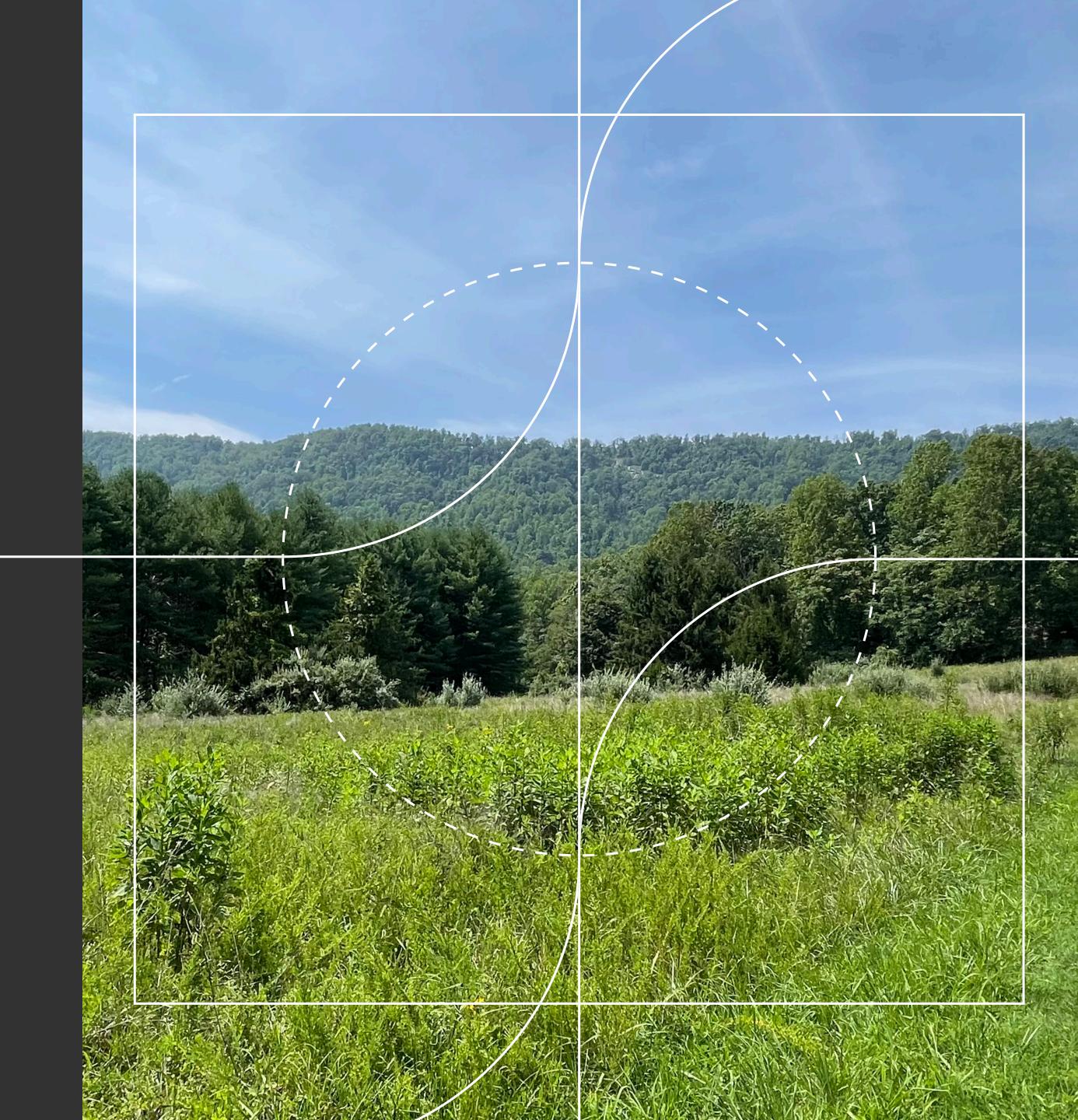


# Special Use Permit Application for CBI Forest School

SUMMER 2025





#### Background

Outdoor environment creates innovative learning experiences

Students range from 18 months through 4th grade

Currently serves 67 families (93 students)

CBI provides childcare and schooling close to the City but with access to nature



#### **Existing Site**

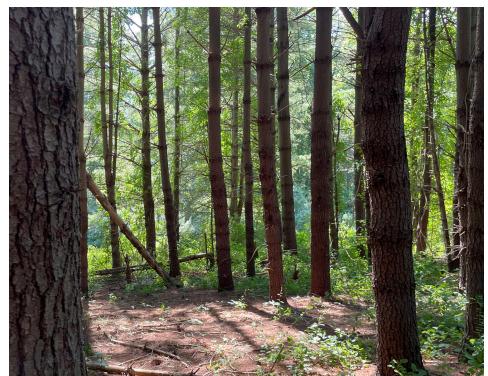
156 Acres

Currently vacant with no existing buildings or infrastructure on site aside from a driveway

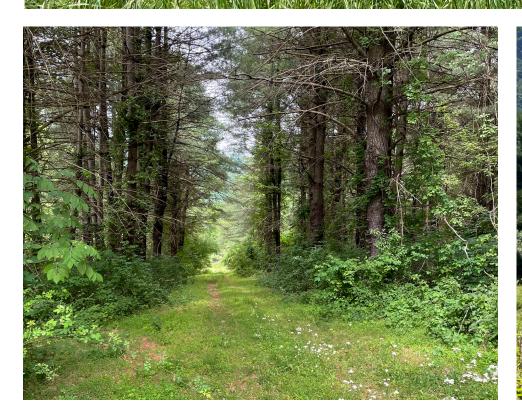
Large, natural site with vegetated fields, forests, and a stream

