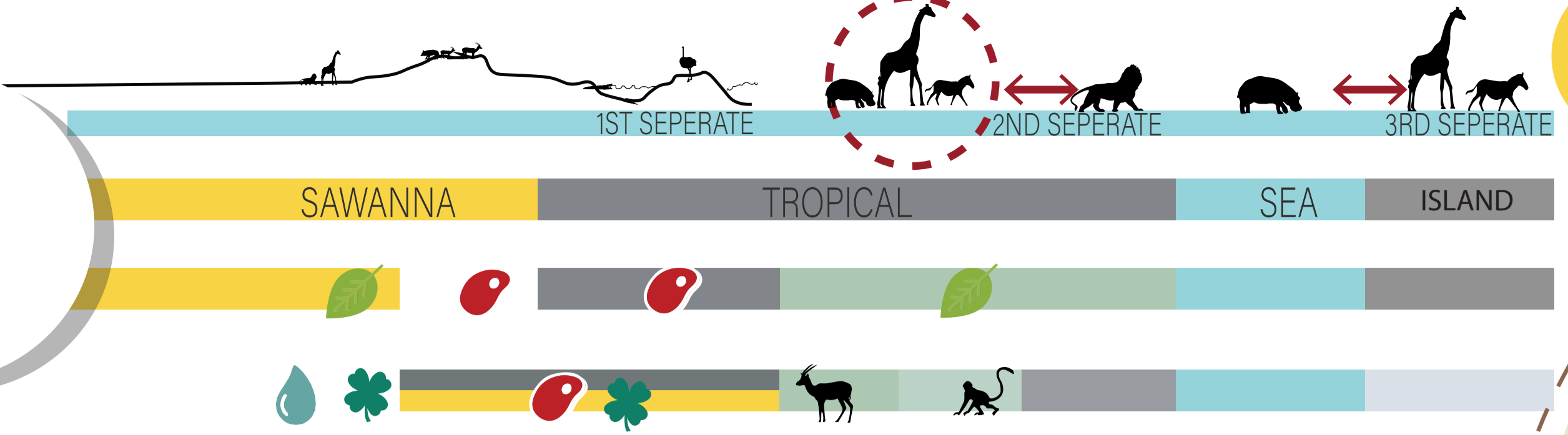


ZOOSCAPE

IMMERSION IN NATURE

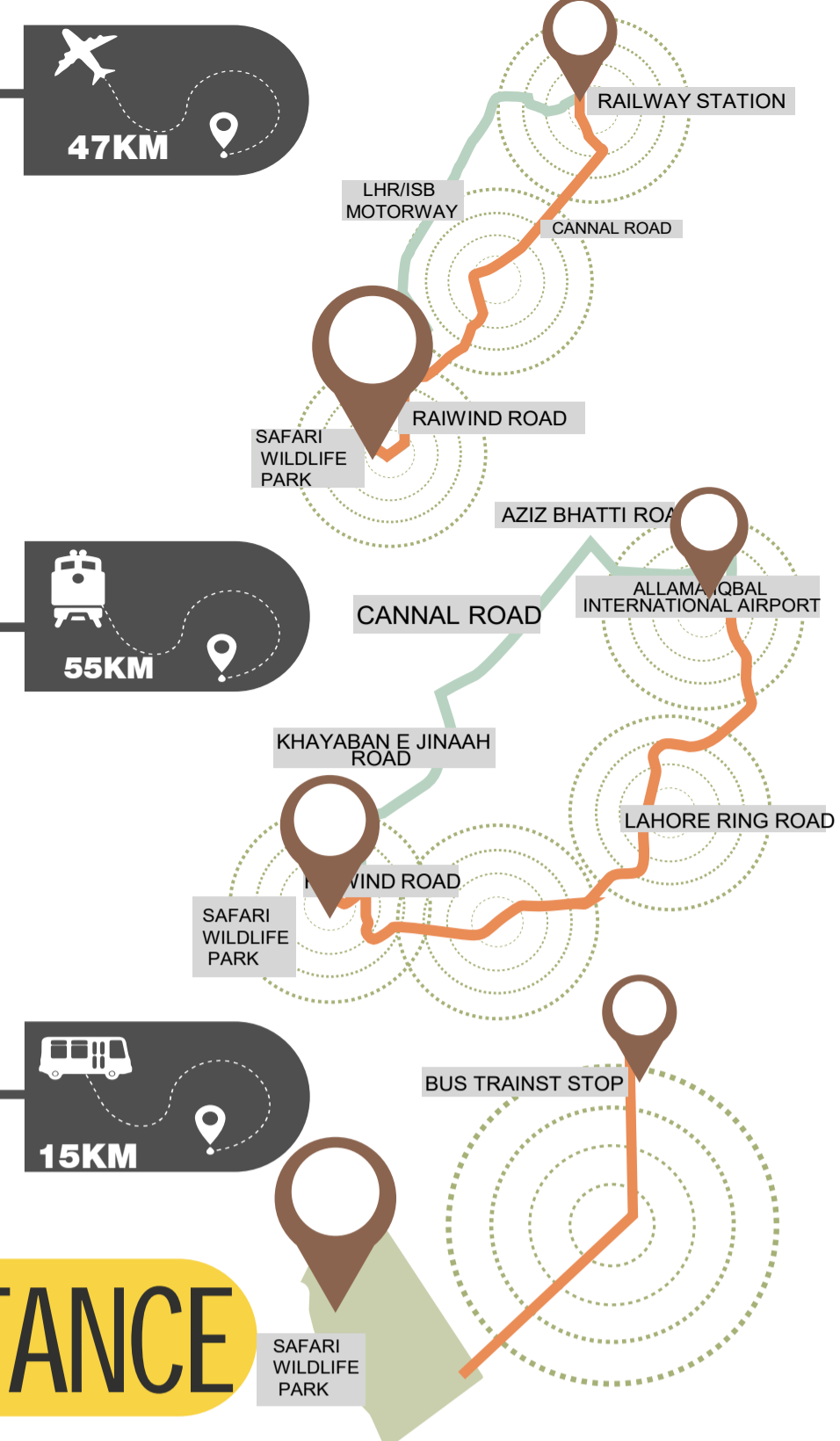
(TRANSFORMATION OF ZOOLOGICAL GARDEN IN THE SUBURBAN OF THE CITY)

SITE ANALYSIS



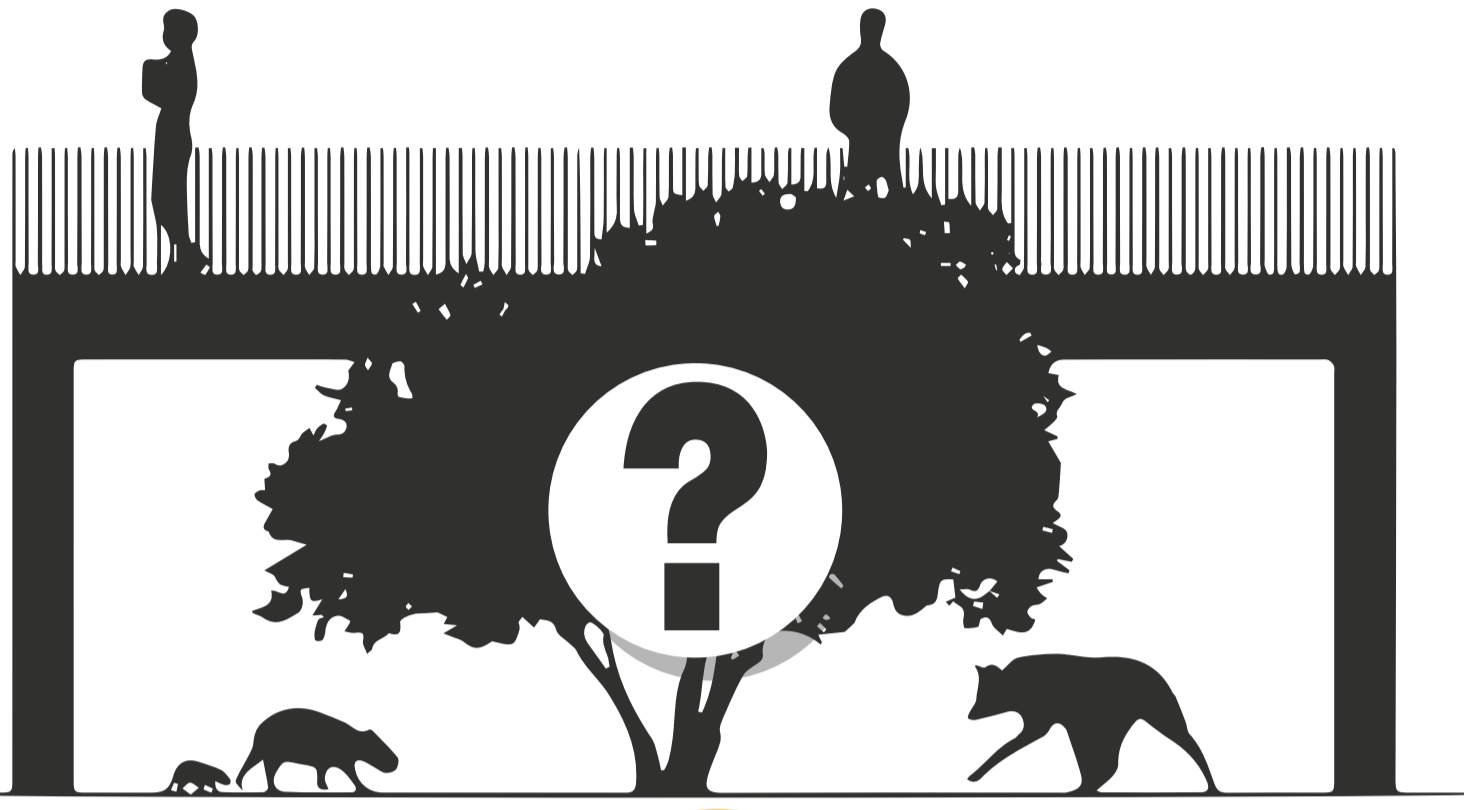
MACRO LEVEL

THE SITE IS SITUATED IN THE SUBURBAN OF LAHORE NEAR TO RAIWIND ROAD WHICH MAKE IT AN APPROACHABLE TO NEAR SMALLER (MINOR) CITIES. THE SITE IS PRESENT SAFARI WILDLIFE PARK LAHORE. THIS PROJECT IS GOING TO UPGRADE AND CHANGE THE VISION OF ZOO CONCEPT EXISTING SAFARI PARK DOESN'T FULLFIL THE FUNCTION OF A GOOD SAFARI PARK. THE ANIMALS GONNA BE ACCOMMODATE IN THE PROPOSED DESIGN AND SAFARI ACTIVITIES WILL BE DESIGNED AS WELL ACC TO INTRNATIONAL STANDARDS.



