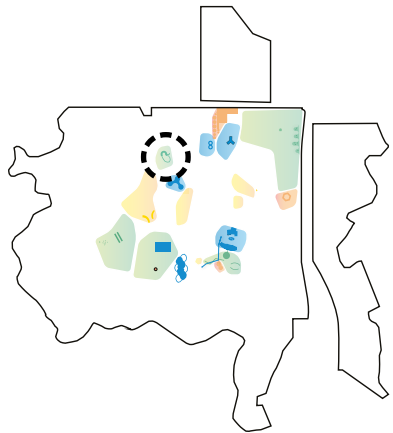


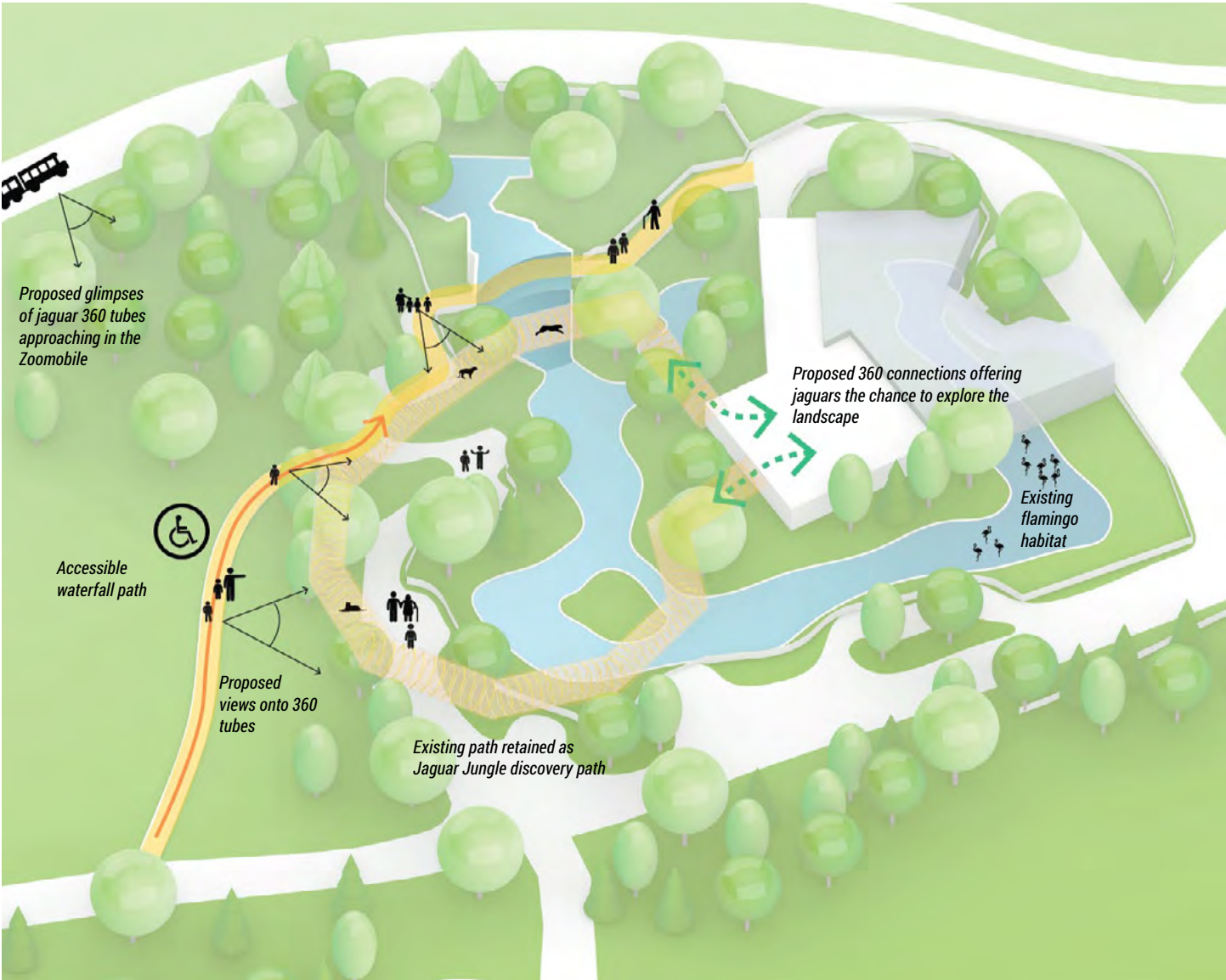
5. THE NEW MASTER PLAN

5.3. CAPITAL PROJECTS: JAGUAR HABITAT AND WATERFALL

The waterfall and habitat in the Americas section at the Northwestern part of Your Zoo is an incredible landscape, however accessibility challenges exist on the route to the waterfall, and the jaguars and other species here could benefit from larger holding and larger habitat spaces. In the first phase of the proposal, a new, accessible path brings guests up to the waterfall. The proposed habitat takes advantage of the monumental landscape, giving space back to jaguars here by creating 360 tubes that extend far out into their landscape, allowing them to lounge and explore above guests. This brings them past the waterfall and close to the treetops in many places, providing them with many enrichment opportunities. Similarly, guests feel much more immersed in the jaguar jungle, as they move up to the waterfall, with jaguars watching them from overhead, and in some places offering new eye-to-eye encounters.



Existing



Proposal Step 1

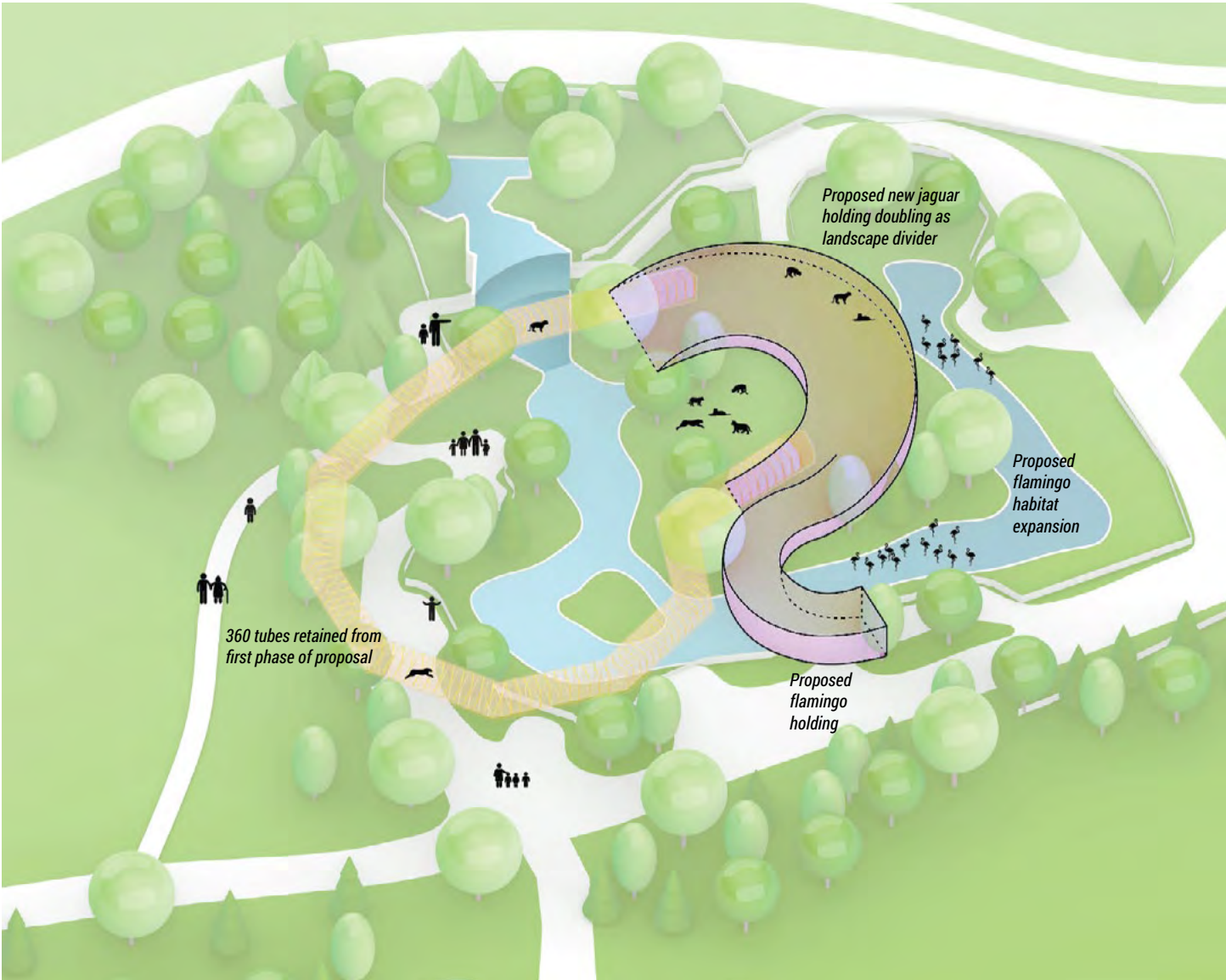
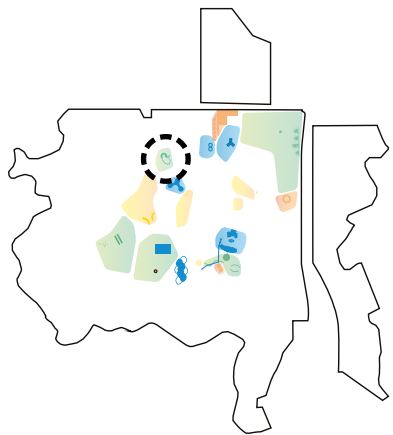
5. THE NEW MASTER PLAN

5.3. CAPITAL PROJECTS: JAGUAR HABITAT AND WATERFALL

Building upon the 360 tubes implemented in the first phase here, in the second phase of redevelopment even more space is given to jaguars by creating a larger holding building that also acts as a landscape barrier that jaguars are able to occupy. Smaller, charismatic species such as the flamingoes are still able to feel barrier-free, while the jaguars get an improved and expanded habitat with much more natural enrichment and guests get more views onto this iconic species, in a stunning landscape.

Preliminary program

- **6 760 sqft total building**
- 1 level, with 6m ceiling at tallest point, 4.5m ceiling in smallest arc near path
- two internal spaces - small arc holding for flamingoes, large arc holding for jaguars
- **150 m of 360 tubes**, allowing jaguars to move and explore above habitat spaces
- new gently sloping path leading up to waterfall (60 m long)