Centrally located within Albemarle County











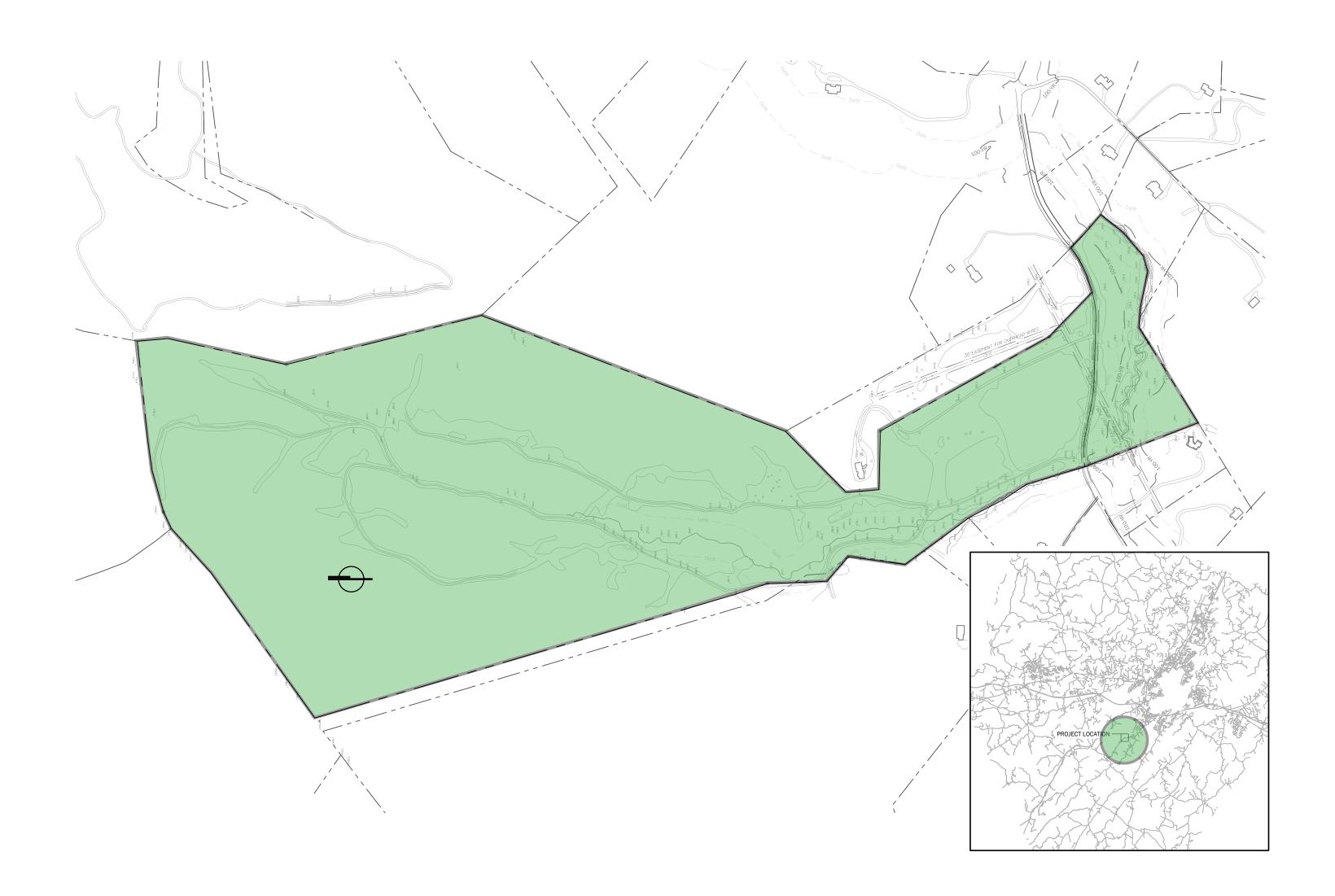
#### **Existing Site**

156 Acres

Currently vacant with no existing buildings or infrastructure on site aside from a driveway

Large, natural site with vegetated fields, forests, and a stream

Centrally located within Albemarle County



## Updates Since Planning Commission Meeting

June 30 - Meet and Greet at Grace Church in Red Hill

July 11 - Meet and Greet at Rivanna Rifle & Pistol Club

Postcards, email exchanges, oneon-one meetings

Finding opportunities for collaboration



MAILER FOR NEIGHBORHOOD MEET AND GREET

This is a chance for our County to strengthen early childhood infrastructure.

This is a chance for our County to support religious and cultural communities.

This land will be cherished.



## Proposal

#### Request/Proposed **Concept Overview**

Maximum enrollment: 144 students

Fully compliant VDOT Commercial Entrance

#### **ADA** accessible

Phase 1 - four (4) total buildings, including 3 classroom cabins, 1 base camp

Phase 2 - three (3) additional buildings, including 2 cabins and 1 building for congregation use\*



