

Bee Run

sutton lake, wv

Bee Run Master Plan Draft August 23, 2012

BCDA Braxton County
Development Authority



**PARSONS
BRINCKERHOFF**

Master Plan

Bee Run

sutton lake, wv



Master Plan

Bee Run

sutton lake, wv



Master Plan

Bee Run

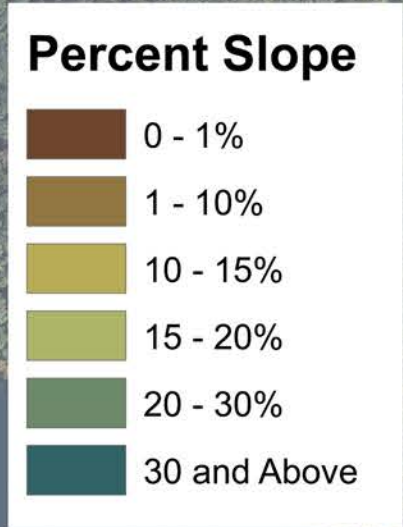
sutton lake, wv



Master Plan

Bee Run

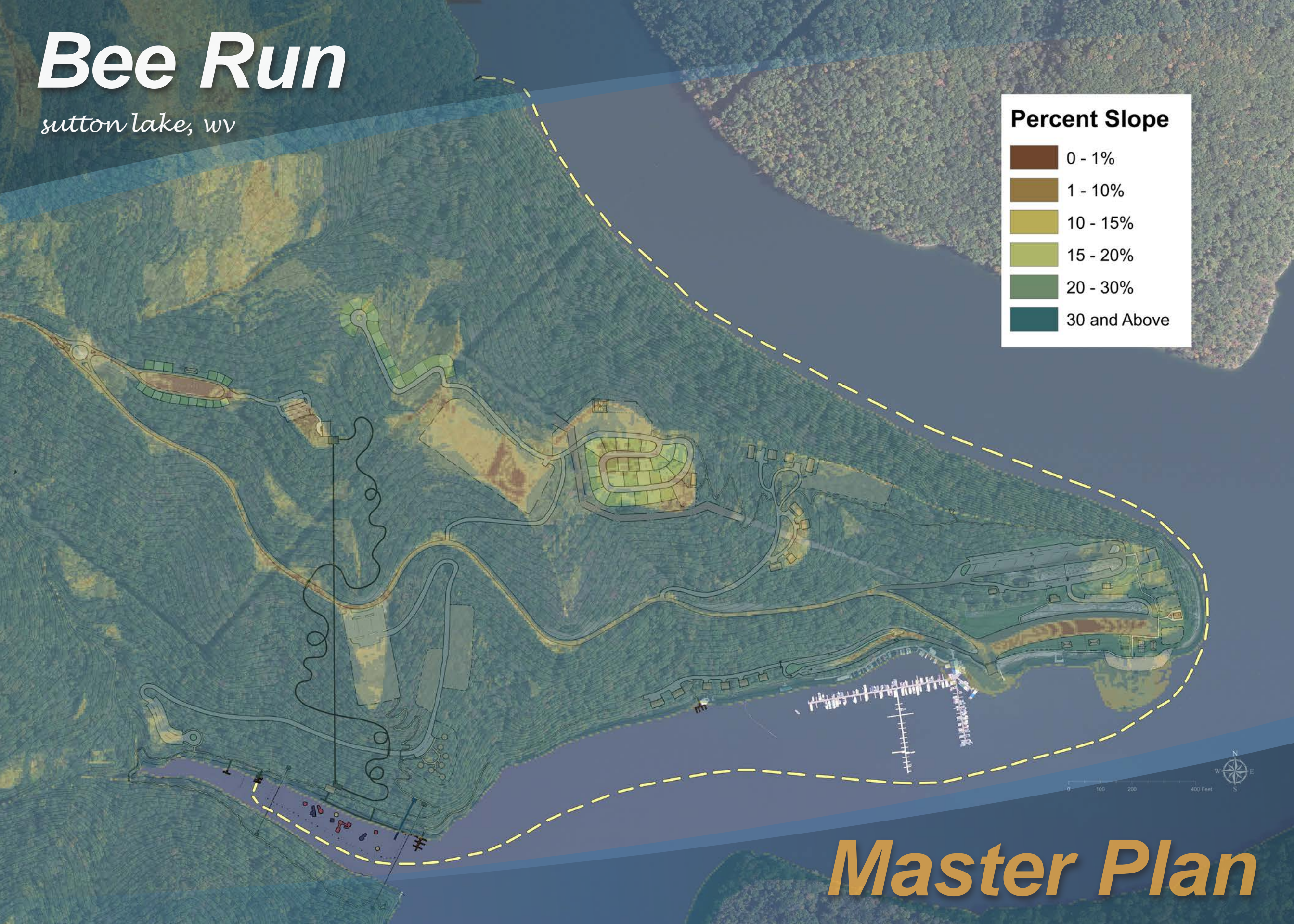
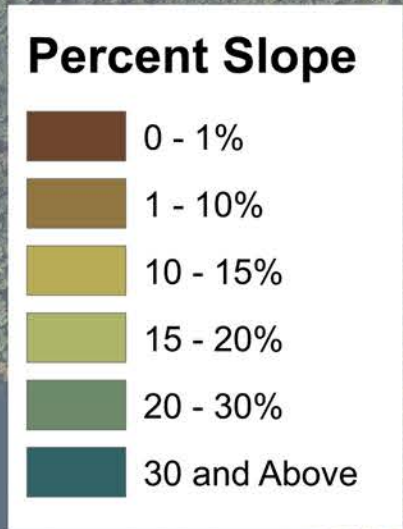
sutton lake, wv



Master Plan

Bee Run

sutton lake, wv



Master Plan

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ADVENTURE RIDGE



Master Plan

Bee Run

sutton lake, wv

LODGING ZONE



Master Plan

Bee Run

sutton lake, wv

DAY-USE ZONE



Master Plan

Bee Run

sutton lake, wv

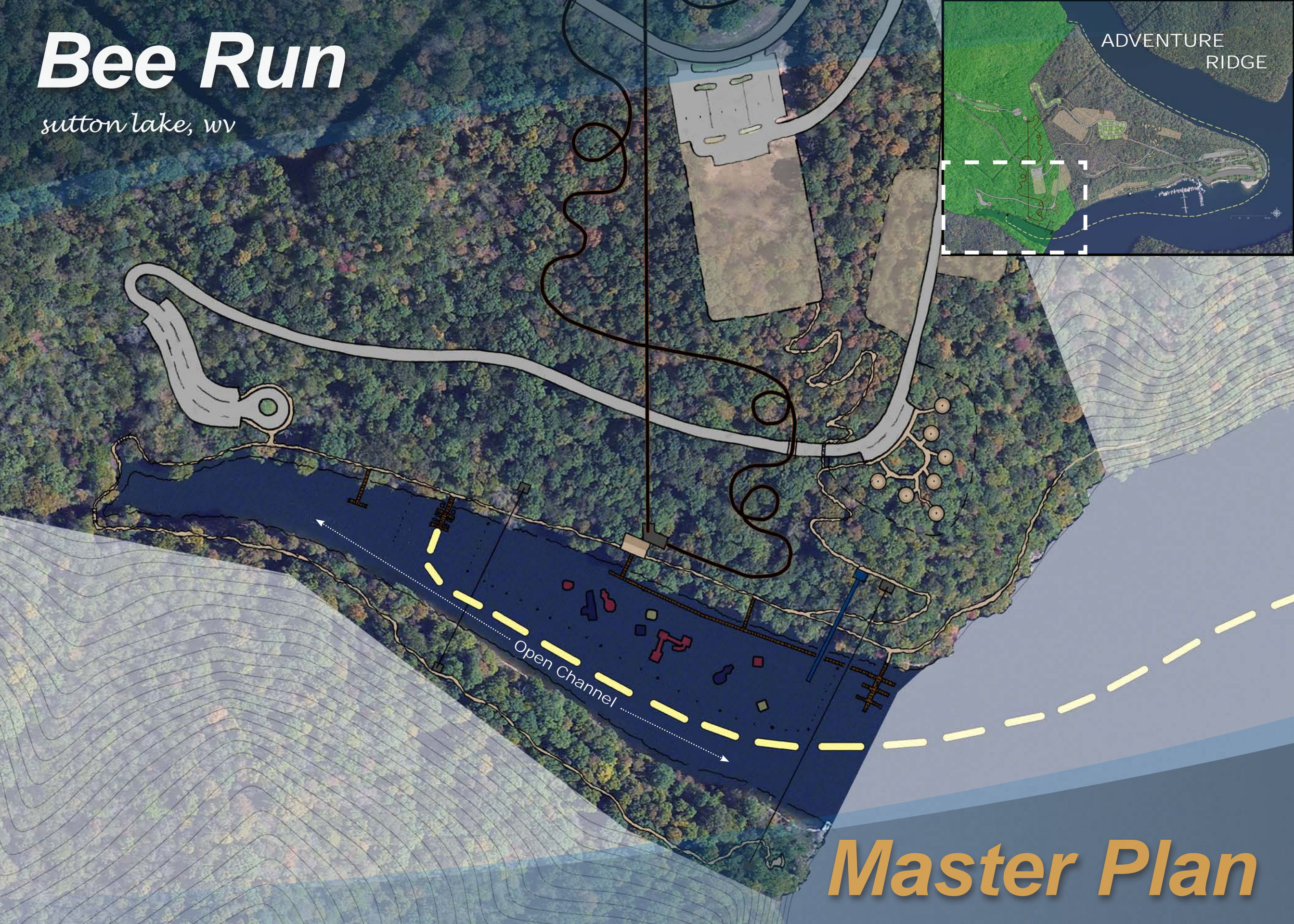
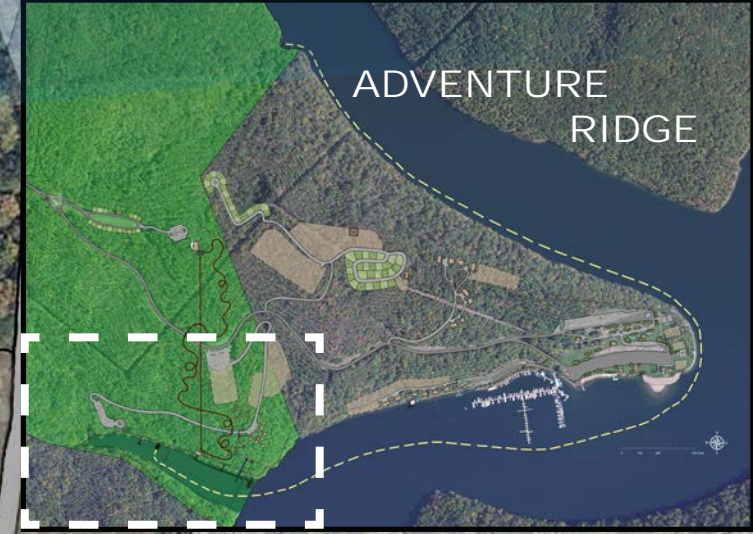
ADVENTURE RIDGE