Proposal Step 2

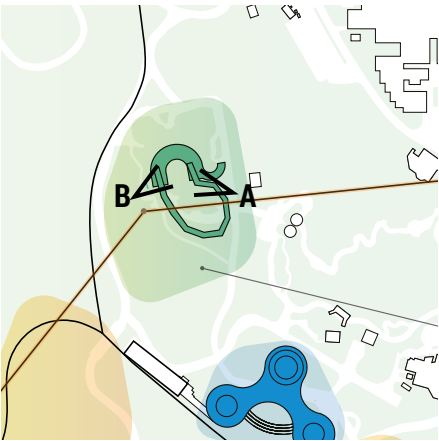


Proposal Step 2: building connections

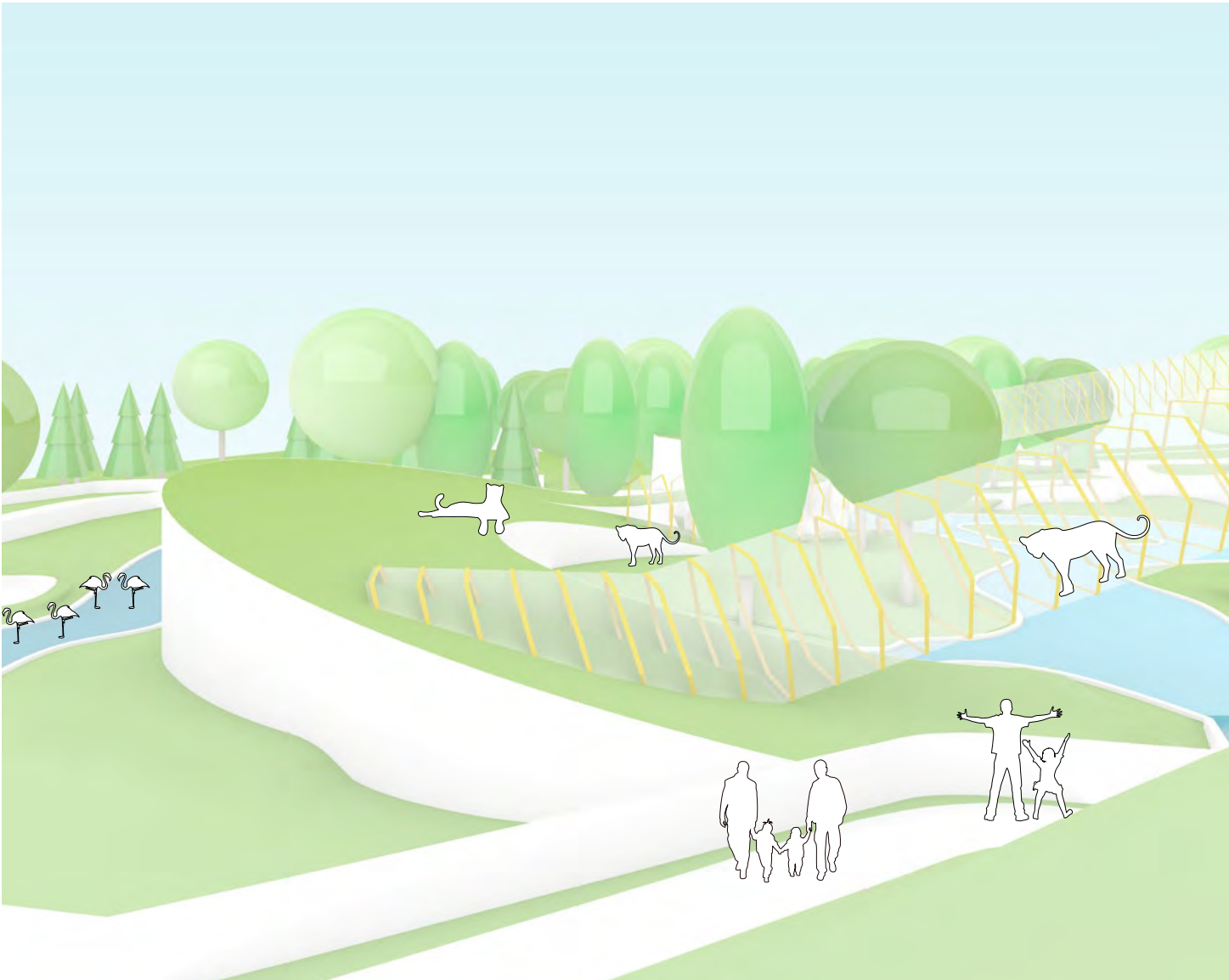
5. THE NEW MASTER PLAN

5.3. CAPITAL PROJECTS: JAGUAR HABITAT AND WATERFALL VIEWS

Approaching the jaguar habitat, guests are greeted by jaguars overhead as they explore their environment through 360 tunnels around the habitat. With higher areas to hangout on the building, jaguars also become easier to see as guests approach the habitat. Interpretation here also highlights the important connection of this waterfall space to the larger stormwater system, highlighting water recirculation, filtration, and reuse on site. From the waterfall viewpoint, guests are able to catch glimpses of the flamingoes in the lower pond, as well as jaguars lounging in the landscape that is created from their holding building.



View A: views from the path onto the waterfall and jaguars lounging on the holding landscape

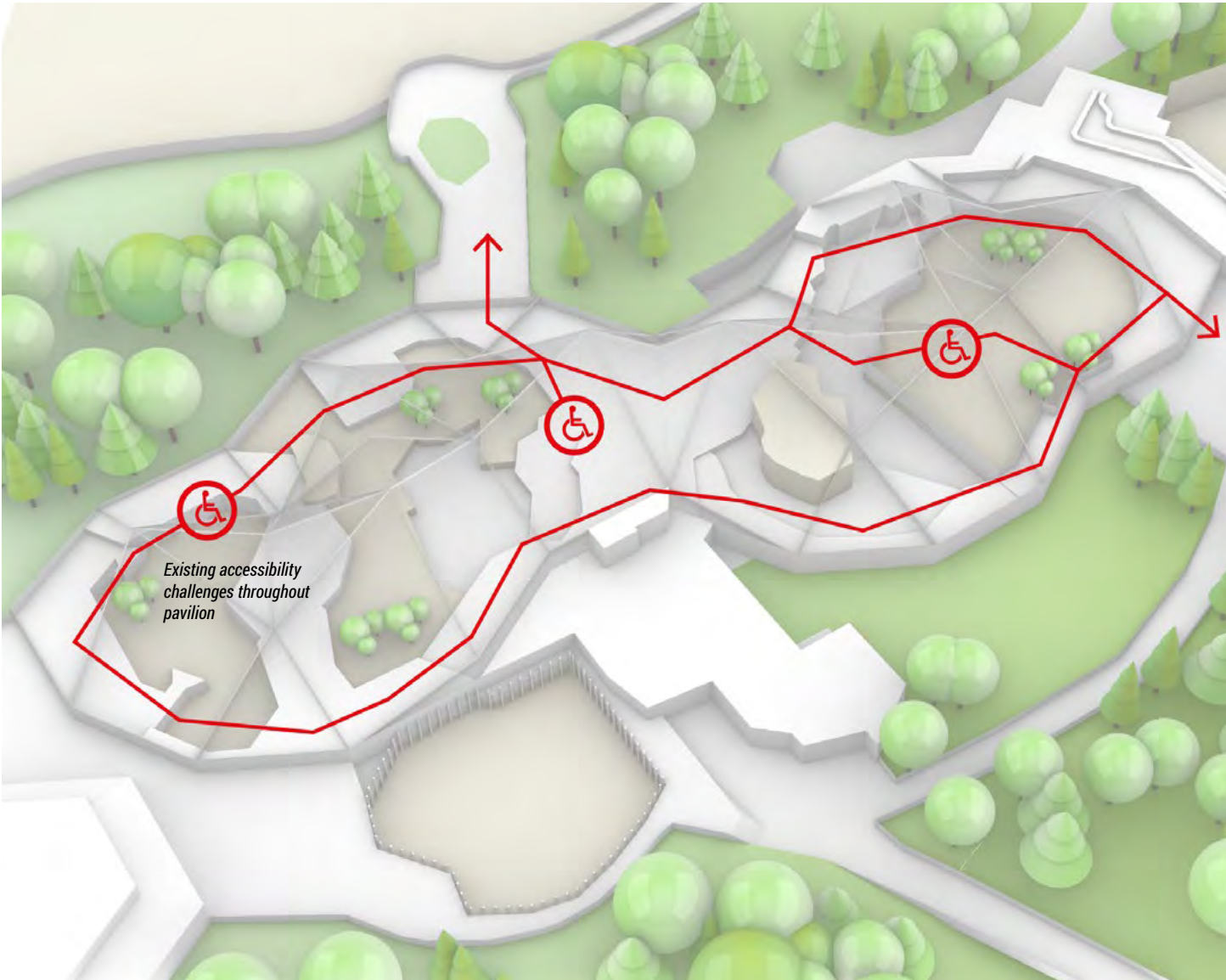
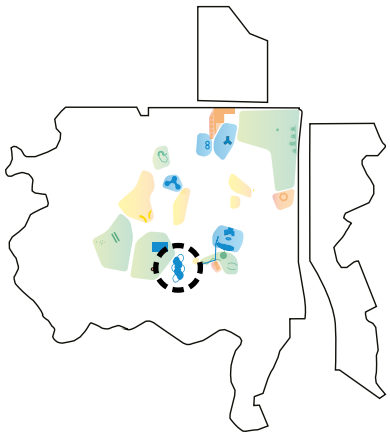


View B: looking towards the jaguar holding landscape from the waterfall

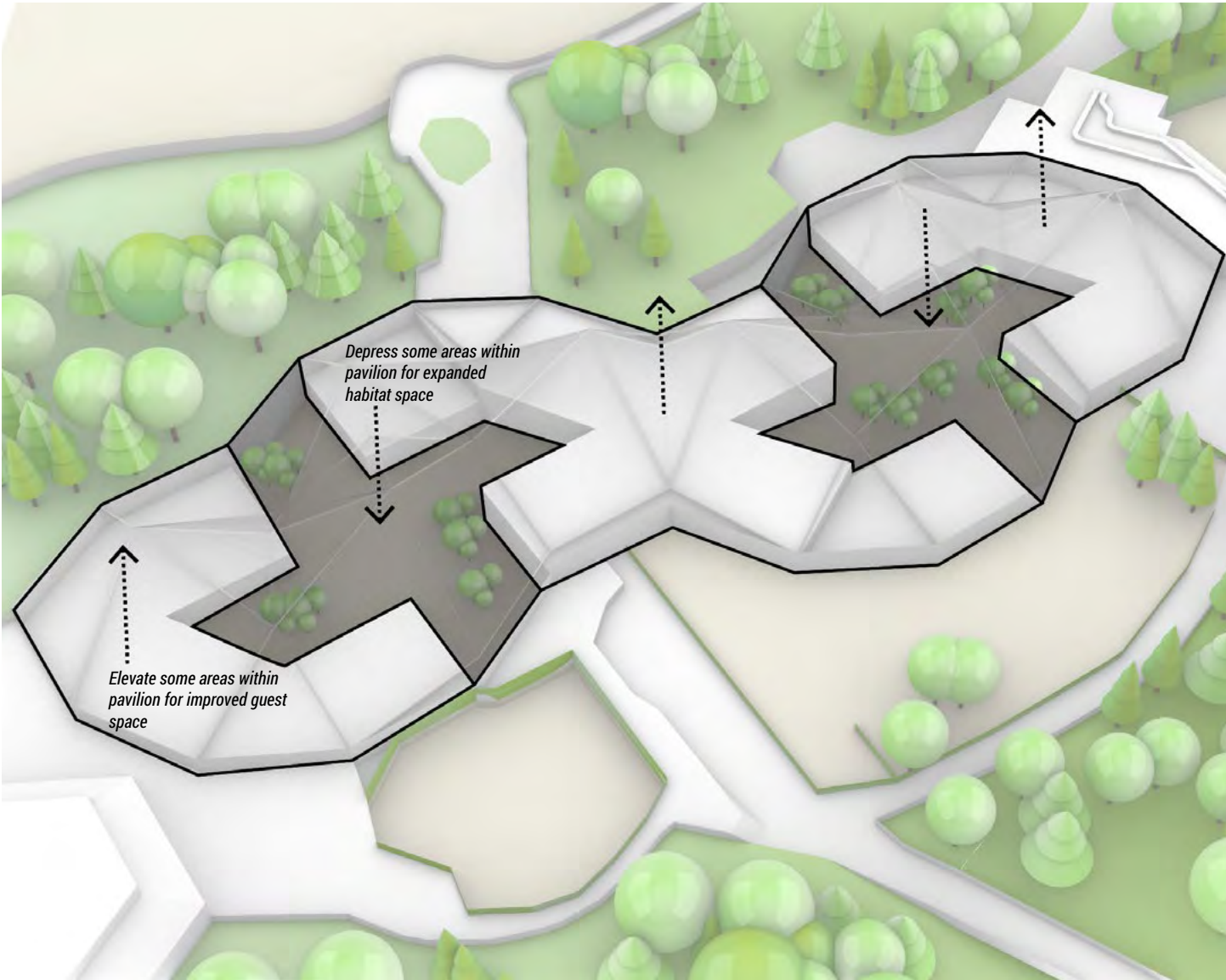
5. THE NEW MASTER PLAN

5.3. CAPITAL PROJECTS: GORILLAND

The African Rainforest Pavilion is a stunning architectural feat, with majestic sails forming the roof, however it faces many internal accessibility challenges currently. The refurbishment of the pavilion elevates pockets for guests within the pavilion, and then connects them, to create larger, better connected internal habitat areas for species by giving more of the groundplane to animals. Although the building massing itself does not change, the internal structure is modified such that the expansive vertical space within the pavilion becomes much better used by both guests and the species that call this pavilion home. Glass retrofits to this building allow for the pavilion to become better climate-controlled, and more sustainable. By creating new pockets for guests throughout the pavilion, microclimates within the pavilion can also be more easily adjusted, creating an environment that becomes easier to modify, and more inviting to guests year-round.