<sup>\*</sup>Congregation use is not part of this Special Use Permit request

#### Request/Proposed **Concept Overview**

Working with County staff and consultants to optimize site layout

Fire road relocated outside of stream buffer

Drainfield relocated per on-site soils exploration

Road widened to 20 ft in front of site



#### Phased Approach: Phase 1\*

Three (3) classroom cabins

Base camp cabin

Minimal paved surfaces

Entrance location meets all visibility requirements



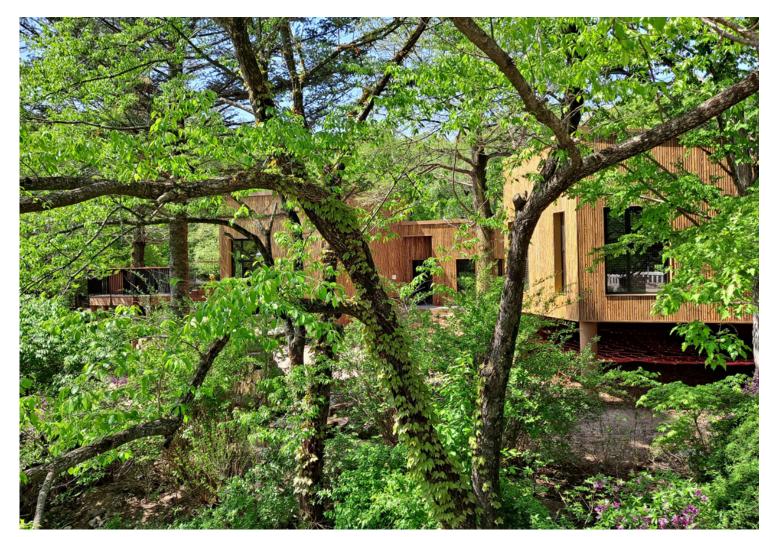
\*SITE MASTERPLAN INCLUDES TWO (2) ADDITIONAL CABINS AND CONGREGATION SPACE

#### Precedent Images for Concept Plan







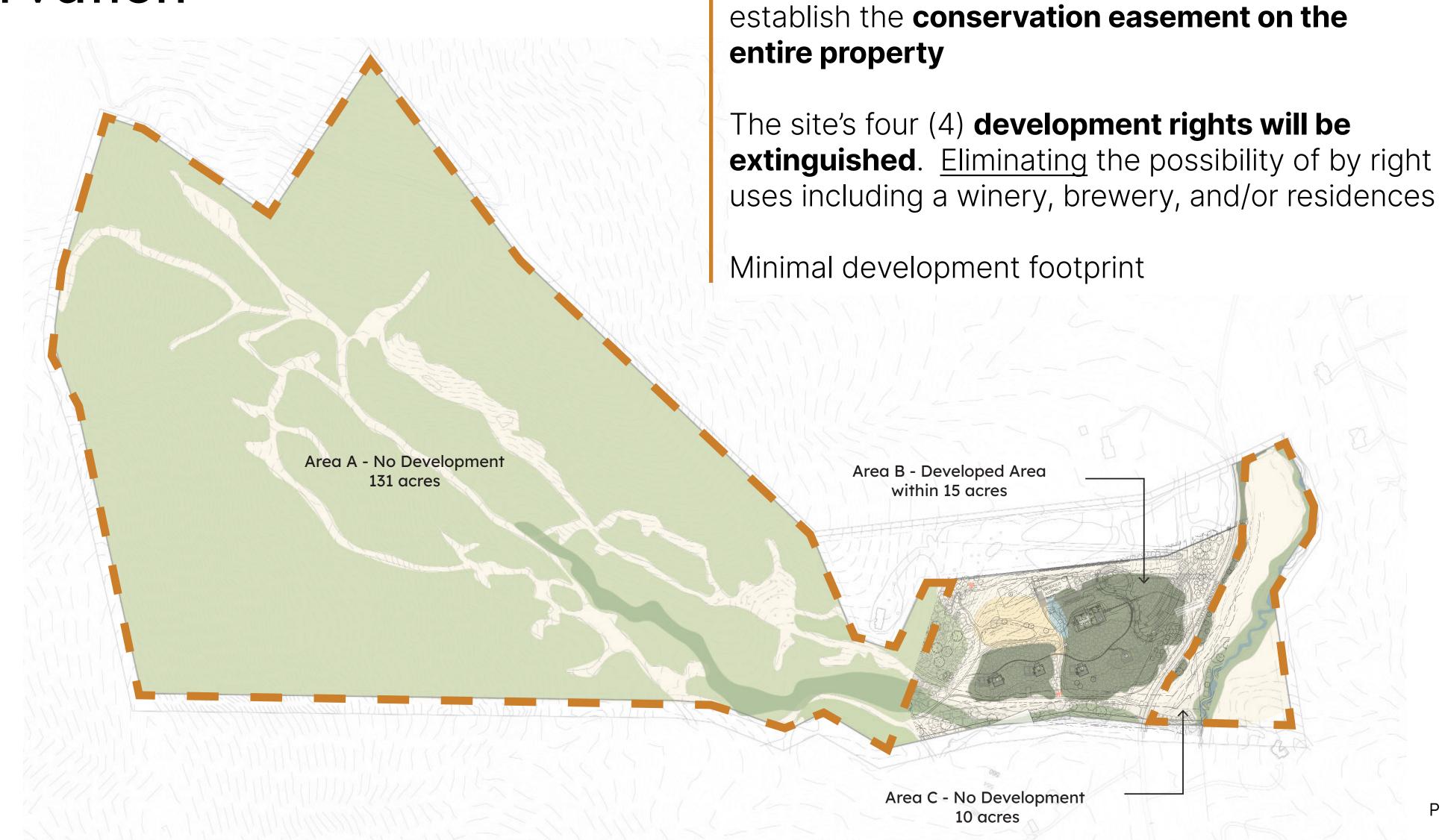








## Commitment to Conservation



A neighbor is donating this to CBI and plans to

### Ongoing Stream Buffer Restoration

Property is <u>already enrolled</u> in the **Department of Forestry Hardwood Initiative** and the **James River Buffer Program** 

Invasive species removal has begun; hardwood plantings begin this autumn

Planting over **2,000 native trees** of **22 different species** 

Ongoing coordination with landscape architect regarding planting plan and strategic thinning of pines