Master Plan

Bee Run

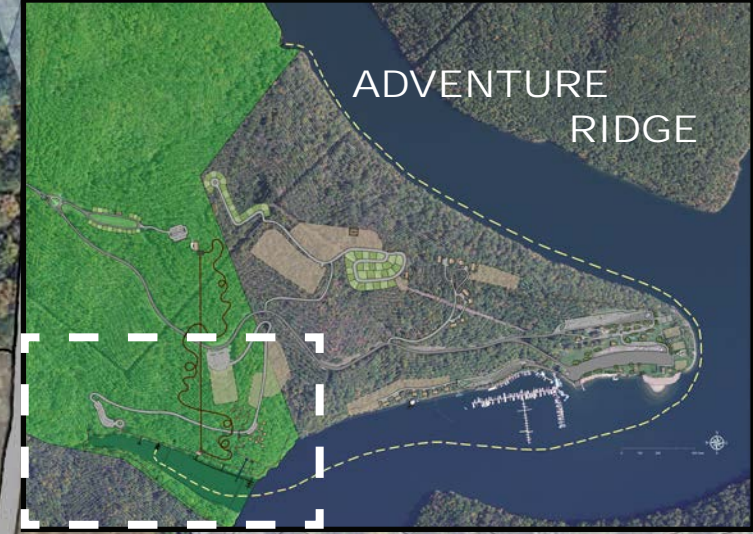
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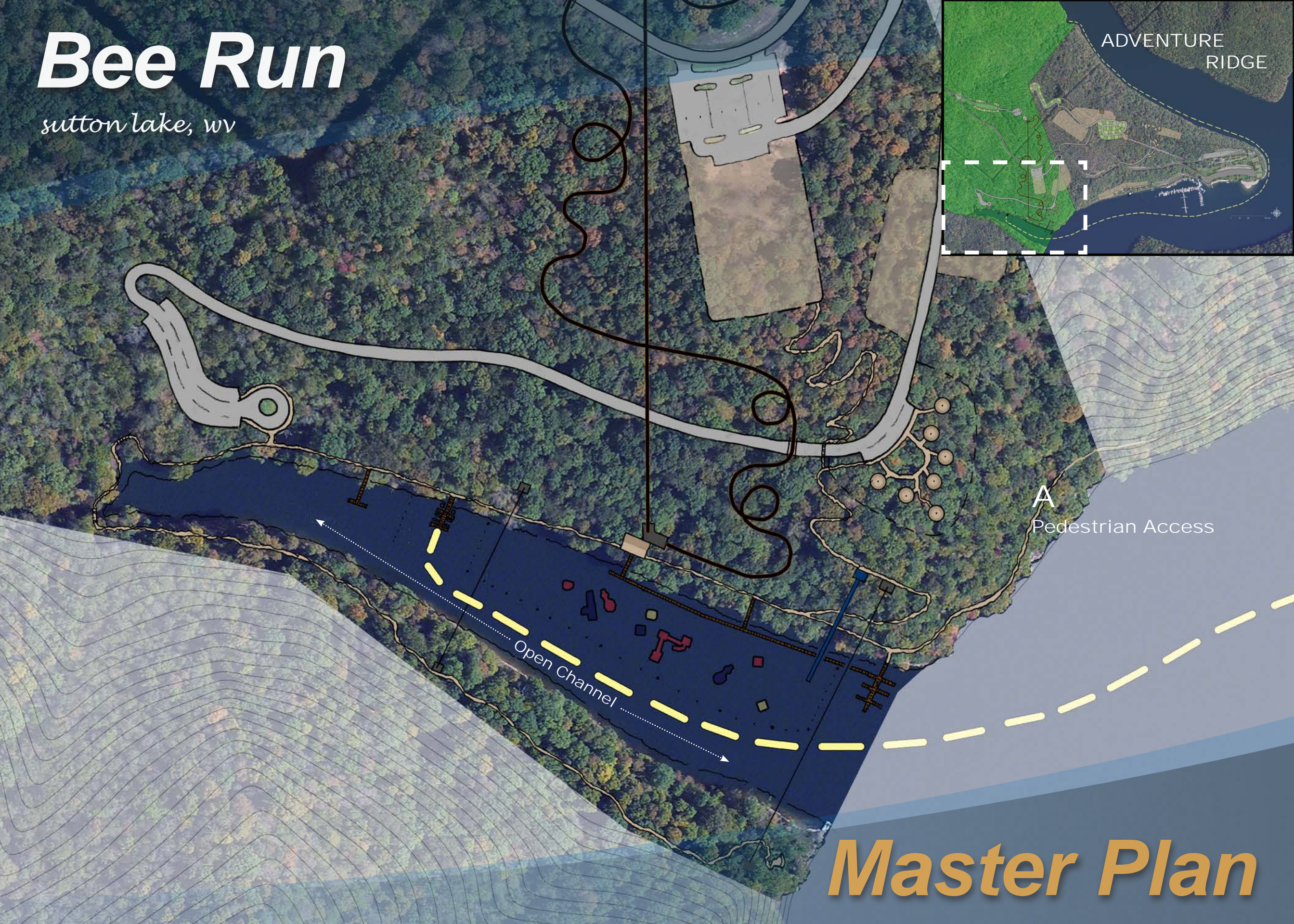
sutton lake, wv



A
Pedestrian Access

Open Channel

Master Plan



Bee Run

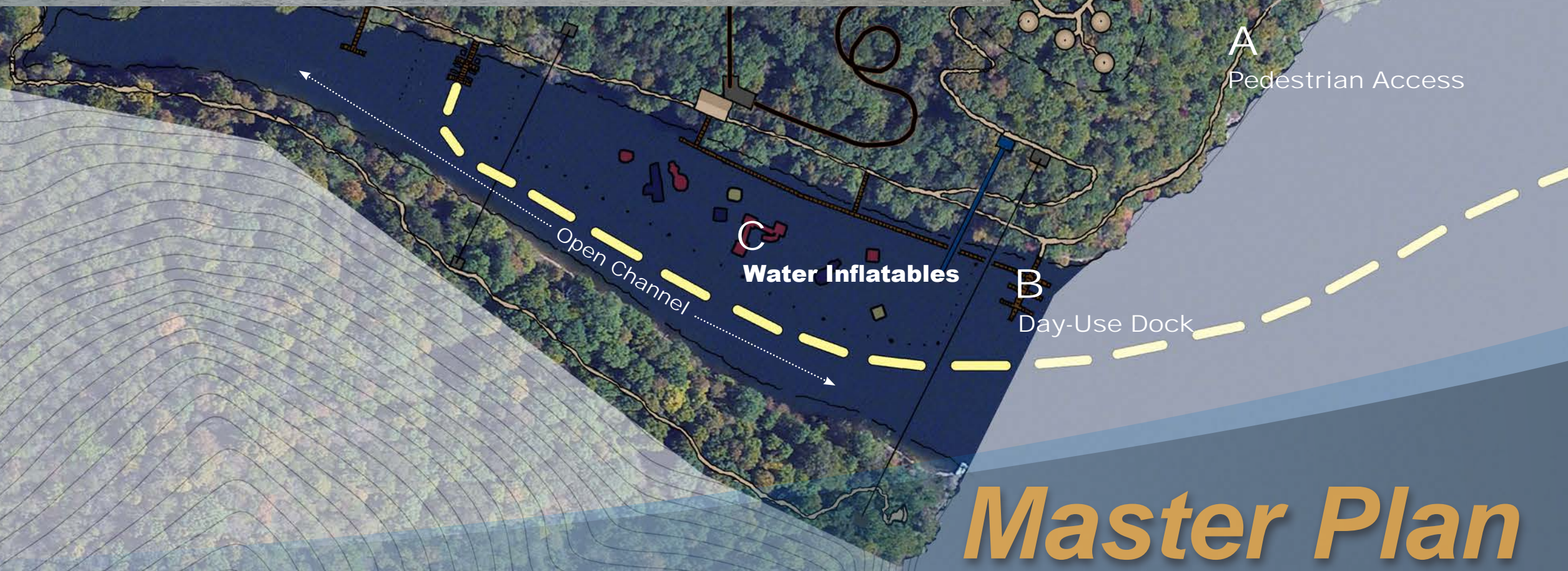
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Master Plan