DISTANCE

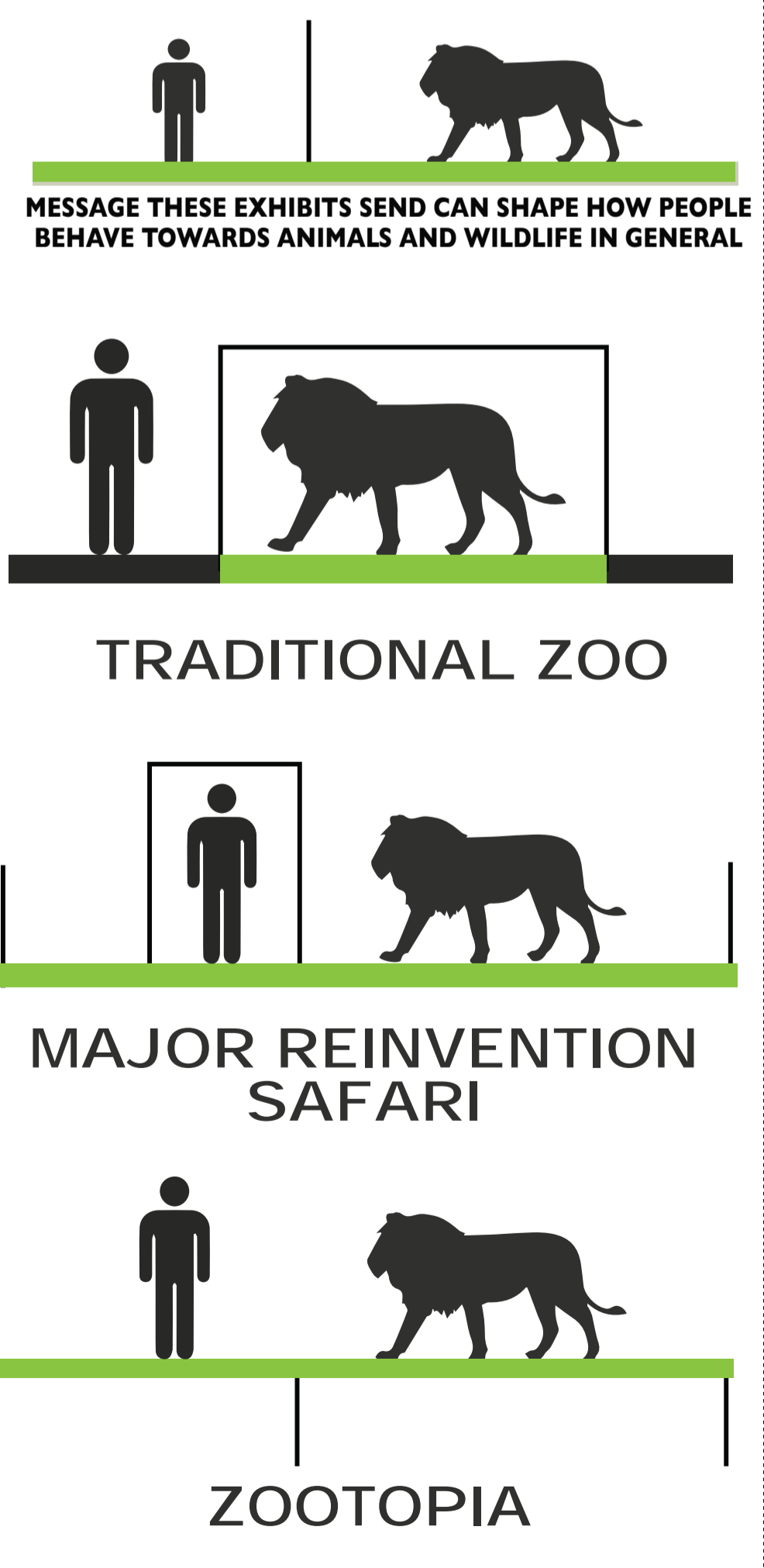
- CONSERVATION
- FUND RAISING
- BALANCE PUBLIC EDUCATION
- ENTERTAINMENT
- SCHOOL GROUP
- RESEARCH SCHOLARS STUDENTS
- WILDLIFE ENTHUSIASTS
- FAMILIES
- TOURIST GROUPS



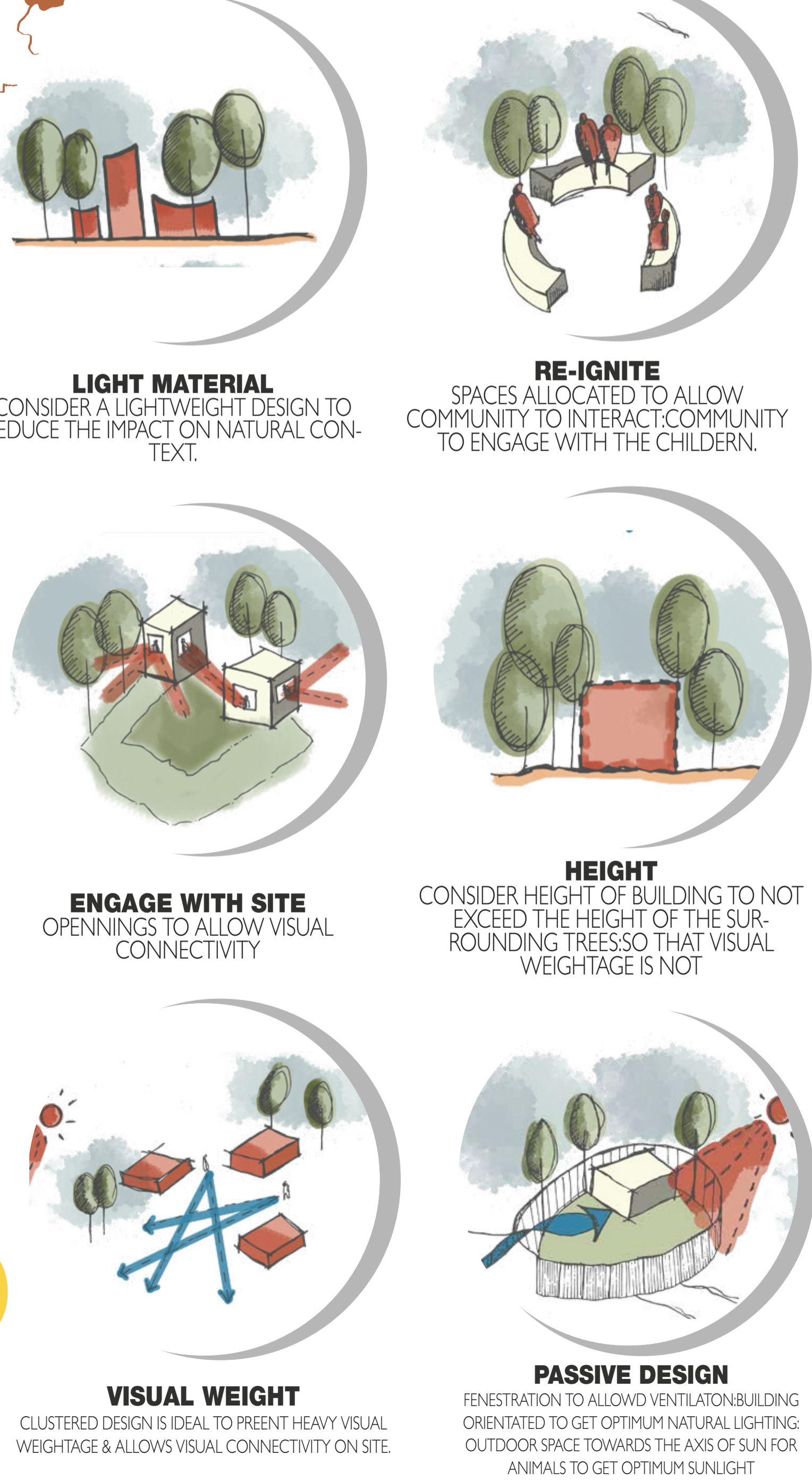
- 1 PRESERVING THE ANIMAL WELFARE AND THEIR NEED SO THEY CAN EXPRESS THEIR NATURAL BEHAVIORS EXPRESS.
- 2 ENHANCING THE EXPERIENCE OF VISITORS WHO DESIRE TO SEE WILD ANIMAL CLOSEUP & PROVIDE FINANCIAL SUPPORT

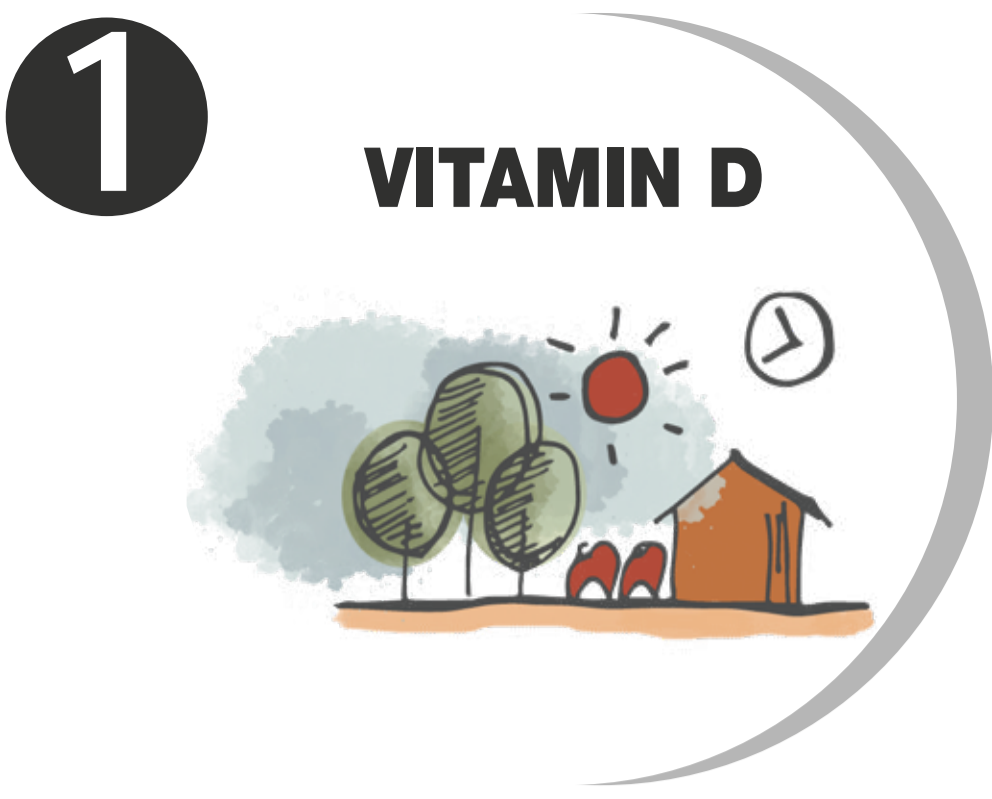
- RESEARCH CENTER
- CONCESSION
- RESTROOM
- COMMISARY
- SPECIAL SERVICES
- QUARANTINE
- ADMINISTRATION
- MAINTANCE