Riparian buffers provide a number of benefits: **filtering out pollutants** from runoff, **providing habitat** for wildlife, **stabilizing eroded streambanks**, and **reducing flood impacts** 



RIPARIAN BUFFER PLAN - JAMES RIVER ASSOCIATION



IMAGE FROM JCLA STUDIO



IMAGE FROM JCLA STUDIO

## Impact Mitigation



#### Viewshed Preservation

Parking will be screened from view

Trees will be preserved wherever possible onsite to maintain the natural character

**Buildings** are intentionally designed to **integrate with the** wooded site

Lighting will be controlled for backlight, uplight and glare, will be dark sky compliant and implemented minimally through the site for safety



IMAGE FROM JCLA STUDIO

#### Stewardship with Infrastructure

#### Minimize land disturbance

Low Impact Design

**Avoid mass grading** 

Maximize stormwater infiltration

Conservation landscaping

Bioretention practices

Permeable pavers

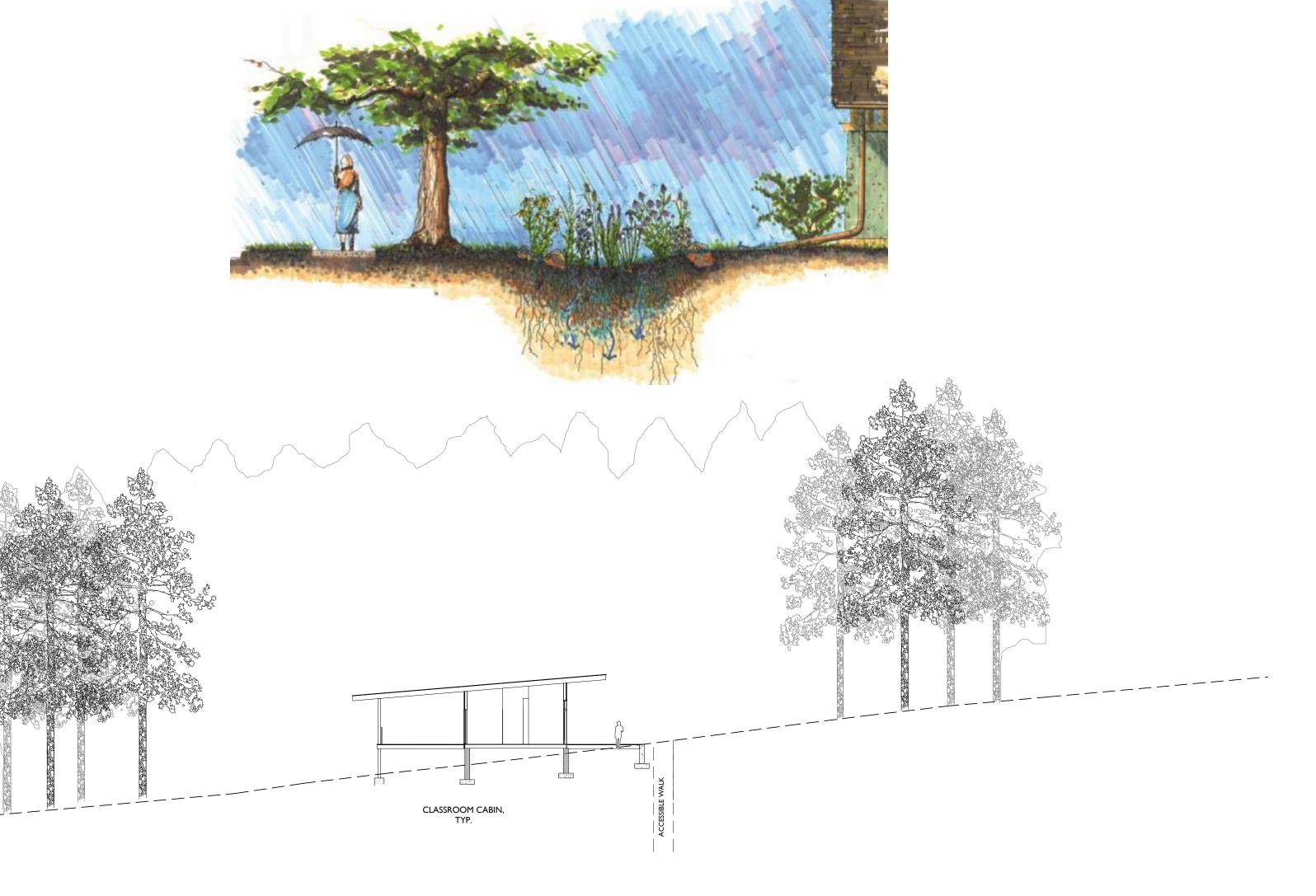


IMAGE FROM JCLA STUDIO

#### Water Use

VDH guidelines conservatively estimate water use of 10 GPD/student or teacher

**Actual water use** observed at MACAA site is **6 GPD/student** 

On a yearly basis, water use is comparable to one or two single family homes

A Tier 3 Groundwater Assessment was conducted and suggests that there is adequate water available within the watershed to support the proposed use

Conservation Easement helps protect water resources as it includes crucial groundwater recharge areas that maintain water quality and quantity

WATER DEMANDS:				
			PEAK DAY	
USE DESCRIPTION	UNITS	QTY OF	FLOW (GAL PER DAY)	
USL DESCRIPTION	UNITS	UNITS	TLOW (GAL FLIT DAT)	
*Schools w/o showers	Per Person	173.00	1,730	
*By-Right 3 BR Dwelling	Per Dwelling	4.00	1,800	

Per Person

500.00

<sup>1</sup>By-Right Winery, 5 acres Vines

Summary Annual Water Use Projections for Dudley Mo	untain Road Site (gallons per	year)
CBI Forest School	124,835	
CBI Forest School + Religious Assembly Building	132,843	
3 BR Dwelling	164,250	
(4) 3 BR Dwelling	657,000	
Winery	805,584	

2,582

<sup>\*</sup>Information per State Code 12VAC5-610-670, water use assumed to equal or exceed sewage flows

<sup>&</sup>lt;sup>1</sup> Assumes 300 cases wine per acre, 6 gal water used per gal water produced, not including irrigation. Assumes 5 gpd per visitor in tasting room. Number of visitors assumed based on trip generation for size of building assumed.

