues

Exterior Accessible Routes

Accessibility issues include lack of an accessible route to and around the playground and lack of an accessible route to all the play components and benches in the playground. Additional issues include lack of the minimum required vertical clearance inside the playground due to the presence of elevated walkways that act as protruding objects. Running slopes at the west parking lot ramp leading to the playground and ramps in the playground are higher than the maximum allowed, the ramp handrails do not have a compliant cross section, and edge protection is not provided. In addition, handrails at the staircase from the east parking lot and at the playground do not extend 12".

Stairways

Accessibility issues include handrails that are higher than the maximum allowed, handrails that do not extend 12", handrail

cross sections are not compliant, and the stairs have open risers. In addition, stairs have a surface that is not stable, firm and slip resistant.

Additional Accessibility Issues

- An accessible portable toilet is not provided in the same area where an inaccessible portable toilet is located.

Order of Magnitude Cost Estimates

- Provide an accessible route to all play components (poured-in-place rubber within the playground).
- Provide an accessible route to and around the playground.
- Provide an accessible route to play components and benches in the playground.
- Provide a portable accessible toilet.

Total: \$0






Note: Where elevated play components are provided, at least 50 percent shall be on an accessible route.

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 striping the two parking spaces at path entry so vehicles do not block route to playground.
- Recommend providing a 36" x 48" stable, stable firm and slip resistant surface at one end of bench extending behind bench 12" so a person in a wheelchair to sit alongside someone on the bench with shoulders alignment.

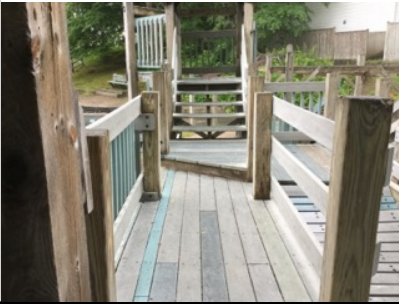




**Town of Barnstable
Centerville Playground**

ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
Approach and Entrance												
Exterior Access Route												
1	Route From West Parking Lot at Centerville Recreation Building	Ext.		Exterior Access Route	Walkway		Cross slope > 1:50 (2.00%) Running slope > 1:20 (5%)	5.2% 8.8%	Reduce cross slope to be no steeper than 1:50 (2.00%). Reduce running slope to be no steeper than 1:20 (5%).	1	-	\$0
2	Route From West Parking Lot at Centerville Recreation Building	Ext.		Exterior Access Route	Walkway		Cross slope > 1:50 (2.00%) Running slope > 1:20 (5%)	4% 9.6%	Reduce cross slope to be no steeper than 1:50 (2.00%). Reduce running slope to be no steeper than 1:20 (5%).	1	-	\$0
3	Pedestrian Access From Main Street Sidewalk to Playground	Ext.		Exterior Access Route	Walkway		Cross slope > 1:50 (2.00%) Running slope > 1:20 (5%) Level changes > 1/4" Surface is not stable, firm, and slip-resistant Does not prevent accumulation of water Route not maintained in operable working condition Accessible route not provided	19.5% 9% 5" - - -	Reduce cross slope to be no steeper than 1:50 (2.00%). Reduce running slope to be no steeper than 1:20 (5%). Alter change in level to be 1/4" high max. Repair surface. Ensure the accessible route is maintained in operable working condition. Ensure an accessible route is provided.	1	-	\$0
4	Ramp Route to the Playground From West Side Parking Lot	Ext.		Exterior Access Route	Walkway		Cross slope > 1:50 (2.00%) Running slope > 1:20 (5%) Surface is not stable, firm, and slip-resistant	5.9% 15.9% -	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.	1	-	\$0
5	Route From West Parking Lot at Centerville Recreation Building	Ext.		Exterior Access Route	Walkway		Running slope > 1:20 (5%)	8.9%	Reduce running slope to be no steeper than 1:20 (5%).	1	-	\$0




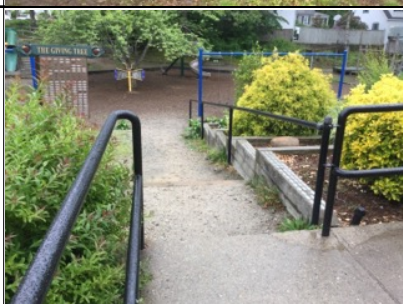

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ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
6	Route From West Parking Lot at Centerville Recreation Building	Ext.		Exterior Access Route	Walkway		Running slope > 1:20 (5%)	10.2%	Reduce running slope to be no steeper than 1:20 (5%).	1	-	\$0
7	Route Within Playground	Ext.		Exterior Access Route	Exterior		Running slope > 1:20 (5%)	8.1%	Reduce running slope to be no steeper than 1:20 (5%).	1	-	\$0
8	Route From West Parking Lot at Centerville Recreation Building	Ext.		Exterior Access Route	Exterior		Running slope > 1:20 (5%)	13.4%	Reduce running slope to be no steeper than 1:20 (5%).	1	-	\$0
9	Route From West Parking Lot at Centerville Recreation Building	Ext.		Exterior Access Route	Exterior		Running slope > 1:20 (5%)	7.7%	Reduce running slope to be no steeper than 1:20 (5%).	1	-	\$0
10	Inside Playground	Ext.		Exterior Access Route	Walkway		Level changes > 1/4"	11"	Alter change in level to be 1/4" high max.	1	-	\$0