MICRO LEVEL



MESO LEVEL





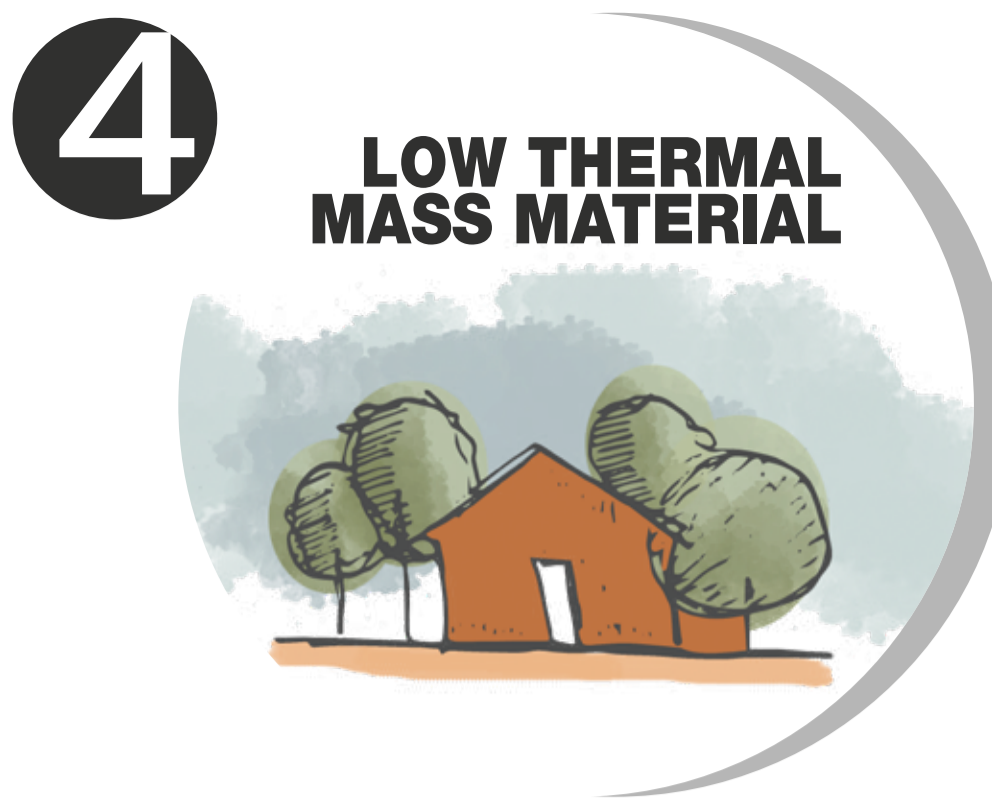
1 VITAMIN D
OUTDOOR AREA ORIENTED TO GET OPTIMUM SUN FOR EXHIBITS FOR ANIMAL NEED



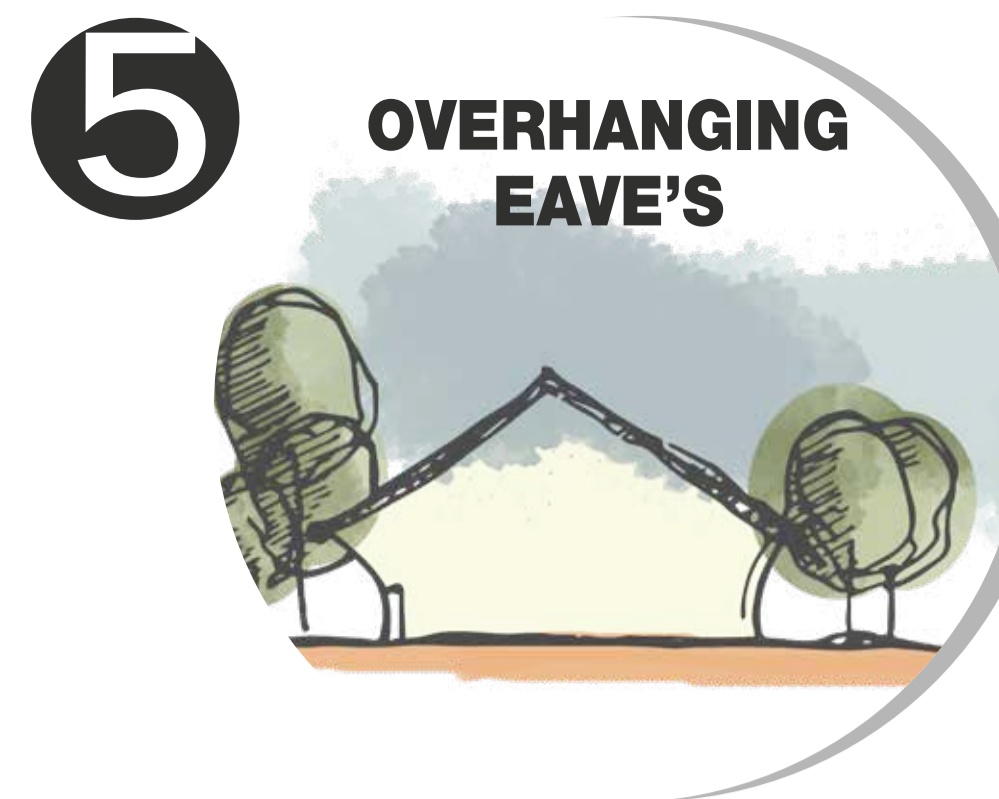
2 OPENINGS
MORE OPENINGS ON NORTH - EAST AND SOUTH WEST FACING FAÇADE TO ALLOW PREVAILING WINDS TO VENTILATE THE SPACES OF HABITAT AND FACILITIES BUILDINGS



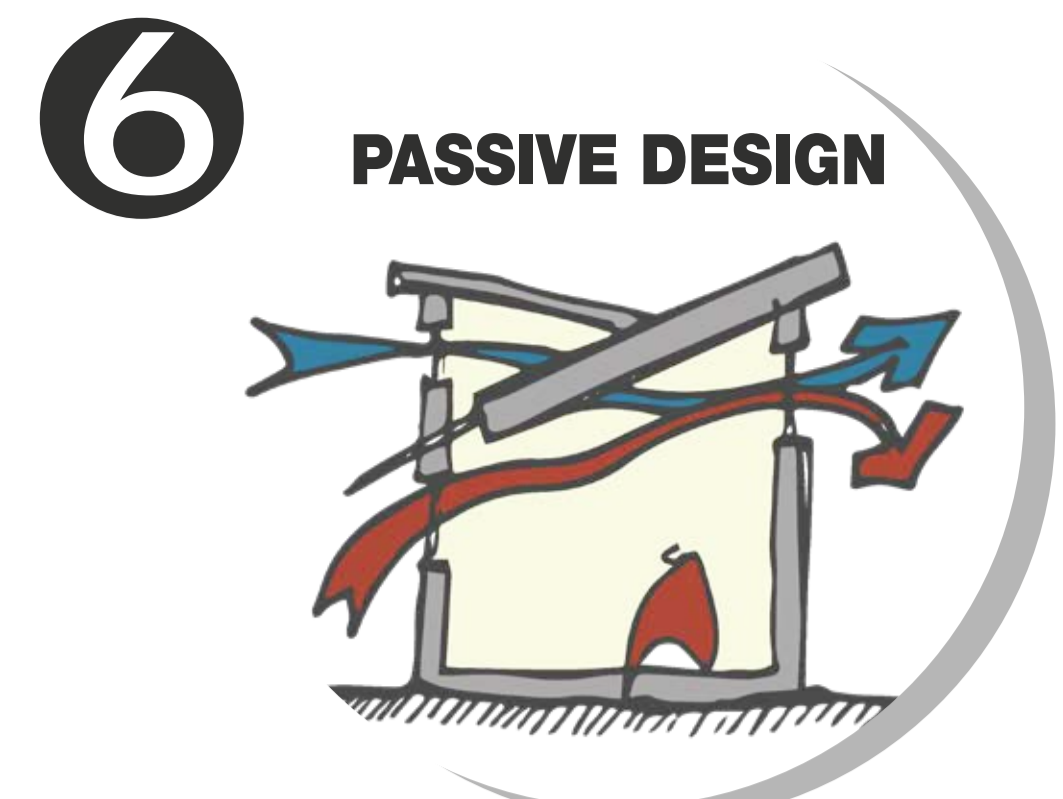
3 ORIENTATION
ALIGN SHORTER FAÇADE TOWARD EAST-WEST AXIS; REDUCING EXPOSURE TO SOLAR RADIATION FOR ENCLOSE HABITATION



4 LOW THERMAL MASS MATERIAL
USING LOW THERMAL MASS MATERIAL TO MINIMIZE HEAT ABSORBS HEAT DURING THE DAY AND RELEASE IT BY NIGHT EG: TIMBER, BAMBOO, BRICK

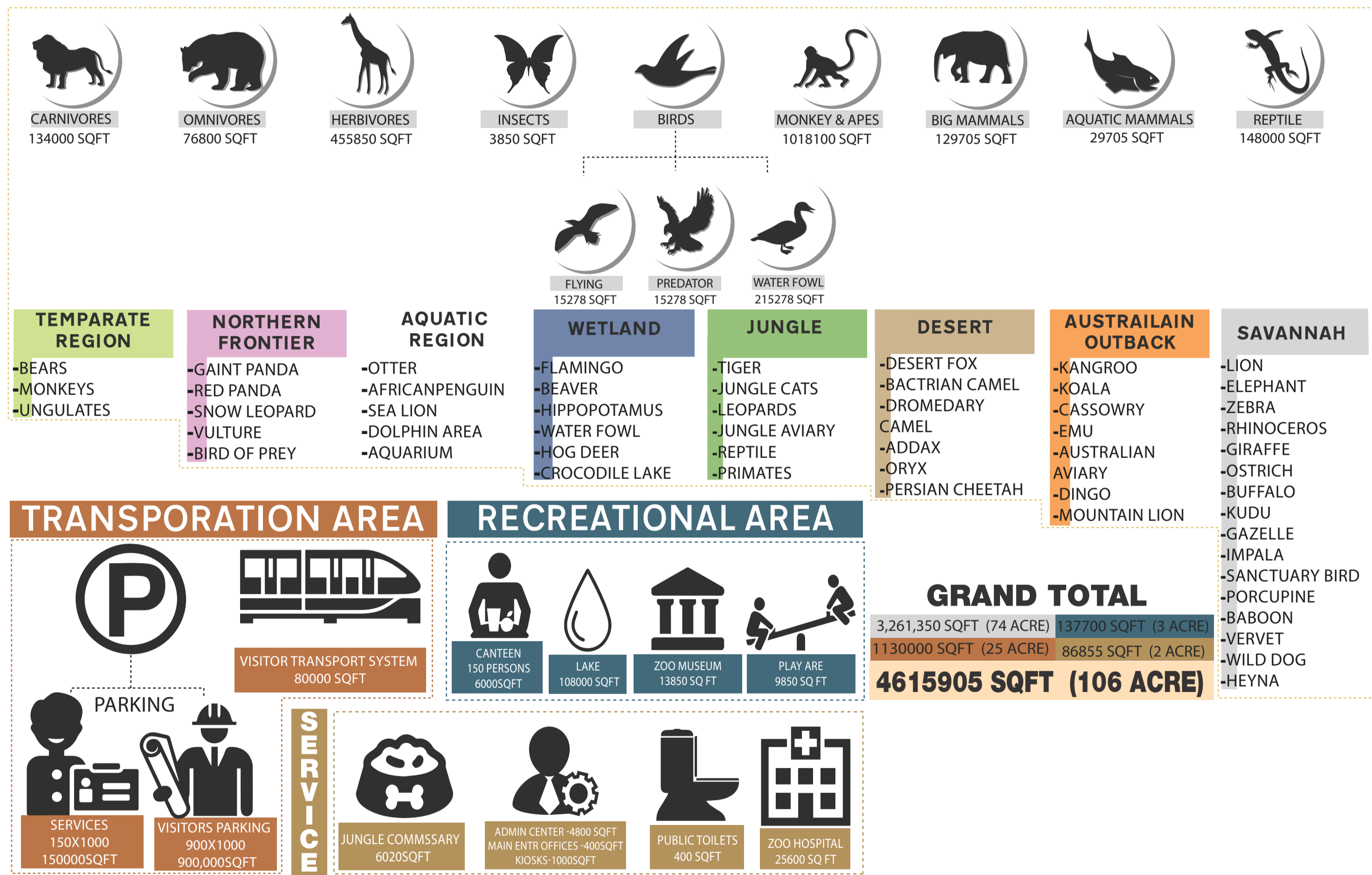


5 OVERHANGING EAVE'S
OVERHANGING EAVES WILL DIRECT THE SUN'S RAYS LOWER ON THE WINDOW, ALLOWING LESS LIGHT IN AND PREVENTING THE LIGHT FROM HEATING UP THE BUILDING AND HABITAT. SHADING

