

Initial Site Program

(#s vary by Schematic Design Alternative)

Group Sites

- 2 - 3 group campsites
- 60 People Total
- Central Pavilion w/ electricity, fire pit (2)

Parking and Circulation

- Parking for 19 - 24 vehicles total (15 - 18 POV, 4 - 6 work vehicles)
- Existing Gravel Roads
- Clustered Parking / Shared - not dispersed
- 1 or 2 access points from road
- Campground Signage & Entrance Gates

Amenities

- Vault Toilet (2)
- Potable Water Station(s)
- Food Prep / Hand Washing Station(s)
- Solar Shower (2)
- Outdoor Kitchen w/ table, posts, tarps

Site Furnishings

- Picnic Tables
- Trash and Recycling
- Dumpsters
- Bear Boxes
- Posts – hang up hammocks, tarps

Landscape Improvements

- Grading and drainage for campsite improvements
- Protect existing setting and habitat
- Revegetation
- Preserve owl tree and rock with plaque

Pavilion

(Style varies by Schematic Design Alternative)



Alternative 1 - Modern



Alternative 2 - Contemporary



Alternative 3 - Rustic

Site Furnishing Precedents

Trash / Recycling / Bear Bin



Vault Toilet



USFS Design Guidelines

6. The size of the vault is determined by the amount of use at each site. The size is usually 750 to 1,000 gal.

Each site has a different use pattern. The capacity of the vault should be designed so that the vault is pumped at least once at the end of the season. If the season happens to be all year long, then the capacity should be designed so that pumping occurs a minimum of three times each year.

Remember that we are trying to reduce odors at every place we can. Frequent pumping, thorough cleaning, precharging with fresh water, and using a vault that is completely sealed to prevent leaking and odor absorption will help greatly to alleviate odors.

As a design rule, it takes approximately 1,500 normal average uses to fill a 100-gal capacity. Generally the 750 or 1,000-gal size will be adequate for most recreation sites.

Solar Shower



NPS Campground Design Guidelines

NUMBER OF TOILET FIXTURES (WATER CLOSETS PER COMFORT STATION) *	NUMBER OF PERSONS	DISTANCE FROM FARTHEST CAMPSITE
1	35	250 to 500 feet

Ratios and distances. In a loop campsite design, ensure there is a minimum of one comfort station per loop or a recommended 250 to 500 foot distance from the farthest accessible campsite. (figure 3.94) An inclusive campground aims to provide all campsites to within roughly this distance, realizing that this is not always achievable. Evaluate the number of comfort stations and their distances to a reasonable amount within a short walking distance. Locate the number of fixtures (unisex) to serve approximately seven sites. This is based on an average of five persons occupying each campsite. The use of unisex facilities has increased over time and is often preferred by visitors with disabilities.

ROCKY MOUNTAIN NATIONAL PARK

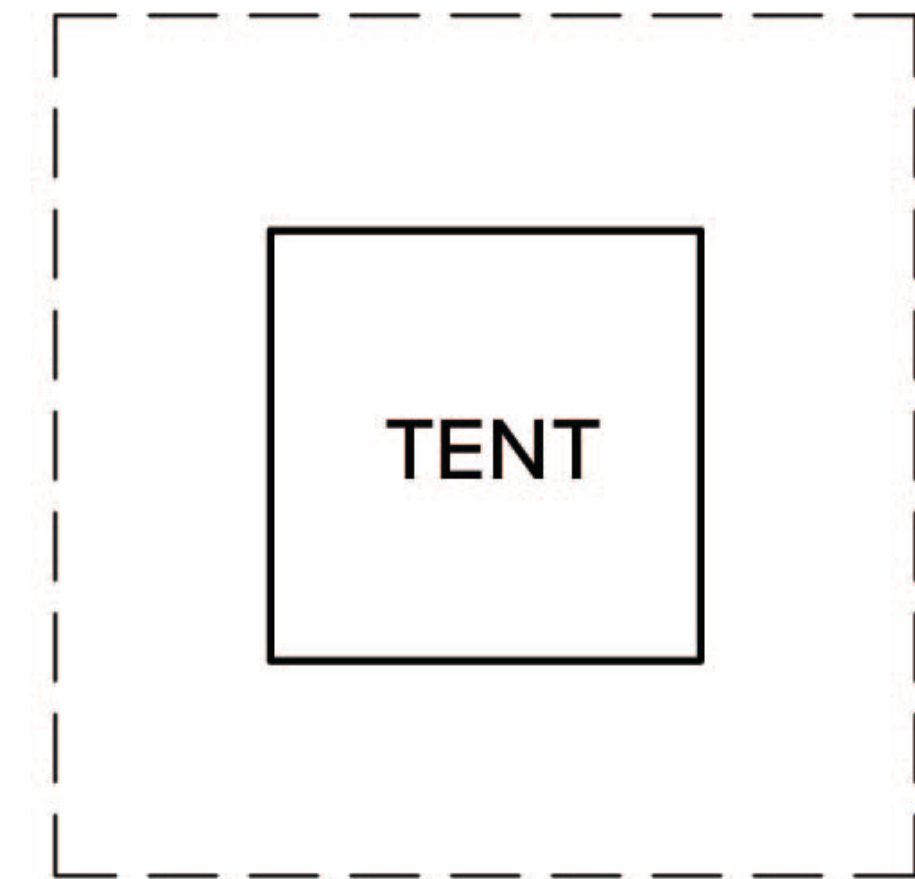
Design of Admin Campground at Cascade Cottages at ROMO

