



NATIONAL COVID-19
OUTDOOR LEARNING
INITIATIVE

CREATING
OUTDOOR SPACES

EMERGENCY
SCHOOLYARD
DESIGN VOLUNTEERS



SILVER RAILS ELEMENTARY SCHOOL — BEND, OREGON

Silver Rail Elementary School is located in a recently developed suburban area of Bend, Oregon. The school is located in the high desert region east of the Cascade Mountains with hot summers and cold winters, but sunny and enjoyable spring and fall weather. The school is excited to expand outdoor learning features for students in a large natural area on the school grounds, as well as throughout their campus. Older students will spend hours in their new outdoor classroom with hands-on learning opportunities including seating, native plants and special projects.

SILVER RAIL ES Bend, Oregon

School Characteristics

School Community

- 520 students in grades PK-5, 30-32 per class
- Would like to be able to engage students outdoors, especially older students (even half days outside)
- Building has central services (cafeteria, restrooms in the west/central part of the building)
- Classrooms are in the wings with hallway doors at the ends of the wings

School Grounds

- Edge of town, suburban location
- School building and grounds developed 6 years ago
- In a recently developed part of town, with residential north and west and commercial/industrial just east of school
- Stone Creek Park (city) is just west of school, used for walking field trips (shelter, nature play, etc.)
- Playgrounds north and south of the building are pretty identical
- Central courtyard has several features for play and sitting
- Some storage for sports outside, active sports community

Climate

- Has diverse weather conditions, with hot dry summers (high desert) and cold, snowy winters (12" of precipitation/year)
- Hardiness zone 6a-6b, eco-region 9d
- Temperatures can vary from -20 in the winter, with most snow between December and February (could occur November through March). Warm in May & June as well as September

Drawing package prepared by:

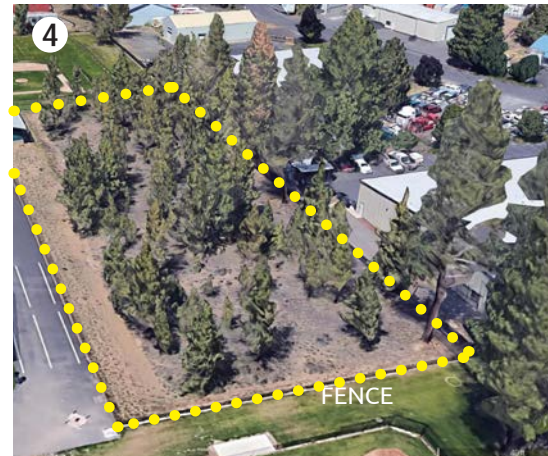
Jane Tesner Kleiner, nature+play designs (Vancouver)
Clara Cheeves, (Tacoma)
Lauren Iverson Fazio Associates (Seattle)
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Image Source: Google Earth Pro

SILVER RAIL ES Bend, Oregon

Site Photographs



Photographs, top row to bottom row

1. Looking South - towards north wing of classrooms, there is shade along the wall and a small alcove where the doors are
2. Looking North - identical layout as north but full sun
3. Looking West - main courtyard between classroom wings, note alcoves into both wings with rain/snow cover
4. Looking North - fenced in natural area, is down a small slope. Note commercial/industrial uses immediately to the east

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SOURCE: GOOGLE EARTH

SILVER RAIL ES Bend, Oregon

Scenario #1: No / Low Cost

Climate Considerations

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

Climate Adaptation Strategies

- Use building for shade during warm days of September/October and May/June
- Small courtyard alcoves can help protect from winter snow/wind