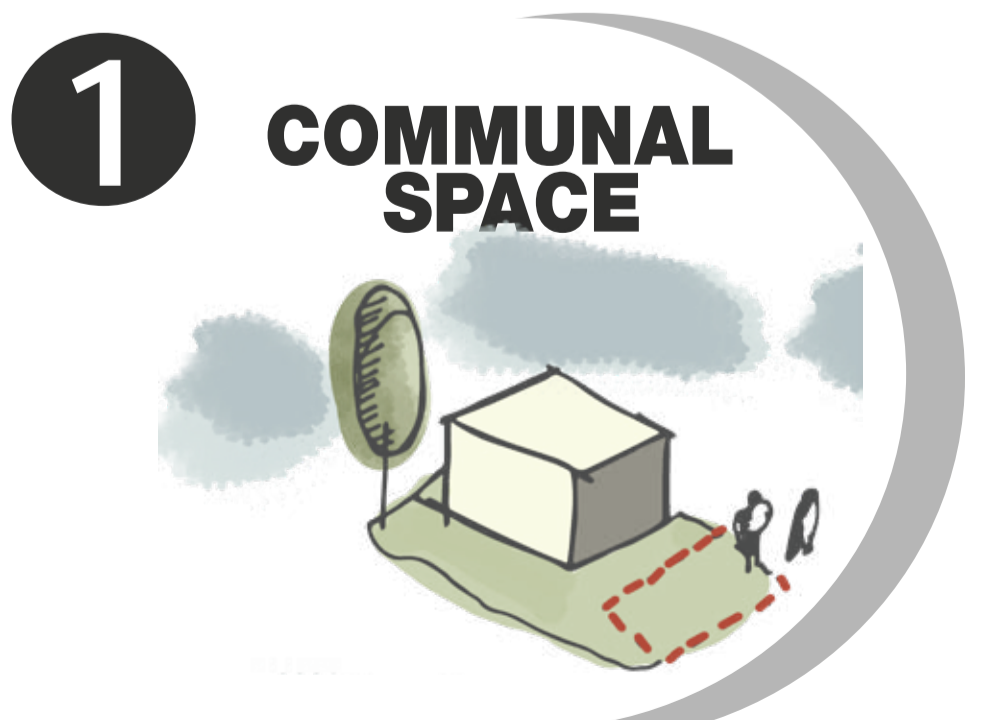
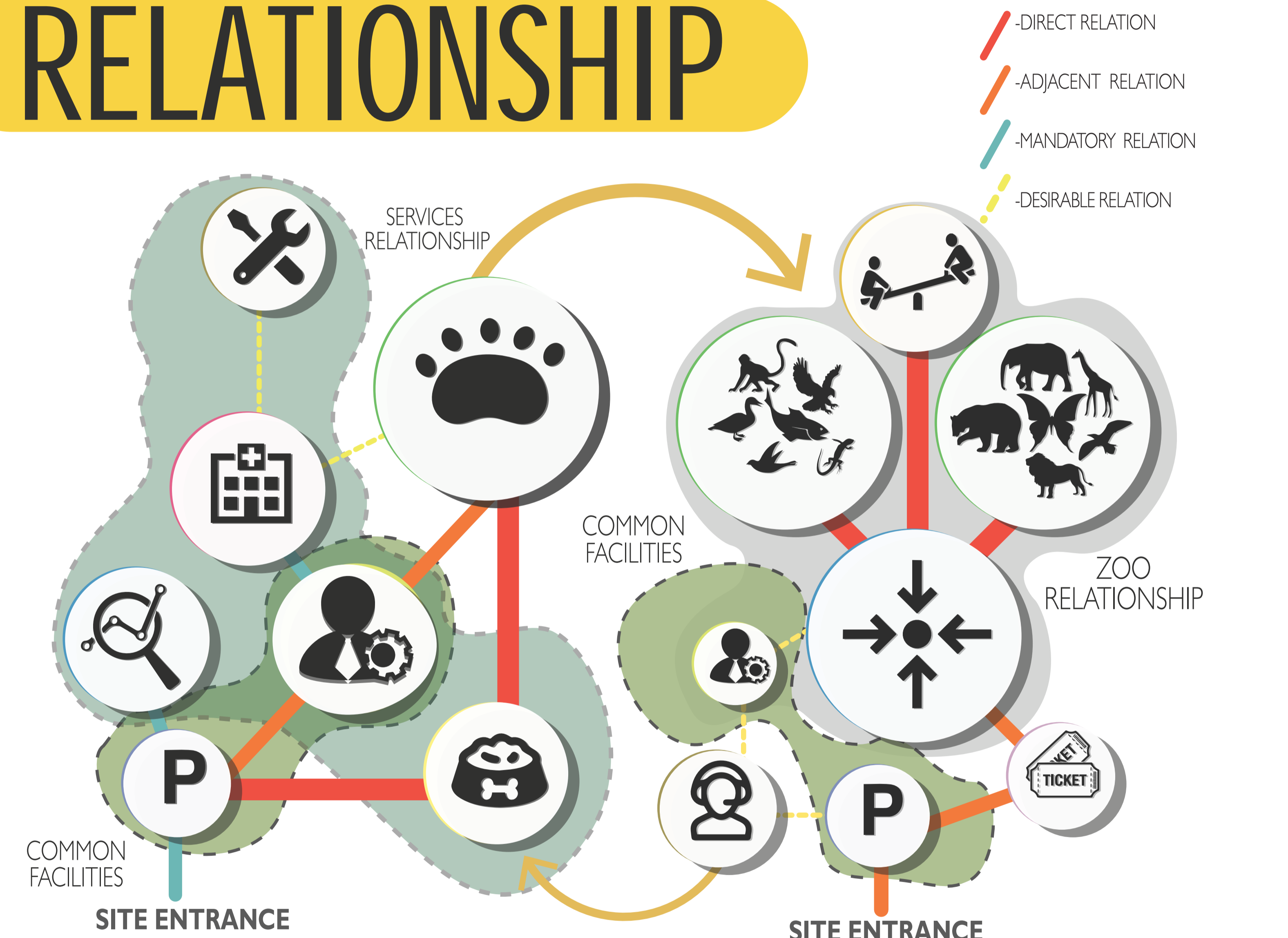


6 PASSIVE DESIGN
DUE TO HOT WEATHER, NATURAL OR MECHANICAL VENTILATION SHOULD BE IMPLEMENTED IN EXHIBIT AND BUILDING DESIGN TO ACHIEVE USERS THERMAL COMFORT EG: CROSS & STACK VENTILATION