Existing



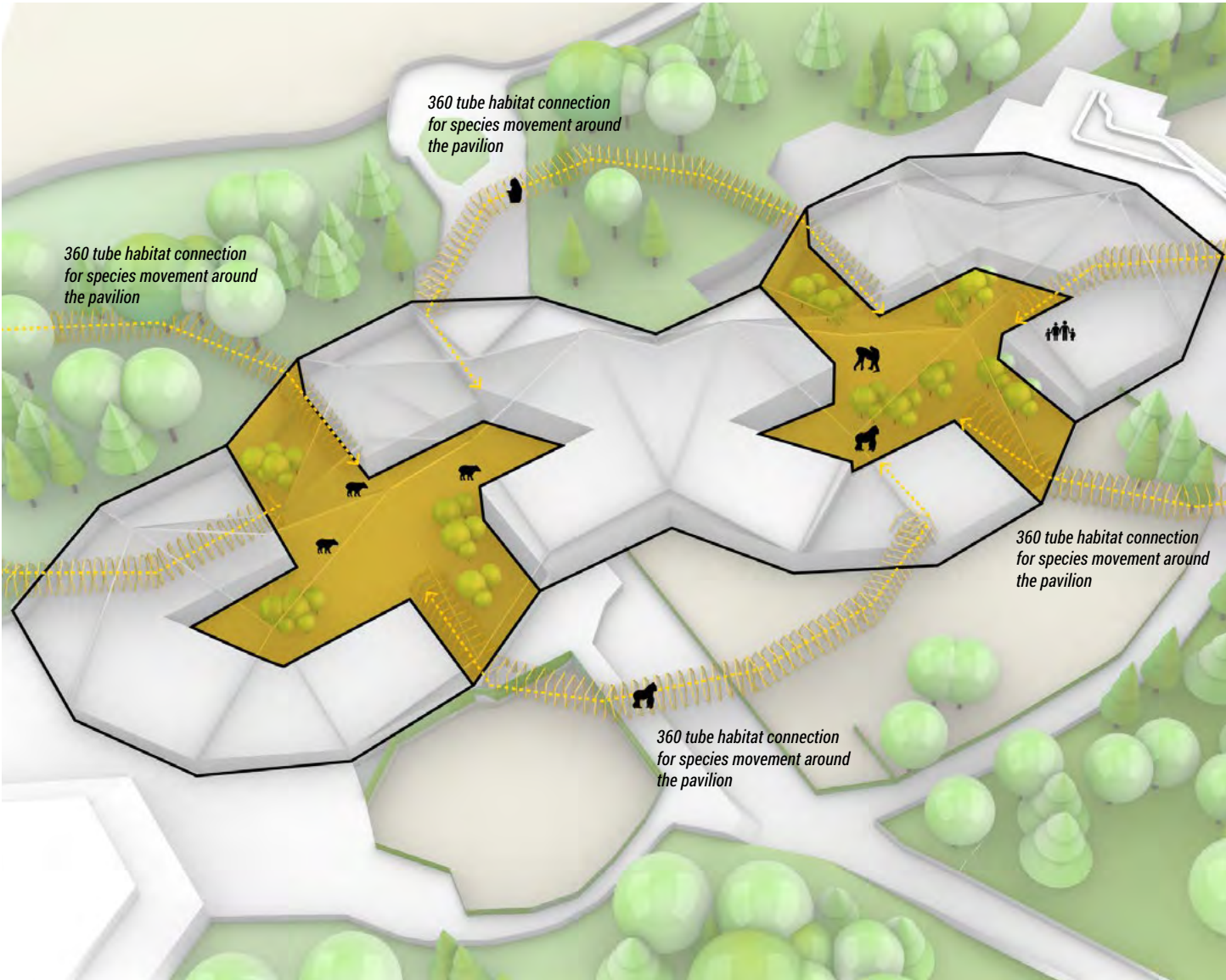
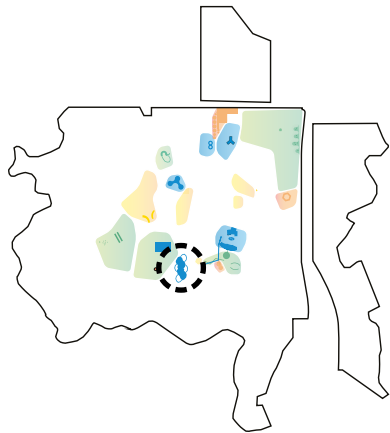
Proposal Step 1

5. THE NEW MASTER PLAN

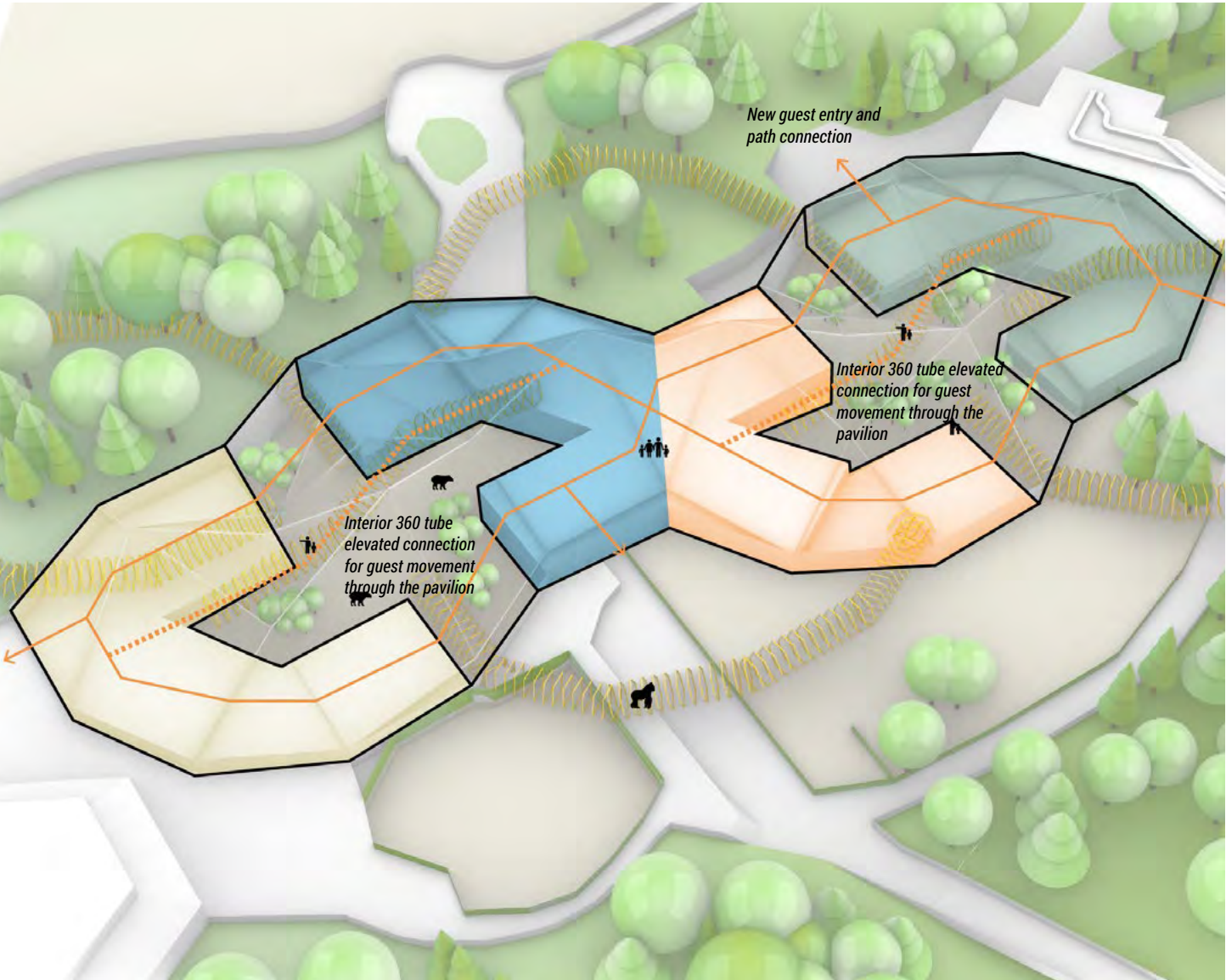
5.3. CAPITAL PROJECTS: GORILLAND

The refurbishment of the pavilion uses 360 tubes that extend out of the building, and then loop back into it, to connect different habitat areas, giving species more freedom of choice and enrichment. Within the pavilion, 360 tubes are used in some areas to bring guests up above the existing landscape, giving more space to species within the pavilion. New experiences are provided for both guests and species. Over the long-term, this presents a more flexible way for moving species between different parts of the pavilion, and building flexibility into the pavilion so that it is more agile as the species’ needs within the pavilion shift.

- Preliminary program
- **76 200 sqft internal building modification** - these areas (white areas within the pavilion) become slightly elevated, serving as spaces for guest
 - **454 m of 360 tubes** (78 m for humans, 376 m for animals)
 - tubes are elevated, allowing animals or humans to move between different habitat areas or areas in the pavilion



Proposal Step 2: animal connections

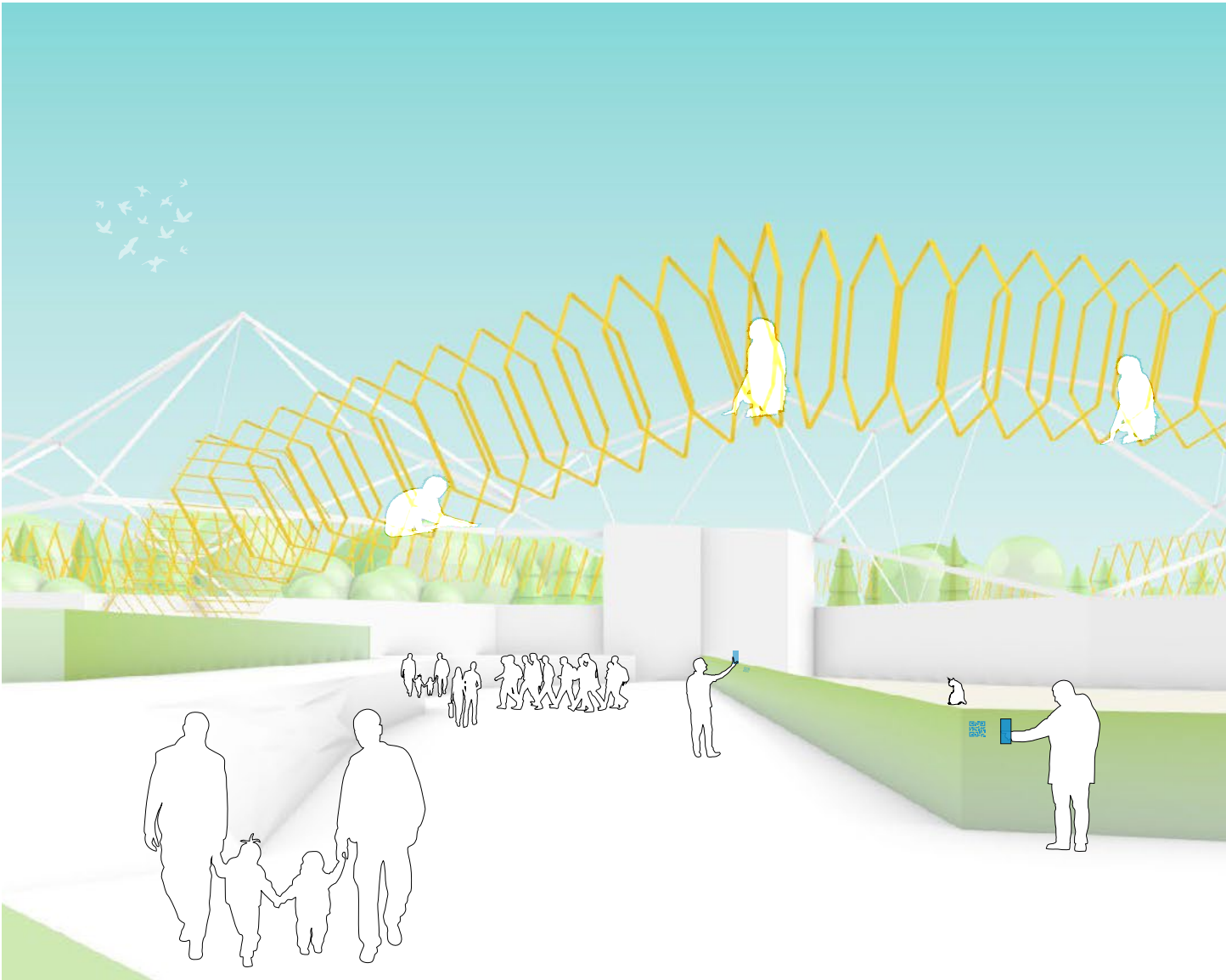
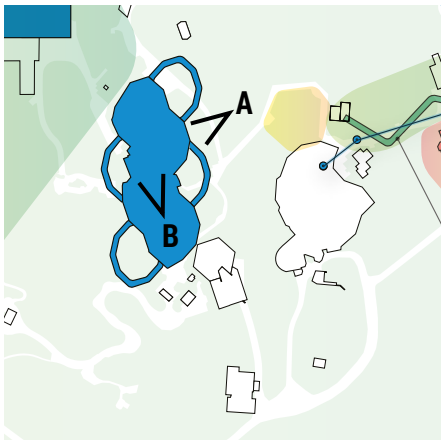