Bee Run

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Master Plan

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Master Plan

Bee Run

sutton lake, wv

D
Lookout Point

K
Yurt Village

C
Water Inflatables

B
Day-Use Dock

A
Pedestrian Access

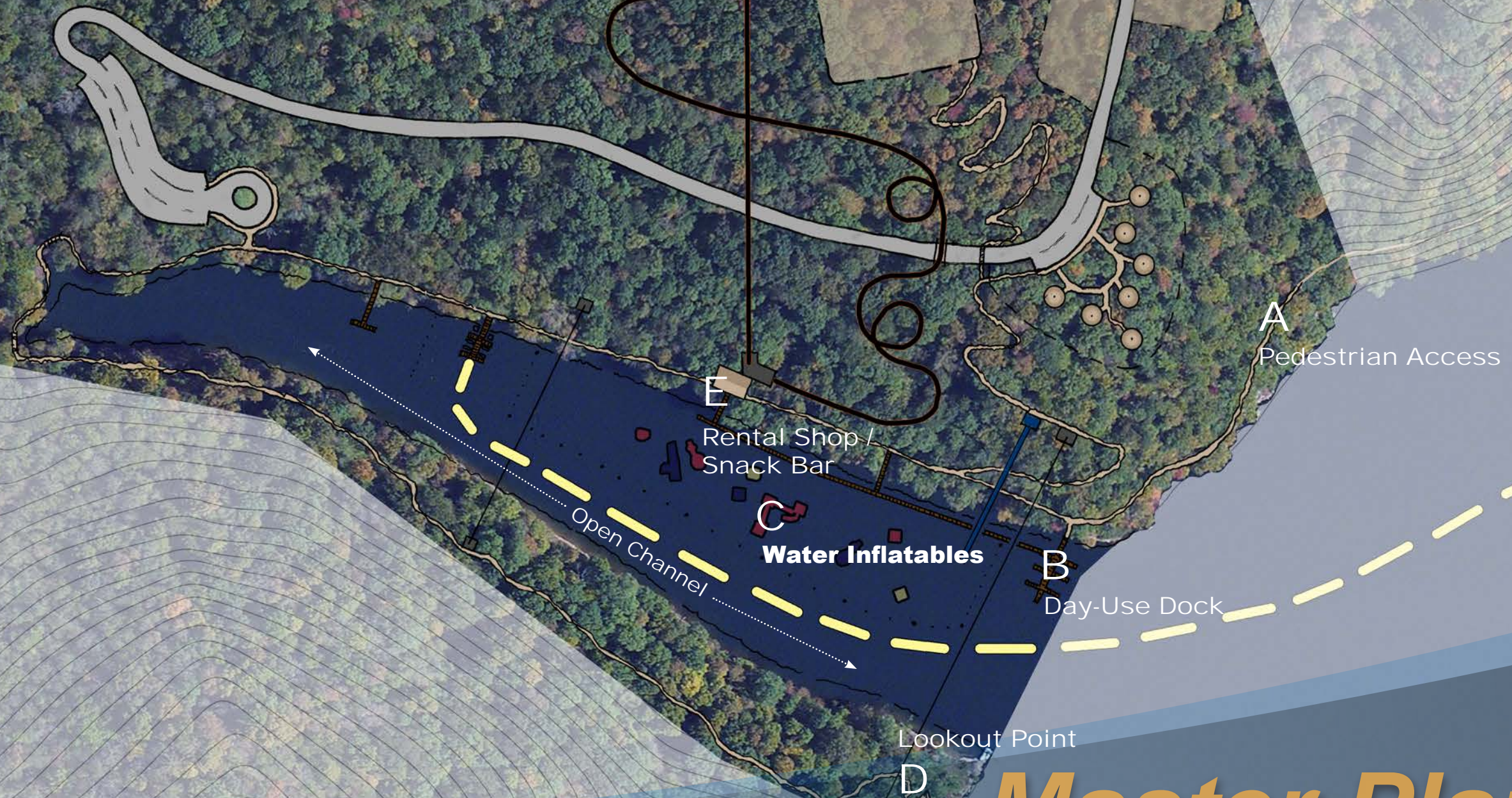
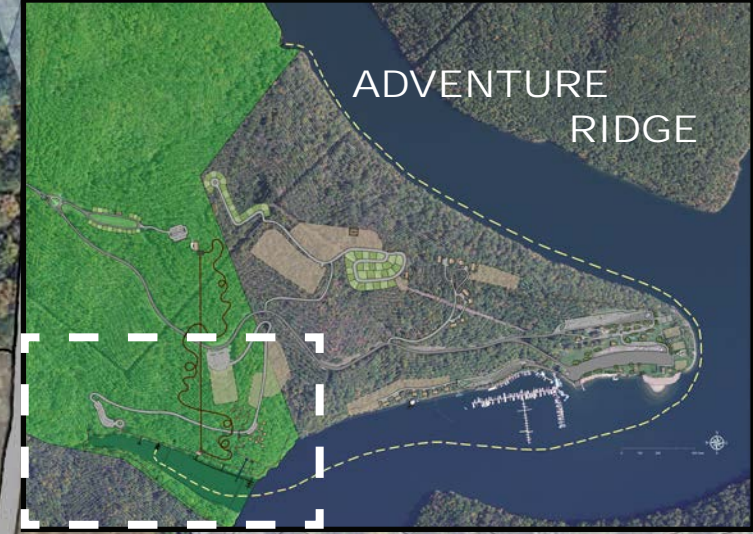
Waterfront Cabins

Sutton Lake Marina

Master Plan

Bee Run

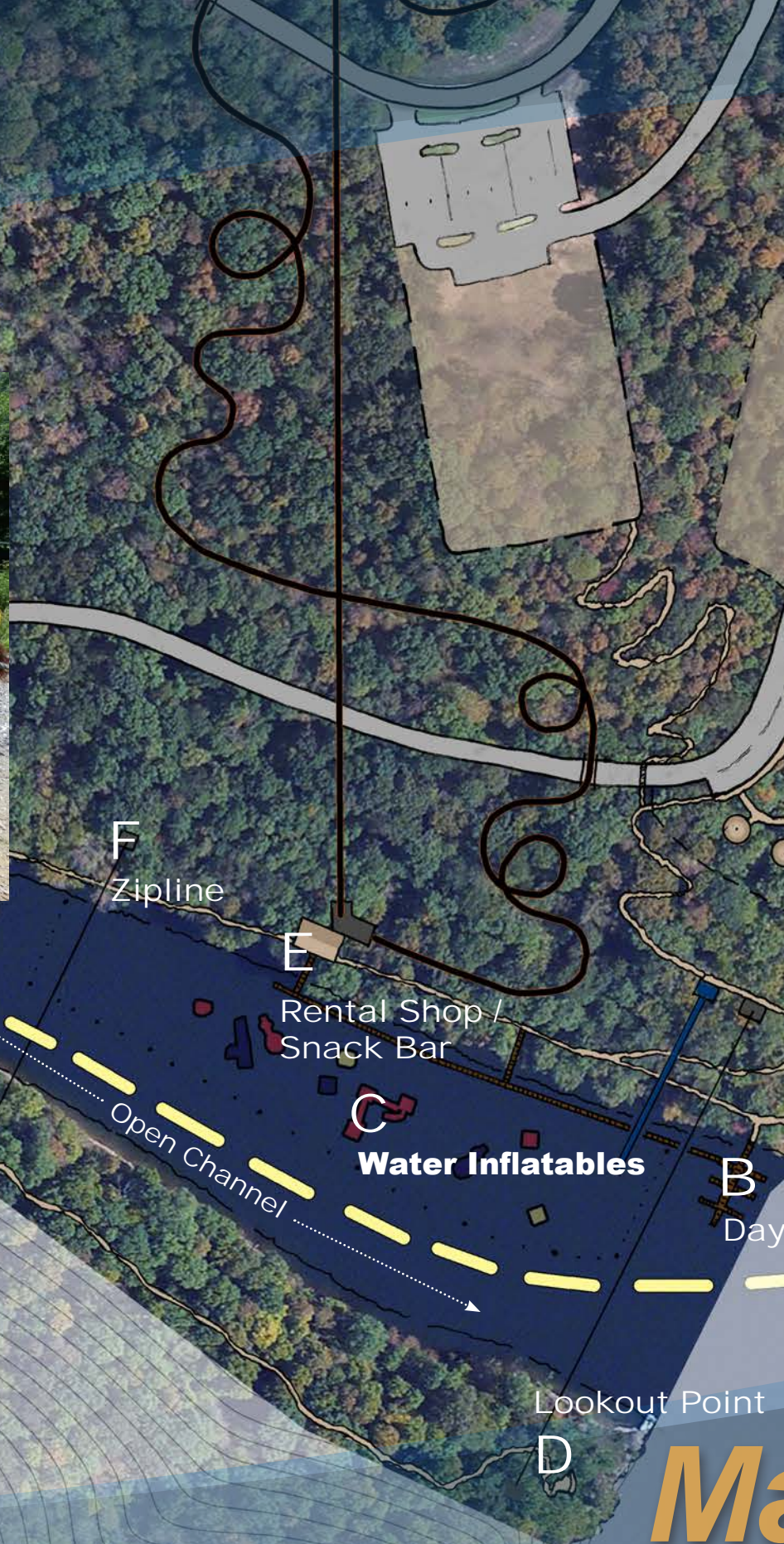
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Master Plan

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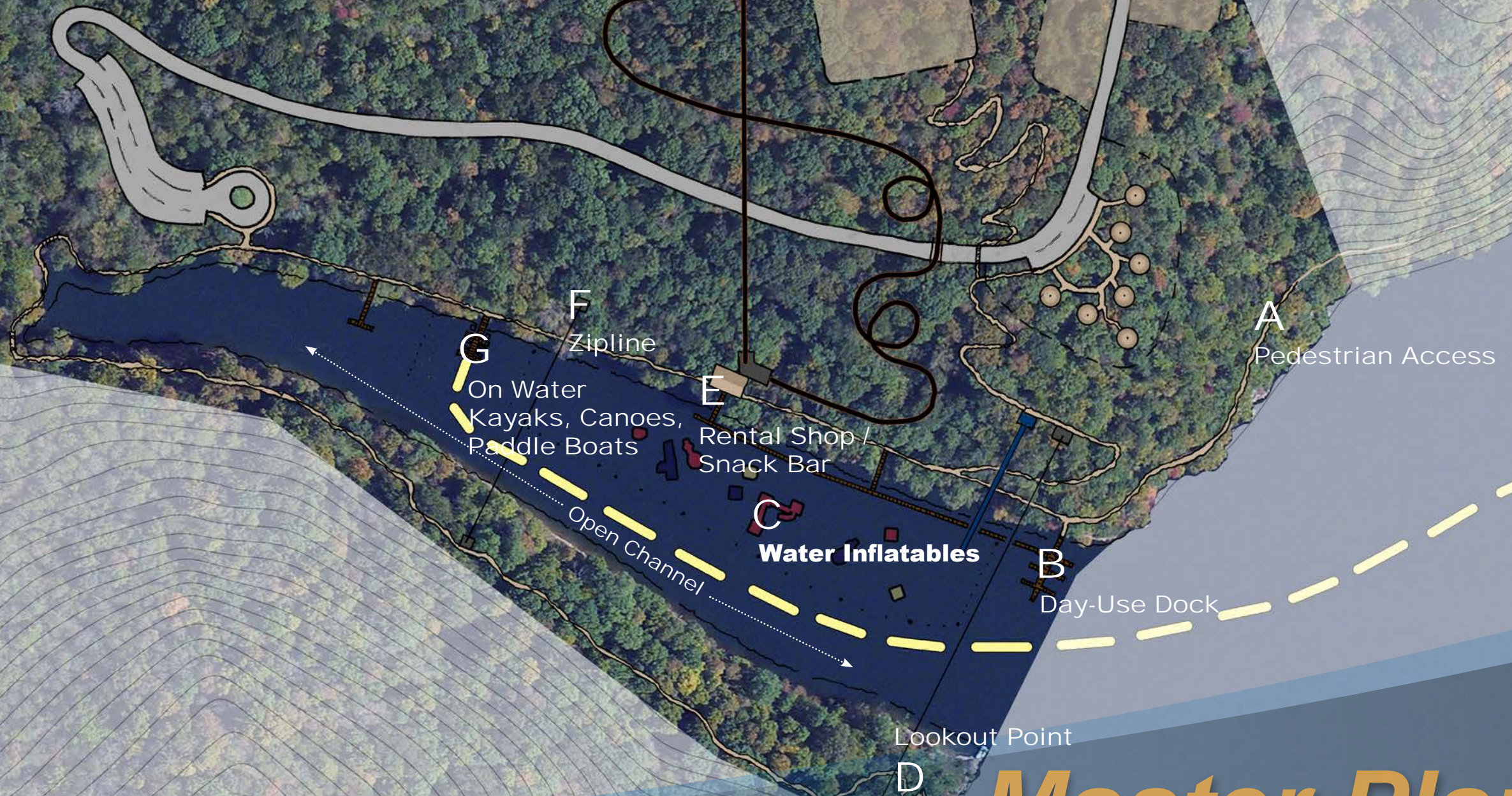
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Master Plan