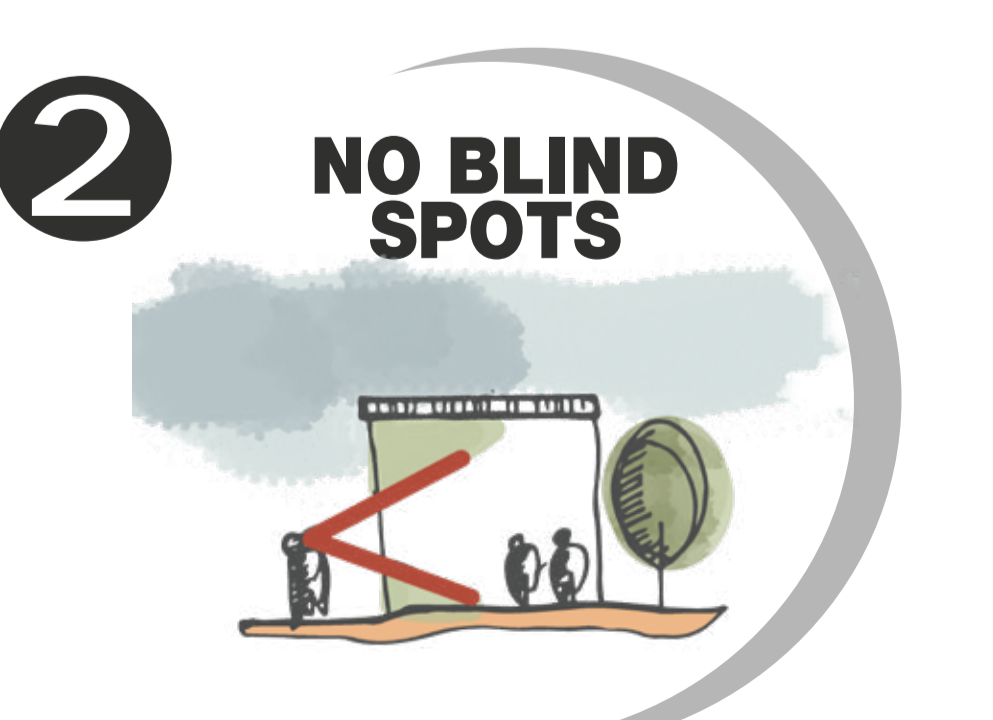
ARCHI PROGRAM



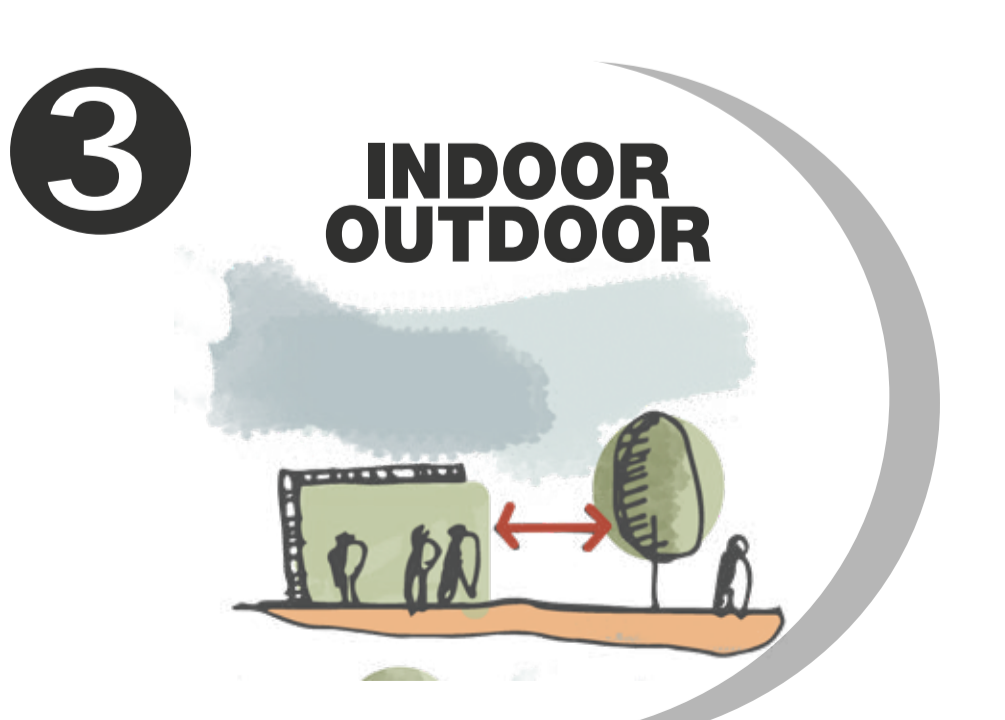
RELATIONSHIP



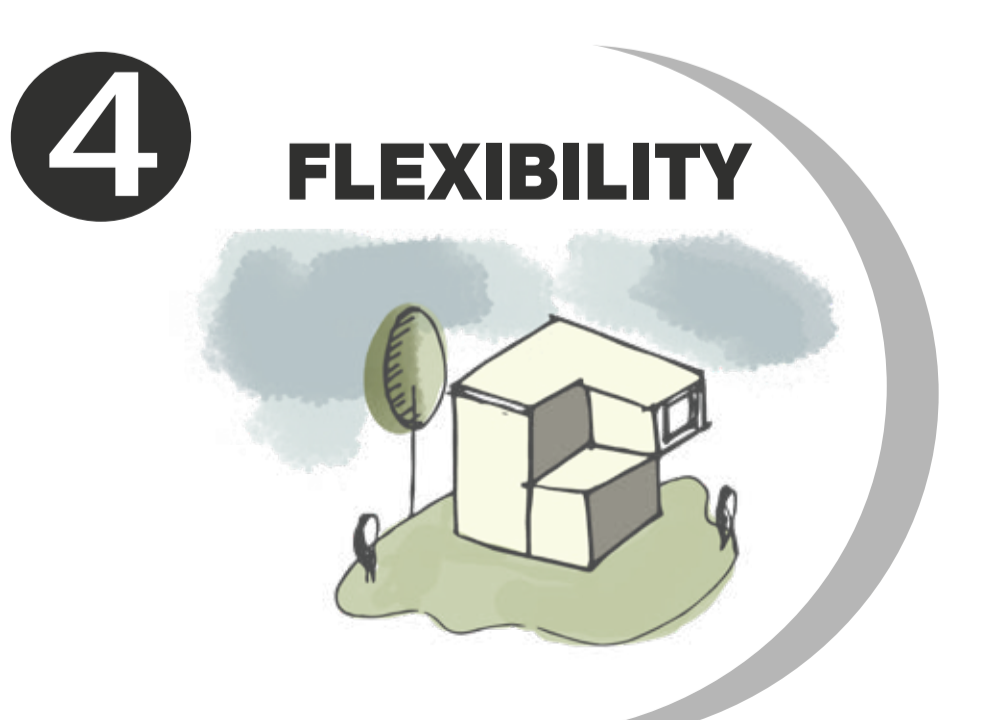
1 COMMUNAL SPACE
PROVIDE COMMUNAL SPACE WHICH CAN BE USED FOR BREAKS



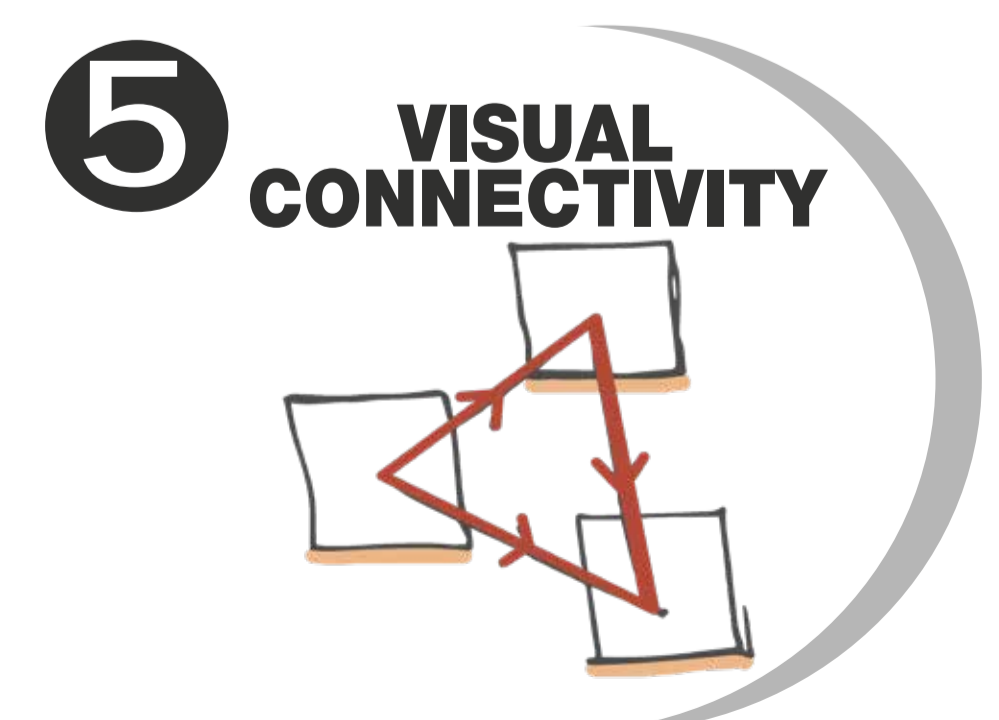
2 NO BLIND SPOTS
HAVING VISUAL PERMEABILITY AS A SAFETY PRECAUTION



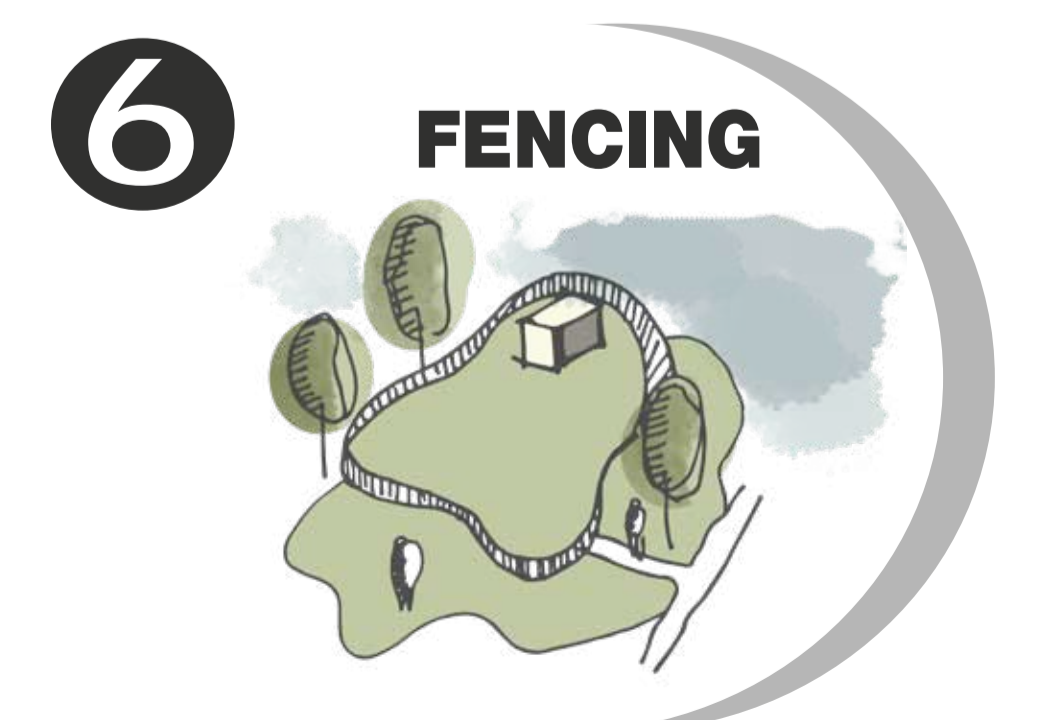
3 INDOOR OUTDOOR
PROVIDE A TRANSITION BETWEEN INDOOR & OUTDOOR ACTIVITIES



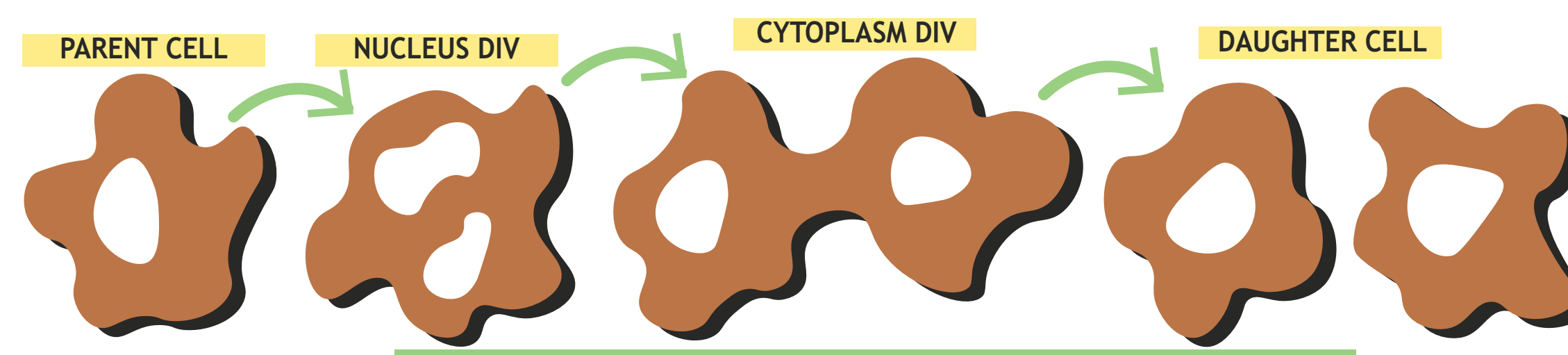
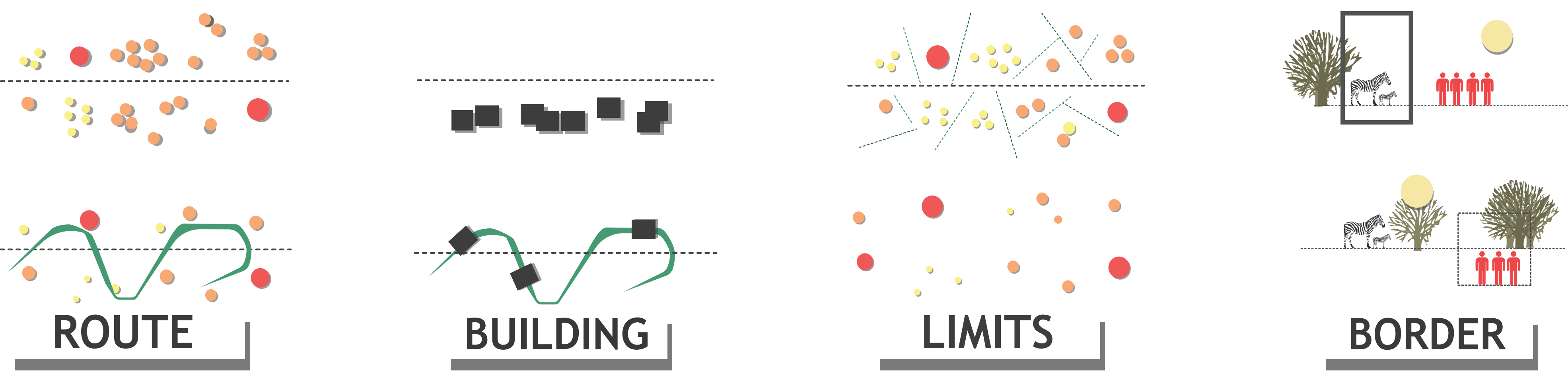
4 FLEXIBILITY
PROVIDE FLEXIBLE SPACES THAT CAN CATER TO DIFFERENT ACTIVITIES