A - 1

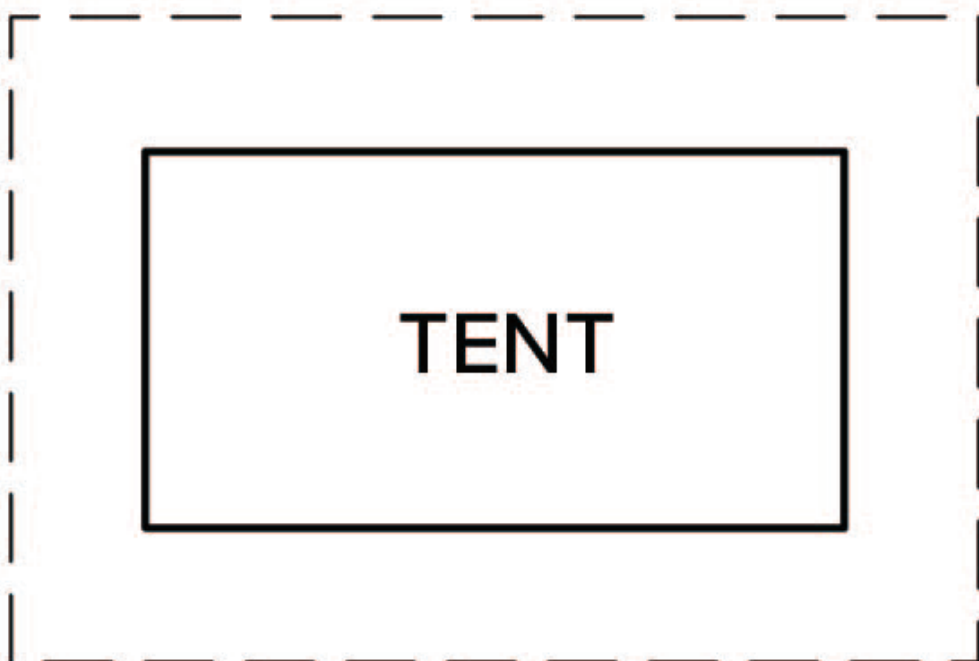
AE DESIGN | MUNDUS BISHOP | JUNE 2023

Site Furnishings

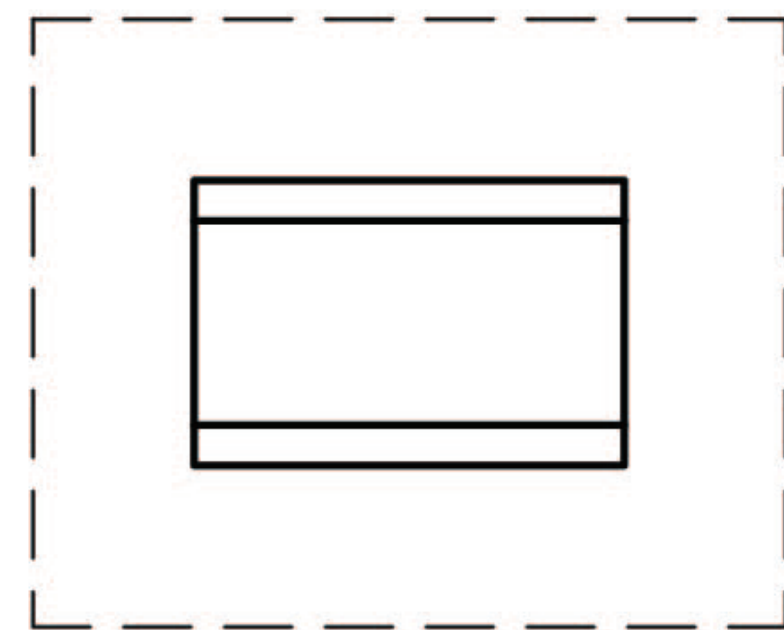
CAMPSITE - 16' X 16'
ROMO
2 TO 4 PERSON TENT
(8' X 8' TENT PAD W/ 48" CLR ALL SIDES)



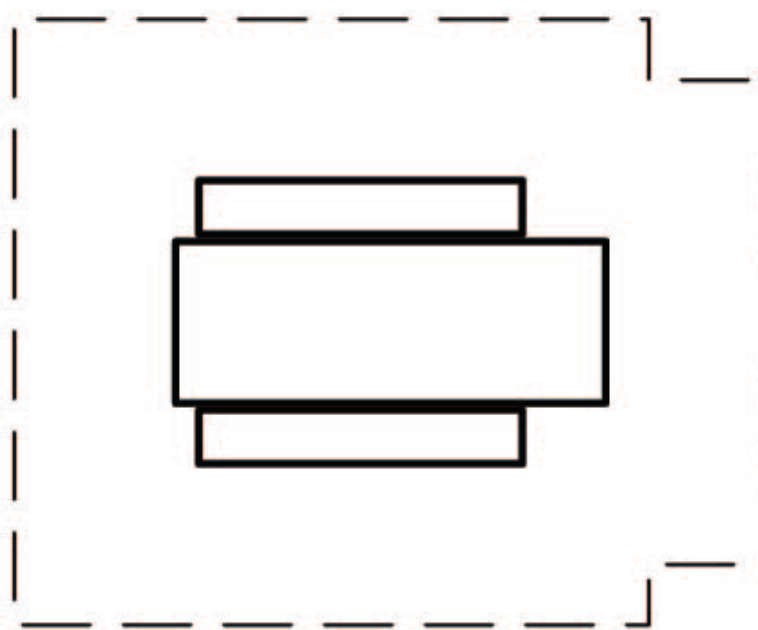
CAMPSITE - 12' X 18'
ROMO
4 TO 6 PERSON TENT
(7' X 13' TENT PAD W/ 30" CLR ALL SIDES)



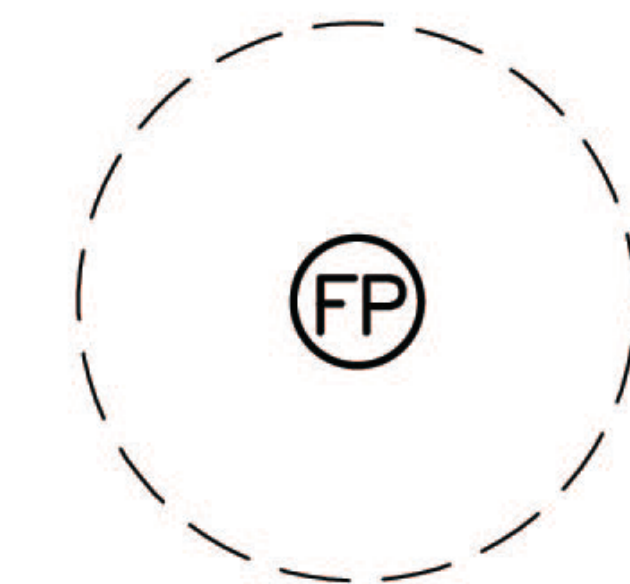
PICNIC TABLE - 5'-6" X 8'
ROMO
(36" CLR ALL SIDES)



