

NATIONAL COVID-19  
OUTDOOR LEARNING  
INITIATIVE

CREATING  
OUTDOOR SPACES

EMERGENCY  
SCHOOLYARD  
DESIGN VOLUNTEERS



## ELEMENTARY AND MIDDLE SCHOOL — CENTRAL VIRGINIA

This private school has about 400 students, from kindergarten through 8th grade. The school has a wooded area with an existing outdoor classroom, as well as many wonderful opportunities for more nature-based learning. Their goal was to have about 16 outdoor class spaces, each accommodating 10-12 students and 1-2 teachers. The suggestions presented by the volunteer designers include adding active garden areas, hugel berms, improving access through the wooded area and increasing overall outdoor classroom capacity. One scenario can accommodate about 75% of the students.

# Site Analysis Consideration



Image Source: Google Earth

## Private School Central Virginia

### School Characteristics

#### Students

- 238 students in grades K-5, 153 students in grades 6-8
- 16 suggested outdoor class spaces; each can take 10-12 students and 1-2 teachers.

#### School Grounds

- Suburban location, large site
- Low levels of noise from surrounding residential neighborhood; some noise from outdoor PE classes
- Odors from dumpsters
- 2 student gardens and a greenhouse
- Good outdoor storage available
- Surrounded by wooded area with walking trails
- Lake with floating dock accessible by sloped wooded trails
- Near several parks

#### Climate

- May, September and October are the most pleasant months of the year. January is the snowiest month and July is the most humid month.
- There are 210 sunny days per year on average, and 116 days per year with precipitation.

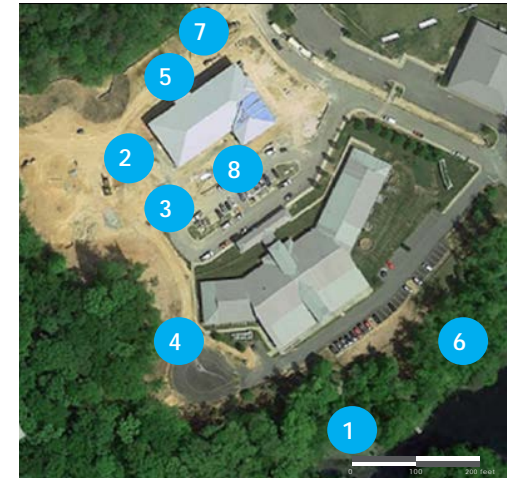
NOTE: These diagrams are intended to provide visual concepts to assist schools in planning. They are neither intended nor may be used for construction. Neither Green Schoolyards America nor the design volunteers assume responsibility or liability for the technical accuracy of drawings or for any unauthorized use.

# Existing Conditions Photographs



Private School  
Central Virginia

## Site Photographs



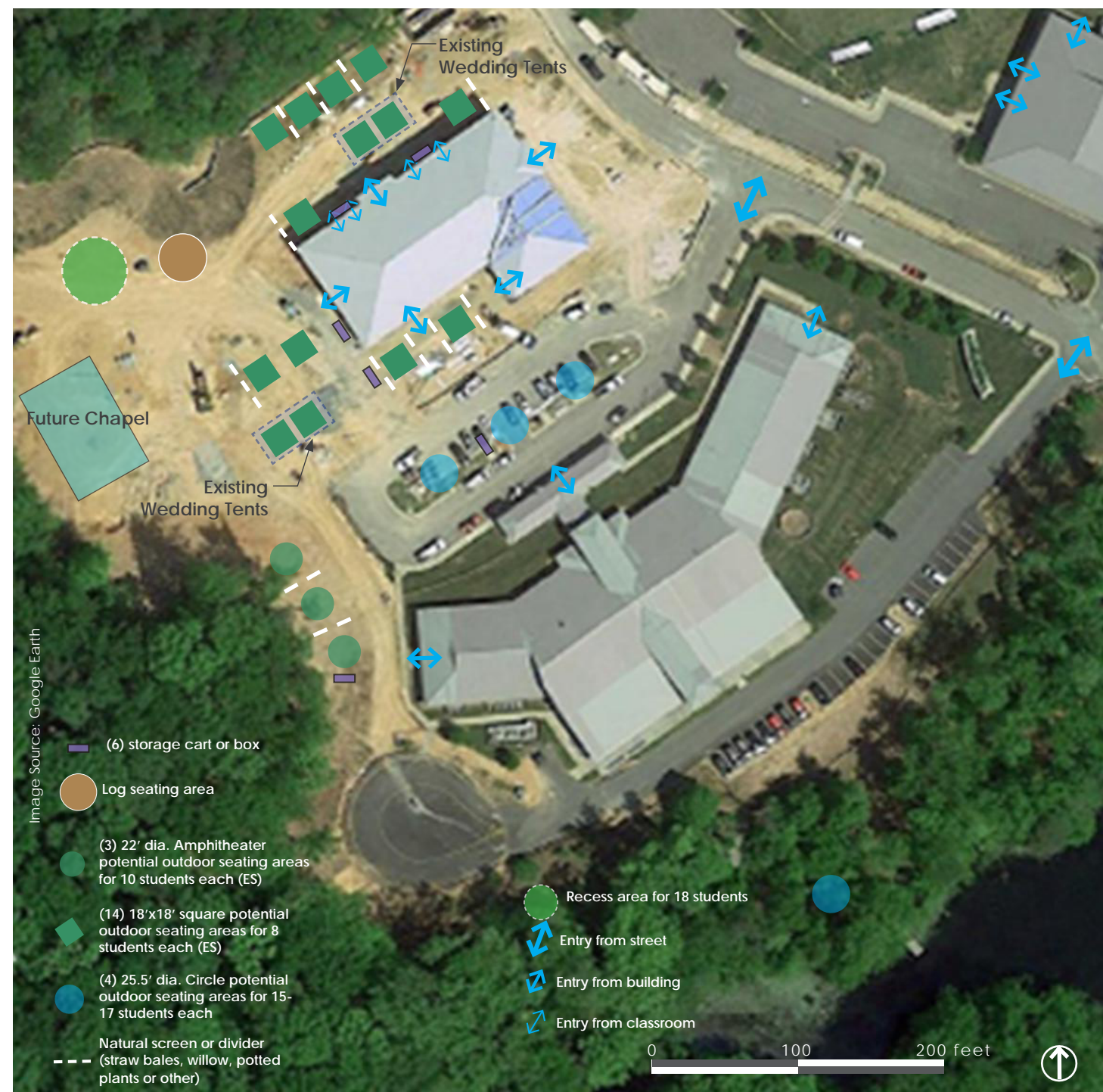
Photographs of Priority Areas, top row to bottom row