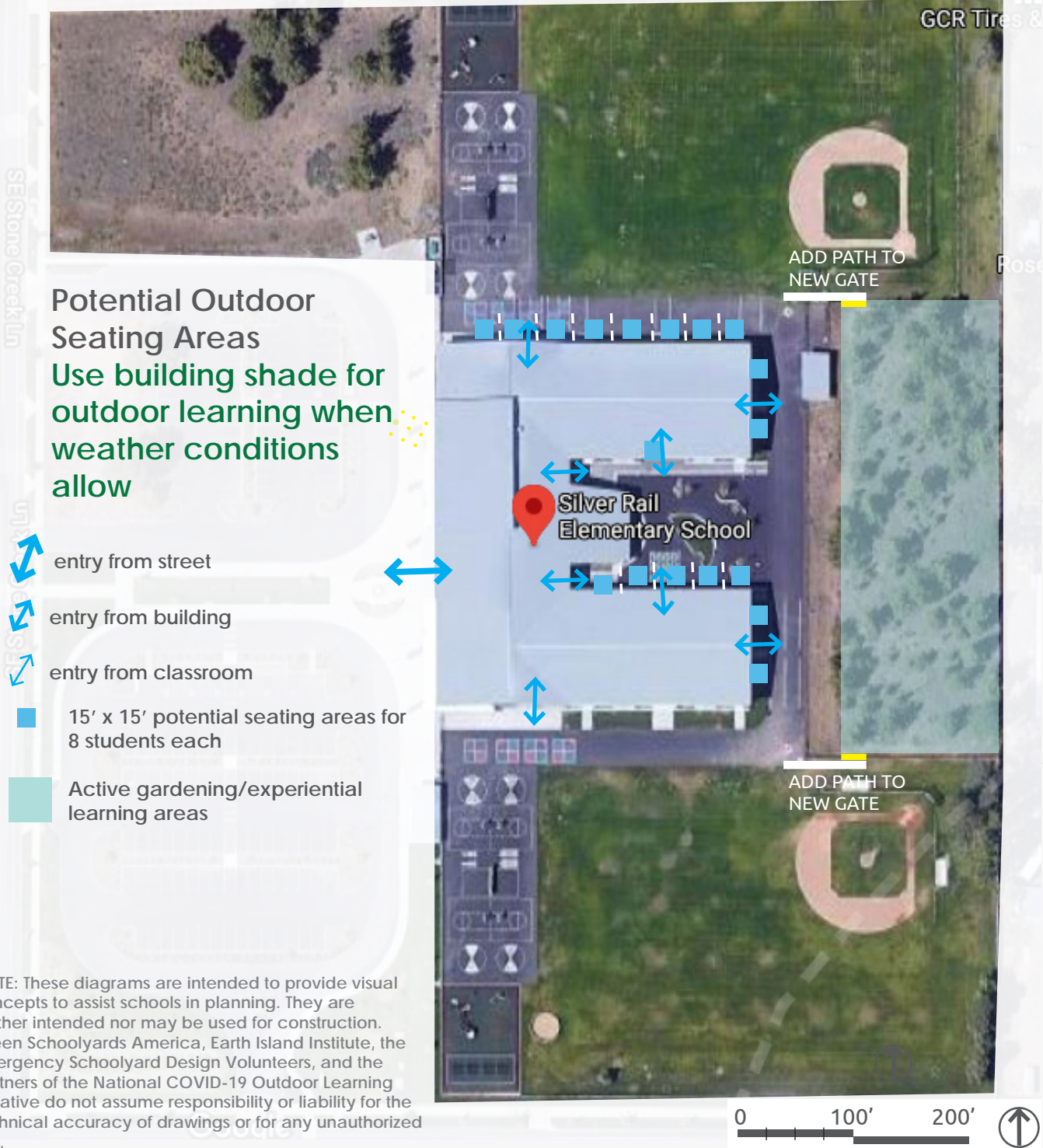
Use and Augment Existing Infrastructure

- Use existing school chairs outside of classroom doors on north facing walls.
- Could alternate use with half day north wing use and then south wing use
- Place seating circles outside doors with 8 students 8' apart
- Other students could be accommodated on pavement areas away from the building but would not have cover.
- Increase exterior wifi capacity at building
- Add two (2) gates to access natural area with path for outdoor learning lab

Scenario #1: Outdoor Capacity in Shade

- Max: 144 students in 18 seating areas
- Capacity: 28% of enrolled students

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SILVER RAIL ES Bend, Oregon

Scenario #2: Preferred Option

Build on Scenario #2

- A1** Install 1 permanent outdoor classroom in natural area, terraced seating in slope. Add gate and stairs from the fenced asphalt fire lane down hill into nature area
- A2** Add new cover shelter (same as bike protection on site) for outdoor classroom in nature area. Include durable surface for flexible seating and durable storage shed
- B** Add new accessible path in nature area from north and south new gates. Include 3 new seating / gathering areas along path
- C** Install 2 permanent outdoor classrooms at edges of lawn areas in playground, cover with solar panels for additional seating
- D** Add native butterfly plants and native plantings throughout nature area
- E** Add raised garden beds along classroom wings south wall (sensory, herb, etc.)
- F** Add accessible path to west nature area and 2 seating / gathering areas
- G** Add compostable toilet and hand washing station (find location - field verify, run water line to location with spigot)