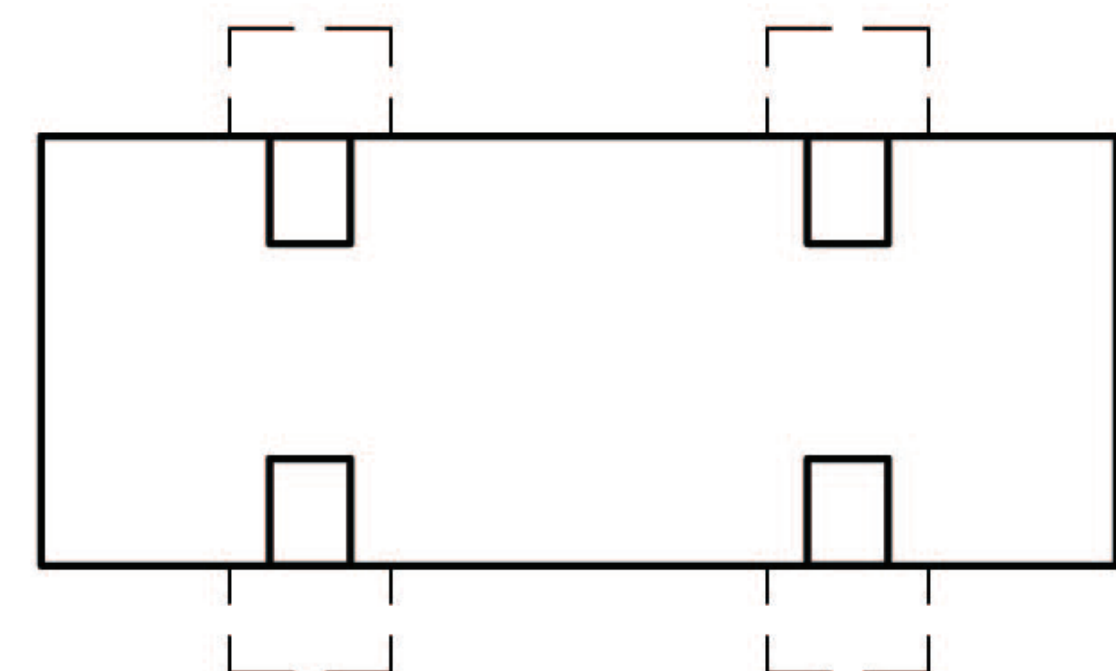
PICNIC TABLE - ABAAS 5'-3" X 8'
ROMO
(36" CLR ALL SIDES)



FIRE PIT - 32" DIA
ROMO
(48" CLR ALL SIDES)



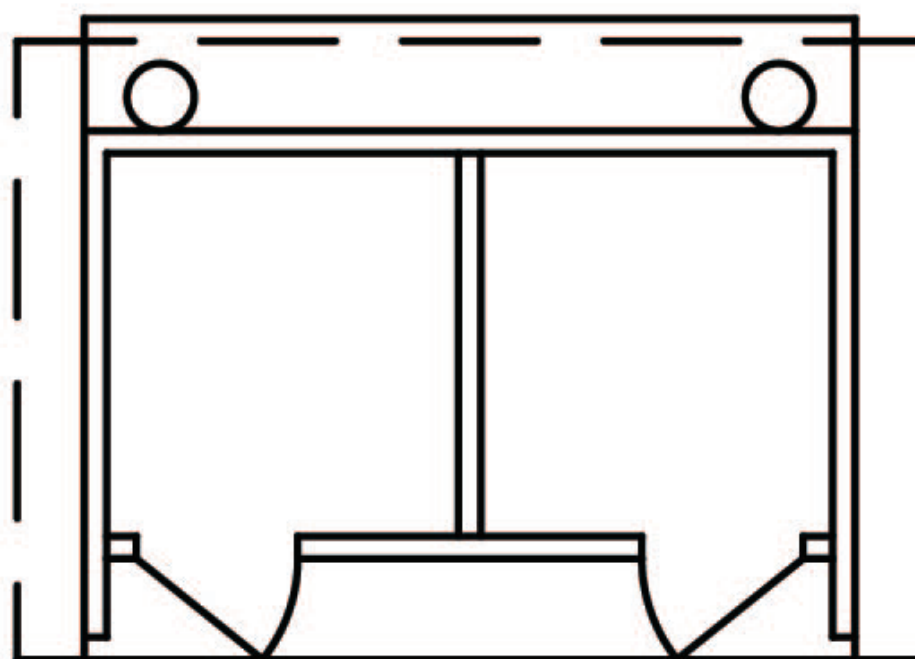
TRASH / RECYCLING - 8' X 20'
ROMO



SOLAR SHOWER - 10' X 19'
ROMO



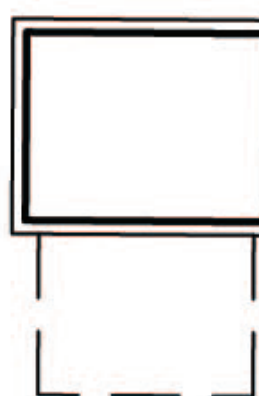
VAULT TOILET - 11.5' X 17'
ROMO
CXT CASCADIAN DOUBLE
(20' CRITICAL AIR MOVEMENT ZONE)



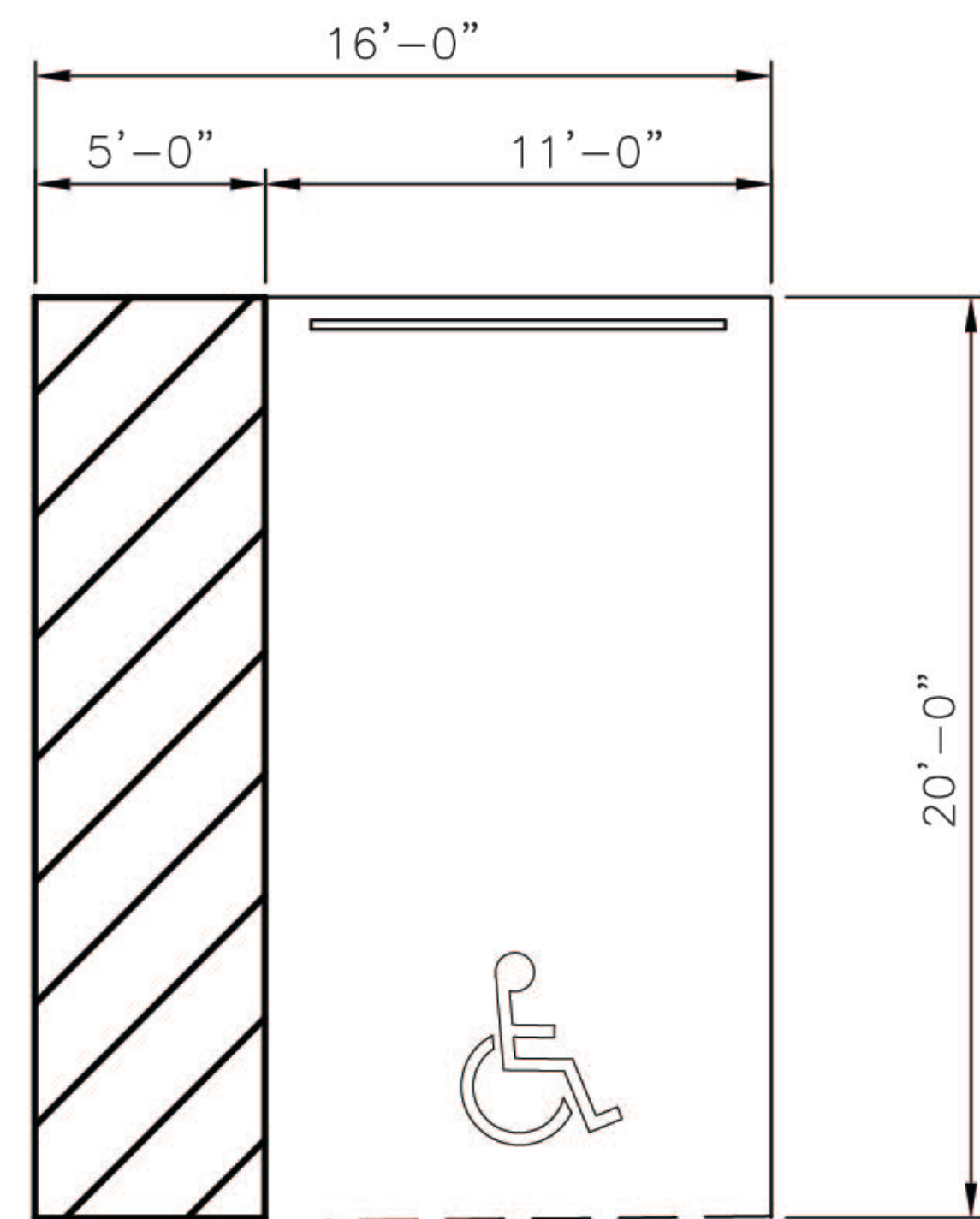
MIXED TRASH & RECYCLE - 2.5' X 4'
ROMO
(36" X 48" CLR)