1. Outdoor classroom with benches located behind the MS building toward the dock.
2. Grassy areas outside 2nd grade classrooms. This area could accommodate 3-4 classrooms worth of students.
3. Hillside and field next to the Green Loop parking lot. Good for lecture style seating.
4. Entrance and clearing at MS Trail-head (located at end of the Yellow carpool loop)
5. Green space outside of the Kindergarten and 1st Grade classrooms.
6. Woods clearing next to the canoe storage across the parking lot behind Singleton Hall.
7. The Story Walk and the trail intersections at the LS Trail-head at the end of the blue loop. Good for scavenger hunts and short hikes.
8. Grassy yard in the middle of the Green carpool loop between Singleton and Hubbard Halls.

(Photographs by: Emerson Underwood)

# Potential Outdoor Classrooms

## Using Existing Tree Canopy and Shade for Mild Weather



### Private School Central Virginia

#### Scenario #1: Low Cost

##### Climate Considerations

- Local climate varies seasonally
- Classes will require protection from sun, rain, and snow and appropriate clothing to keep everyone warm and dry

##### Climate Adaptation Strategies

- Use outdoor classrooms as "Plan A" when the weather is nice; go inside or Online when it is raining or too cold
- Place seating in areas where existing tree canopies provide morning or afternoon shade, and away from street to reduce noise

##### Use and Augment Existing Infrastructure

- Create 4 areas with shelter from the existing wedding tents
- Place straw bales or potted plants so to provide a barrier to the wind
- Some areas will have variable shade throughout the day
- Storage boxes placed in key locations to accommodate multiple outdoor classrooms

#### Scenario #1: Outdoor Capacity

- Max: 228 students in 22 seating areas
- Capacity: 58% of enrolled students

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# Potential Outdoor Classrooms

## Providing Light Shelter for Sun, Rain, or Snow

### Private School Central Virginia

### Scenario #2: Moderate Cost

#### Climate Considerations

- Local climate varies seasonally
- Classes will require protection from sun, rain, and snow and appropriate clothing to keep everyone warm and dry

#### Climate Adaptation Strategies

- Rain/Shade canopies to enable spaces to be used in multiple weather conditions
- Add new experimental learning areas