Bee Run

sutton lake, wv



Master Plan

Bee Run

sutton lake, wv



ADVENTURE RIDGE



H
Fishing Pier
G
On Water
Kaya
Paddling

Access



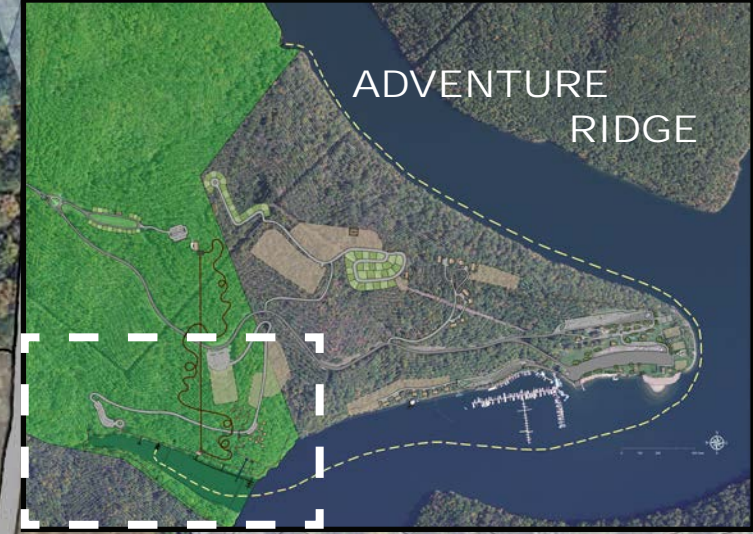
Lookout Point

D

Master Plan

Bee Run

sutton lake, wv



56 Parking Spaces

H
Fishing Pier

F
Zipline

G
On Water
Kayaks, Canoes,
Paddle Boats

E
Rental Shop /
Snack Bar

A
Pedestrian Access

C
Water Inflatables

B
Day-Use Dock

Open Channel

Lookout Point

D

Master Plan

Bee Run

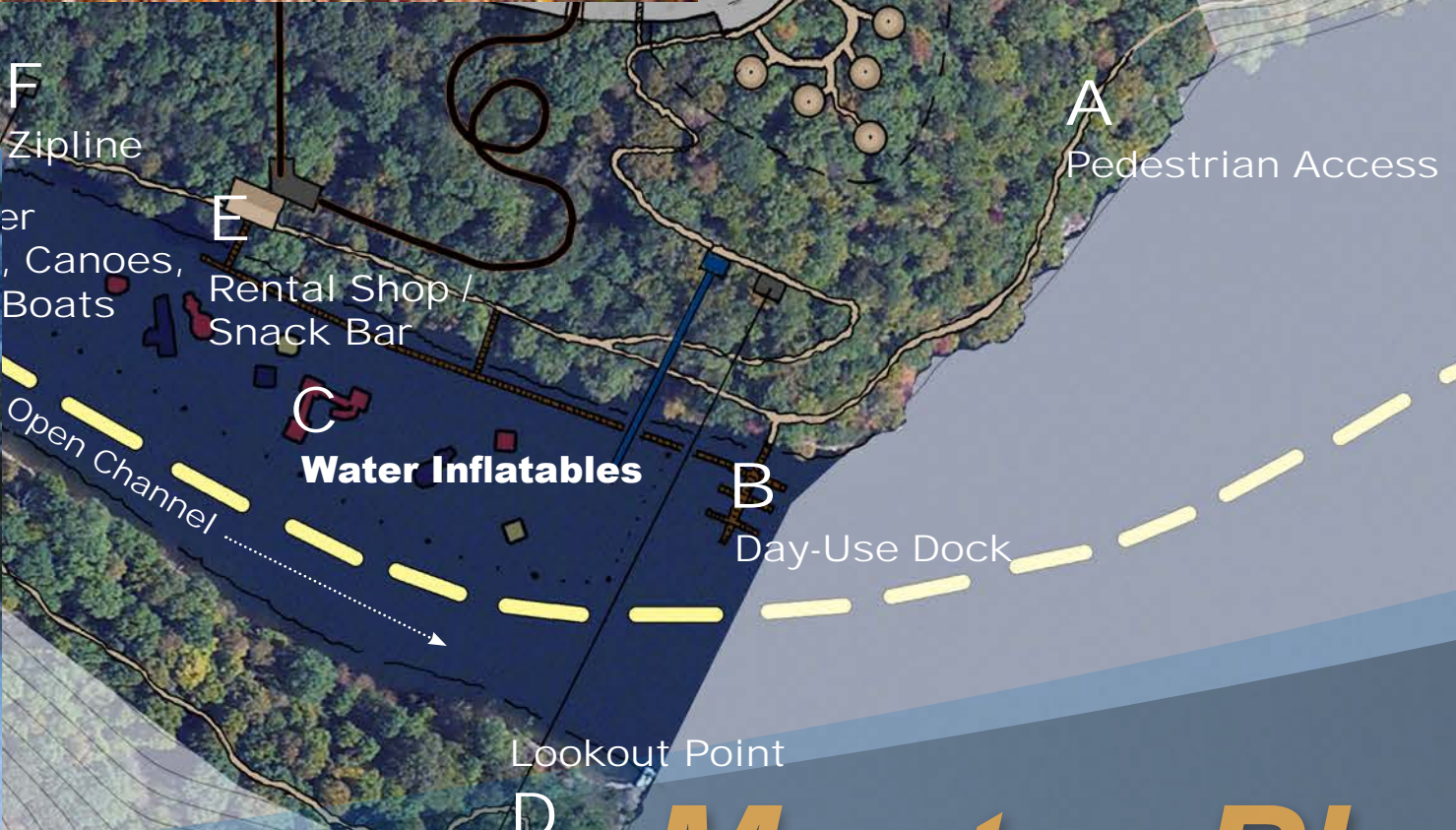
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Master Plan

Bee Run

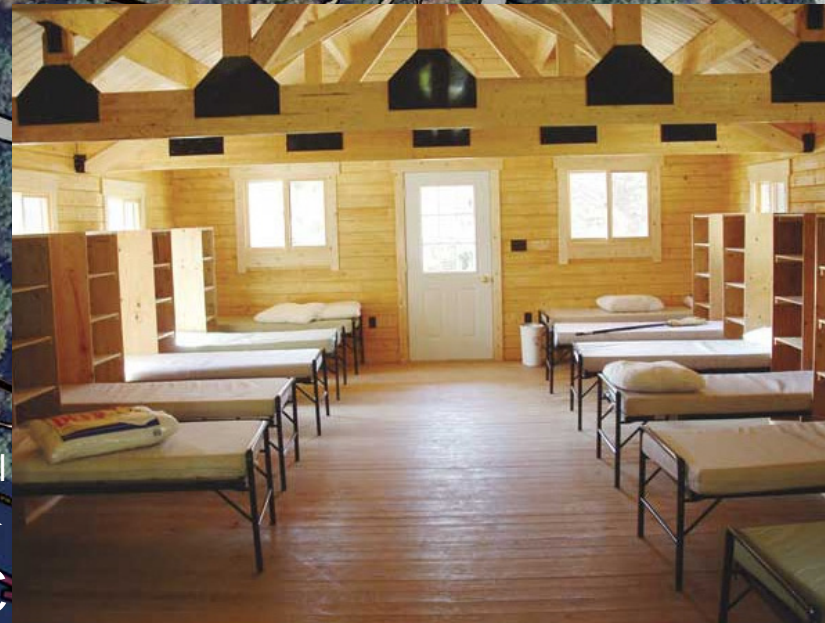
sutton lake, wv



Master Plan

Bee Run

sutton lake, wv



Master Plan

Bee Run

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ADVENTURE RIDGE

L
Group Camping

Future Yurt Area

J
Alpine Coaster

I
56 Parking Spaces

H
Fishing Pier

F
Zipline

G
On Water
Kayaks, Canoes,
Paddle Boats

E
Rental Shop /
Snack Bar

K
Yurt Village

A
Pedestrian Access

C
Water Inflatables

B
Day-Use Dock

Open Channel

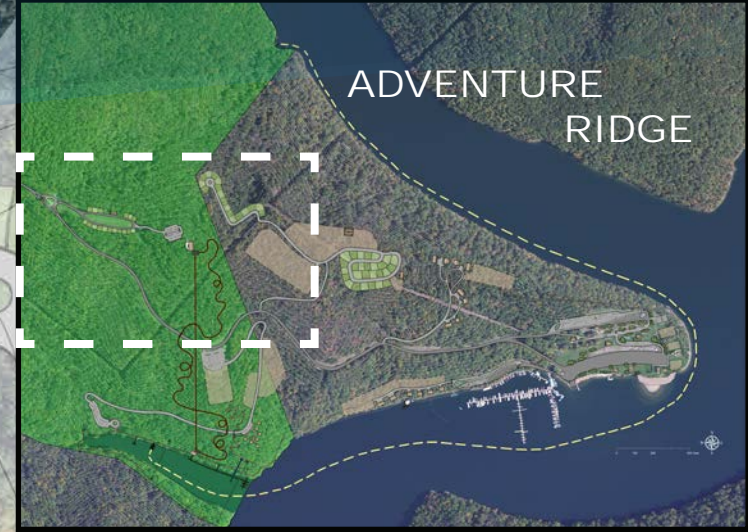
Lookout Point

D

Master Plan

Bee Run

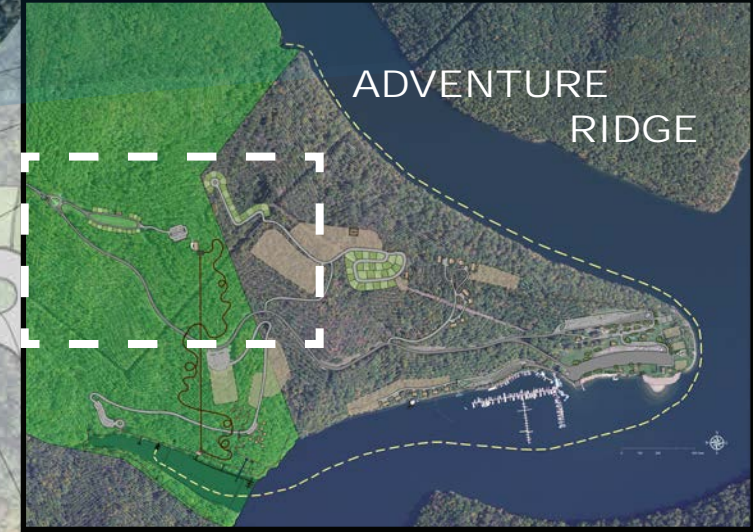
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Master Plan