Climate Adaptation Strategies

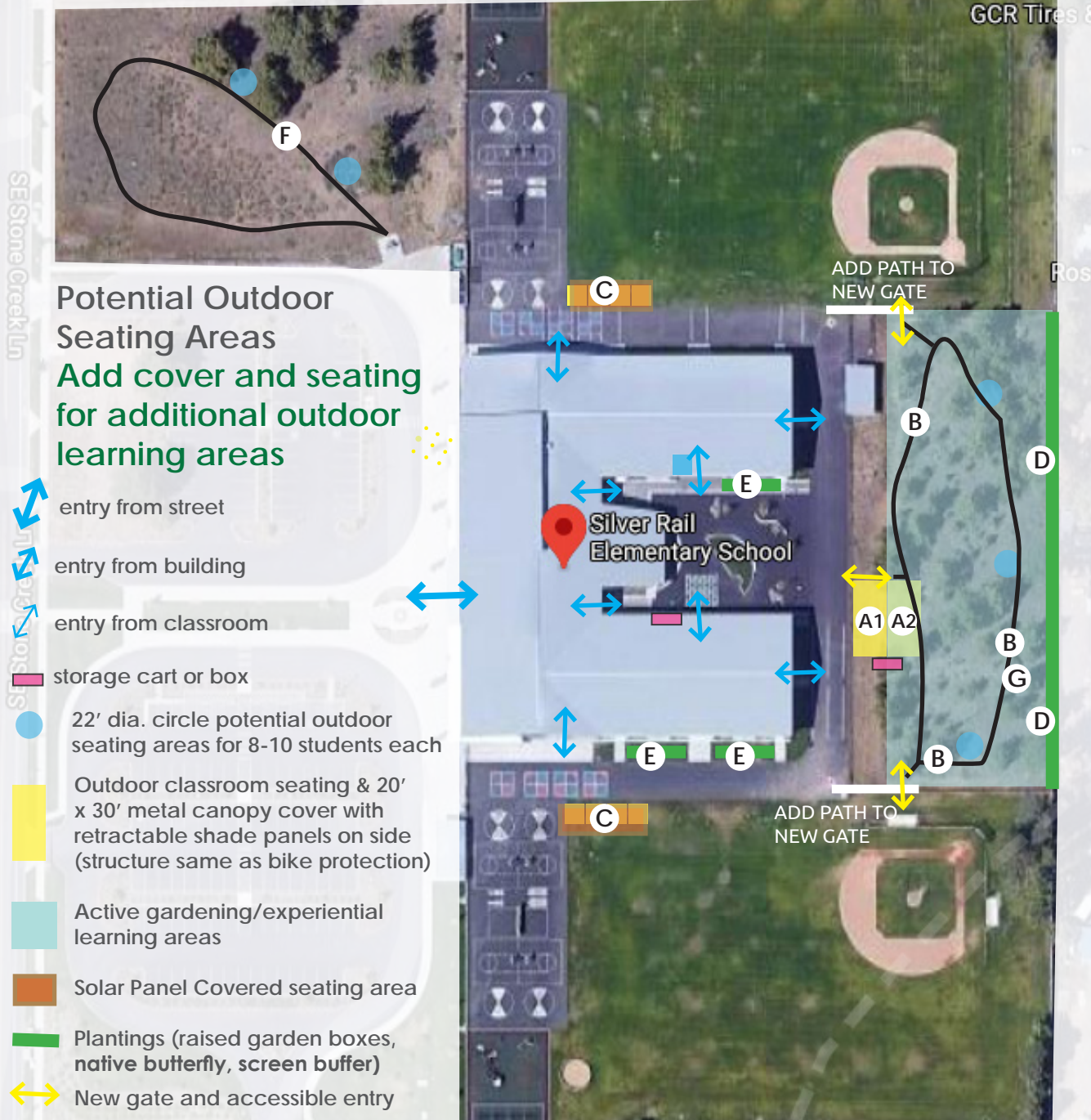
- Add portable shades in courtyard when necessary for weather protection for additional seating capacity
- Could also include temporary seating from Scenario #1 for greater capacity

Scenario #2: Outdoor Capacity

- Max: 115 students in 41 temporary and 20 permanent shade seating areas
- Capacity: 22% of enrolled students

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Potential Outdoor Seating Areas Add cover and seating for additional outdoor learning areas

- entry from street
- entry from building
- entry from classroom
- storage cart or box
- 22' dia. circle potential outdoor seating areas for 8-10 students each
- Outdoor classroom seating & 20' x 30' metal canopy cover with retractable shade panels on side (structure same as bike protection)
- Active gardening/experiential learning areas
- Solar Panel Covered seating area
- Plantings (raised garden boxes, native butterfly, screen buffer)
- New gate and accessible entry

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