Proposal Step 2: guest connections

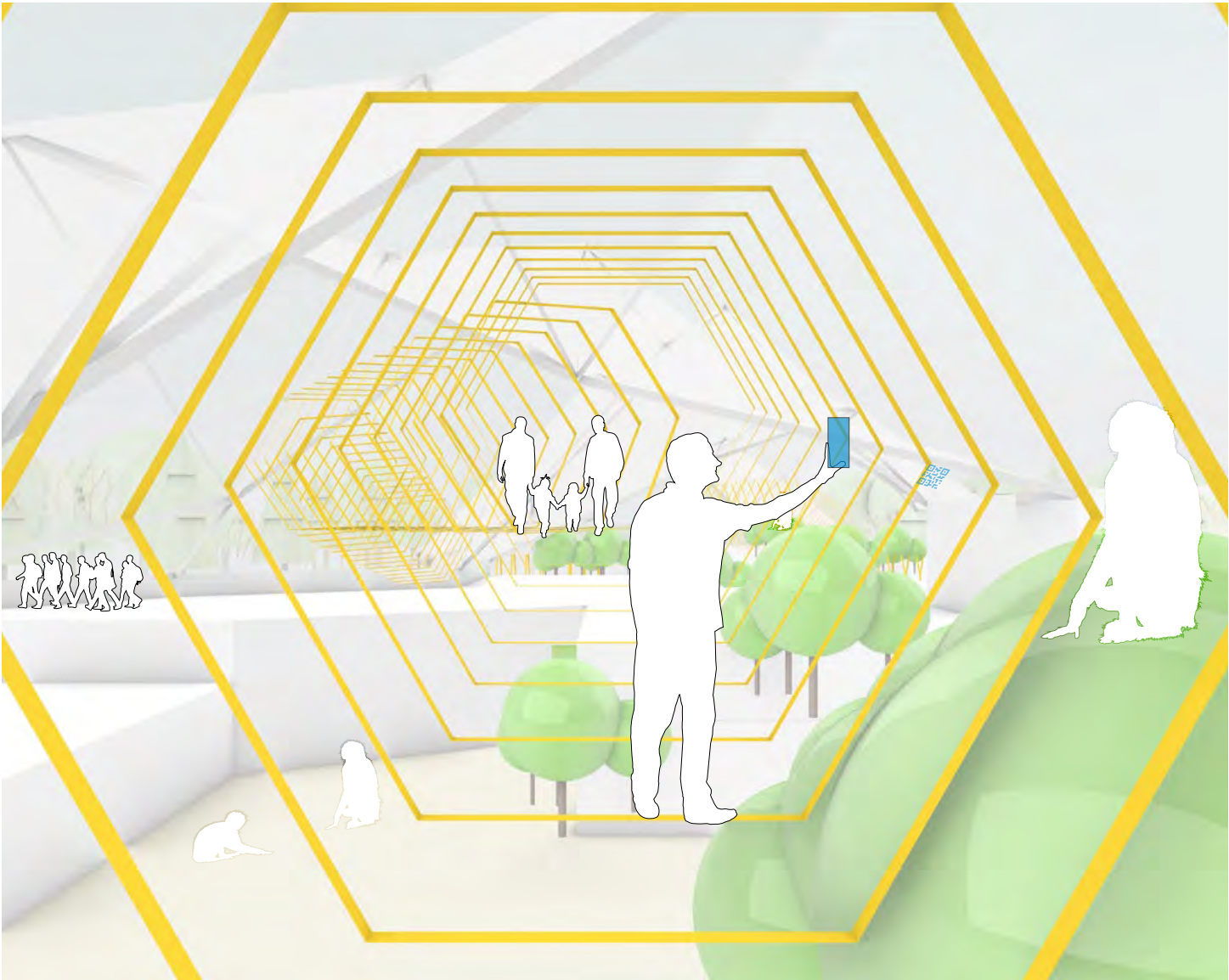
5. THE NEW MASTER PLAN

5.3. CAPITAL PROJECTS: GORILLAND

New vantage points are created for species that are able to perch above guests as they move into and through the pavilion. Similarly, new vantage points are given to guests, with a novel experience that brings them through the landscape of the pavilion in an elevated tunnel, giving more space back to the species that inhabit it, while also creating a unique and memorable experience for guests.



View A: walking towards the African Rainforest Pavilion underneath curious animals



View B: eye-to-eye encounters with species up high in the pavilion

5. THE NEW MASTER PLAN

5.3. CAPITAL PROJECTS: GORILLAND 360 ELEVATED EYE-TO-EYE ENCOUNTERS



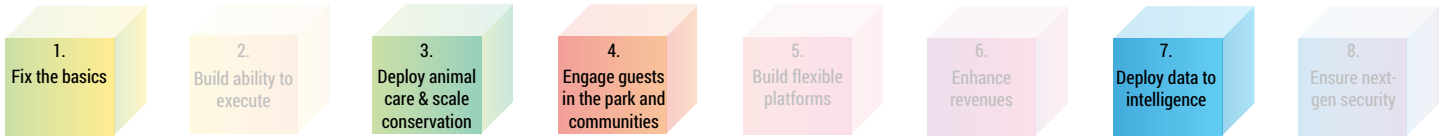
5. THE NEW MASTER PLAN

5.3. CAPITAL PROJECTS: GORILLAND

Proposed experience of IT projects:

With the new Zoo App, guests are able to obtain information about specific animals they see, including their names, history and nutrition information, and are able to directly donate to their care. Implementation of animal cameras and sensors around the habitat and in 360 tubes connecting habitats allows for the monitoring of species to see how they are using different spaces and to monitor their welfare. This also allows for the integration of an audio component for guests by converting animal-based data into soundscapes that reflect the species’ activities. When species are calm and resting, the soundscape in the guest 360 tunnel will reflect this, varying based on the animals’ activity levels and data gathered through sensors throughout the habitat.

Building blocks of the Information Technologies (IT) strategy for this area:



IT projects recommended to be investigated in this capital project (refer to Appendix 5 for the full Technology Master Plan):

- 1.1. Implement Wifi site wide / Install Network
- 3.3. Implement animal cameras and sensors (heat, location)
- 3.7. Predictive care based on history and sensors
- 3.9. Digitize nutrition information to Zoo staff & guests
- 4.15. Build Zoo App V2
- 7.3. Implement sensors for building health monitoring & consumption



Using the Zoo App to identify a gorilla individual and donate directly to its care.



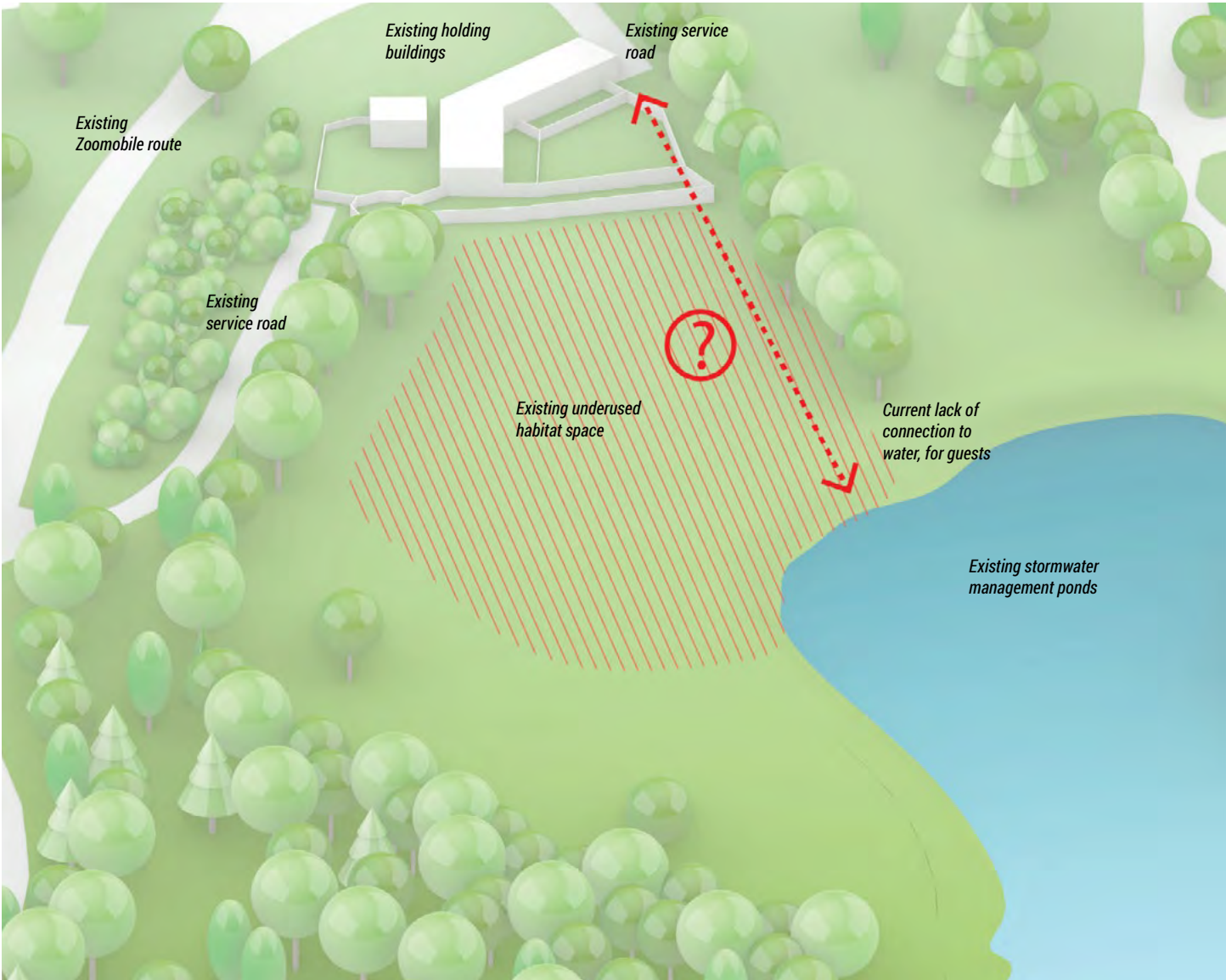
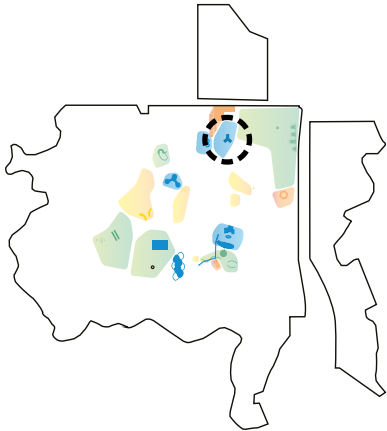
Data from sensors converted into a soundscape in the 360 tunnel, reflecting the activity of the species.