## Traffic Safety: Dudley Mountain Road

#### Roadway Suitability

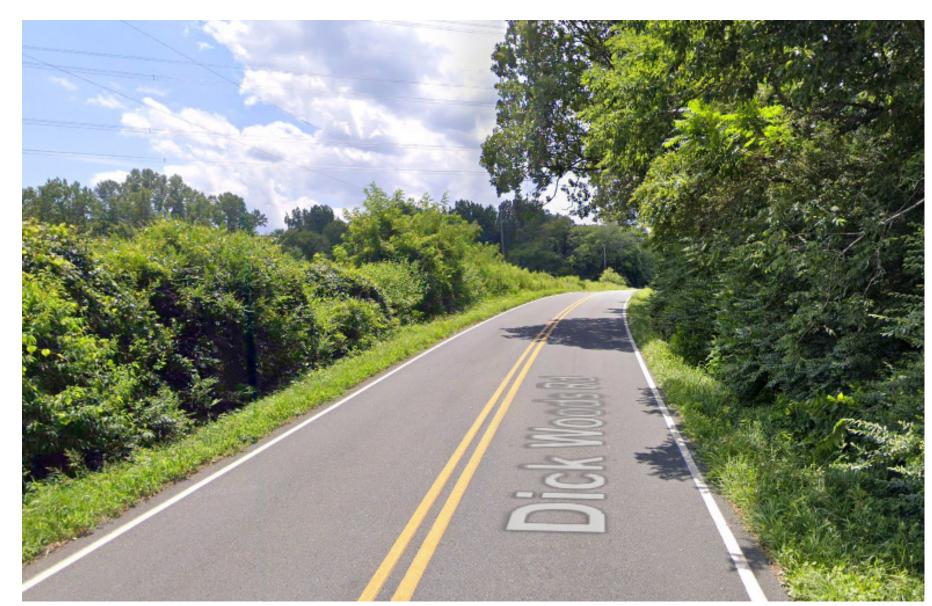
- Average width = 18'
- Rural Areas intentionally don't want wider roads
- Precedent for VDOT to allow similar roads with up to 1,500 VPD

#### County Staff Opposition

- Based on the premise that substandard geometry = unsafe for school use
- Crash data does not suggest this

#### Accidents

- 14 Accidents in 5 years
- Majority of accidents at night (10)
- Under the influence of alcohol (5)
- Snowy or icy conditions (2)
- Only one that was not related to alcohol, ice/snow, or darkness