5 VISUAL CONNECTIVITY
VISUAL CONNECTIVITY BETWEEN SPACES



6 FENCING
FENCING AROUND THE BUILDING TO CONTROL THE ACTIVITIES OF CHILDREN WHILE BEING SAFE



BINARY FUSSION

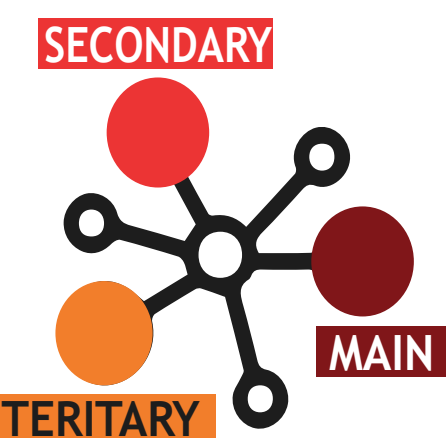
THE CELL COAT OF THE AMEOPA PROVIDES AN IMPERMEABLE LAYER OF PROTECTION VIA A SERIES OF TIGHTY PACKED HELICAL PROTEINS PROTRUDING FROM THE CELL MEMBRANCE

SINGLE CELLED ORGANISM

ZONNING

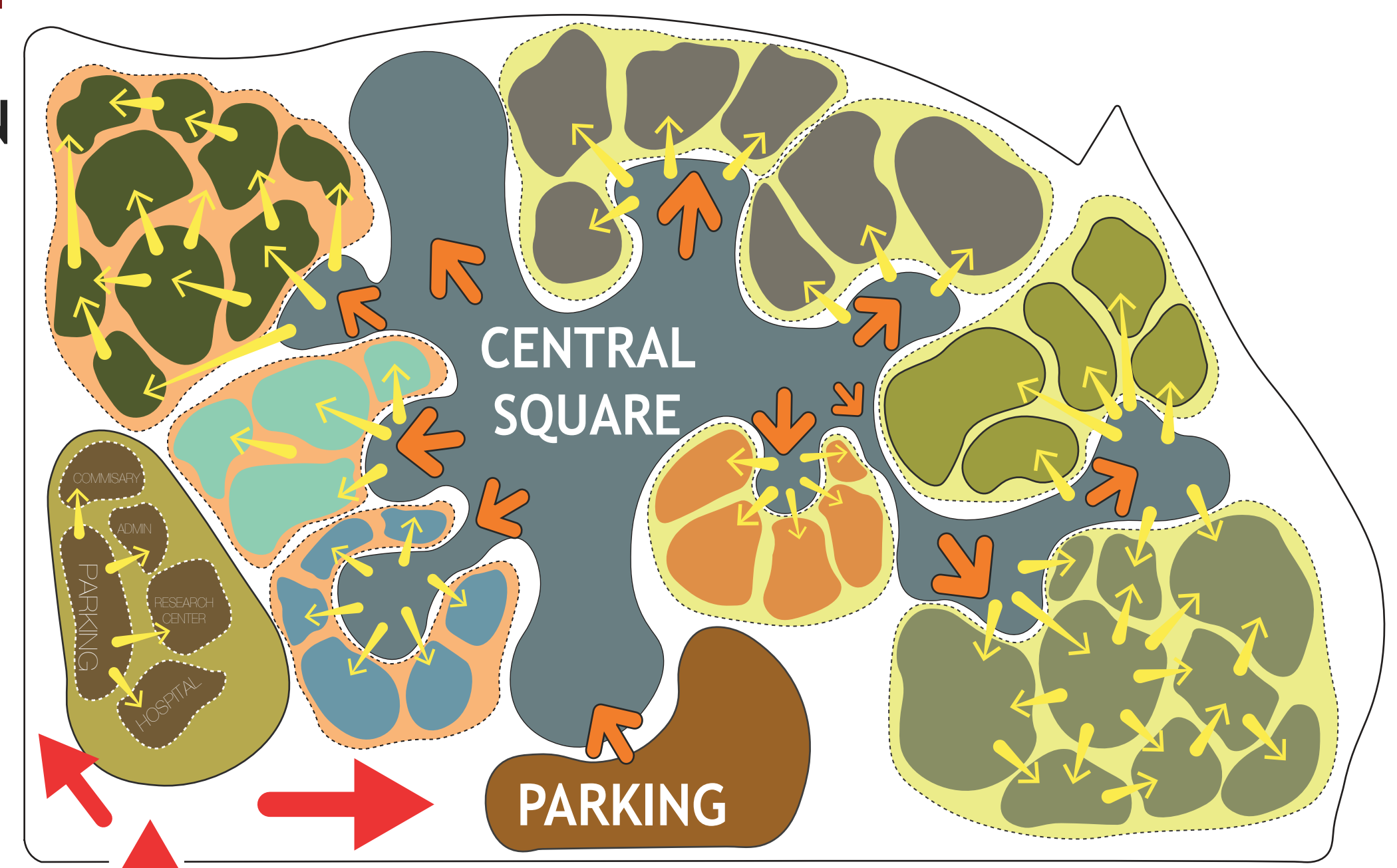
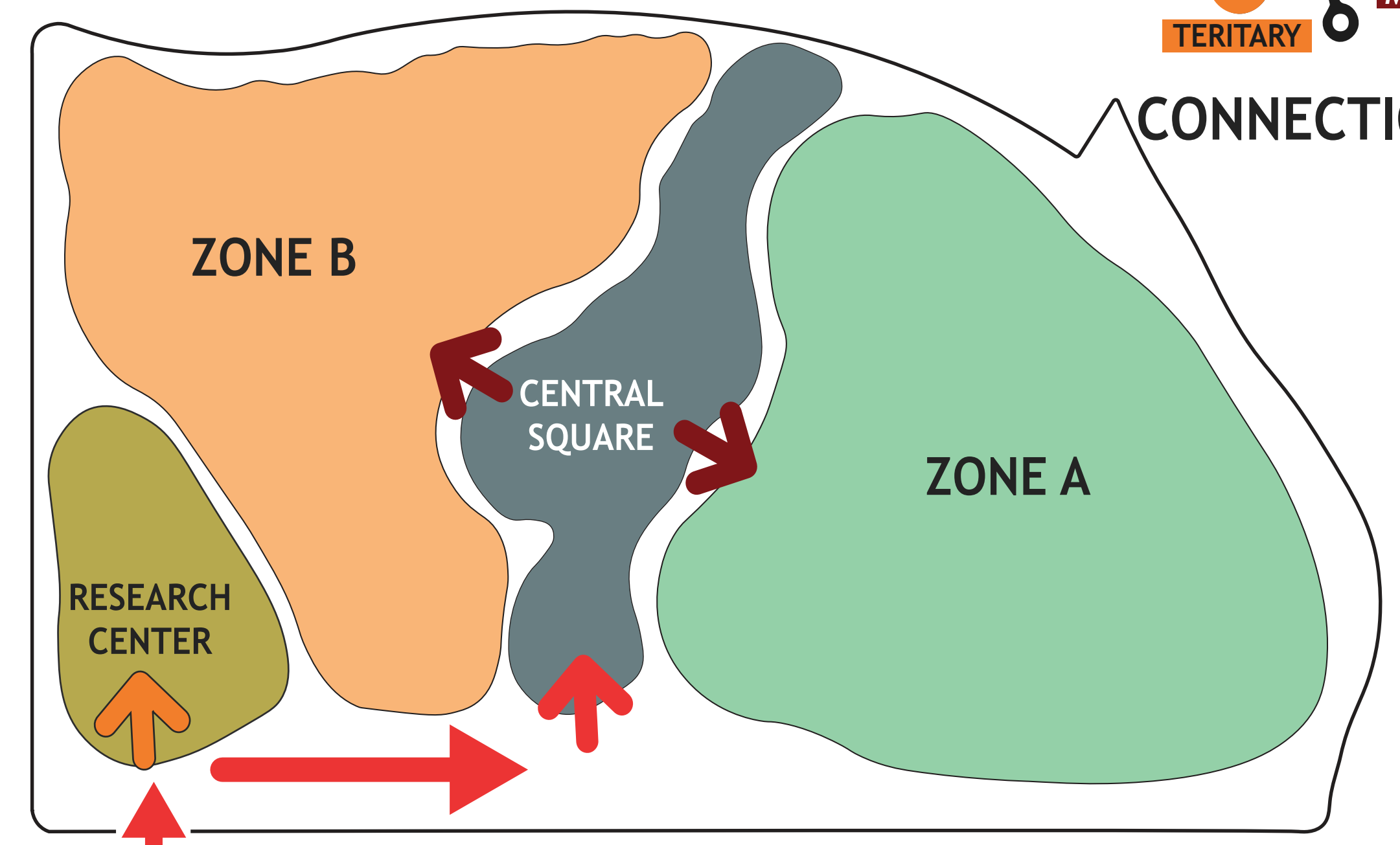
1 FUNDAMENTAL PROGRAMS:

PLACEMENT OF ESSENTIAL FACILITIES AND PROGRAMS ACCORDING TO THE RELATIONSHIPS AS A FUNDAMENTAL UNITS WITHIN THE SITE. PUTTING THE ZOO INTO TWO MAJOR ZONES



