

Ashland Planning Board Resubmission - 08/09/21

- Planning Board Application - Revised
- Site Distance Narrative



**Town of Ashland
Planning Department**

101 Main St.
Ashland, MA 01721
508.881.0101

Ashlandmass.com/193/Planning

Application for Planning Board Approval/Permit

Note: Application must be complete, with a certified plot plan and all application fees to be accepted.

Property Information:

Street Address: 90 Concord Street

Zoning District: Residential B Overlay District: N/A

Assessor's Map: 14 Lot: 185 Deed Book: 08063 Page: 0449

Current Property Owner: Town of Ashland

Permit/Approval Sought:

Special Permit (§9.3) Special Permit Amendment/Modification Design Plan Review (§9.6)

Site Plan Review (§9.4) Site Plan Modification Scenic Road Permit (Ch. 249 §20)

Earth Removal Permit (Ch. 242 §3) Site Alteration Special Permit (§5.8)

Subdivision (Include Subdivision Application Form) Wireless Communication Facilities (§6.4)

Use Type: Residential: Commercial: Industrial: Mixed Use: **Institutional**

Applicant Information: Owner: Tenant: Prospective Purchaser/Tenant:

Name: Town of Ashland, Michael Herbert, Town Manager

Address: 101 Main Street, Ashland, MA 01721

Phone: 508-881-0100 Email: mherbert@ashlandmass.com

Agent's Name: Jared Gentilucci

Agent's Address: 370 Main Street, Suite 850, Worcester, MA 01608

Agent's Phone: 508-365-1032 Agent's Email: jgentilucci@nitscheng.com

Additional Information:

Are all real estate taxes and other assessments to the Town current?: Yes

Is the parcel on a scenic road?: Yes Is the parcel in a flood plain?: Yes

Is the parcel within 100 feet of a wetland or 200 feet of a river: Yes

Is this an amendment to a previously issued Special Permit? (attach approved permit): No

Date structure(s) built?: 1970



Description of the Relief Sought: (attach additional pages if needed)

The project is requesting relief for the requirement to submit plans on 36"x24" sheets due to the number of sheets this would result in. The project is requesting a waiver of all site fees because this is a Town project.

The project is requesting relief under the Dover Amendment to allow an electronic sign which is not permitted in the RB Zoning District in the zoning regulations (5.3.11, Item 5: No sign shall be internally lit).

What specific zoning bylaws and/or Special Permit types are relevant to this application?:

Zoning Bylaw 5.3.11, Item 5

Special Permit Required for Disturbing Steep Slopes

Benefits of Project:

The project will replace an existing school building and will provide several benefits such as better site circulation, an improved stormwater management system, geothermal wells for building heating and cooling, a more energy efficient building, and a LEED certified building.

Existing use and condition of the property and surrounding neighborhood: (Please list all non-conformities.)

The existing site is located in the Residential B Zoning District and the use is institutional (elementary school). There are no existing non-conformities on the site.

Attach Building Permit Denial letter if applicable.

By signing below you assert this application is complete and accurate to the best of your knowledge:

Signatures:

Applicant/Agent: Michael Herbert Applicant's Name: Michael Herbert

Agent's Relationship to Applicant: _____ Firm: _____

Owner: Michael Herbert Owner's Name: _____

Note: If the applicant is not the owner, please have the owner sign above or submit a letter of permission with the application.



9 Sight Distance

Stopping Sight Distance (SSD) is the length of the roadway ahead that is visible to the driver and should be sufficiently long to enable a vehicle traveling at or near the design speed to stop before reaching a stationary object in its path. Stopping sight distance is the sum of the distance traversed by the vehicle from the instant the driver sights an object necessitating a stop to the instant the brakes are applied, and the distance needed to stop the vehicle from the instant brake application begins.

Intersection Sight Distance (ISD) is the length of the leg of the departure sight triangle along the major road in both directions for a vehicle stopped on the minor road waiting to depart. The critical departure sight triangles for the new school driveways are for traffic approaching from either the left or right for left turns from the driveways onto Concord Street. The methods for determining the sight distances needed by drivers approaching intersections are based on the same principles as stopping sight distance, but incorporate modified assumptions based on observed driver behavior at intersections.

The SSD and ISD values associated with a given design speed are shown in Table 13. The sight distance evaluations for the intersection are shown in Table 14.

Table 13 - Sight Distance Criteria

Design Speed (MPH)	Design Stopping Sight Distance Value¹ (SSD) (FT)	Recommended Intersection Sight Distance Value² (ISD) (FT)
15	80	170
20	115	225
25	155	280
30	200	335
35	250	390
40	305	445
45	360	500
50	425	555
55	495	610
60	570	665
65	645	720
70	730	775
75	820	830
80	910	885
<i>Source: A Policy on Geometric Design of Highways and Streets, AASHTO, Washington DC (2011)</i>		
¹ Design value based on a grade of less than 3%, a brake reaction distance predicted on a time of 2.5 seconds and a deceleration rate of 11.2 ft/s ²		
² Recommended value based on Case B1 - a stopped passenger car to turn left onto a two-lane highway with no median and grades 3% or less		

The posted speed limit for Concord Street at the project site is 20 MPH because of the School Zone, with the 85th percentile speeds of 38 MPH at both the eastbound and the westbound directions. To be conservative, we used the 85th percentile speeds for the sight distance analysis at both driveways.

Table 14 - Proposed Sight Distance Evaluation

Intersection	Posted Speed (MPH)	85 th Speed (MPH)	Minimum (FEET) ^{1,2}	Measured (FEET)	Obstruction
<u>Concord Street at the Easterly School Driveway</u>					
Stopping Sight Distance:					
Concord Street Eastbound	20	38	283	450	
Concord Street Westbound	20	38	283	430	
Intersection Sight Distance:					
Looking to the right from E Driveway	20	38	423	>450	
Looking to the left from E Driveway	20	38	423	>430	
<u>Concord Street at the Westerly School Driveway</u>					
Stopping Sight Distance:					
Concord Street Eastbound	20	38	283	290	
Concord Street Westbound	20	38	283	350	
Intersection Sight Distance:					
Looking to the right from W Driveway	20	38	423	>450	
Looking to the left from W Driveway	20	38	423	290	Horizontal Curve along Concord Street
<p>Source: A Policy on Geometric Design of Highways and Streets, AASHTO, Washington DC (2011)</p> <p>¹ Table 3-1. Stopping Sight Distance on Level Roadways</p> <p>² Table 9-6. Design Intersection Sight Distance - Case B1, Left Turn from Stop</p>					

As shown in Table 14 both SSD values at the new school driveways, as well as ISD values at the easterly driveway exceed the minimum values. The ISD value at the westerly driveway for the eastbound traffic also exceeds the minimum value, however because of the horizontal curve along Concord Street between both driveways, the ISD value at the westerly driveway for the westbound traffic does not meet the minimum value for the 38 MPH 85th percentile speeds but exceeds the minimum value for the posted speed limit of 20 MPH (225 FT).