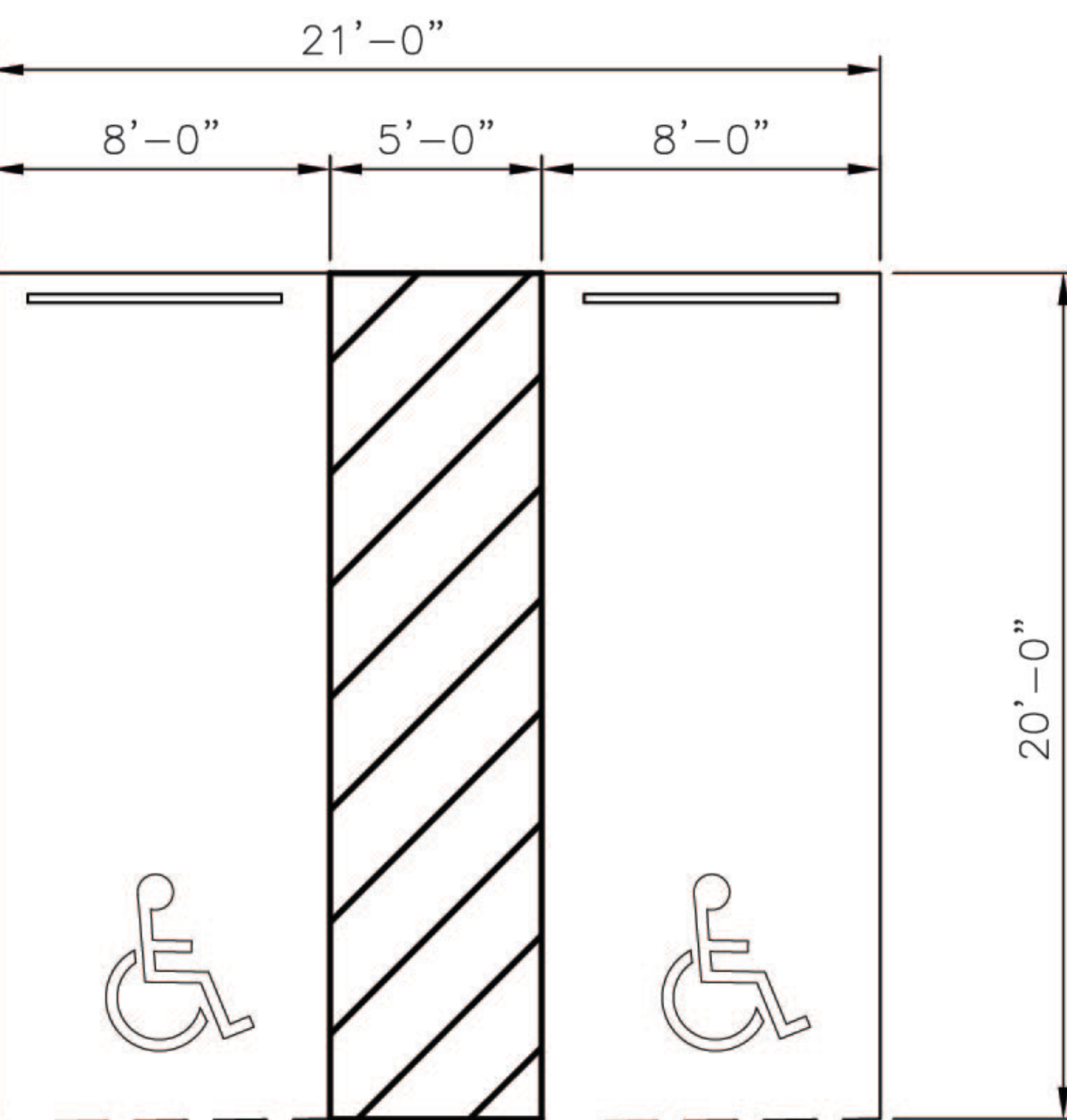
BEAR BOX 4' X 5'
ROMO
(36" X 48" CLR)