2 CONNECTIVITY:

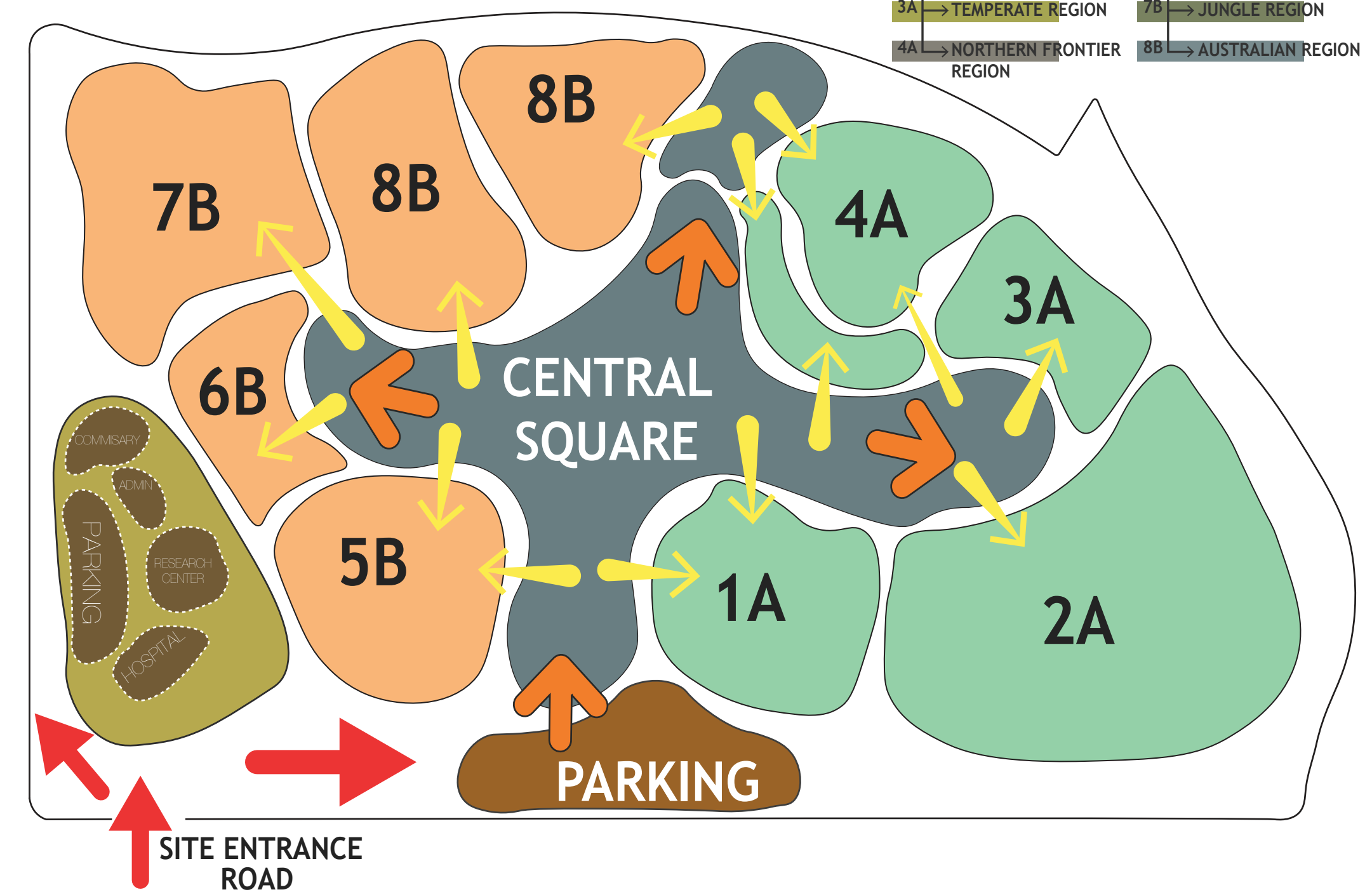
CREATING CONNECTIVITY BETWEEN ALL ZONES AND MAKE DIRECT CONNECTION WITH CENTRAL SQUARE.



3 ADDITION OF ZONES :

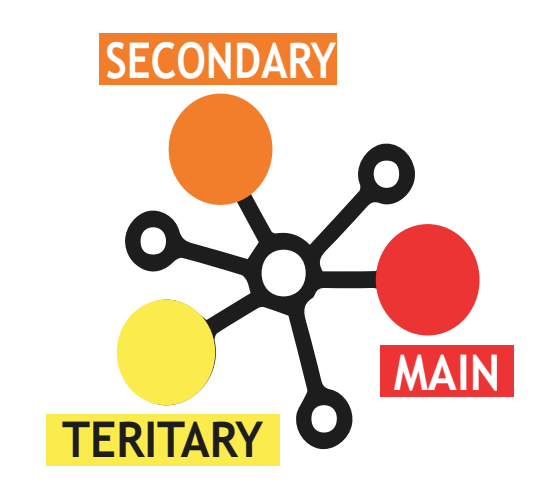
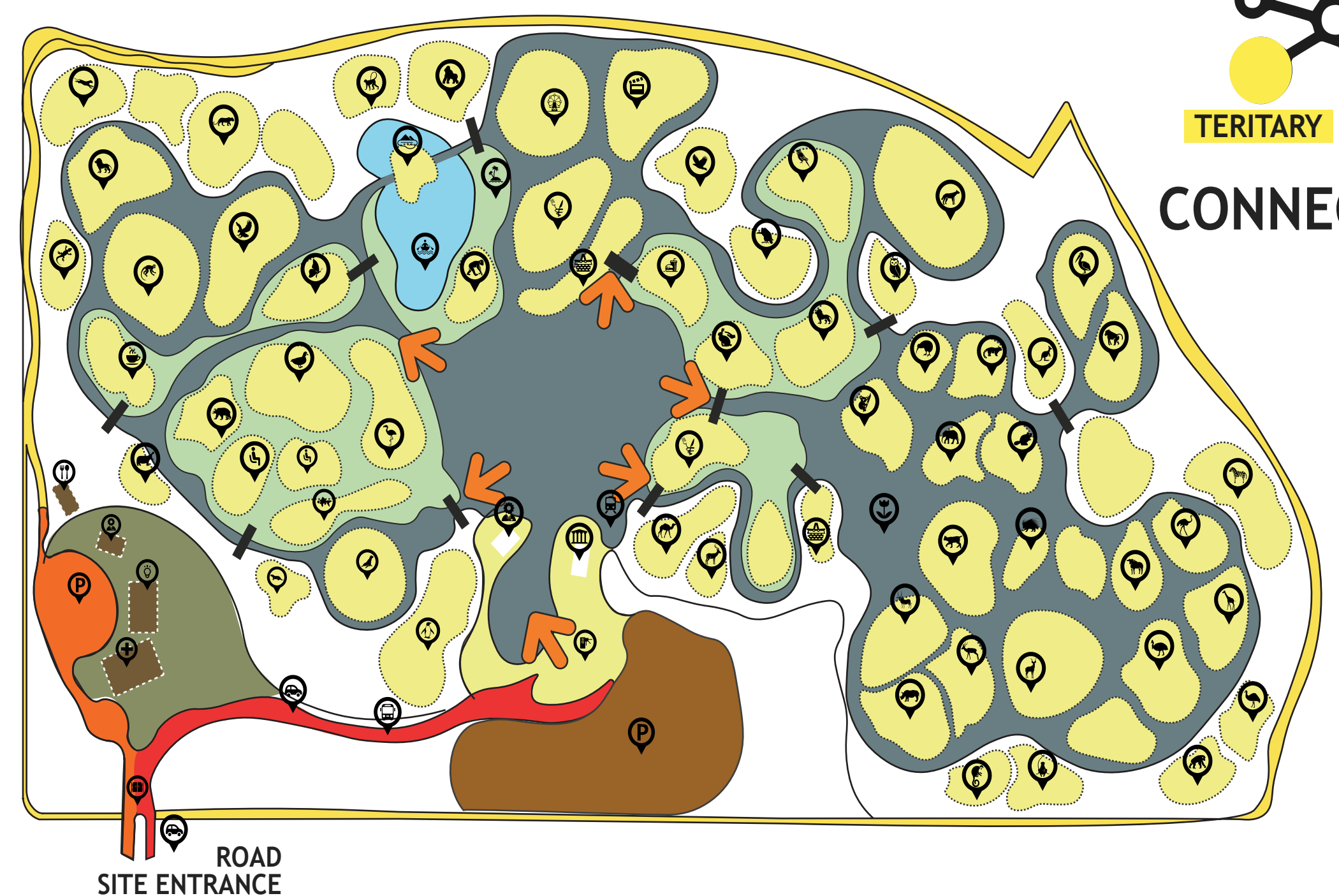
ADDITION OF REGION ZONES WITHIN THE TWO ZONES EACH FOUR IN ONE INSPIRED BY THE BINARY FUSION PROCESS.

ZONE A		ZONE B	
1A	DESERT REGION	5B	AQUATIC REGION
2A	SAVANNAH REGION	6B	WETLAND REGION
3A	TEMPERATE REGION	7B	JUNGLE REGION
4A	NORTHERN FRONTIER REGION	8B	AUSTRALIAN REGION