5. THE NEW MASTER PLAN

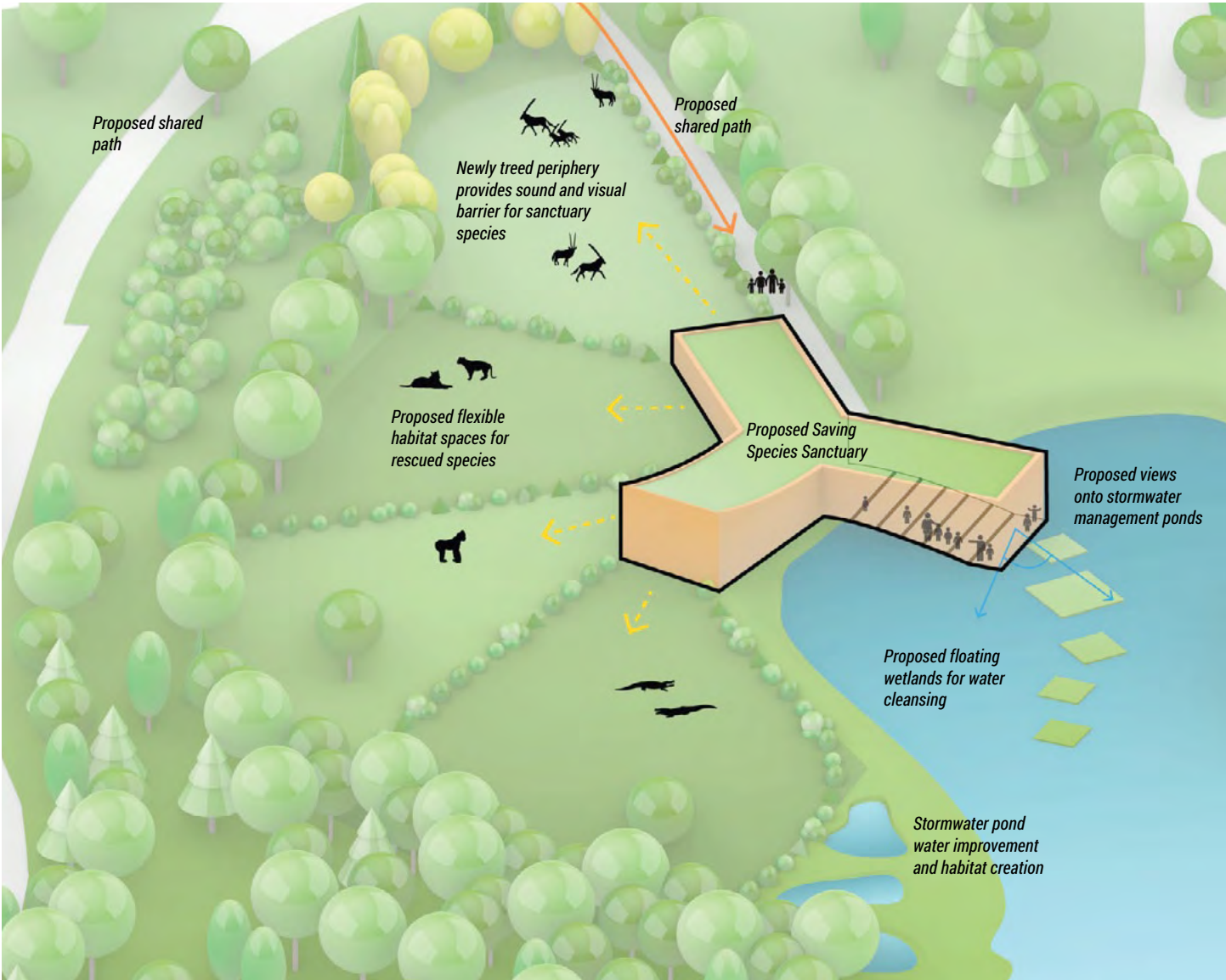
5.3. CAPITAL PROJECTS: SAVING SPECIES SANCTUARY

This area east of the Administration complex, at the North of Your Zoo, is currently underused and feels disconnected from the stormwater ponds. This site presents a real opportunity to become a sanctuary for saving exotic rescued animals that are confiscated from smuggling or illegal ownership. Building massing includes three wings, two of which have elevated ceilings including one of the wings serving as a quarantine space able to accommodate different species' needs, that also connects to flexible outdoor habitat spaces. Proximity to the Northern entry to Your Zoo, as well as to the Wildlife Health Centre, makes this an ideal location for this program. The building becomes partially open to the public, with views onto the stormwater ponds demonstrating new technologies used to improve water quality while creating habitat for native species. The sanctuary will be built as a partnership with government funding and donors, demonstrating Your Zoo's commitment as a conservation leader for species in peril locally and globally.

- Preliminary program**
- **6 460 sqft building** - one floor
 - separate quarantine and holding spaces
 - 2 wings double-height
 - all wings insulated for year-round use



Existing

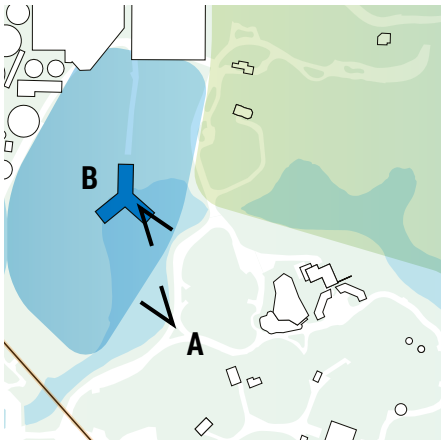


Proposal

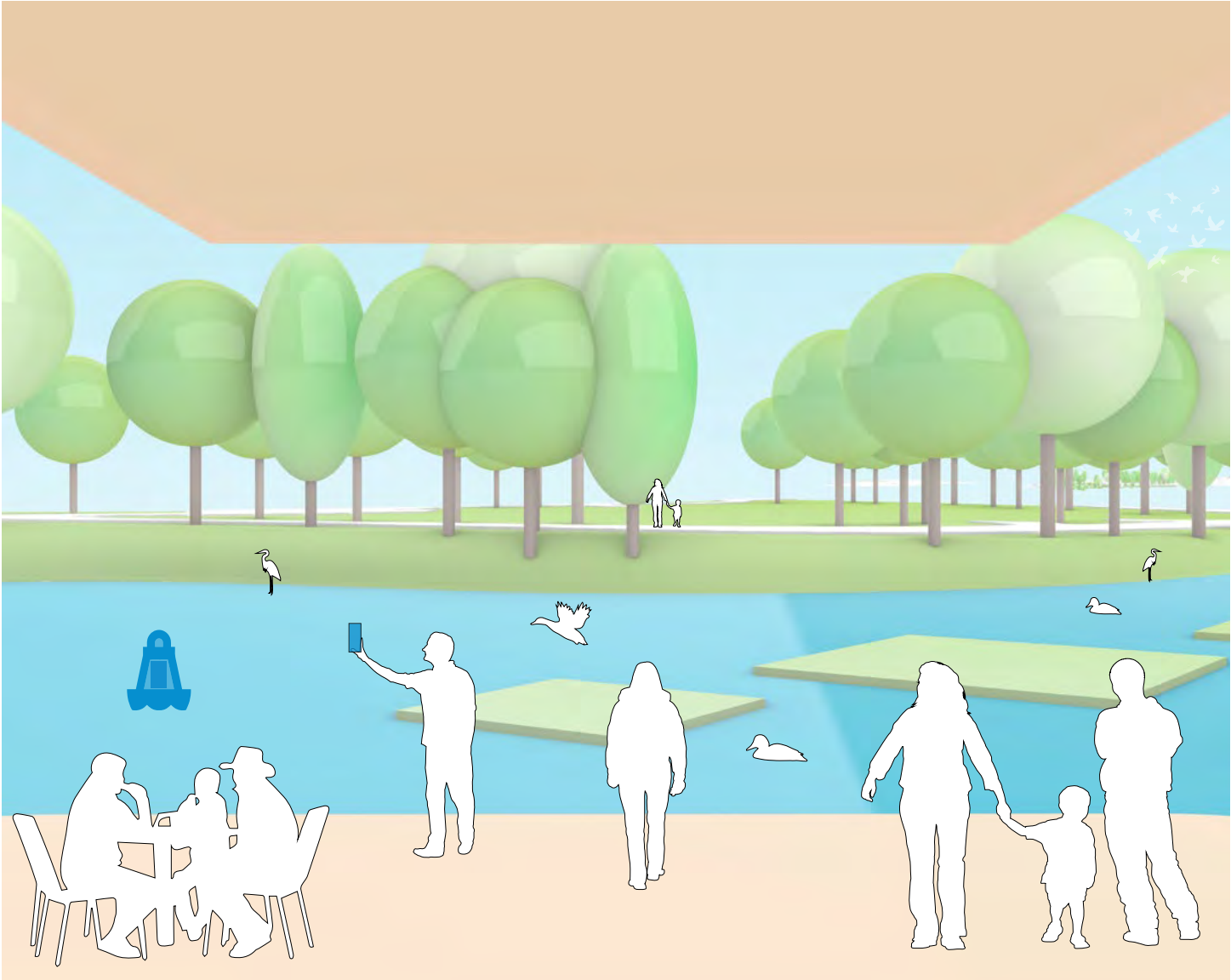
5. THE NEW MASTER PLAN

5.3. CAPITAL PROJECTS: SAVING SPECIES SANCTUARY

Views from Eurasia allow guests to view some species at the Sanctuary from afar, even when the sanctuary itself may be closed to guests if animals need more tranquility. Views from within one wing of the sanctuary, looking out over the stormwater ponds, demonstrate the work that is happening onsite to improve existing conditions for local flora and fauna, inviting more native species to thrive and call Your Toronto Zoo home.



View A: view from Eurasia towards the sanctuary



View B: from within the sanctuary, looking onto the stormwater ponds with floating wetlands

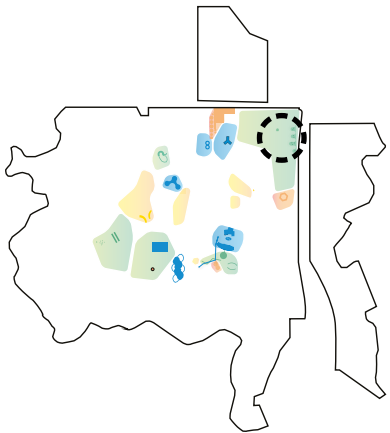
5. THE NEW MASTER PLAN

5.3. CAPITAL PROJECTS: WILDERNESS NORTH

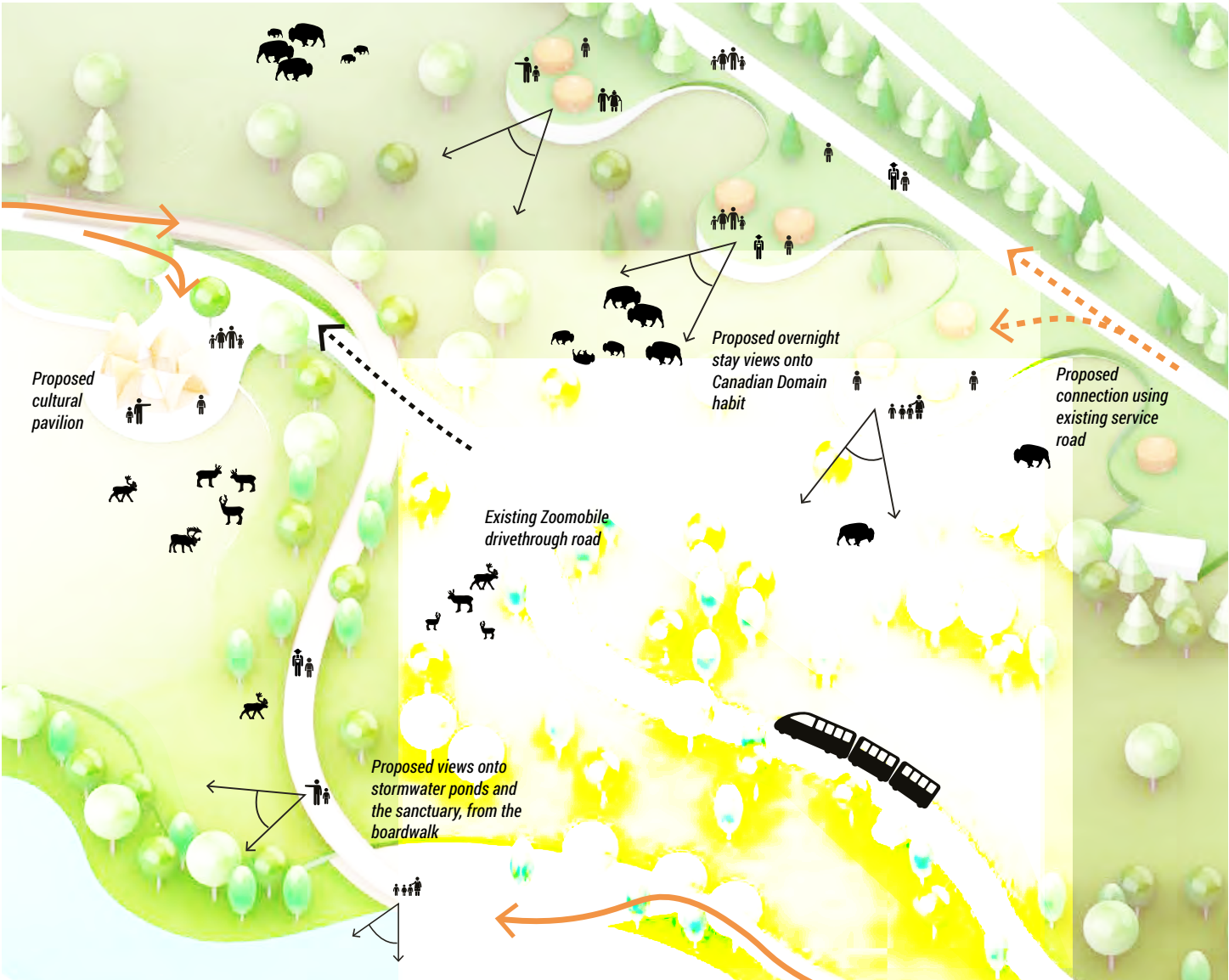
The Northeastern corner of Your Zoo today boasts an incredible, almost pastoral landscape, but feels somewhat disconnected and is only accessible by Zoomobile. Habitats run parallel to the stormwater pond, but have no real connection to it, despite being home to interesting plant and animal species. Wilderness North brings native Canadian species that are currently difficult to access due to distance and steep slopes at the far Southwestern corner of Your Zoo up to this corner of Your Zoo. The addition of a pavilion at the furthest-most corner provides a resting and gathering point, while all-season yurts along the Eastern periphery invite guests to stay overnight with the feeling of being embedded right in the habitat. An artwalk throughout this area brings a new conversation to the Wilderness North experience, offering a new perspective and allowing guests and staff to connect with the species and the landscape anew.