Bee Run

sutton lake, wv



A
Zip line/Rope Course

Master Plan

Bee Run

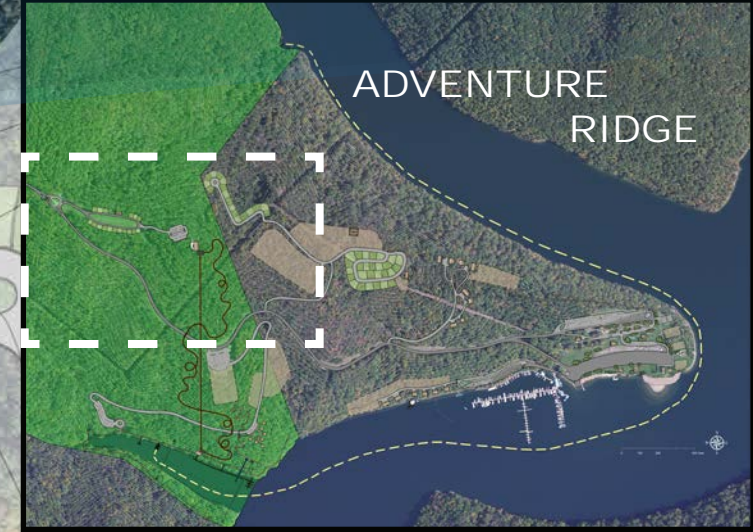
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A
Zip line/Rope Course



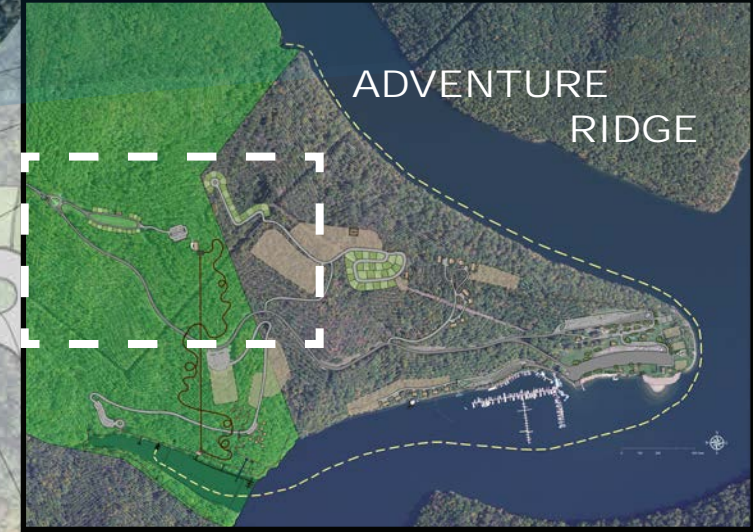
B
Adventure Ridge Center



Master Plan

Bee Run

sutton lake, wv



C
RV Pull Through Sites
Wooded Camp Sites

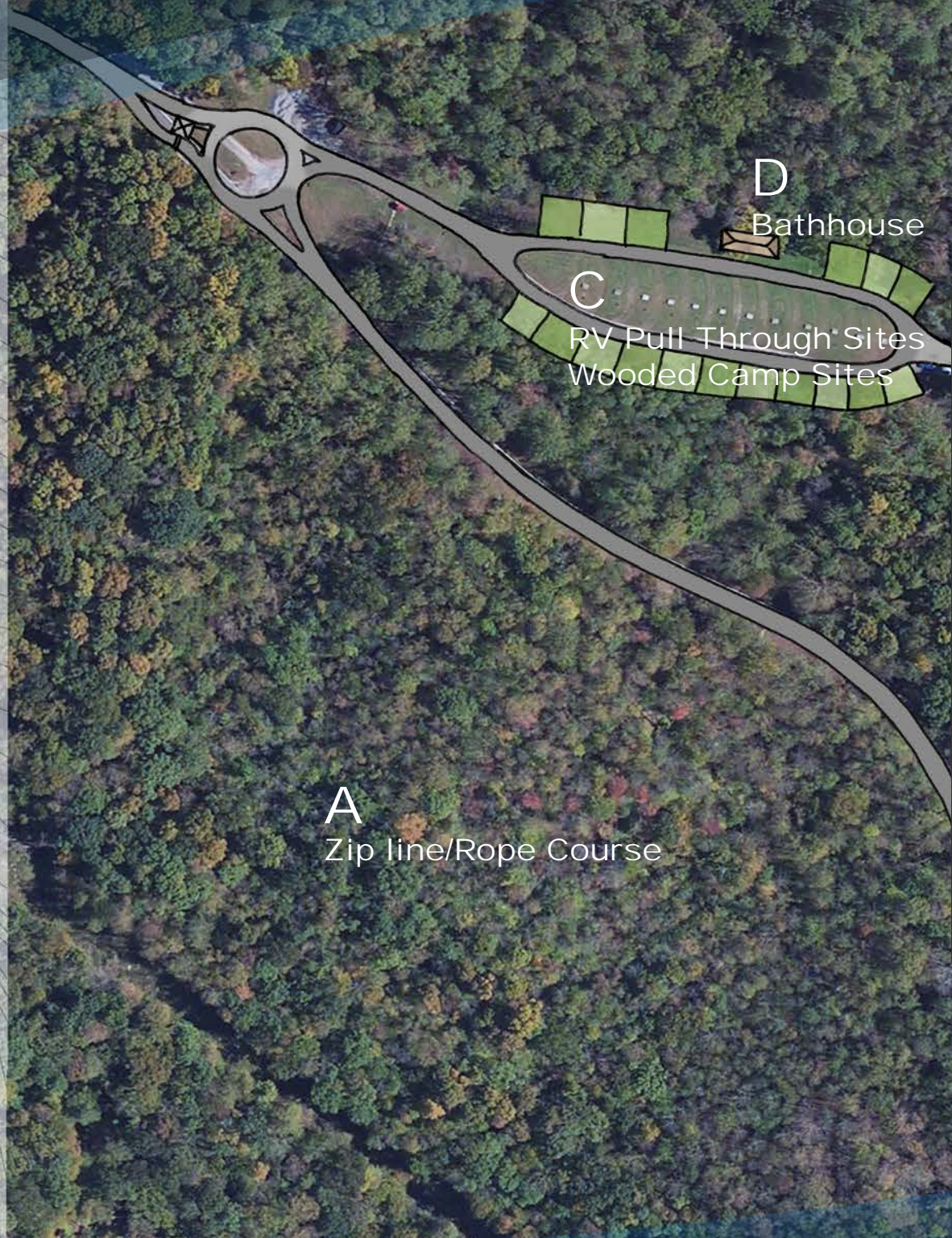
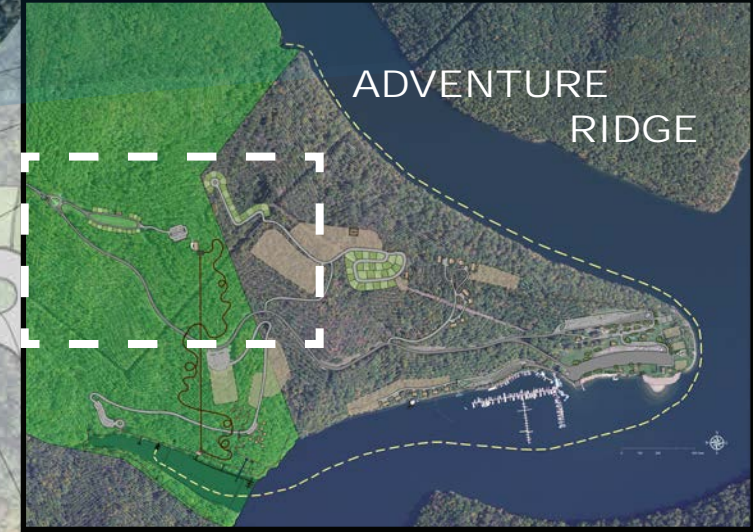
B
Adventure Ridge Center

