

**From:** [RobinM](#)  
**To:** [Michael Behrendt](#)  
**Cc:** [Karen Edwards](#)  
**Subject:** 19 Main Street | query for Feb. 23 | vegetation for sloped earth above retaining wall  
**Date:** Tuesday, March 15, 2022 8:14:01 PM

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Greetings, Michael --

I understand that the 2:1 slope above the retaining wall for the 19 Main Street parking lot is to be vegetated. Sheet C501 in the [revised plans \(February 3, 2022\)](#) provides information on that area, including below excerpts.

Perhaps I overlooked other information in the site plans or simply don't understand the proposal, but **I hope the Planning Board will first take a look at specimen photographs online and then ask the applicants to explain their choice of vegetation for this area.**

Please forward this email to the Planning Board and ask Karen to include it in the packet for the February 23rd meeting. Thank you.

### **RELEVANT PORTIONS OF SHEET C501**

#### **Permanent Vegetation** (notes)

D. Maintenance

2. Mow seeded areas as necessary.

#### **Seed Mixtures for Permanent Vegetation** (table)

Mixture C: Tall fescue, creeping red fescue, birdsfoot trefoil

### **OBSERVATIONS AND QUESTIONS:**

1) Please tell us about the **choice of grasses versus shrubs**:

I thought we might see native shrubs in this location -- perhaps starting off as very young plants, e.g., from the Strafford County Conservation District, something along the lines of low-growing sumac or low-bush blueberry -- but of course, I am not an expert and they may not be appropriate.

Perhaps shrubs wouldn't do the job or survive?

However, it is my impression that it is unusual to find grass growing naturally among or near woods. Perhaps the grasses have fast-growing root structures that would hold the slope better? On the other hand, shrubs would be more in keeping with the vegetated buffer.

2) **Birdsfoot trefoil**:

(a) It's typically grown in open areas, e.g., pastures, for livestock forage, so it strikes me as a curious choice. Also, see below for challenges of establishing the plants.

(b) Is it an invasive species in NH? It is in some other states; see below.

3) **How shady will this area be?** Conversely, how much sun will it get?

Missouri Botanical Garden (MOBOT) [Plant Finder](#) states that **birdsfoot trefoil requires full sun**. Typically, **grasses also need a lot of sun**.

4) **Creeping red fescue is a lawn grass.** The [American Meadows](#) website states: \*Plant Creeping Red Fescue for an easy, low-maintenance ground cover. It is beneficial for erosion control and will attract wildlife to your lawn or meadow. Perennial. (Festuca rubra)\*  
Isn't this an odd choice for a steep slope above a retaining wall?

5) **Tall fescue is a lawn grass.** The [Pennington Seed](#) company website states: \*Tall fescue is valued for its adaptability to a wide range of climates and its tolerances for cold, heat, drought and shade. In its preferred growing zones, tall fescue provides lawn owners with outstanding options for improving lawn resilience and durability. Depending on where you live and your lawn goals, this versatile grass may be an excellent choice for you.\*  
Isn't this an odd choice for a steep slope above a retaining wall?

### **ESTABLISHING BIRDSFOOT TREFOIL IS A CHALLENGE**

[Birdsfoot trefoil](#) -- PennState Extension

EXCERPT: Because of its small seed size and poor seedling vigor, birdsfoot trefoil requires careful management for successful establishment. Before seeding, trefoil seed should be inoculated with Rhizobium lupini bacteria, which are specific for birdsfoot trefoil. This will ensure sufficient nodulation of the root system and adequate atmospheric nitrogen fixation. Trefoil's small seed necessitates that it be placed no deeper than ¼ inch in the soil to achieve maximum stands and yields (Figure 2). A smooth, firm seedbed will greatly facilitate accurate depth placement of the seed. Early spring seedings are generally more successful than late summer seedings.

[Birdsfoot trefoil](#) -- University of Missouri; extensive commentary, including: \*During the seedling period (first 60 to 90 days of life), it is less aggressive than most plants, so competition from other plants must be controlled.\*

### **BIRDSFOOT TREFOIL: INVASIVE SPECIES ? ?**

Seacoast Online | [Nature News: Bird's-foot trefoil an interesting invasive plant](#) [June 25, 2021; written by Susan Pike, a researcher and an environmental sciences and biology teacher at Dover High School]

MOBOT [Plant Finder](#) states: \*It is now considered an exotic invasive weed in parts of the United States, Canada, and Australia.\*

[Birdsfoot trefoil](#) -- University of Minnesota Extension [excerpt; see website]

Quick facts

- Birdsfoot trefoil is an invasive species. It should be reported.
- Birdsfoot trefoil is found in prairies and open areas, such as roadsides.
- It forms dense mats, choking and shading out most other vegetation.

### **WHAT DOES BIRDSFOOT TREFOIL LOOK LIKE?**

[photos of birdsfoot trefoil](#): internet search results

Regards,

-- Robin

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