Preliminary program

- **410 sqft/yurt** - 8 yurts for year-round, overnight stays
- **1 850 sqft pavilion**
- pavilion includes bathroom
- pavilion for year-round use but not insulated



Existing

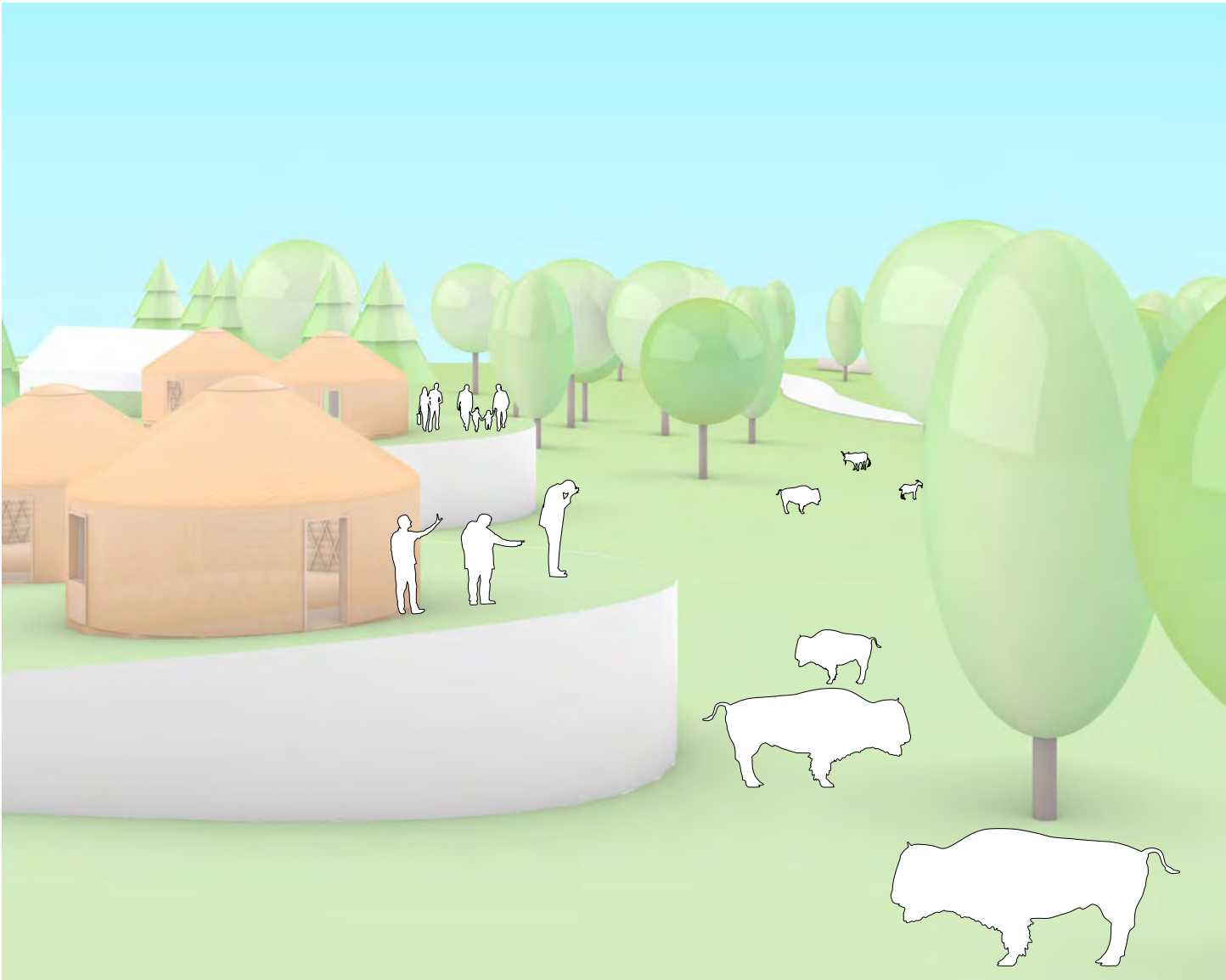
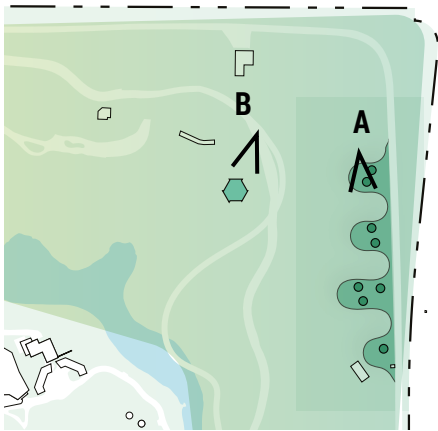


Proposal

5. THE NEW MASTER PLAN

5.3. CAPITAL PROJECTS: WILDERNESS NORTH

As guests make their way through Wilderness North, they encounter large-scale artworks at the start of their journey along with unique views, and charismatic wildlife. This is a place alive with stories and music. Guests may find a three-dimensional excerpt of a poem about the Northern Bald Eagle embedded in a hidden vista, or discover an animal habitat within a small cluster of trees. Guests can use their personal device to access an additional layer of interpretation such as an orchestral soundscape that changes with them as they move through Your Zoo, delivering a technology-rich, hands-free immersive work of art. Each species of wildlife featured in Wilderness North may have its own particular instrument and musical theme, cued as a guest approaches that animal's home.



View A: year-round overnight experience surrounded by Canadian species



View B: heading towards the Cultural Pavilion and exploring the boardwalk through Canadian species' habitats

5. THE NEW MASTER PLAN

5.3. CAPITAL PROJECTS: WILDERNESS NORTH DAYTIME VISTAS



5. THE NEW MASTER PLAN

5.3. CAPITAL PROJECTS: WILDERNESS NORTH MAGICAL OVERNIGHT STAYS



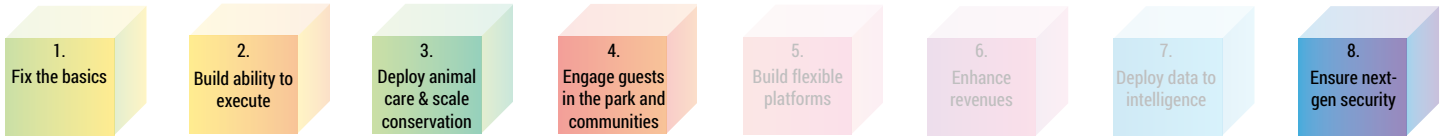
5. THE NEW MASTER PLAN

5.3. CAPITAL PROJECTS: WILDERNESS NORTH

Proposed experience of IT projects:

Thanks to the new Zoo App, guests will be able to book a yurt in Wilderness North before getting to the Zoo. Once on site, they will be able to check in and unlock their yurt with the Zoo App. As Wifi becomes available throughout Your Zoo, they will be able to order meals, snacks, or anything needed for their comfort. By developing technology partnerships, Your Zoo will be able to be an innovator, testing new interactive technologies that allow guests to create constellations of their favourite species through the Zoo App, for future guests to discover through Virtual Reality glasses. Technology partnerships here allow guests to have a new, surprising experience with every return visit.

Building blocks of the Information Technologies (IT) strategy for this area:



IT projects recommended to be investigated in this capital project (refer to Appendix 5 for the full Technology Master Plan):

- 1.1. Implement Wifi site wide / Install Network
- 1.7. Implement guest distress system / Zoo wide alarm
- 2.1. Manage Technology Partnerships/Become an innovation zone
- 2.10. Implement Centralized Inventory Management System
- 3.3. Implement animal cameras and sensors (heat, location)
- 3.7. Predictive care based on history and sensors
- 4.17. Build Zoo App V2
- 8.11. Implement new kiosks and ticketless system



Utilizing the Zoo App for check-in, unlocking and yurt-service deliveries.

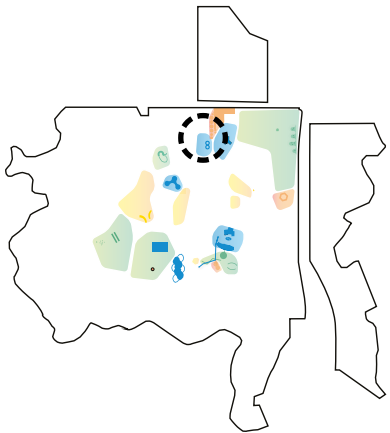


Discovering the striped skunk constellation with augmented reality at night.

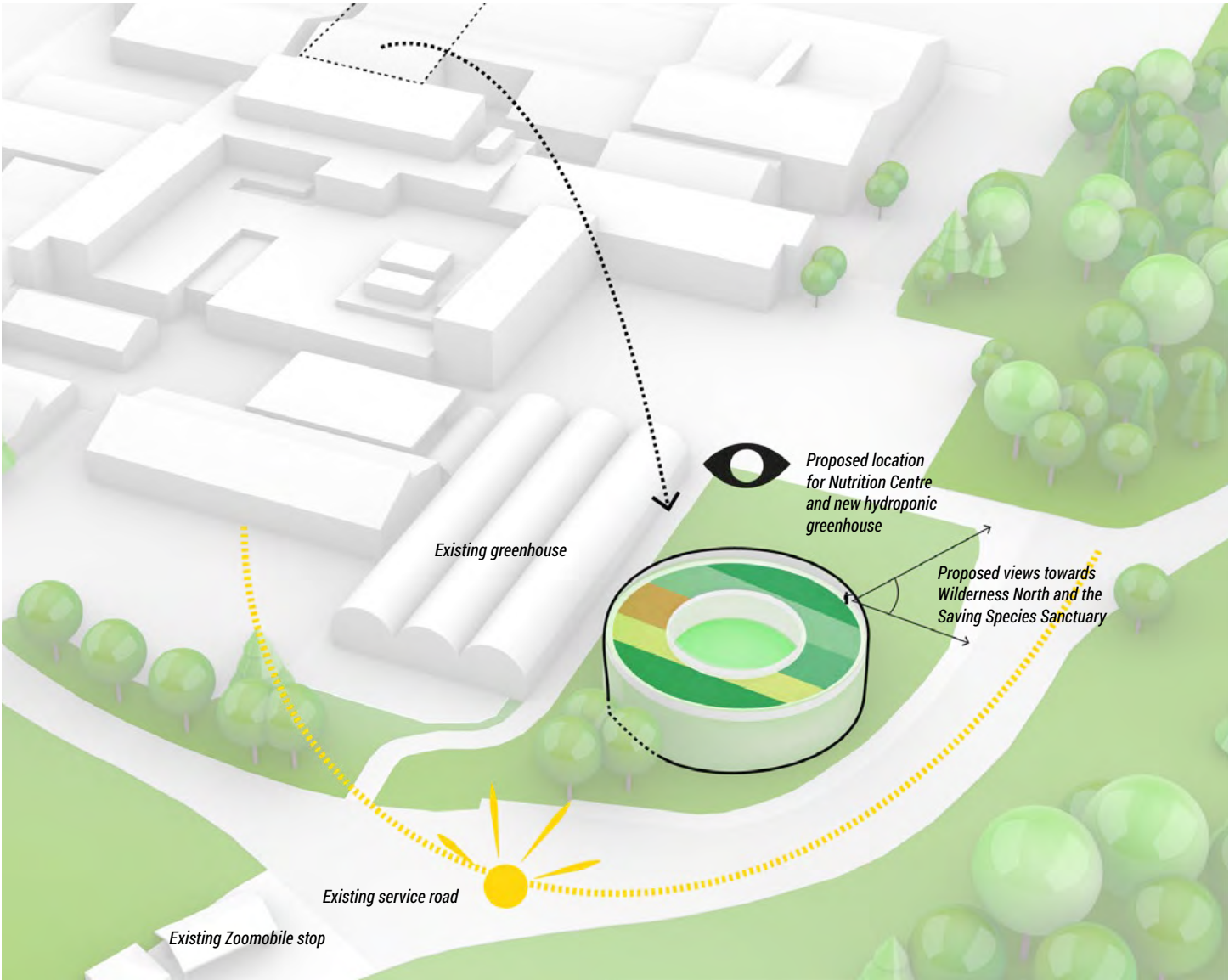
5. THE NEW MASTER PLAN

5.3. CAPITAL PROJECTS: NUTRITION CENTRE AND RESTAURANT

The Nutrition Centre today is tucked within the larger administration complex, making it hidden to guests. This program, which is essential to animal welfare, also requires more space than it currently occupies. The new Nutrition Centre and Restaurant becomes a place of high production for animal diets as well as for guest, staff and volunteer consumption, with a rounded massing and south-facing hydroponic greenhouse allowing for maximum sun exposure, as well as a place for guests and staff to observe Your Zoo's nutrition expertise being implemented. This creates an experience and an amenity, for guests, staff and volunteers, and allows the former Nutrition Centre space to be used for new purposes that would fit well in these conditions, for example for additional storage space, or technology-related storage space, as the technology onsite is upgraded and could benefit from having space within this complex.