A
Zip line/Rope Course

Master Plan

Bee Run

sutton lake, wv



D
Bathhouse

C
RV Pull Through Sites
Wooded Camp Sites

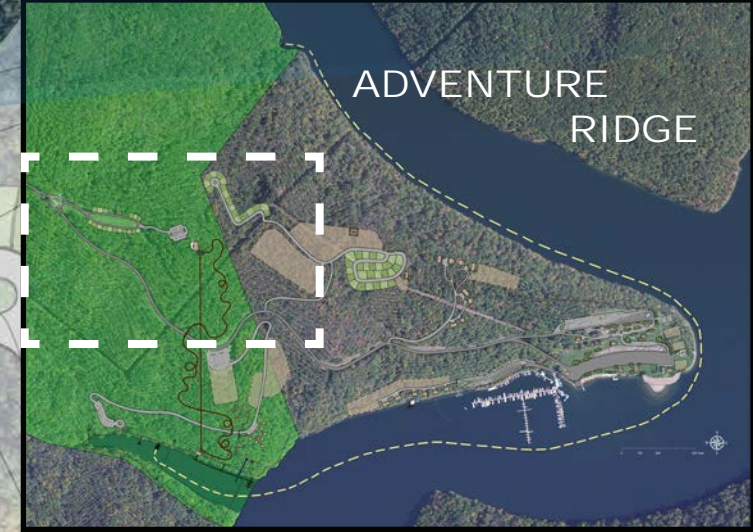
A
Zip line/Rope Course



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Adventure Ridge

Master Plan

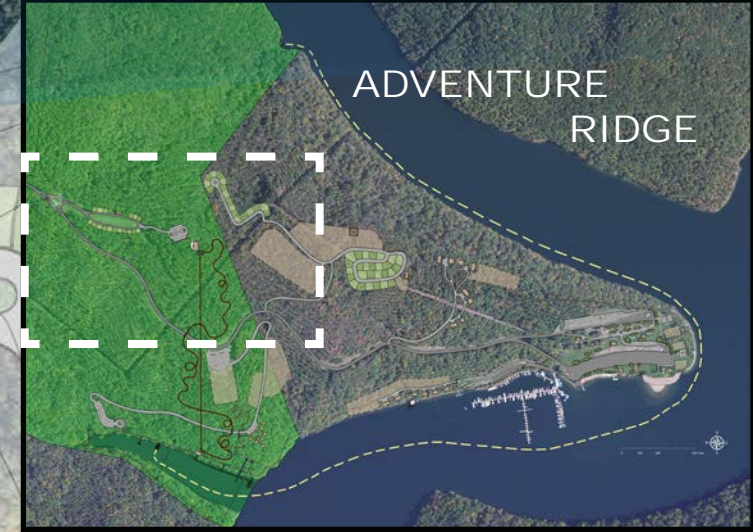
Bee Run

sutton lake, wv

E
Gate House



A
Zip Line



ADVENTURE
RIDGE

Adventure Ridge Center

Master Plan

Bee Run

sutton lake, wv



Master Plan

Bee Run

sutton lake, wv



A
Mountain Bike Area



Master Plan

Bee Run

sutton lake, wv



B
Kayak Tours



Master Plan



Bee Run

sutton lake, wv



B
Kayak Tours



C
Frisbee Golf

Master Plan

Bee Run

sutton lake, wv

D
Paintball

B
Kayak Tours



A
Mountain Bike Area



C
Frisbee Golf

Master Plan

Bee Run

sutton lake, wv

LODGING ZONE



Master Plan

Bee Run

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Master Plan

Bee Run

sutton lake, wv



Waterfront Cabins

Master Plan

Bee Run

sutton lake, wv



Master Plan

Bee Run

sutton lake, wv



A
Boat Storage

Master Plan

Bee Run

sutton lake, wv



B
17 Camping Spaces

A
Boat Storage

Master Plan

Bee Run

sutton lake, wv



B
17 Camping Spaces

A
Boat Storage

C
27 Camping Spaces

Master Plan

Bee Run

sutton lake, wv



Master Plan

Bee Run

sutton lake, wv



B
17 Camping Spaces

A
Boat Storage

C
27 Camping Spaces

D
Bathhouse

E
Playground

Master Plan

Bee Run

sutton lake, wv



B
17 Camping Spaces

A
Boat Storage

C
27 Camping Spaces

D
Bathhouse

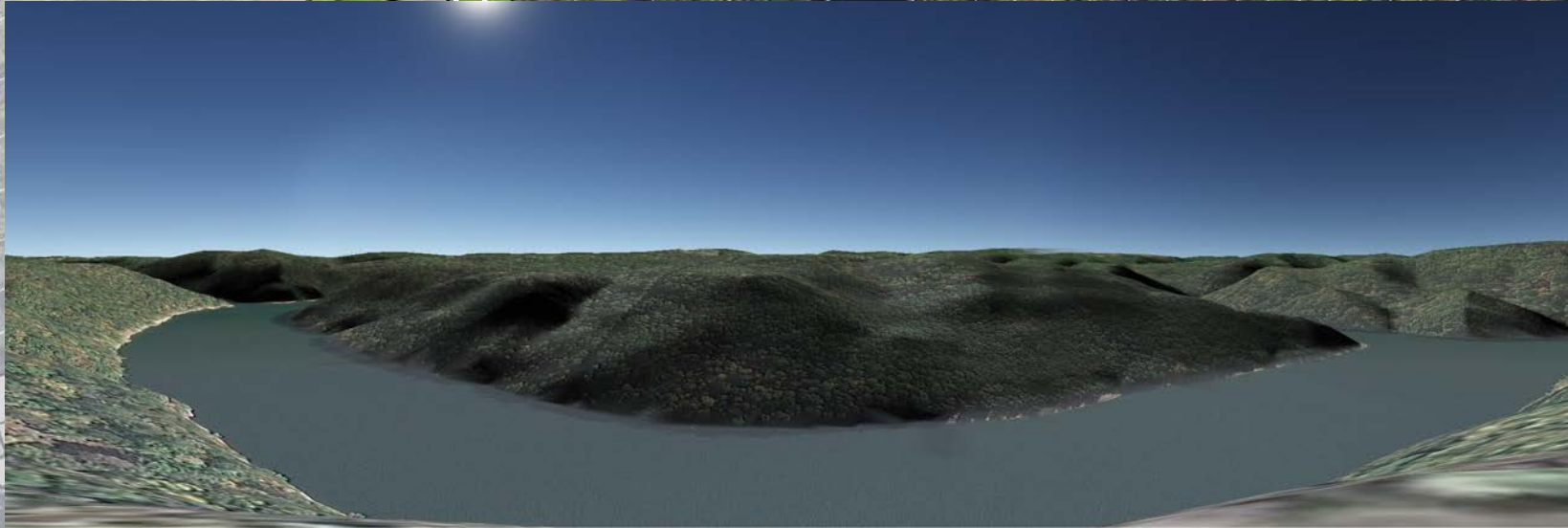
E
Playground

F
Realignment Of Utility

Master Plan

Bee Run

sutton lake, wv



A
Boat Storage

G
Restaurant

C
27 Camping Spaces

D
Bathhouse

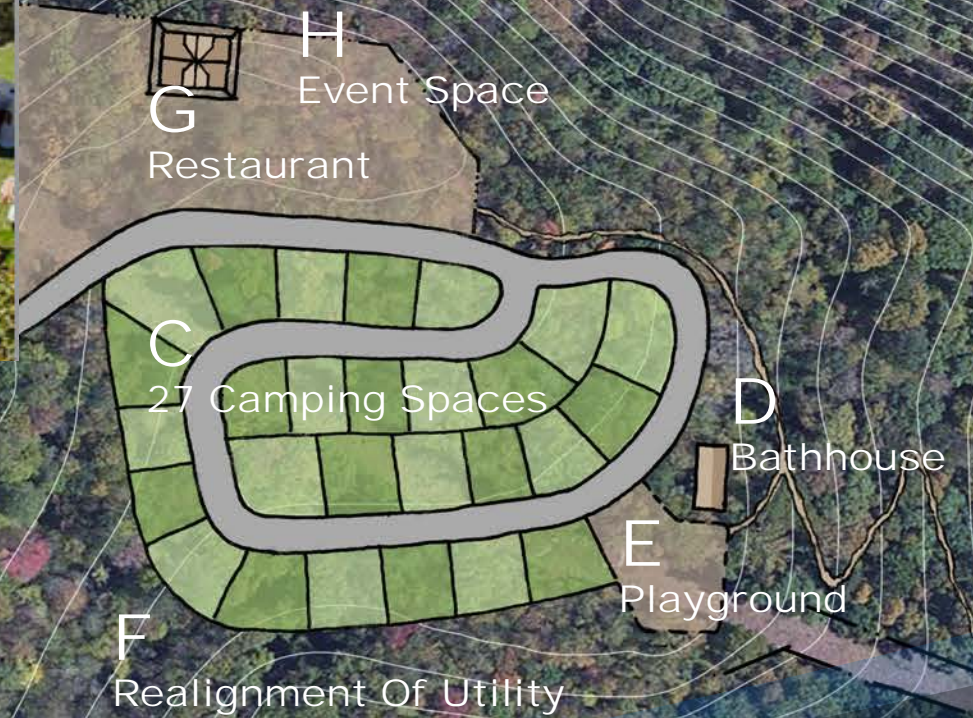
E
Playground

F
Realignment Of Utility

Master Plan

Bee Run

sutton lake, wv



Master Plan

Bee Run

sutton lake, wv



B
17 Camping Spaces

A
Boat Storage

I
Future Lodge and
Waterpark Location

G
Restaurant

H
Event Space

C
27 Camping Spaces

D
Bathhouse

E
Playground

F
Realignment Of Utility

Master Plan

Bee Run

sutton lake, wv



Master Plan

Bee Run

sutton lake, wv



Master Plan

Bee Run

sutton lake, wv

Final Phase Lodging



Master Plan

Bee Run

sutton lake, wv

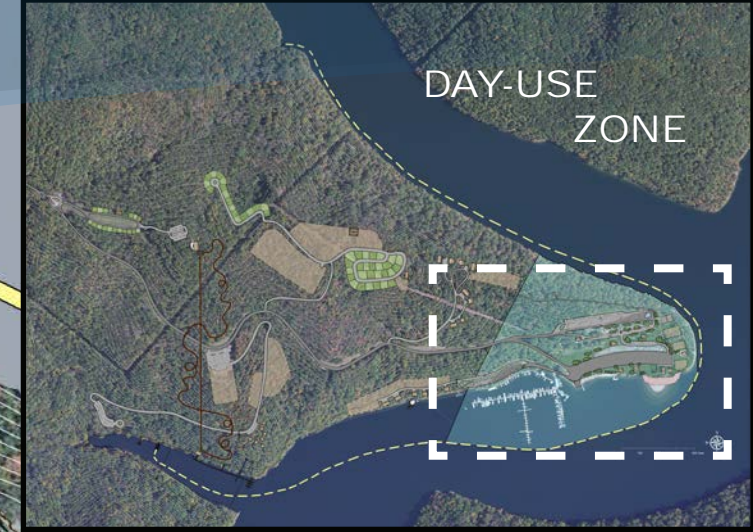
DAY-USE ZONE



Master Plan

Bee Run

sutton lake, wv



Master Plan

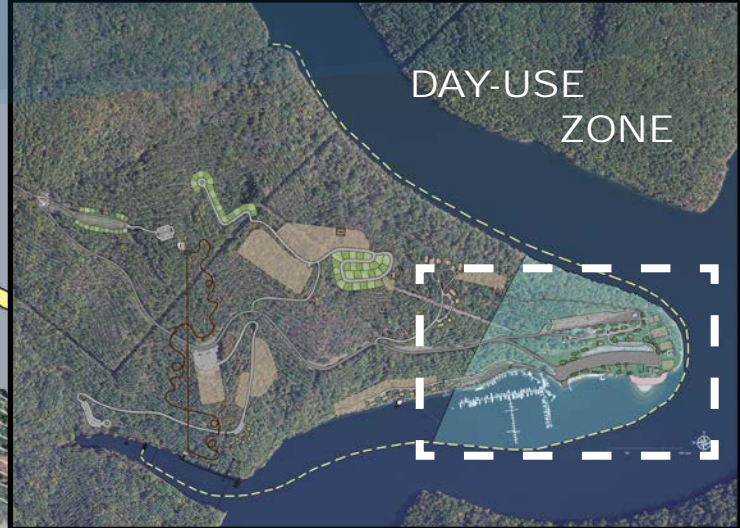
0 100 200 400 Feet



Bee Run

sutton lake, wv

A
Overlook On Trail



Master Plan

0 100 200 400 Feet



Bee Run

Sutton Lake, WV

A
Overlook On Trail

B
Upper Parking Lot
66 Car Spaces
50 Boat/Trailer
Lower Parking Lot
38 car Spaces