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ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
11	Inside Playground	Ext.		Exterior Access Route	Walkway		Level changes > 1/4"	5.75"	Alter change in level to be 1/4" high max.	1	-	\$0
12	Inside Playground	Ext.		Exterior Access Route	Walkway		Level changes > 1/4"	9.5"	Alter change in level to be 1/4" high max.	1	-	\$0
13	Front Parking Lot Entrance to Playground			Exterior Access Route	Walkway		Level changes > 1/4"	1.75"	Alter change in level to be 1/4" high max.	1	-	\$0
14	Inside Playground	Ext.		Exterior Access Route	Walkway		Level changes > 1/4" Surface is not stable, firm, and slip-resistant	12" -	Alter change in level to be 1/4" high max. Repair surface. Ensure a stable, firm and slip resistant accessible route is provided to the playground.	1	-	\$0
15	Pedestrian Access From Main Street Sidewalk to Playground	Ext.		Exterior Access Route	Exterior		Level changes > 1/4" Surface is not stable, firm, and slip-resistant Accessible route not provided	10" - -	Alter change in level to be 1/4" high max. Ensure a stable, firm and slip resistant accessible route is provided to the playground.	1	-	\$0




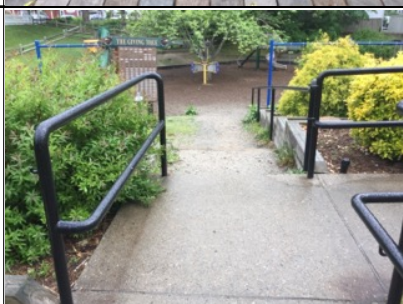

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ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
16	Pedestrian Access From Main Street Sidewalk to Playground	Ext.		Exterior Access Route	Exterior		Level changes > 1/4" Accessible route not provided	10" -	Alter change in level to be 1/4" high max. Ensure an accessible route is provided.	1	-	\$0
17	Inside Playground	Ext.		Exterior Access Route	Walkway		Surface is not stable, firm, and slip-resistant	-	Repair surface.	1	-	\$0
18	Inside Playground	Ext.		Exterior Access Route	Exterior		Surface is not stable, firm, and slip-resistant Vertical clearance < 80" above ground	- 31"	Repair surface. Provide a cane-detectable barrier underneath stair that is 27" max. above the ground.	1	-	\$0
19	Ramp Route to the Playground From West Side Parking Lot	Ext.		Exterior Access Route	Exterior		Accessible route not provided	-	Ensure an accessible route is provided.	1	-	\$0
20	Inside Playground	Ext.		Exterior Access Route	Exterior		Vertical clearance < 80" above ground	45"	Provide a cane-detectable barrier underneath stair that is 27" max. above the ground.	1	-	\$0






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ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
21	Inside Playground	Ext.		Exterior Access Route	Exterior		Vertical clearance < 80" above ground	48"	Provide a cane-detectable barrier underneath stair that is 27" max. above the ground.	1	-	\$0
Access to Goods and Services												
Ramps												
22	Ramp Route to the Playground From West Side Parking Lot	Ext.		Ramps	Exterior		Running slope >1:12 (8.33%)	12.4%	Reduce running slope to be no steeper than 1:12 (8.33%).	1	-	\$0
23	Inside Playground	Ext.		Ramps	Exterior		Running slope >1:12 (8.33%) Handrails do not extend 12" past top & bottom Handrails have non-compliant cross section	24.3% - -	Reduce running slope to be no steeper than 1:12 (8.33%). Alter handrails to extend horizontally above the landing for 12" min. beyond the top and bottom of ramp runs. Provide handrails with 1-1/4" to 1-1/2" circular cross section.	1	-	\$0
24	Inside Playground	Ext.	Top	Ramps	Exterior		Running slope >1:12 (8.33%) Handrails have non-compliant cross section	9.4% -	Reduce running slope to be no steeper than 1:12 (8.33%). Provide handrails with 1-1/4" to 1-1/2" circular cross section.	1	-	\$0
25	Ramp Route to the Playground From West Side Parking Lot	Ext.		Ramps	Exterior		Running slope >1:12 (8.33%) Edge protection < 4" high	9.2% -	Reduce running slope to be no steeper than 1:12 (8.33%). Provide edge protection that prevents the passage of a 4" diameter sphere, where any portion of the sphere is within 4" of the finished floor or ground surface.	1	-	\$0