Existing



Proposal Step 1

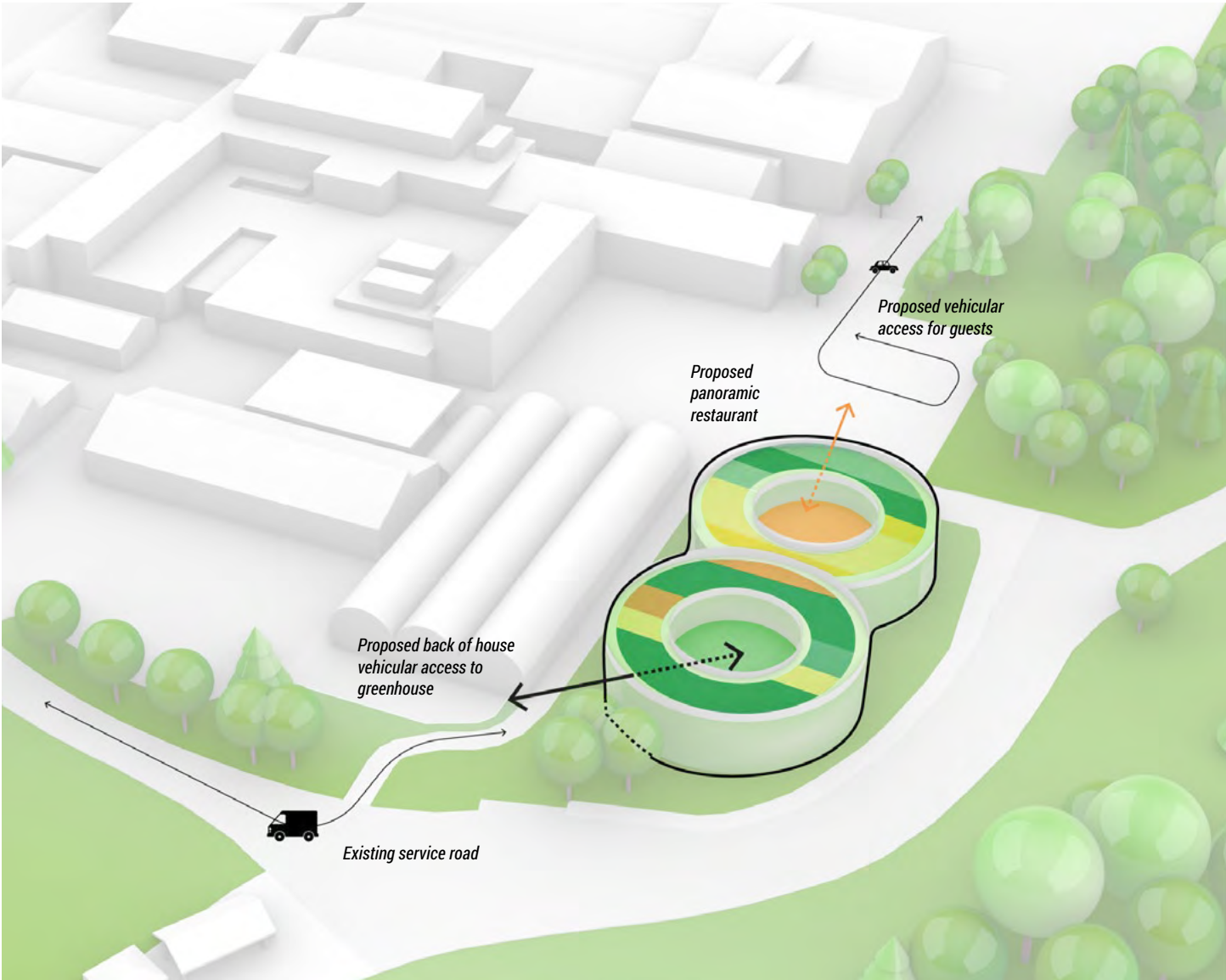
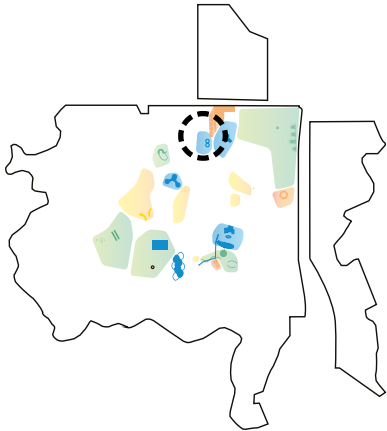
5. THE NEW MASTER PLAN

5.3. CAPITAL PROJECTS: NUTRITION CENTRE AND RESTAURANT

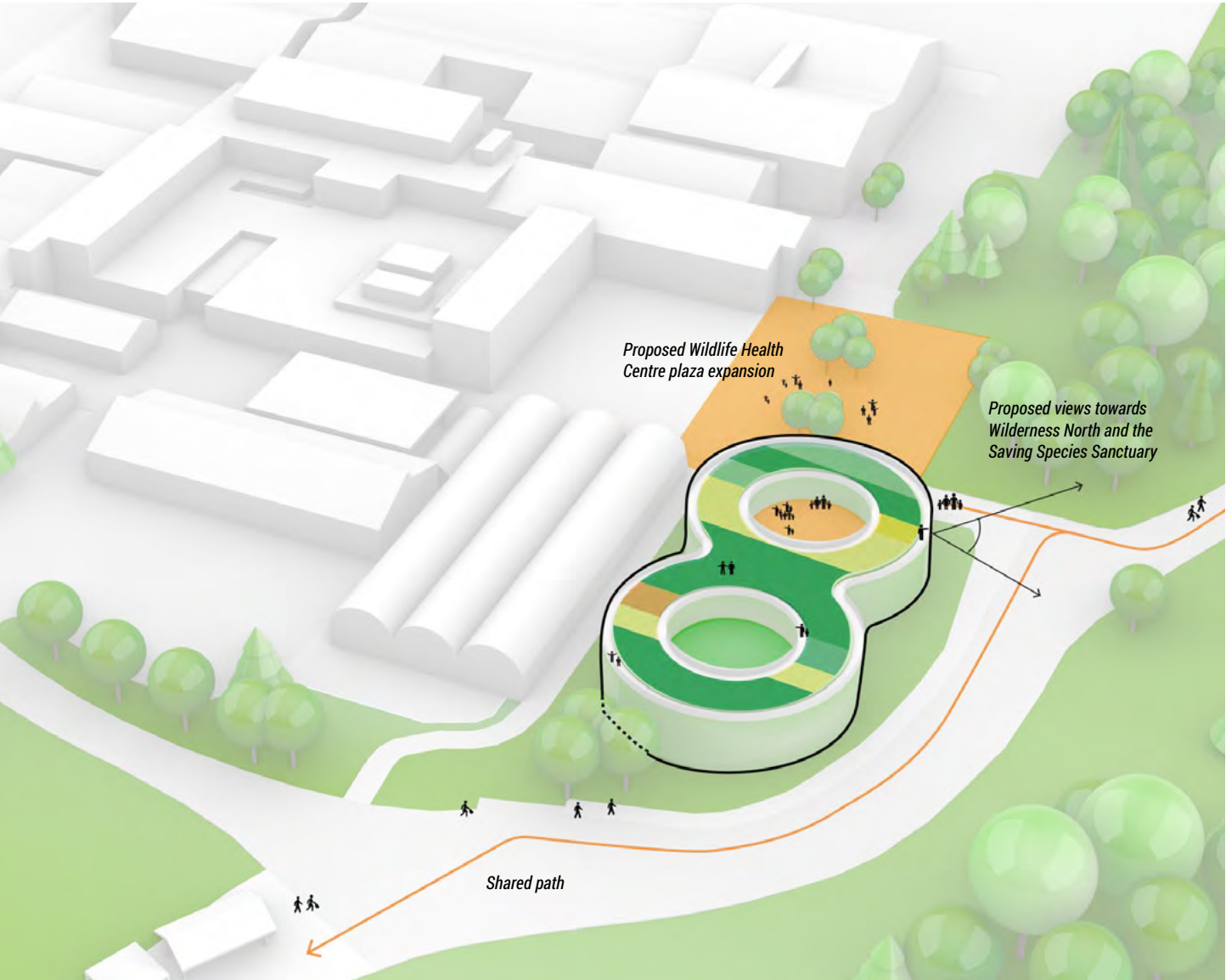
With the southern ring of the Nutrition Centre becoming the productive end and the Northern ring becoming the restaurant, the restaurant spills out into the Wildlife Health Centre Plaza, while roof access offers views into the greenhouse, restaurant, and towards the sanctuary. Waste material is easily transferred to the nearby biodigester to be located in this corner of Your Zoo as well, giving guests an experience that brings them into the sustainable cycles of production, processing, and waste reuse onsite. This is a project that works to showcase Your Zoo’s commitment to sustainability and reduction of its carbon footprint, as well being a leader of sustainability in the neighbourhood through education and facilities demonstrating reduction in waste streams. Refer to page 109 for a proposed partnership funding roadmap for the Nutrition Centre and Restaurant project.

Preliminary program

- **17 000 sqft building** - across 2 levels
- southern ring is a hydroponic greenhouse with Nutrition Centre
- roof accessible on entire building, with ample planting
- restaurant in Northern ring, with internal plaza in middle



Proposal Step 2

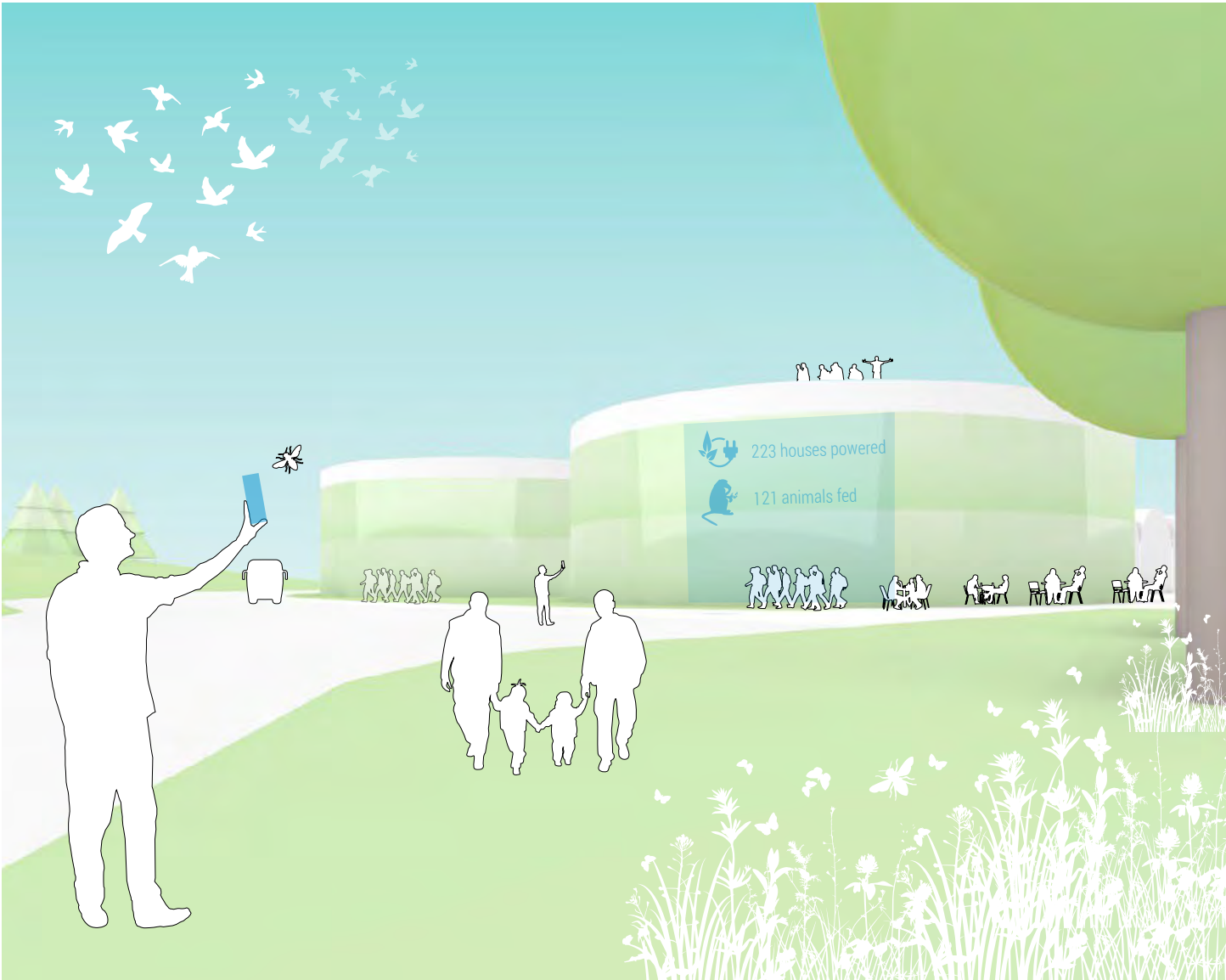
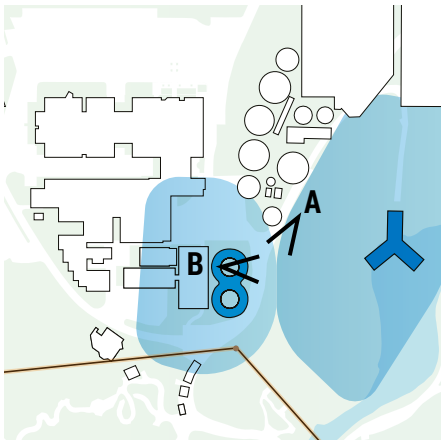


Proposal Step 3: New Nutrition Centre and Restaurant

5. THE NEW MASTER PLAN

5.3. CAPITAL PROJECTS: NUTRITION CENTRE AND RESTAURANT

New views are created as the Nutrition Centre and Restaurant invites guests to witness diet food production and processing on site, while offering new rooftop views as well. Newly planted pollinator gardens infuse beauty into a sensory-enriched conservation experience at the Nutrition Centre, while displays around the centre demonstrate how species collect and process food. Guests can use the Zoo Passport app on their personal device to identify blooms, add data about pollinator activity, query a horticulture team member, make a restaurant reservation or sign up for a Garden Kit to cultivate at home. If guests activate the site-wide GPS-based Soundwalk, they can tune in to a site-specific podcast, updated seasonally, about what's growing and what's good to eat. Guests can save cross-species recipes within the app to access from home, and purchase a Meal Kit full of garden-fresh produce to pick up on their way out or to ship home from the site.