Master Plan

0 100 200 400 Feet



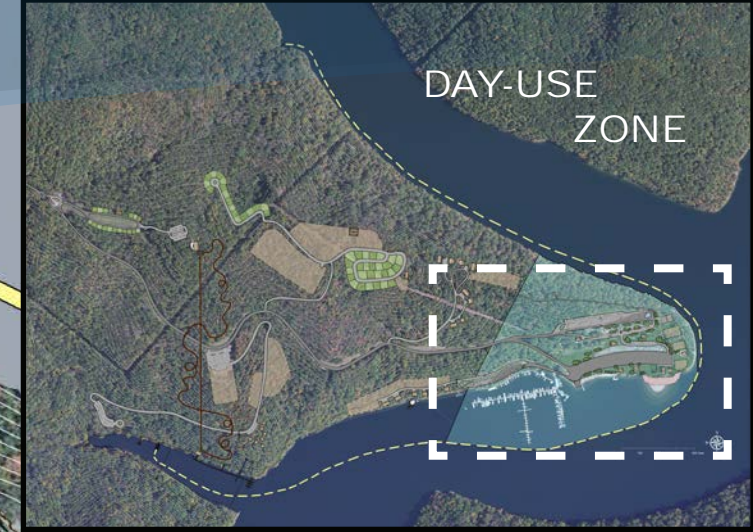
Bee Run

Sutton Lake, WV

A
Overlook On Trail

B
Upper Parking Lot
66 Car Spaces
50 Boat/Trailer
Lower Parking Lot
38 car Spaces

C
Existing Parking Lot
106 Car Spaces
47 Boat/Trailer



Master Plan

0 100 200 400 Feet



Bee Run

sutton lake, wv

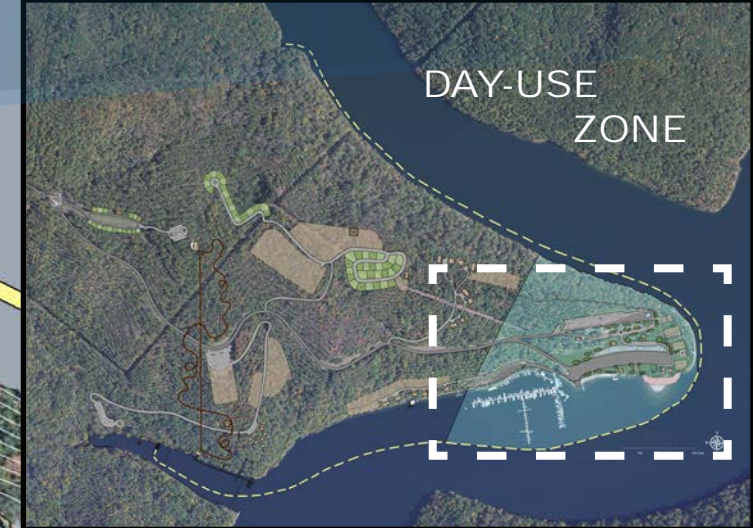
A
Overlook On Trail



B
Upper Parking Lot
66 Car Spaces
50 Boat/Trailer
Lower Parking Lot
38 car Spaces



D
Multi-Purpose Sports Court



Master Plan

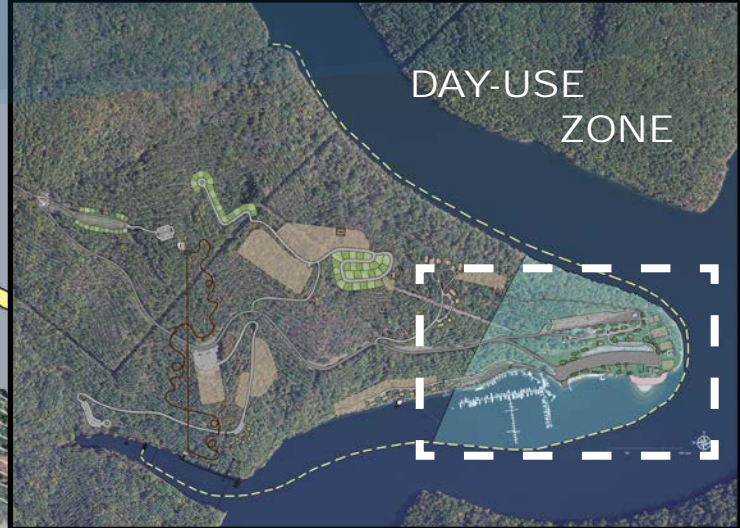
0 100 200 400 Feet



Bee Run

Sutton Lake, WV

A
Overlook On Trail



C
Existing
106 Car
47 Boats



Master Plan

0 100 200 400 Feet



Bee Run

Sutton Lake, WV

A
Overlook On Trail

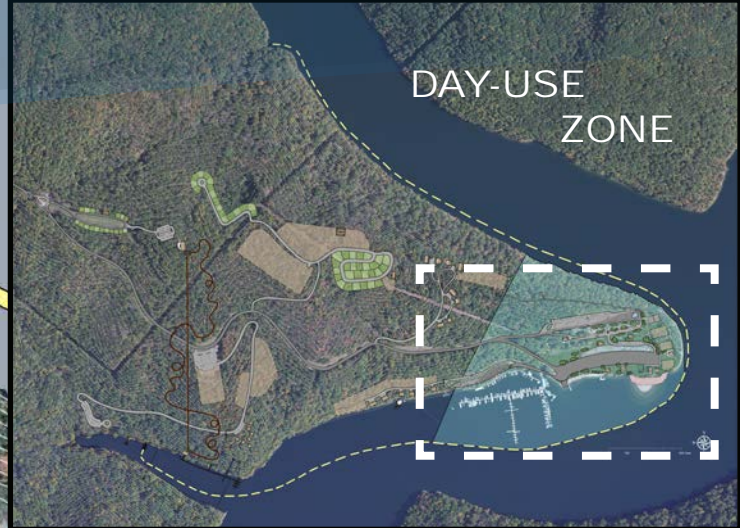
B
Upper Parking Lot
66 Car Spaces
50 Boat/Trailer
Lower Parking Lot
38 car Spaces

C
Existing Parking Lot
106 Car Spaces
47 Boat/Trailer

D Multi-Purpose Sports Court

E Mixed-Use Skating Area

F Playground



Master Plan

0 100 200 400 Feet



Bee Run

Sutton Lake, WV

A
Overlook On Trail

B
Upper Parking Lot
66 Car Spaces
50 Boat/Trailer
Lower Parking Lot

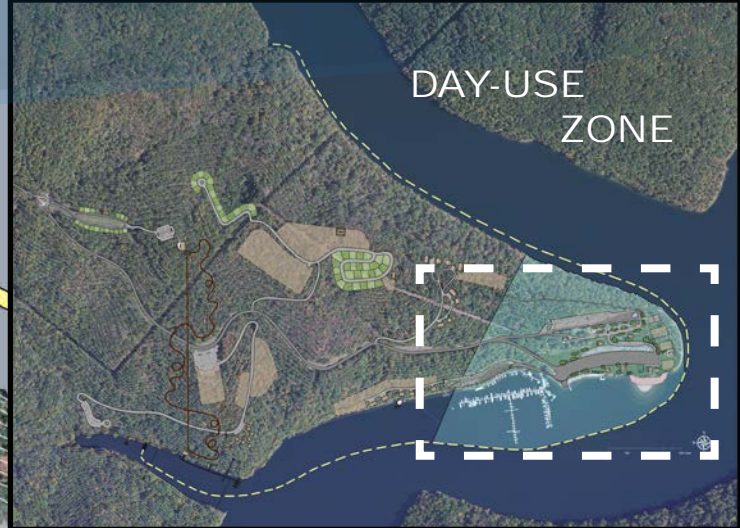
D Multi-Purpose Sports Court

E Mixed-Use Skating Area

F Playground

G Picnic Point

DAY-USE
ZONE



Master Plan

0 100 200 400 Feet



Bee Run

Sutton Lake, WV

A
Overlook On Trail

B
Upper Parking Lot
66 Car Spaces
50 Boat/Trailer
Lower Parking Lot
38 car Spaces

C
Existing Parking Lot
106 Car Spaces
47 Boat/Trailer

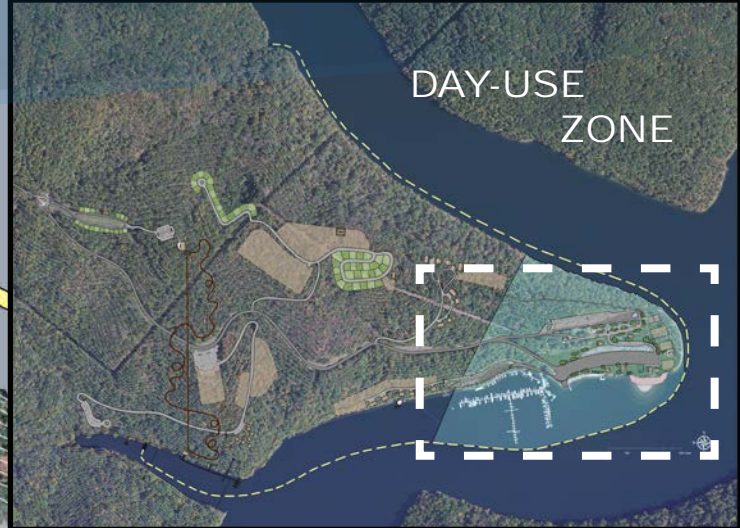
D Multi-Purpose Sports Court

E Mixed-Use Skating Area

F Playground

G Picnic Point

Volleyball Court



Master Plan

0 100 200 400 Feet



Bee Run

Sutton Lake, WV

A
Overlook On Trail

B
Upper Parking Lot
66 Car Spaces
50 Boat/Trailer
Lower Parking Lot
38 car Spaces