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ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
26	Ramp Route to the Playground From West Side Parking Lot	Ext.		Ramps	Exterior		Cross slope > 1:50 (2.00%) (MAAB)	11.1%	Reduce the cross slope to be no steeper than 1:50 (2.00%).	1	-	\$0
27	Ramp Route to the Playground From West Side Parking Lot	Ext.		Ramps	Exterior		Handrails do not extend 12" past top & bottom	-	Alter handrails to extend horizontally above the landing for 12" min. beyond the top and bottom of ramp runs.	1	-	\$0
28	Inside Playground	Ext.		Ramps	Exterior		Handrails do not extend 12" past top & bottom Handrails have non-compliant cross section Surface not stable, firm, and slip-resistant	- - -	Alter handrails to extend horizontally above the landing for 12" min. beyond the top and bottom of ramp runs. Provide handrails with 1-1/4" to 1-1/2" circular cross section. Repair surface.	1	-	\$0
29	Ramp Route to the Playground From West Side Parking Lot	Ext.		Ramps	Exterior		Edge protection < 4" high	-	Provide edge protection that prevents the passage of a 4" diameter sphere, where any portion of the sphere is within 4" of the finished floor or ground surface.	1	-	\$0
Stairways												
30	East Parking Lot Entrance to Playground	Ext.		Stairways	Exterior		Handrail height < 34" or > 38"	45"	Alter so the handrails are 34"- 38" high above the floor.	1	-	\$0





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ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
31	Inside Playground	Ext.	Top	Stairways	Exterior		Handrail height < 34" or > 38" Handrails do not extend 12" from stairs Handrails have non-compliant cross section Tread widths and/or riser heights are not uniform Stair has open risers	32" - - -	Alter so the handrails are 34"- 38" high above the floor. Top: Ensure handrails extend horizontally above the landing for 12" min. beginning above the first riser nosing. Bottom: Ensure that the sloped bottom extension extends one tread depth minimum beyond last riser nosing in same direction as stair flight. Provide handrails with a 1 1/4" - 2" circular cross section. Ensure stairs have closed risers.	1	-	\$0
32	Inside Playground	Ext.		Stairways	Exterior		Handrail height < 34" or > 38" Handrails do not extend 12" from stairs Handrails have non-compliant cross section Risings > 7" high Tread widths and/or riser heights are not uniform	42" - 8" -	Repair to this stairway might be technically infeasible. Alter so the handrails are 34"- 38" high above the floor. Top: Ensure handrails extend horizontally above the landing for 12" min. beginning above the first riser nosing. Bottom: Ensure that the sloped bottom extension extends one tread depth min. beyond last riser nosing in same direction as stair. Provide handrails with a 1 1/4" - 2" circular cross section.	1x	-	\$0
33	East Parking Lot Entrance to Playground			Stairways	Exterior		Handrails do not extend 12" from stairs Handrails have non-compliant cross section Risings > 7" high	- - 7.5"	Top: Ensure handrails extend horizontally above the landing for 12" min. beginning above the first riser nosing. Bottom: Ensure that the sloped bottom extension extends one tread depth minimum beyond last riser nosing in same direction as stair flight. Provide handrails with a 1 1/4" - 2" circular cross section. Repair to this stairway might be technically infeasible.	1	-	\$0
34	East Parking Lot Entrance to Playground			Stairways	Exterior		Handrails do not extend 12" from stairs Handrails have non-compliant cross section Tread widths and/or riser heights are not uniform	- - -	Top: Ensure handrails extend horizontally above the landing for 12" min. beginning above the first riser nosing. Bottom: Ensure that the sloped bottom extension extends one tread depth minimum beyond last riser nosing in same direction as stair flight. Provide handrails with a 1 1/4" - 2" circular cross section. It may not be technically feasible to adjust risers or treads, however stairs may be hazardous for users.	2	-	\$0
35	Inside Playground	Ext.		Stairways	Exterior		Handrails do not extend 12" from stairs Handrails have non-compliant cross section Stair has open risers	- - -	Top: Ensure handrails extend horizontally above the landing for 12" min. beginning above the first riser nosing. Bottom: Ensure that the sloped bottom extension extends one tread depth minimum beyond last riser nosing in same direction as stair flight. Provide handrails with a 1 1/4" - 2" circular cross section. Ensure all stairs in the playground have closed risers.	1	-	\$0