View A: a multi-sensory experience at the Nutrition Centre and Restaurant



View B: views onto production and the Nutrition team hard at work from the roof of the Nutrition Centre and Restaurant

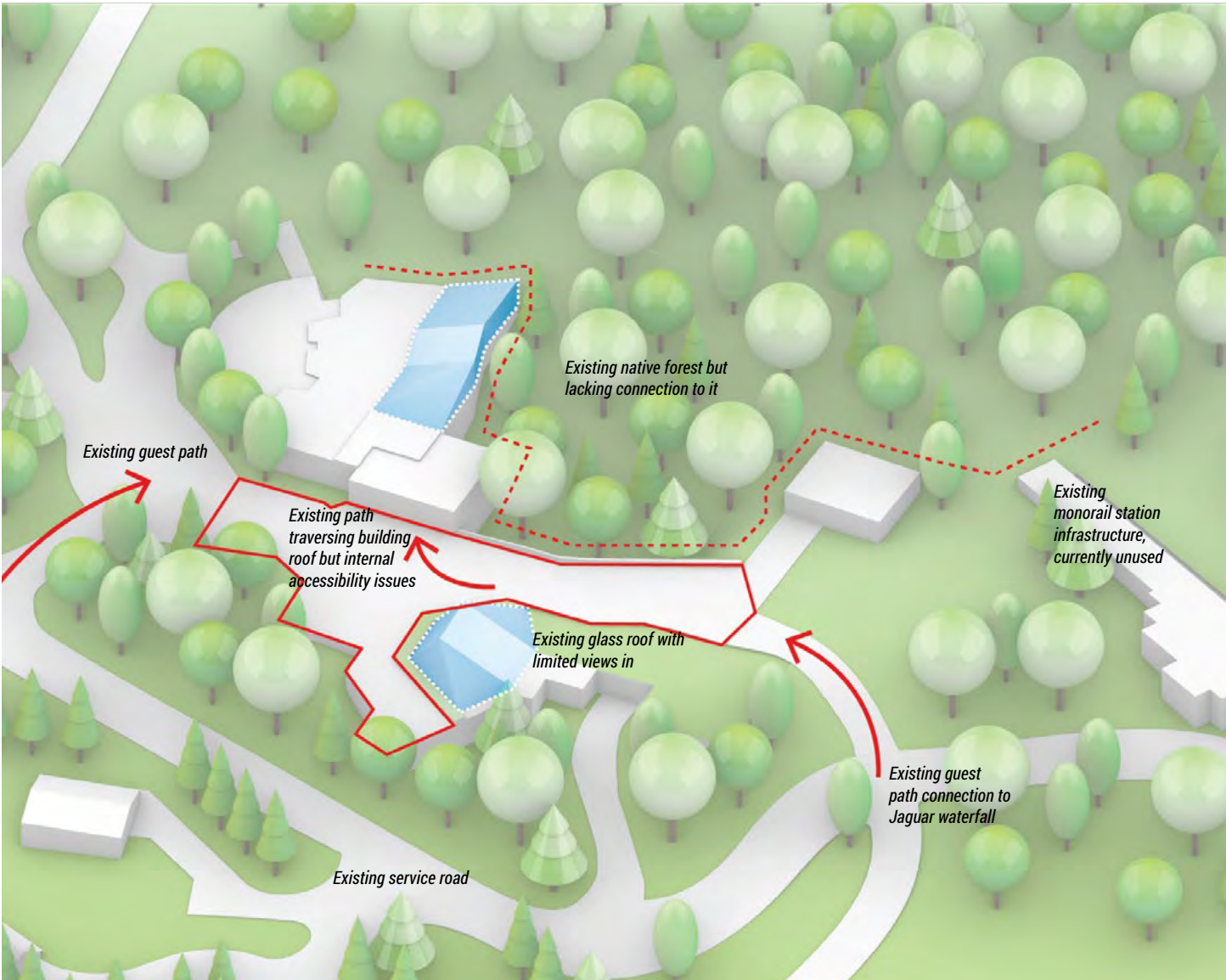
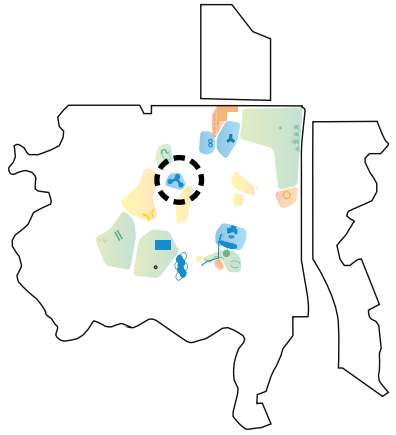
5. THE NEW MASTER PLAN

5.3. CAPITAL PROJECTS: AMERICAS PAVILION

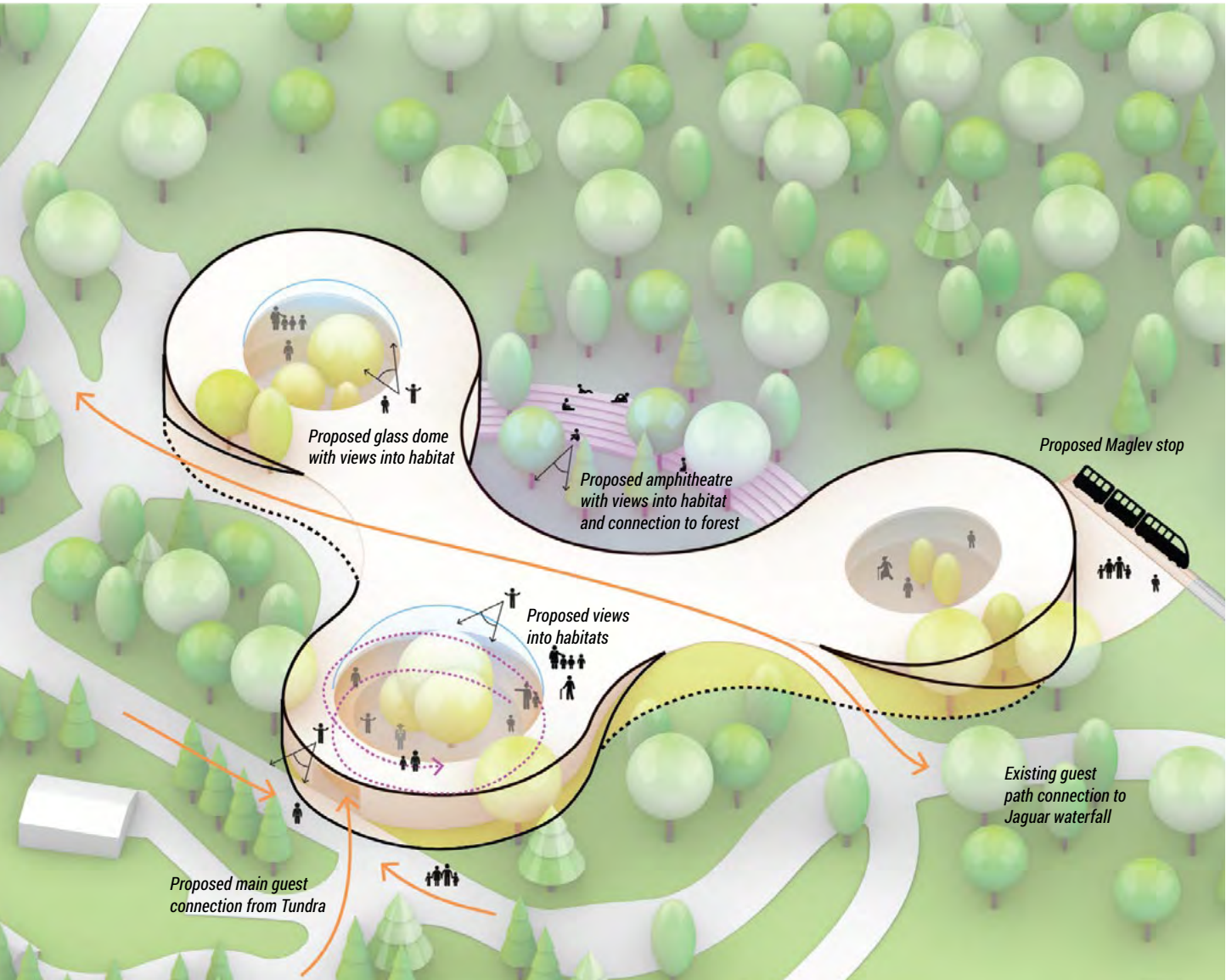
The Americas Pavilion, at the Western edge of the site, near a former monorail station, has entry from its roof, with steep internal grades making accessibility challenging. Glass roofs provide light into some pavilion spaces but don't allow guests to see into the spaces, and the spaces currently feel disconnected. The Americas Pavilion modification proposes creating a new connection from Tundra, highlighting contrast between Tundra and the dense, lush, jungle-like landscape inside the pavilion that becomes even grander as it spills into expanded atrium spaces, with a ramp bringing people from the ground up through the understory and canopy in the pavilion. The new glass domes provide views from the roof into these lush spaces, and a new amphitheatre connects guests directly to the forest context that hugs the pavilion, allowing guests to be surrounded by forest, but with views directly into the Americas pavilion. One extension of the pavilion connects guests to the new monorail, creating a real experience of arrival as they enter this space.

Preliminary program

- **19 700 sqft total building**
- one level, doubleheight, path crossing roof, building embedded in landscape
- internal ramp winding up from path to roof space
- interior of building is large display areas + holding areas for small species
- **4 300 sqft surface area large dome** - radius = 30.3ft, footprint = 2 900 sqft
- **2 800 sqft surface area small dome** - radius = 23 ft, footprint = 1 600 sqft
- **1 600 sqft glass roof** - looking into pavilion near monorail
- **2 200 sqft amphitheatre steps** - facing onto glass facade of building



Existing



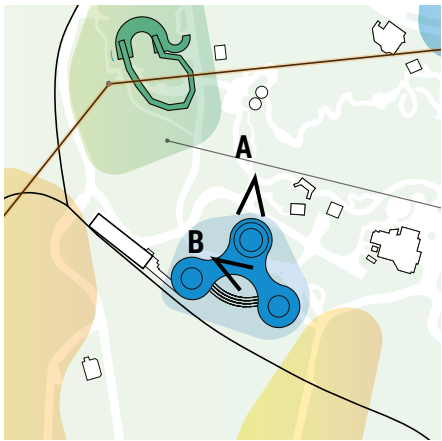
Proposal

5. THE NEW MASTER PLAN

5.3. CAPITAL PROJECTS: AMERICAS PAVILION VIEW

The modified Americas Pavilion thoroughly celebrates contrast as guests move from Tundra Trek into a lush environment that pulls them from the roots of the dense indoor jungle all the way up through the canopy, bringing them up onto the pavilion roof where they re-encounter Canadian forest tree species.

A large-scale interpretive graphic set within the railing of the spiral ramp stretches from the forest floor to the canopy above. This multidimensional graphic surrounds guests in interpretation about the diversity and interconnectedness of the forest ecosystem. Each graphic element is a marker that, when scanned with the Zoo Passport app, reveals additional information about a species or plant on the guest's personal device. This area creates a dialogue around climate change and shifting habitats and how we can mitigate this, as guests arrive from Tundra Trek into this lush, verdant space.



View A: heading towards the spiral ramp bringing guests up into the Americas Pavilion from Tundra



View B: crossing the top of the Americas Pavilion and catching glimpses of lush canopy in a pavilion dome