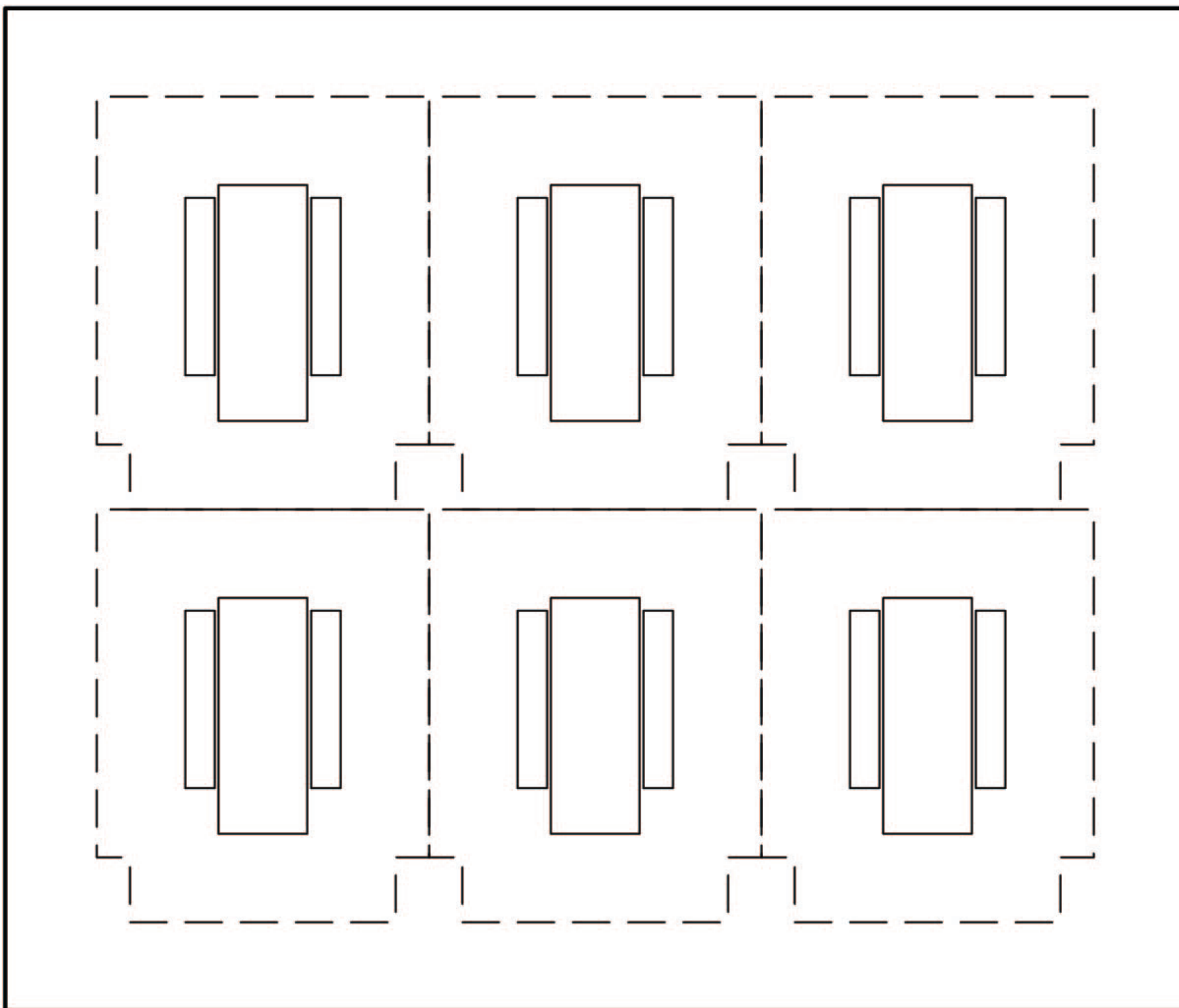
ABAAS VAN PARKING SPUR
16' X 20' MIN



ABAAS 2 CAR PARKING SPUR
21' X 20' MIN



PAVILION - 34' X 40'



Schematic Design Alternatives

Summary Matrix

	Alternative 1	Alternative 2	Alternative 3
Site Work	100,010 SF Total Site Disturbance (32,077 SF Developed Campground Area + 67,933 SF Native Seeding)	90,115 SF Total Site Disturbance (28,280 Developed Campground Area + 61,835 SF Native Seeding)	116,401 SF Site Disturbance (33,173 SF Developed Campground Area+ 83,228 SF Native Seeding)
	25 trees removed, 142 trees added	14 trees removed, 106 trees added	34 trees removed, 190 trees added
Circulation	One-way Road, Oriented West to East 11,900 SF Gravel Paving	One-way Road, Oriented East to West 11,900 SF Gravel Paving	<i>West Campground: One-Way Road, Oriented East to West</i> <i>East Campground: Two-Way Road</i> <i>19,604 SF Gravel Paving</i>
	22 Parking Spaces (Gravel Paving) 1 ABA Parking Space (Concrete Paving)	13 Parking Spaces (Gravel Paving) 1 ABA Parking Space (Concrete Paving)	22 Parking Spaces (Gravel Paving) 2 ABA Parking Spaces (Concrete Paving)
Group Campsites	13 Group Campsites 42 Tent Pads	15 Group Campsites 43 Tent Pads	16 Group Campsites 57 Tent Pads
	1 ABA Group Campsite 4 ABA Tent Pads	1 ABA Group Campsite 3 ABA Tent Pads	2 ABA Group Campsites 7 ABA Tent Pads
	18,265 SF Stabilized Crusher Fines Paving	15,200 SF Stabilized Crusher Fines Paving	23,410 SF Stabilized Crusher Fines Paving
	17 Bear Bins 2 ABA Bear Bins	18 Bear Bins 1 ABA Bear Bin	23 Bear Bins 3 ABA Bear Bin
	15 Picnic Tables (all ABA)	15 Picnic Tables (all ABA)	15 Picnic Tables (all ABA)
	10 Fire Pits 1 ABA Fire Pit	13 Fire Pits 1 ABA Fire Pit	11 Fire Pits 2 ABA Fire Pits
Group Gathering Area	(1) Group Gathering Area with Stabilized Crusher Fines Paving 2,945 SF (1) Gathering Area with Concrete Paving 2,960 SF	(2) Group Gathering Areas with Stabilized Crusher Fines paving 6,320 SF total	(1) West Gathering Area with Stabilized Crusher Fines Paving 3,140 SF (1) East Gathering Area with Concrete Paving 2,910 SF
	2 Pavilions 34' x 40', modern aesthetic, shed roofline, standing seam metal roof, exposed wood beams, wood columns, tongue and groove ceiling	2 Pavilions 34' x 40', contemporary aesthetic, gable roofline, shingled roof, exposed wood beams, wood columns, tongue and groove ceiling	2 Pavilions 34' x 40', rustic aesthetic, gable roof, metal standing seam roof, exposed wood beams, stone columns, tongue and groove ceiling, stone wall on one side with integrated stone fireplace
	17 Picnic Tables (all ABA)	16 Picnic Tables (all ABA)	17 Picnic Tables (all ABA)
	2 Outdoor Kitchens Each kitchen includes 1 ABA picnic table and vertical wood posts for hanging items	2 Outdoor Kitchens Each kitchen includes 1 ABA picnic table and vertical wood posts for hanging items	3 Outdoor Kitchens Each kitchen includes 1 ABA picnic table and vertical wood posts for hanging items
	4 Fire Pits (all ABA)	4 Fire Pits (all ABA)	4 Fire Pits (all ABA)
	4 Trash/Recycling Receptacles (all ABA)	4 Trash/Recycling Receptacles (all ABA)	4 Trash/Recycling Receptacles (all ABA)
Utilities	2 Vault Toilets w/ 2 risers each	2 Vault Toilets w/ 2 risers each	2 Vault Toilets w/ 2 risers each
	2 Solar Showers w/ two stalls each	2 Solar Showers w/ two stalls each	2 Solar Showers w/ two stalls each
	2 dumpsters w/concrete pad and 2 concrete parking spaces	2 dumpsters w/concrete pad and 1 concrete parking space	2 dumpsters w/ concrete pad and 2 concrete parking spaces
	2 Water Tanks Located above ground w/gravity fed spigot (no pump)	2 Water Tanks Located below ground w/ pump to spigot	2 Water Tanks Located below ground w/pump and piping to Water Filling / Handwashing Stations
	4 Water Filling / Handwashing Stations Water is manually transported from water tanks to fill Water Filling / Handwashing Stations	4 Water Filling / Handwashing Stations Water is manually transported from water tanks to fill Water Filling / Handwashing Stations	4 Water Filling / Handwashing Stations Water is pumped from below ground water tanks to fill Water Filling / Handwashing Stations
	4 underground tanks for greywater capture from Water Filling / Handwashing Stations (1 underground tank at each Water Filling / Handwashing Station)	2 underground tanks for greywater capture from Water Filling / Handwashing Stations (1 underground tank shared between 2 Water Filling / Handwashing Stations)	2 underground tanks for greywater capture from Water Filling / Handwashing Stations (1 underground tank shared between 2 Water Filling / Handwashing Stations)
	Electric Photovoltaic System at each Pavilion No power to Water Tanks (no pump)	Electric Underground Power to Pavilion Underground Power to Water Tank Pumps	Electric Photovoltaic System at each Pavilion Underground Power to Water Tank Pumps
Site Improvements	1,063 LF Timber Edge	1,034 LF Timber Edge	2,015 LF Timber Edge
	4,800 FF Stone Rubble Wall (0-3' Ht) Includes above and below grade material	4,206 FF Stone Rubble Wall (0-3' Ht) Includes above and below grade material	4,892 FF Stone Rubble Wall (0-3' Ht) Includes above and below grade material
	2,741 FF Stone Veneer Wall (3'+ Ht)	1,634 FF Stone Veneer Wall (3'+ Ht)	557 FF Stone Veneer Wall (3'+ Ht)