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ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
36	Inside Playground	Ext.		Stairways	Exterior		Handrails do not extend 12" from stairs Handrails have non-compliant cross section Stair has open risers	- - -	Top: Ensure handrails extend horizontally above the landing for 12" min. beginning above the first riser nosing. Bottom: Ensure that the sloped bottom extension extends one tread depth minimum beyond last riser nosing in same direction as stair flight. Provide handrails with a 1 1/4" - 2" circular cross section. Ensure stairs have closed risers.	1	-	\$0
37	Ramp Route to the Playground From West Side Parking Lot	Ext.		Stairways	Exterior		Handrails not continuous where required Risers > 7" high Surface not stable, firm, and slip-resistant Tread widths and/or riser heights are not uniform	- 8.75" - -	Provide continuous handrails. Repair surface.	1	-	\$0
38	Ramp Route to the Playground From West Side Parking Lot	Ext.		Stairways	Exterior		Risers > 7" high Surface not stable, firm, and slip-resistant Handrails not provided Tread widths and/or riser heights are not uniform	14" - - -	Repair surface. Provide handrails.	1	-	\$0
39	Route From West Parking Lot at Centerville Recreation Building	Ext.		Stairways	Exterior		Risers > 7" high Handrails not provided Tread widths and/or riser heights are not uniform	7.5" - -	Provide handrails.	1	-	\$0
Signage												
40	East Parking Lot Entrance to Playground			Signage	Directional		Directional sign to acc. entrance to playground not provided	-	Provide a sign indicating the location of the nearest accessible entrance to the playground.	1	-	\$0






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ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
Benches												
41	Playground	Ext.		Benches	N/A		No accessible route to one bench in this area	-	Provide an accessible route to at least one bench in this area.	1	-	\$0
42	Pedestrian Access From Main Street Sidewalk to Playground	Ext.		Benches	N/A		No accessible route to one bench in this area	-	Provide an accessible route to at least one bench in this area.	1	-	\$0
Toilet & Bathing Rooms												
Portable Toilet												
43	Portable Toilet by Rear Parking Lot			Portable Toilet	N/A		Not located on an accessible route Accessible portable toilets not provided	- -	Locate portable toilet on an accessible route. Ensure that at least 5% of portable toilets is accessible.	1	-	\$0
Additional Access												
Drinking Fountains												
44	Drinking Fountain	Ext.		Drinking Fountains	Seated		Fountain not on accessible route Spout < 38" or > 43" (standing users) No drinking fountain provided for seated users	- 31" -	Provide an accessible route to the drinking fountain. Relocate drinking fountain so that the spout is between 38"- 43" above the finished floor or ground. Provide an additional drinking fountain for seated users.	1	-	\$0
Play and Sport Areas												

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ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
Play Areas												
45	Playground	Ext.		Play Areas	N/A		Accessible route not provided around playground Accessible route not provided at play components	- -	Install an accessible route to and around the playground. Provide a compliant impact-attenuating surface under and around the play components.	1	-	\$0
46	Playground	Ext.		Play Areas	N/A		Accessible route not provided at play components	-	Provide a compliant impact-attenuating surface under and around the play components.	1	-	\$0
47	Playground			Play Areas	N/A		Accessible route not provided at play components	-	Provide a compliant impact-attenuating surface under and around the play components.	1	-	\$0
48	Playground			Play Areas	N/A		Accessible route not provided at play components	-	Provide a compliant impact-attenuating surface under and around the play components.	1	-	\$0
49	Playground			Play Areas	N/A		Accessible route not provided at play components	-	Provide a compliant impact-attenuating surface under and around the play components.	1	-	\$0

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ID	Location	Floor	Room	Element	Type	Photo	Issues	Current Measure	Recommendations	Quantity	Price	Cost Estimation
50	Playground			Play Areas	N/A		Accessible route not provided at play components	-	Provide a compliant impact-attenuating surface under and around the play components.	1	-	\$0
51	Playground			Play Areas	N/A		Accessible route not provided at play components	-	Provide a compliant impact-attenuating surface under and around the play components.	1	-	\$0
52	Playground			Play Areas	N/A		Accessible route not provided at play components	-	Provide a compliant impact-attenuating surface under and around the play components.	1	-	\$0
Best Practice												
53	Route From West Parking Lot at Centerville Recreation Building	Ext.			57				Recommend striping the two parking spaces at path entry so vehicles do not block route to playground.	1	-	\$0
Bench												
54	East Parking Lot Entrance to Playground	Ext.		Bench	N/A				Recommend providing a 36" x 48" stable, stable firm and slip resistant surface at one end of bench extending behind bench 12" so a person in a wheelchair to sit alongside someone on the bench with shoulders alignment.	1	-	\$0