DICK WOODS ROAD - 600 VPD (NEAR MILLER SCHOOL RD) - 5 ACCIDENTS UNRELATED TO ALCOHOL, ICE/SNOW, DARKNESS



RED HILL ROAD - 1300 VPD (SOUTH OF OLD LYNCHBURG) - 15 ACCIDENTS UNRELATED TO ALCOHOL, ICE/SNOW, DARKNESS

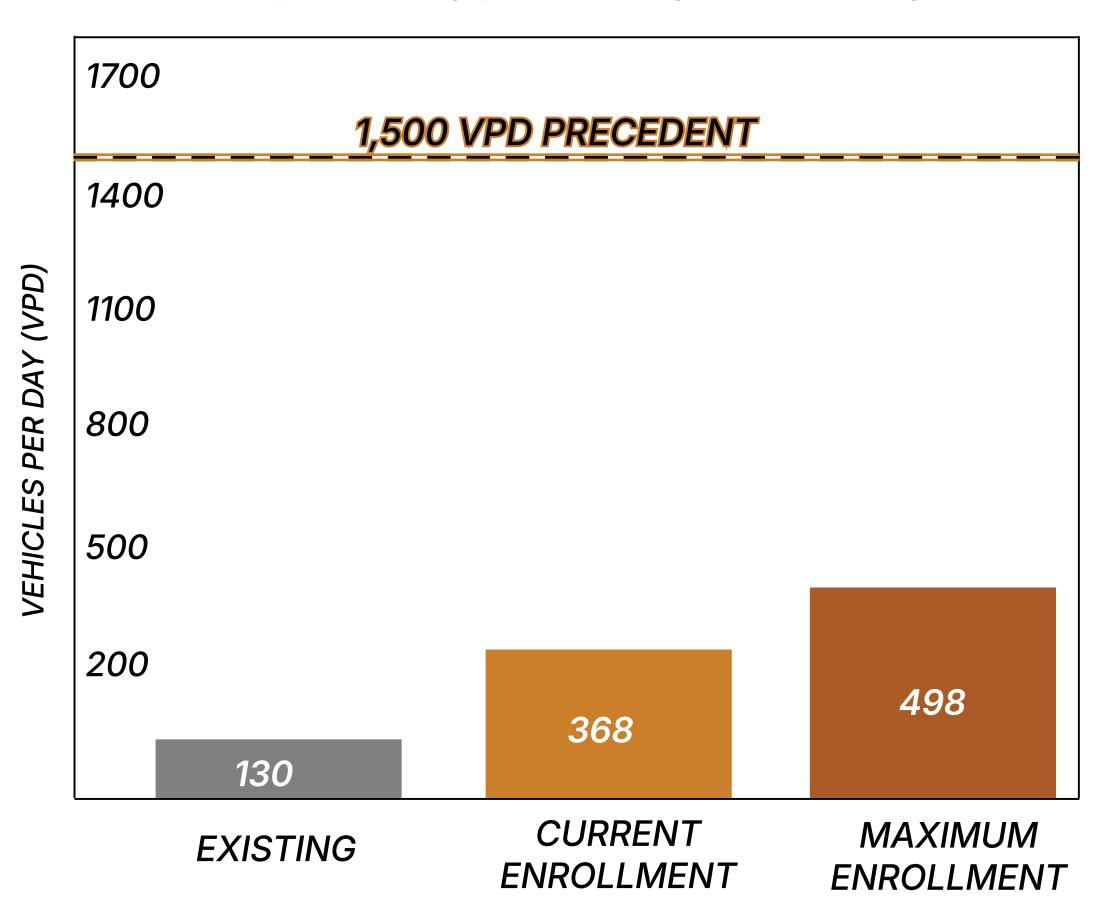
#### **Traffic Demands**

Traffic on **Dudley Mtn Rd** to increase from 130 VPD to:

- **368 VPD** (current enrollment)
- **498 VPD** (maximum enrollment)

Precedent for VDOT to allow similar roads up to 1,500 VPD (Rural Rustic Roads Program)

#### DUDLEY MOUNTAIN ROAD TRAFFIC



#### Traffic Control

CBI collected trip generation data

Less than 2 vehicles per minute expected in peak hour traffic

CBI will ensure a **staggered drop- off** by creating separate drop-off
timeslots over the course of an
hour that families sign up for

**Carpooling** will help further limit traffic impacts

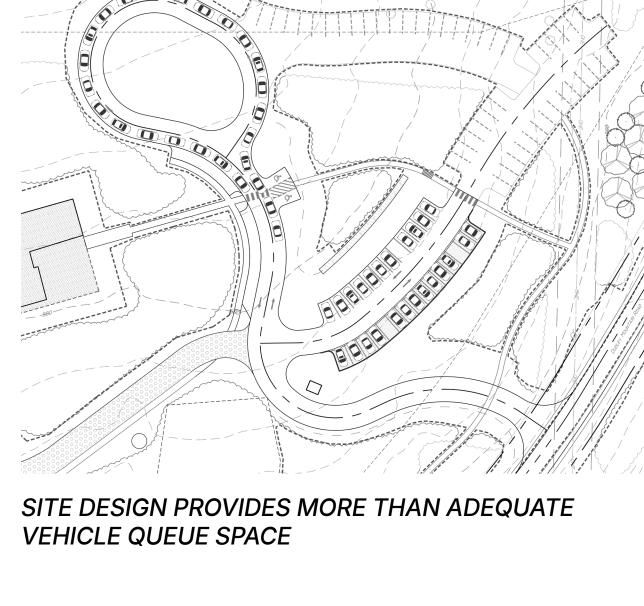
(5 staff members currently bring a total of 8 of their own children to school)

Shuttle option

Queue space available within site

1 HOUR DROP OFF Current Enrollment (93)			
TIME	Cars in	Cars out	Trips
7:30-8:15			
(teachers)	18		18
8:00-8:20	15	15	30
8:20-8:40	17	17	34
8:40-9:00	18	18	36
TOTAL	68	50	118

NOTE: VEHICLE COUNTS ARE BASED ON REAL OBSERVED DATA, TIMING IS ASSUMED



1 HOUR DROP OFF Maximum Enrollment (144)			
TIME	Cars in	Cars out	Trips
7:30-8:15			
(teachers)	25		25
8:00-8:20	25	25	50
8:20-8:40	28	28	56
8:40-9:00	26	26	52
TOTAL	104	79	183

NOTE: THIS IS EXTRAPOLATED FROM REAL OBSERVED DATA

#### Planned Road Improvements

CBI will widen Dudley Mountain Road to 20 ft with 3 ft shoulders in front of their site

CBI will facilitate the placement of hidden driveway signage or convex mirrors at blind driveways along Dudley Mountain Road

CBI will form a joint committee with interested neighbors to advocate for **continued road maintenance** and improvements