Common to All
Native seeding provided in areas of regrading and/or restoration of existing cabin sites
Existing trees removed for campground development, Trees added to screen campground features from Fall River Road and provide privacy between group campsites
Reuse of existing road alignment, Gravel Paving Surface
Angled parking provided near road
Group Campsites provided in each SD Alt
ABA Group Campsite provided in each SD Alt
Stabilized Crusher Fines Paving at all Group Campsites
Bear Bins provided at all Group Campsites, Typical ratio is 1 bear bin per 3 campers
Picnic Tables provided throughout Group Campsites
Fire Pits provided throughout Group Campsites
2 Pavilions
Picnic Tables provided at each Group Gathering Area
Outdoor Kitchen provided at each Group Gathering Area
Fire Pits provided at each Group Gathering Area
Trash and Recycling Receptacles provided at each Group Gathering Area
2 Vault Toilets
2 Solar Showers
2 Dumpsters
2 Water Tanks
4 Water Filling / Handwashing Stations
Underground tanks for capturing greywater
All SD Alts include electricity
Timber Edge delineates site features
Stone Rubble Wall located in areas of 0-3' of grade change
Stone Veneer Wall located in areas of 3'+ of grade change

Schematic Design Alternative 1

Site Plan



Schematic Design Alternative 1 Views

West Entrance - Looking East



East Entrance - Looking East



West Entrance - Looking West