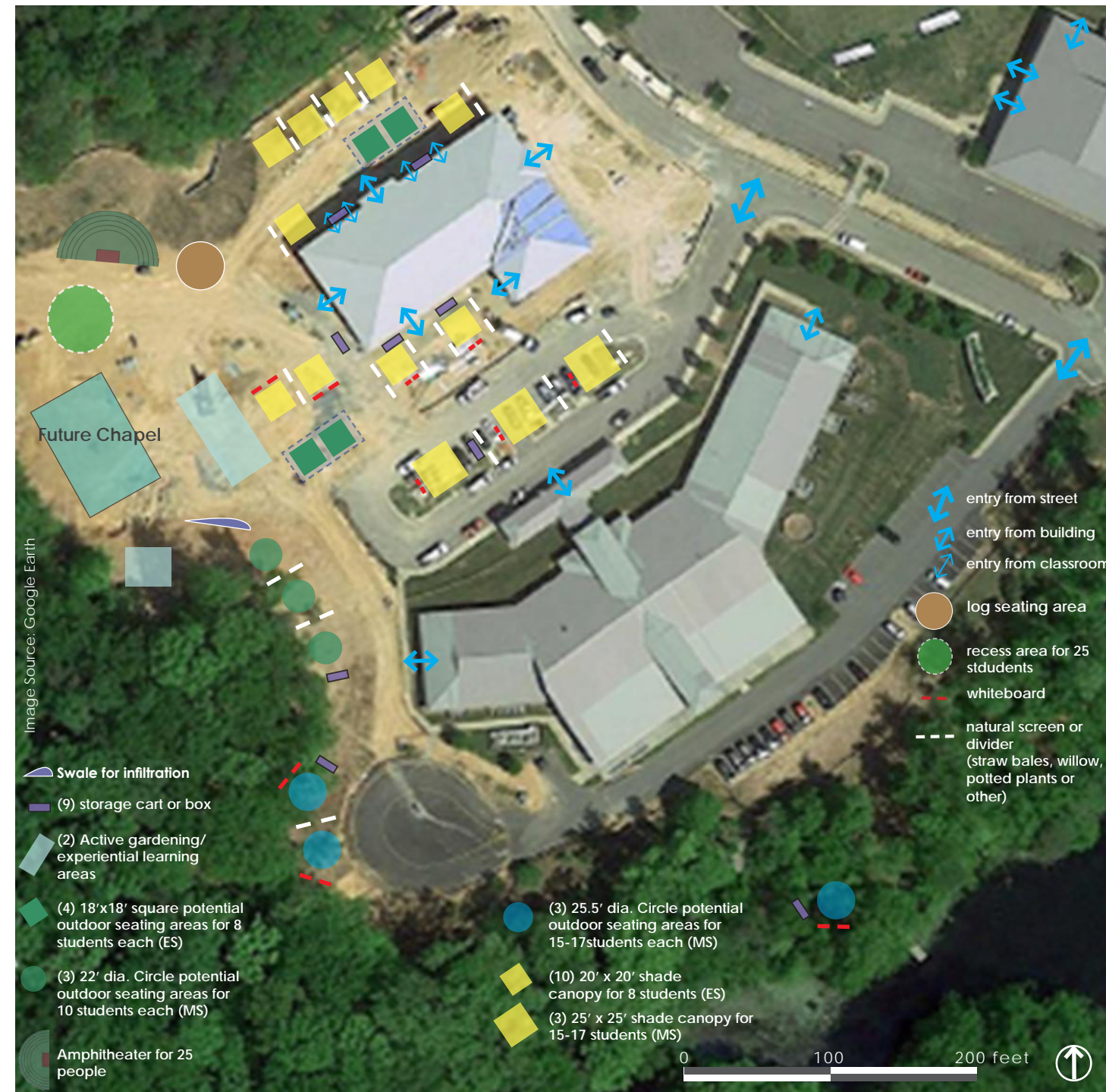
#### Use and Augment Existing Infrastructure

- Use 4 areas with shade from existing wedding tents and add low cost seating (mats, stumps, benches, and/or existing desks/tables)
- Place 4 seating areas alongside the building to provide shelter
- Add amphitheater for students to use as an additional classroom/stage area
- Storage boxes placed in key locations to accommodate multiple outdoor classrooms
- Have whiteboards in a majority of outdoor classrooms

#### Scenario #2: Outdoor Capacity

- Max: 294 students in 24 seating areas
- Capacity: 75% of enrolled students

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# Potential Outdoor Classrooms

## Sun, Rain and Snow Protections with Additional Recreational Area

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### Scenario #3: High Cost

#### Climate Considerations

- Local climate varies seasonally
- Classes will require protection from sun, rain, and snow and appropriate clothing to keep everyone warm and dry

#### Climate Adaptation Strategies

- Rain/Shade canopies to enable spaces to be used in multiple weather conditions
- Add new experimental learning areas
- Add low, planted hills (hugels) on top of asphalt or grass along fence line to help with drainage

#### Use and Augment Existing Infrastructure

- Add seating to all outdoor classrooms (mats, stumps, benches, and/or existing desks/tables)
- Have a sail structure to provide shade for two areas and place 4 square seating areas along side buildings to provide added protection from weather
- Add multiple amphitheatres for students to use as an additional classroom/stage area and add more experimental gardening areas
- Have whiteboards in a majority of outdoor classrooms

#### Scenario #3: Outdoor Capacity

- Max: 264 students in 22 seating areas
- Capacity: 67% of enrolled students