# Consistency with Comprehensive Plan

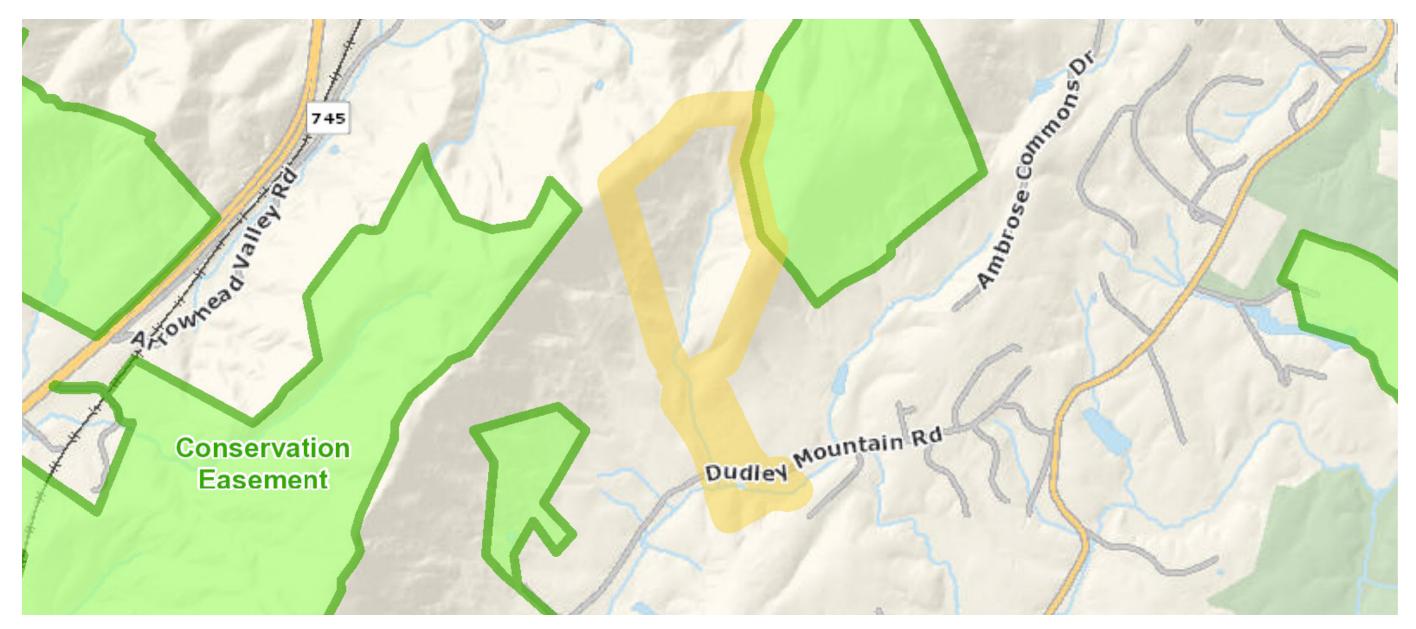
#### Rural Areas

Needs a Rural Area to be succesful, as seen by CBI Forest School's experience at MACAA compared to Camp Holiday Trails

Compatible size and scale of development

Strengthening land conservation initiatives

**Encouraging connectivity of** conservation land



NEARBY CONSERVATION EASEMENTS - ALBEMARLE COUNTY GIS

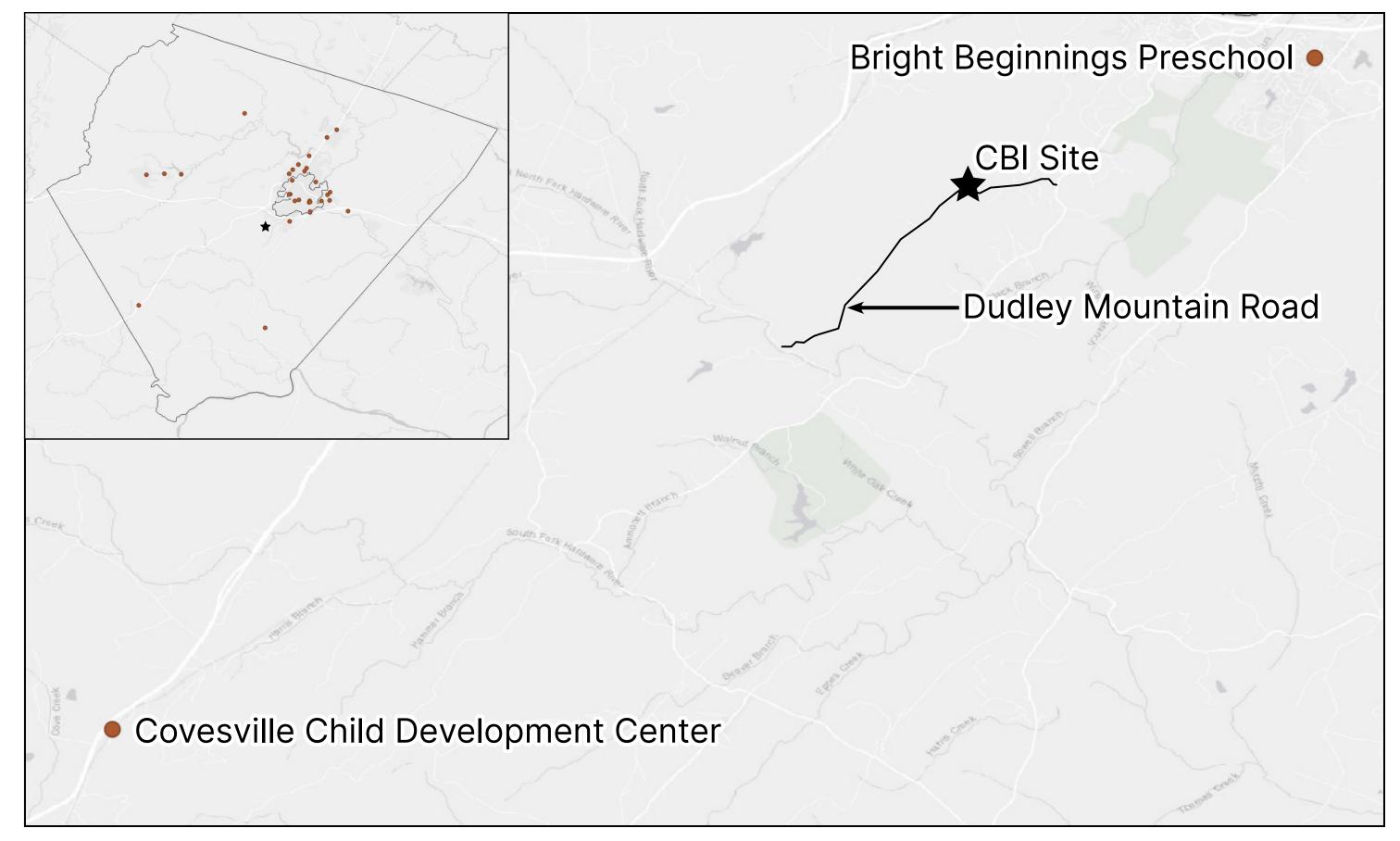
#### Public Need

The Charlottesville Albemarle area has a **substantial need for more schools, especially for the 18-month - kindergarten range** 

Shortage of over 8,000 childcare spots in the Blue Ridge Region (United Way of Greater Charlottesville, 2025).