C
Existing Parking Lot
106 Car Spaces
47 Boat/Trailer

Bocce Ball
Horseshoe Pit
Yard Games

D Multi-Purpose Sports Court

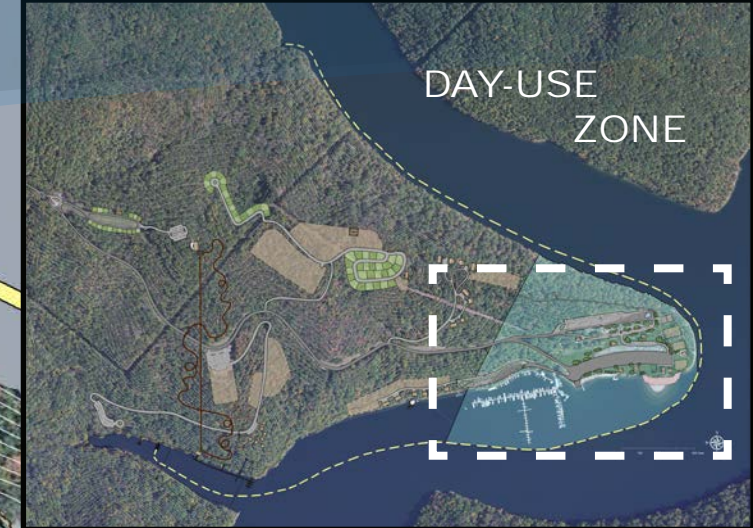
E Mixed-Use Skating Area

F Playground

G Picnic Point

Volleyball Court

DAY-USE
ZONE



Master Plan

0 100 200 400 Feet



Bee Run

Sutton Lake, WV

A
Overlook On Trail

B
Upper Parking Lot
66 Car Spaces
50 Boat/Trailer
Lower Parking Lot
38 Car Spaces

C
Existing Parking Lot
106 Car Spaces
47 Boat/Trailer

Bocce Ball
Horseshoe Pit
Yard Games

D
Multi-Purpose Sports Court

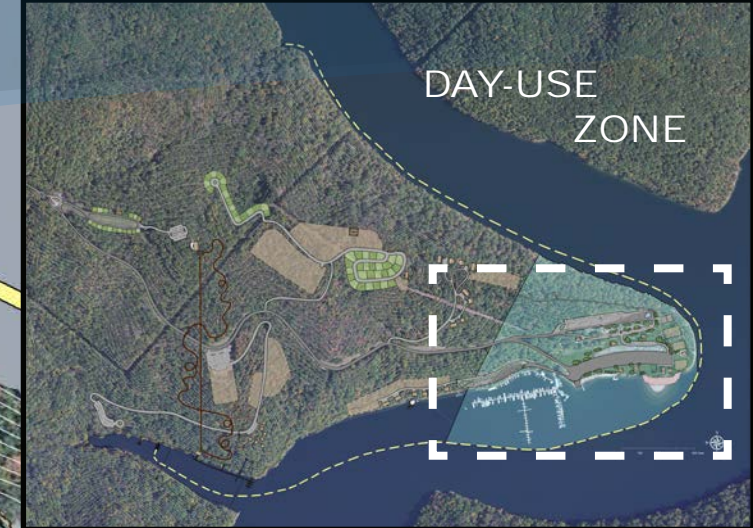
E
Mixed-Use Skating Area

F
Playground

G
Picnic Point

Volleyball Court

J
Expanded Beach



Master Plan

0 100 200 400 Feet



Bee Run

Sutton Lake, WV

A
Overlook On Trail

B
Upper Parking Lot
66 Car Spaces
50 Boat/Trailer
Lower Parking Lot
38 Car Spaces

C
Existing Parking Lot
106 Car Spaces
47 Boat/Trailer

Pavilions

Bocce Ball
Horseshoe Pit
Yard Games

D
Multi-Purpose Sports Court

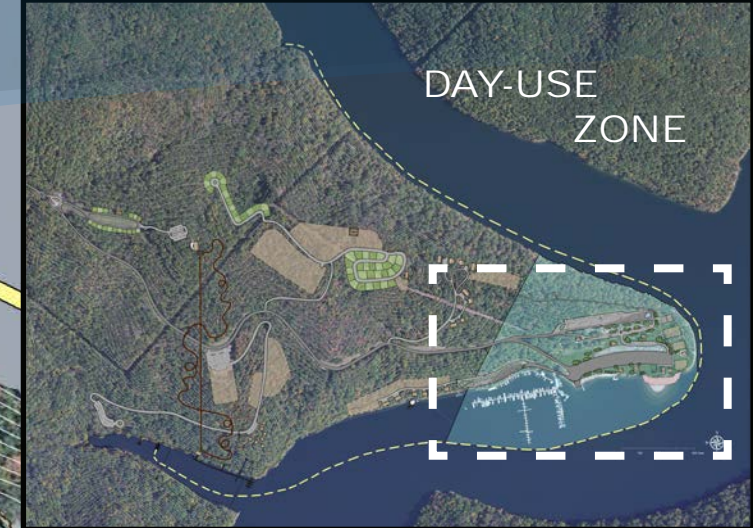
E
Mixed-Use Skating Area

F
Playground

G
Picnic Point

Volleyball Court

Expanded Beach



Master Plan

0 100 200 400 Feet



Bee Run

Sutton Lake, WV

A
Overlook On Trail

B
Upper Parking Lot
66 Car Spaces
50 Boat/Trailer
Lower Parking Lot
38 Car Spaces

C
Existing Parking Lot
106 Car Spaces
47 Boat/Trailer

L
Enlarged Parking Lot
108 Car Spaces

Pavilions
Bocce Ball
Horseshoe Pit
Yard Games

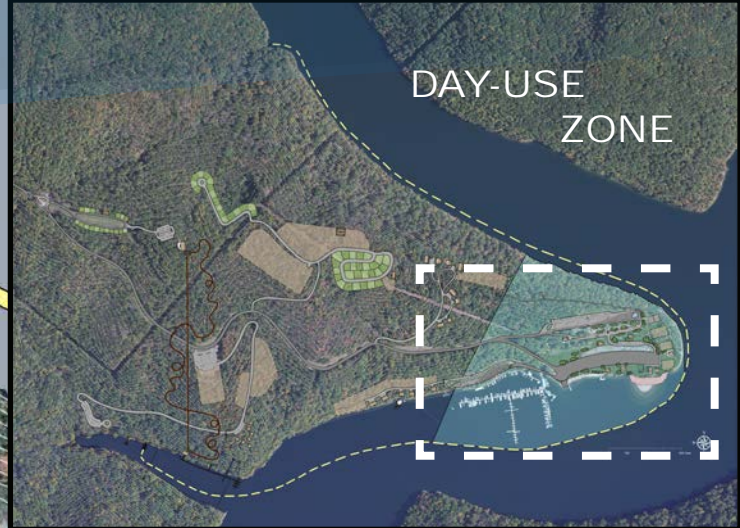
D
Multi-Purpose Sports Court

E
Mixed-Use Skating Area

F
Playground

G
Picnic Point

Volleyball Court
Expanded Beach



Master Plan

0 100 200 400 Feet



Bee Run

sutton lake, wv



WATERFRONT CABINS WITH
PRIVATE DOCK

30' Boats

40'-50'
Boats

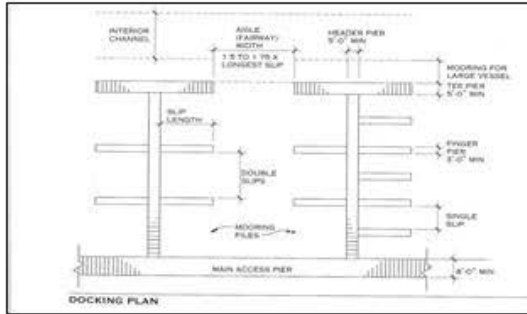
30' Boats

Master Plan

Bee Run

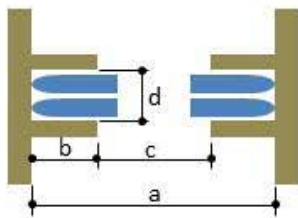
sutton lake, wv

Dock and Marine Development Standards



BOAT LENGTH	SLIP LENGTH	SINGLE SLIP WIDTH	DOUBL SLIP WIDTH
20	23	10	20
25	28	12	25
30	33	14	27
35	38	15	31
40	43	18	34
45	48	19	36
50	53	20	38
55	58	22	42
60	63	23	44

Recommended Slip Dimensions



Boat Size (Max)	a	b	c	d
30'	84'-90'	24'	36'-42'	27'
40'	112'-120'	32'	48'-56'	34'
50'	140'-150'	40'	60'-70'	38'

EXISTING DOCK CONDITIONS AND OBSERVATIONS

- There are 4 docks designated as docks A, B, C and D.
- Dock D is the newest addition to the network.
- All docks were recently upgraded.
- Available Slips: 232 total (Docks A= 35, B=92, C=53 and D=52)
- Most slips are double loaded.
- The typical width of double loaded slips is approximately 20', However, there are some along the south edge of dock B that are approximately 28' wide.
- In many cases the larger boat sizes are underserved by the size of the slips.
- The majority of slips have a finger dock size of 5'x20', with a few finger docks up to 26'-60' in length distributed among the 4 main docks. Dock development standards suggest a finger dock size of approximately 80% of the boat length. Many of the larger boat slips may require larger finger docks.
- Dock A appears to become unusable during times when the lake water level is low.

ASSUMPTIONS

- The average size of boats that the marina serves range in size from 20' to 50' in length, based on data found on Marina website for Dock B. The exception are rented house boats that are 14'x59' in size and rented paddle boats.
- The marina serves a variety of boat types including pontoon, house boats, paddle boats, fishing boats and recreational / ski boats.
- An additional 150 slips are desired for the marina.

RECOMMENDATIONS

- Consider zoning slips according to boat size and slip capacity.
- Add 4 new docks branching off dock B and extend dock B to facilitate 150 additional slips.
- Shift existing dock D one bay to the west to facilitate 2 additional docks for smaller boats.
- Provide longer finger docks for boats 40' and longer.
- Consider relocating Dock A slips to deeper water, potentially at the end of Dock B. The main dock could be as a pedestrian boardwalk to connect the marina to proposed cabins. The existing slips could also be removed or repurposed for additional cabins (floating cabins or on stilts) situated along dock A. Other amenities that could be added along dock A include a cabana, restaurant and dining platform.

Master Plan

Bee Run

ADJACENT FRONT VIEW CABINS

Marina and Option B



Sutton Lake, WV

BATHHOUSE

FUTURE CABIN EXPANSION AREA

LOOKOUT

Lodge Parking

Lodge With Indoor Waterpark

106 CARS

106 CARS
47 BOAT/TRAILER
PARKING SPACES

PAVILIONS

VOLLEYBALL COURT

BASKETBALL

ARTIFICIAL ICE RINK OR SKATE PARK

PLAYGROUND

PICNIC POINT

Centralized Beach Location

Proposed Marina Location

Master Plan

Bee Run

sutton lake, wv



Master Plan

Bee Run

sutton lake, wv

QUESTIONS & COMMENTS



0 100 200 400 Feet



Master Plan