East Entrance - Looking West



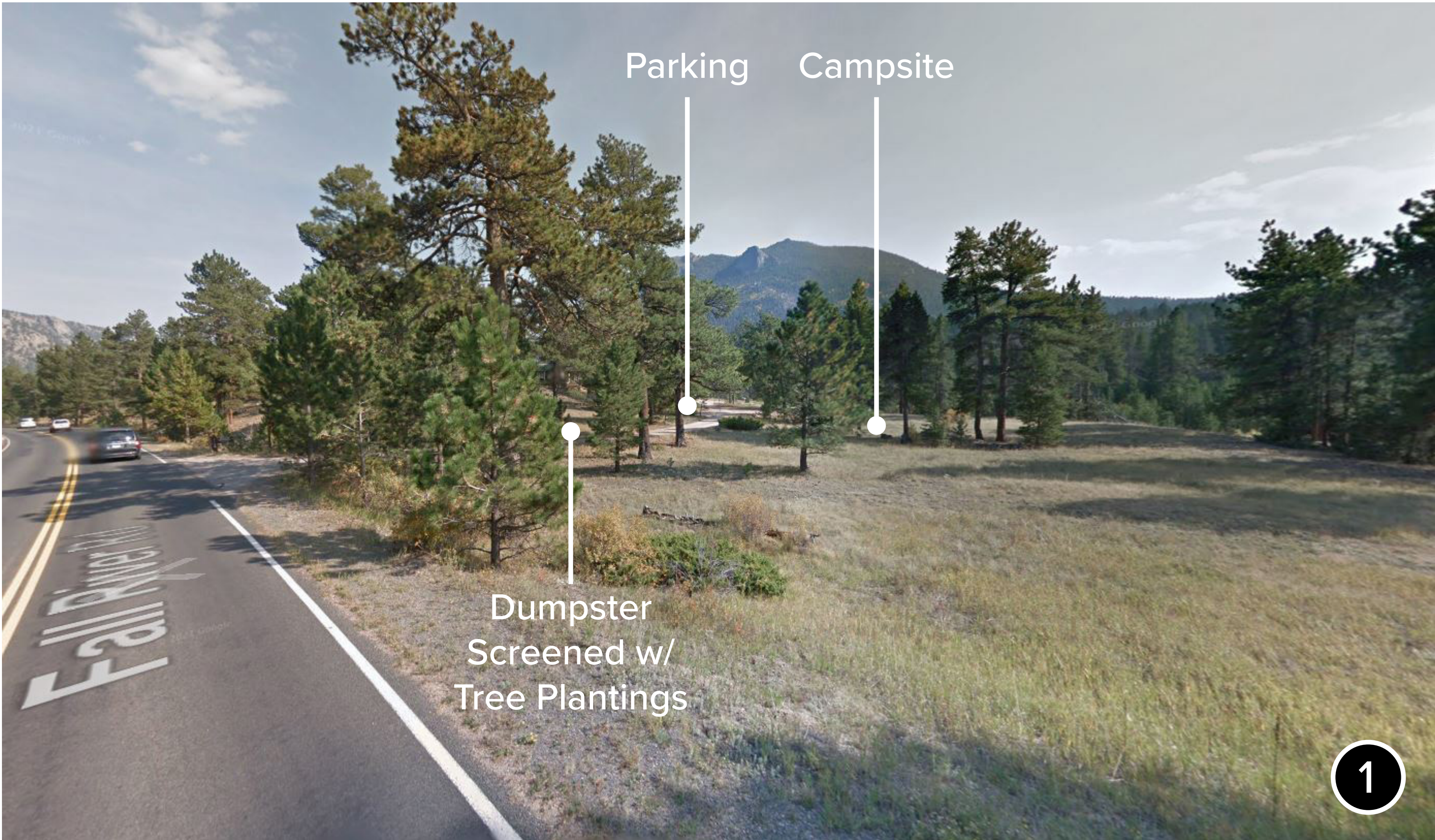
Schematic Design Alternative 2

Site Plan



Schematic Design Alternative 2 Views

West Entrance - Looking East



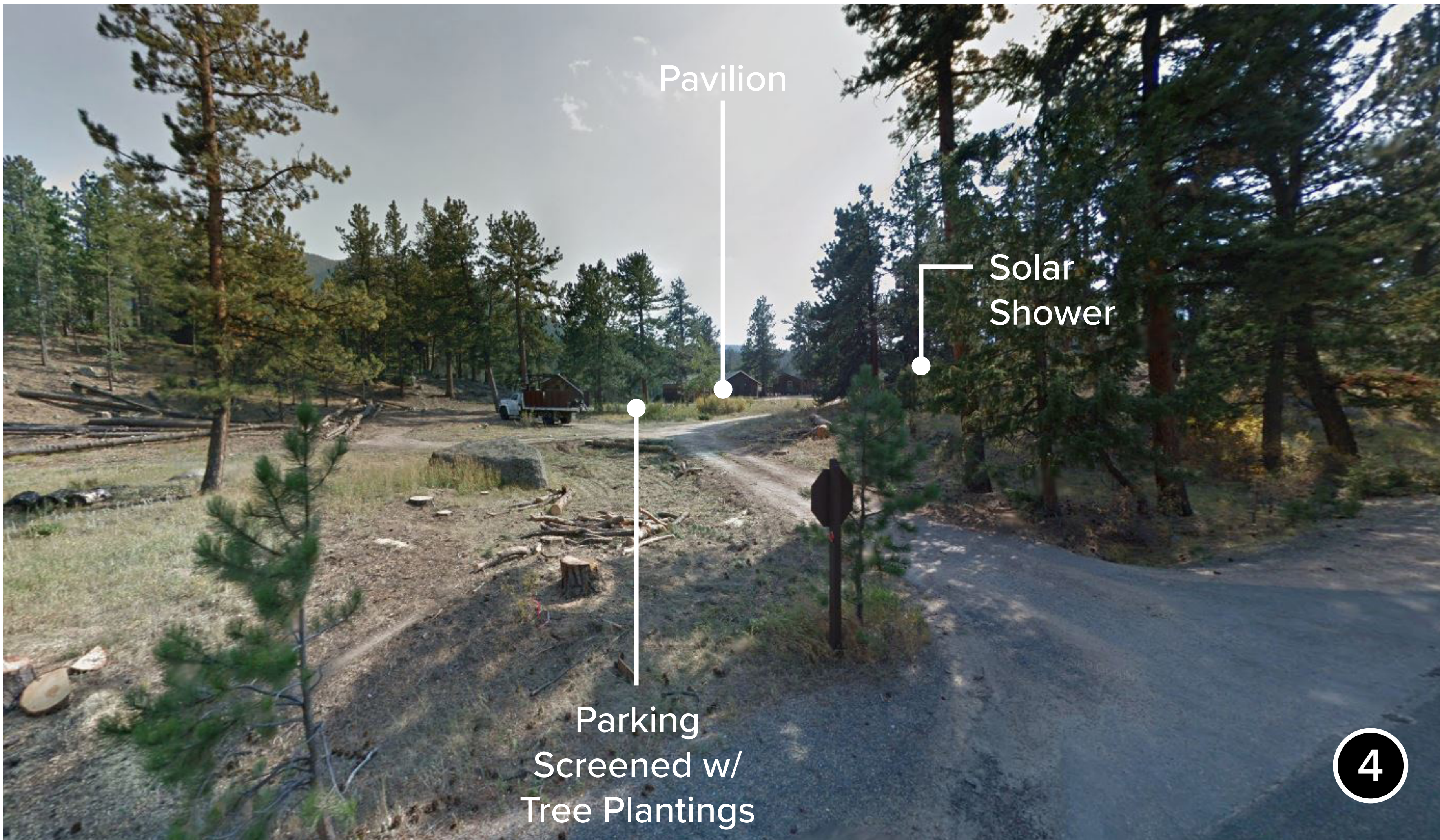
East Entrance - Looking East



West Entrance - Looking West

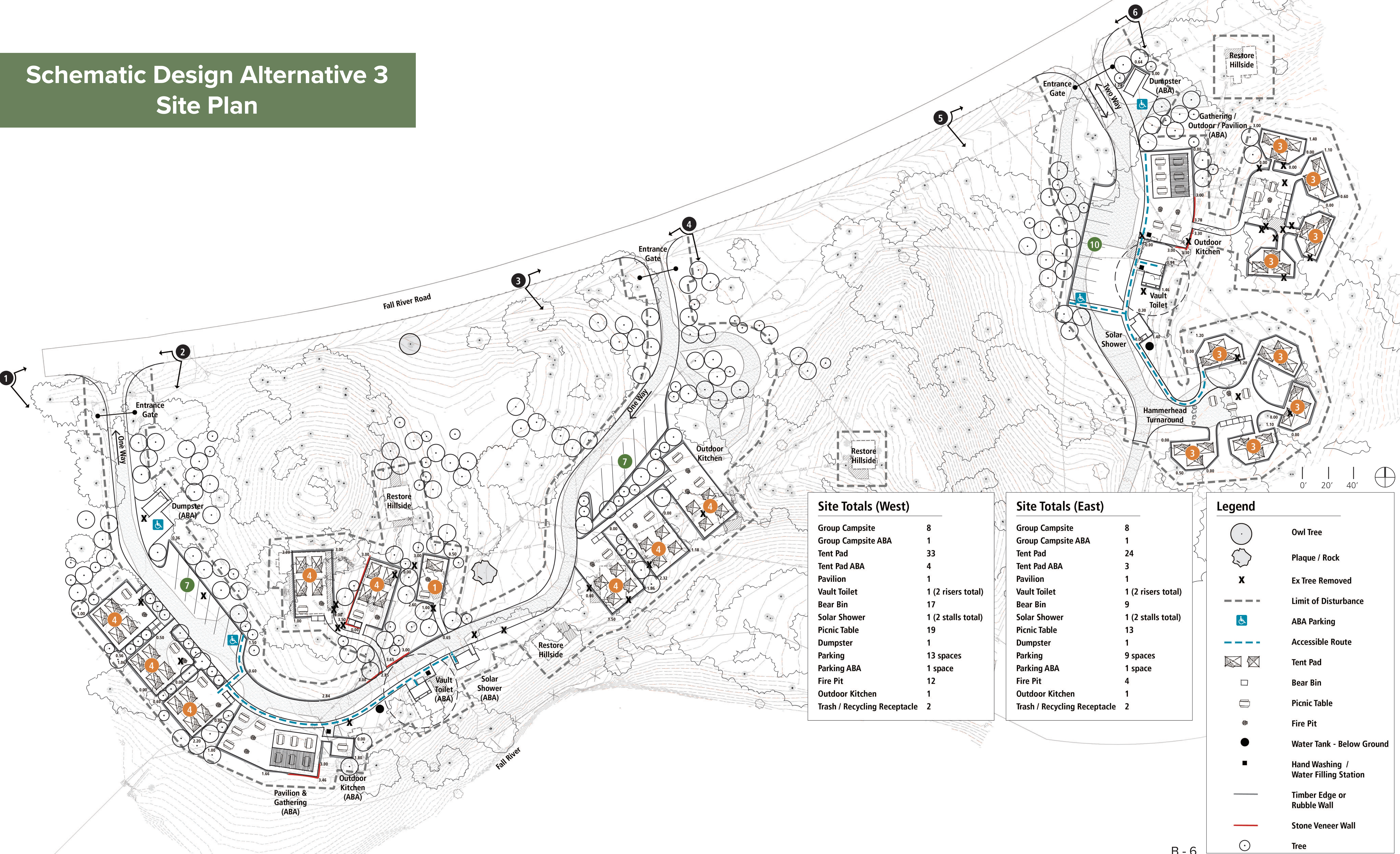


East Entrance - Looking West



Schematic Design Alternative 3

Site Plan



Schematic Design Alternative 3 Views

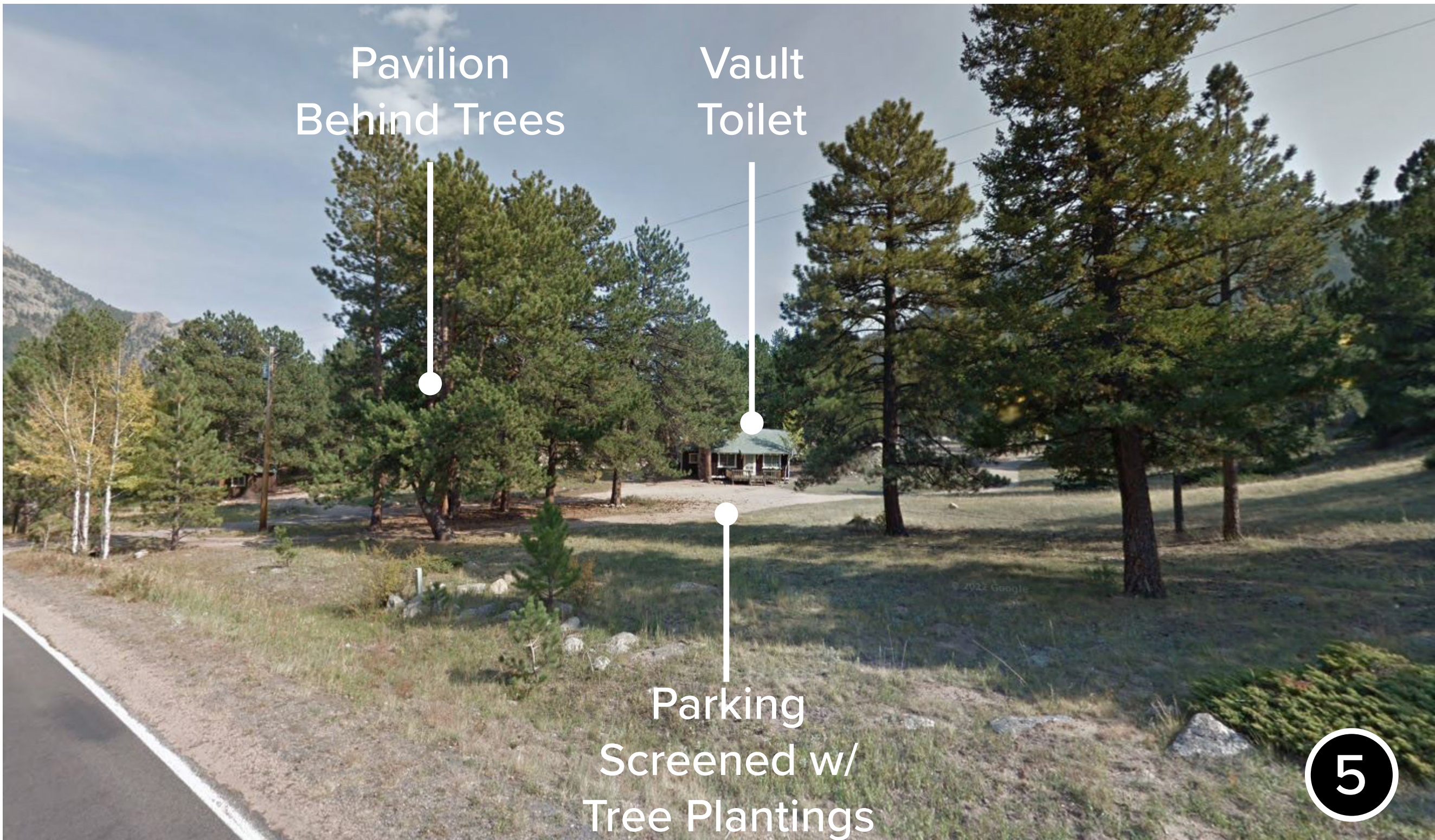
West Entrance - Looking East



Center Entrance - Looking East



East Entrance - Looking East



West Entrance - Looking West



Center Entrance - Looking West



East Entrance - Looking West