County schools are reaching or exceeding their capacity, leading to school overcrowding

38% of County schools are at or above 95% capacity, an increase from last year



LICENSED CHILD CARE CENTERS IN ALBEMARLE COUNTY - DATA FROM CHILD CARE AWARE VIRGINIA

#### Benefits of CBI Forest School

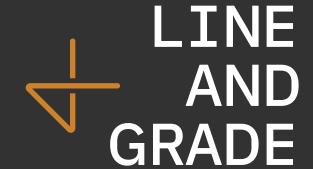
CBI would flourish at this location and help alleviate childcare needs for over 100 families

Fosters **environmental stewardship** through outdoor education

If property cannot be donated for use, it will be sold - this project ensures the conservation of this property

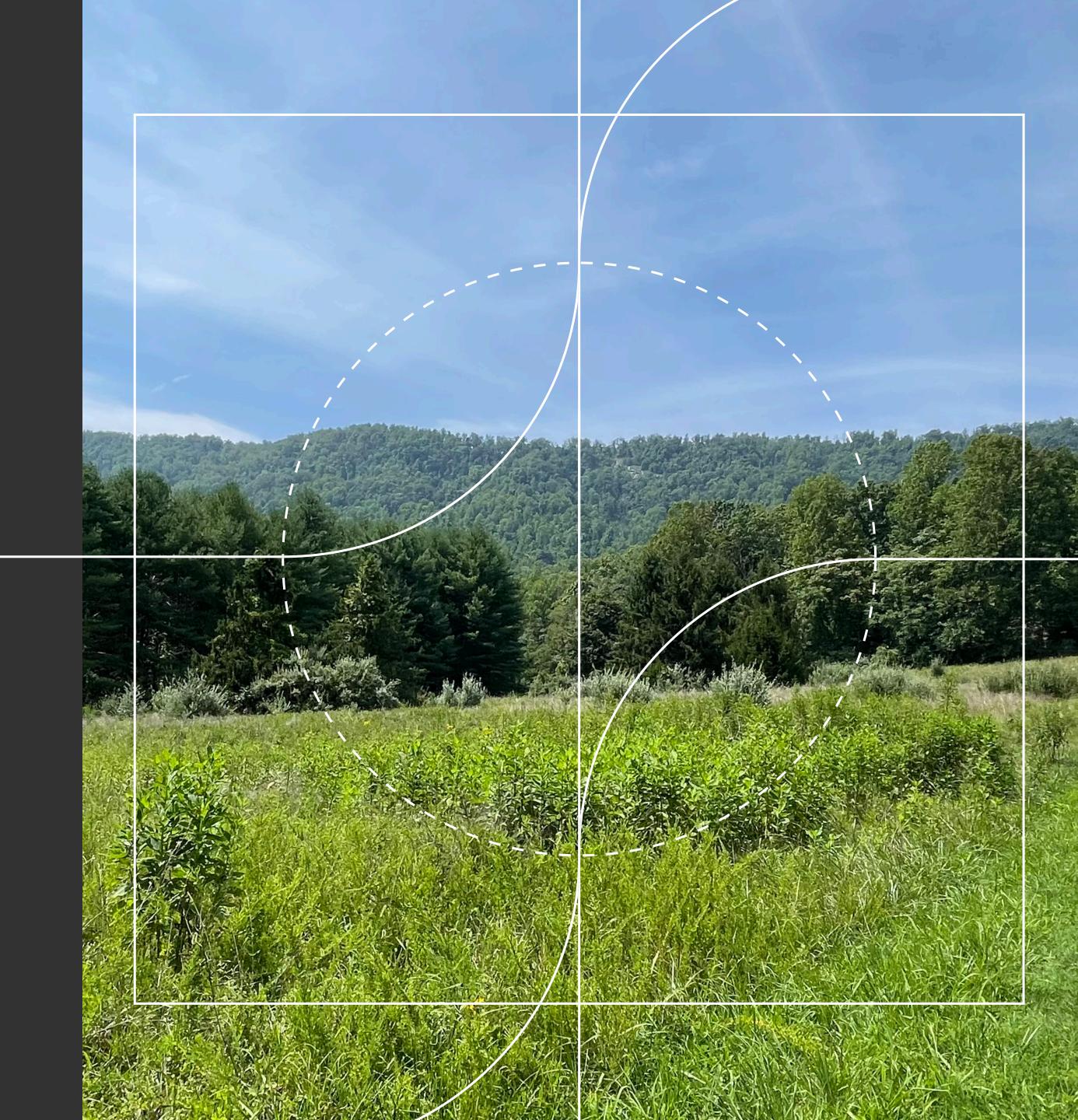






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#### **Traffic Demands**

At maximum enrollment:

- 460 trips total, to and from site
- 80% of those to and from OLR
- 20% to and from Red Hill

Added trips east of site entrance = 368 trips

Added trips west = 92 trips

Existing DMR traffic = 130 trips 368 + 130 = **498 trips maximum on DMR** 

Maximum 28 in 20 minutes, or less than 2 vehicles per minute

1 HOUR DROP OFF Current Enrollment (93)			
TIME	Cars in	Cars out	Trips
7:30-8:15			
(teachers)	18		18
8:00-8:20	15	15	30
8:20-8:40	17	17	34
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TOTAL	68	50	118

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