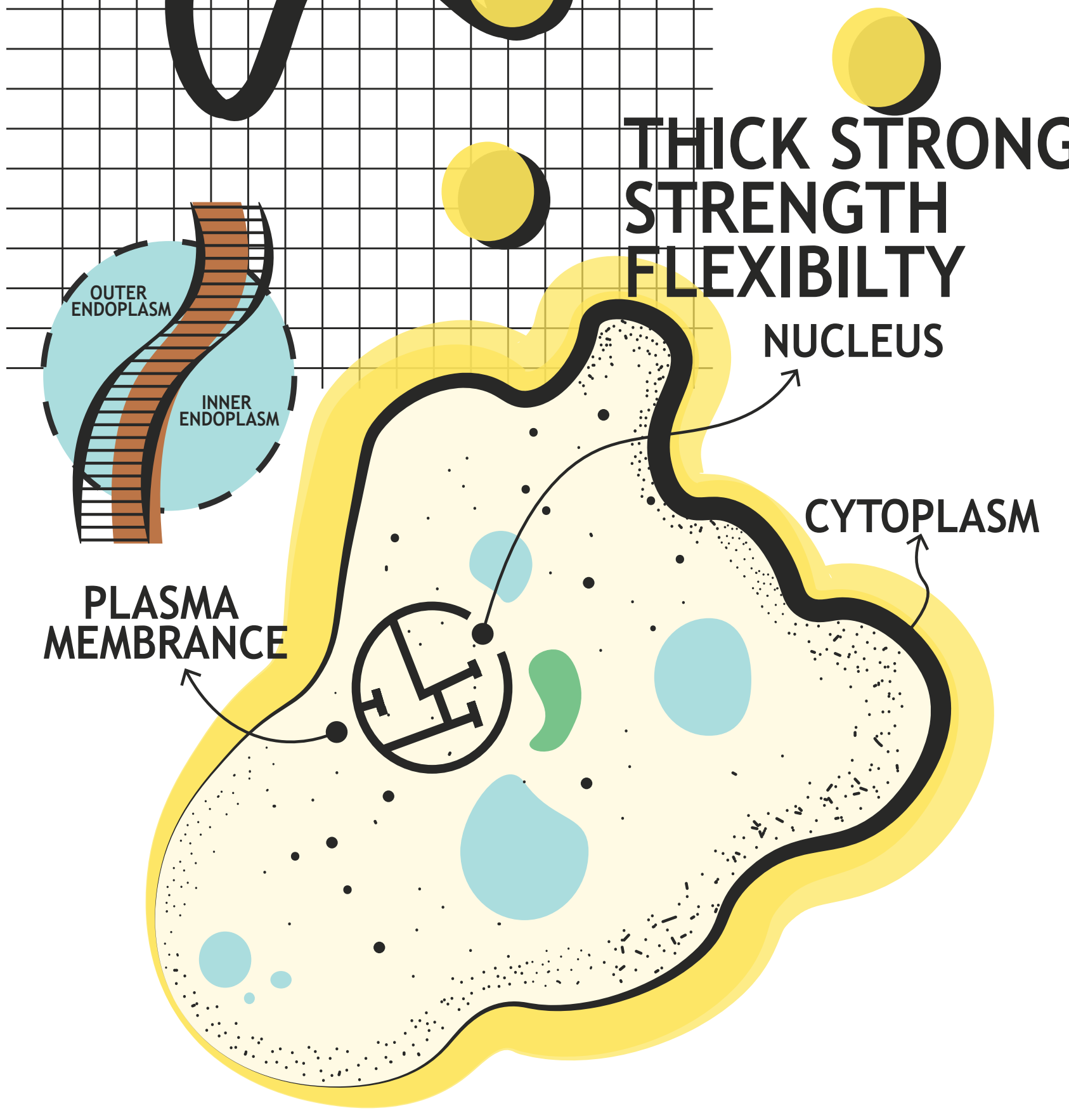
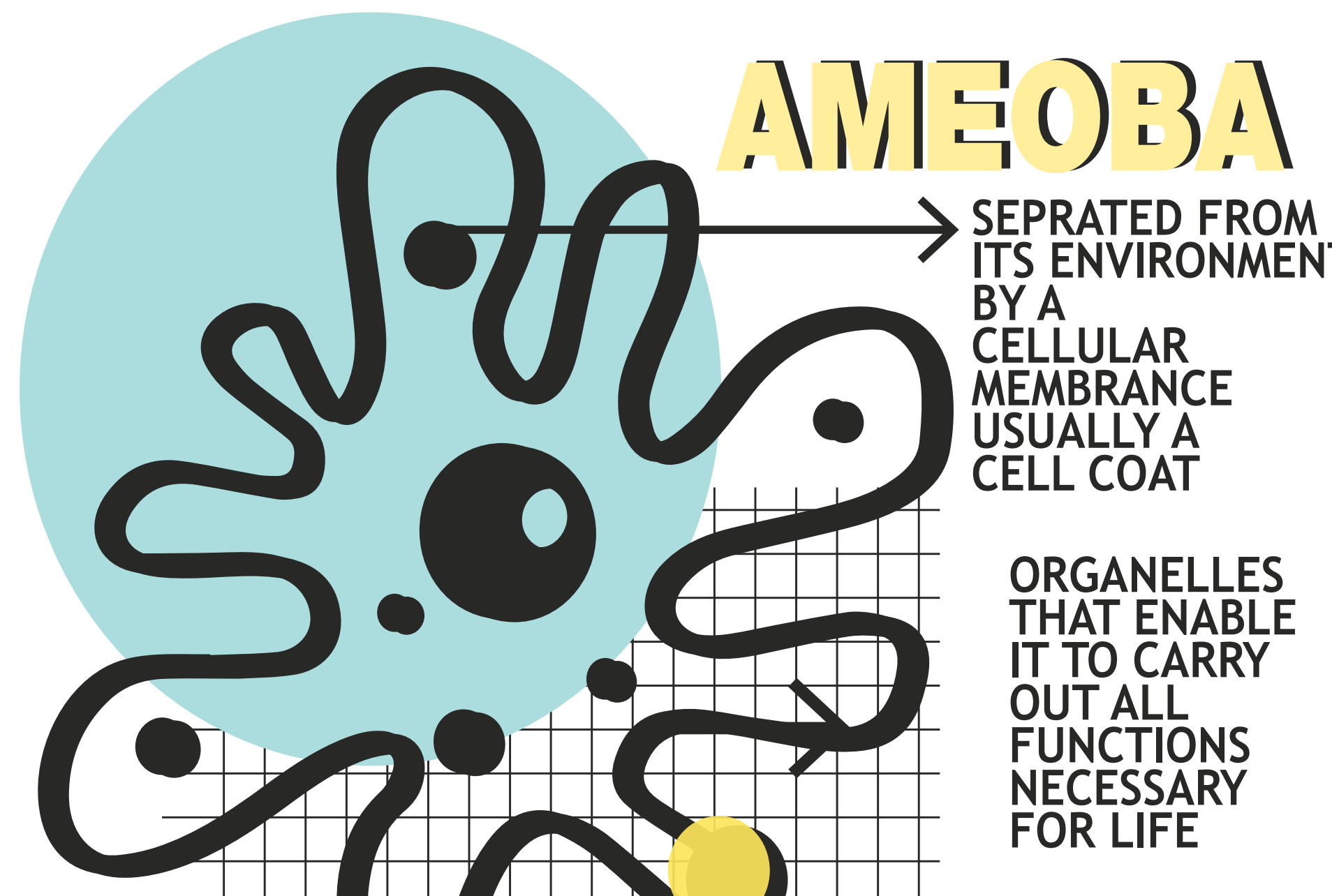


4 EXHIBIT PLACEMENTS:

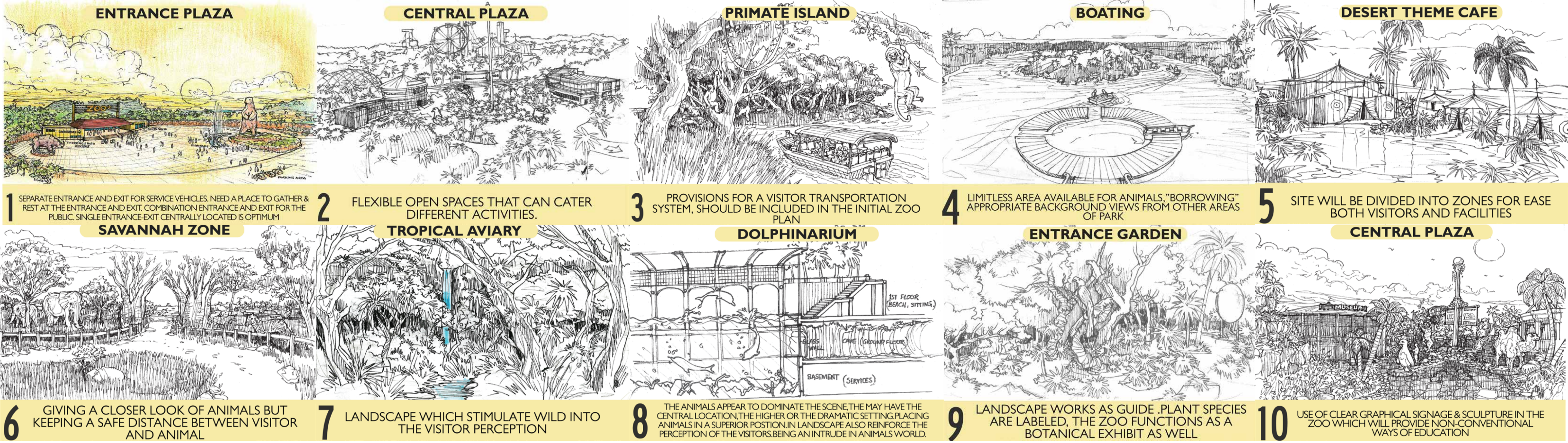
PLACEMENT OF EXHIBITS WITHIN EACH REGIONAL ZONE AND PROVIDING CONNECTIONS ALONG ALL AMENITIES.



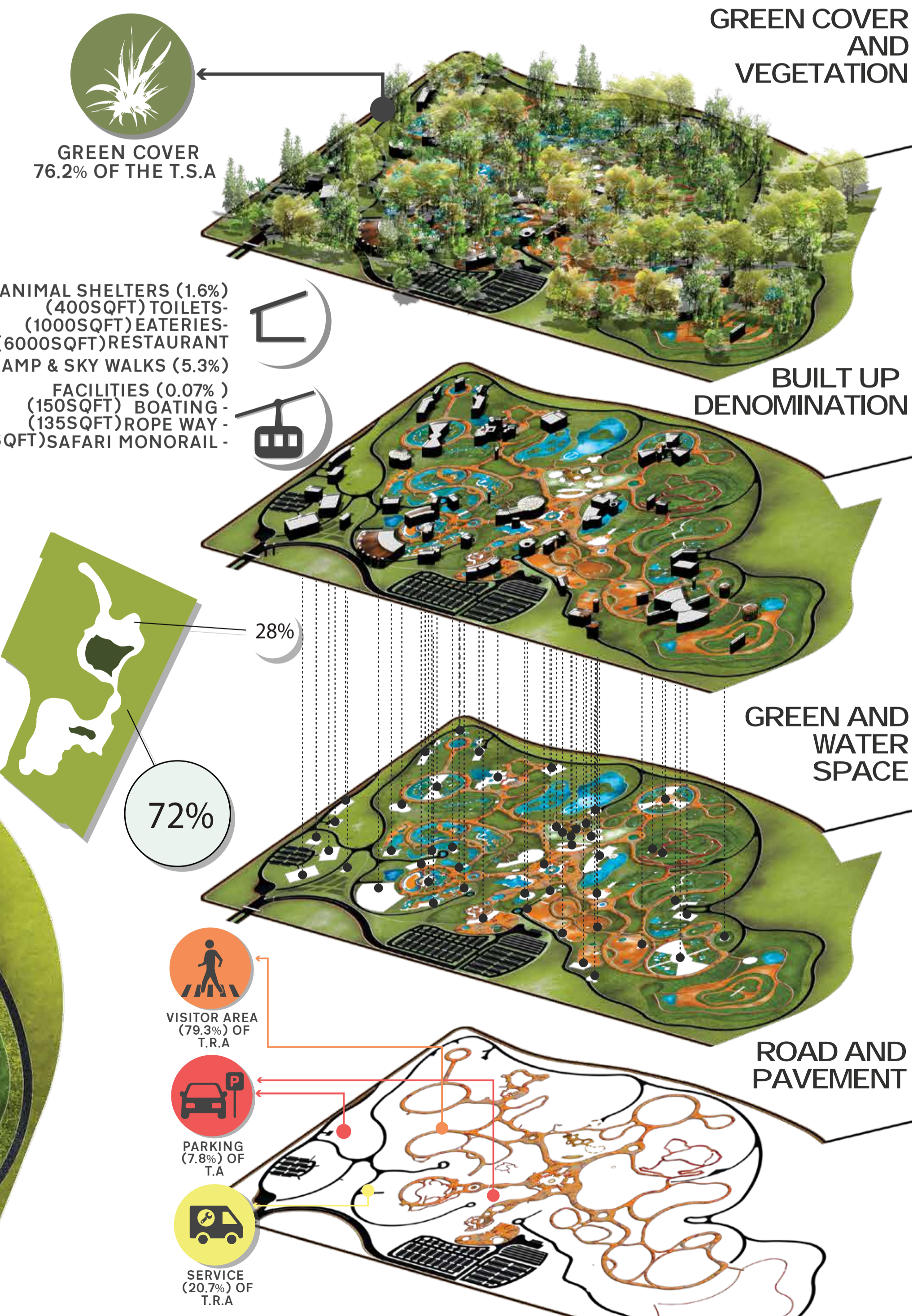
CONNECTION



CONCEPT



MASTER PLAN

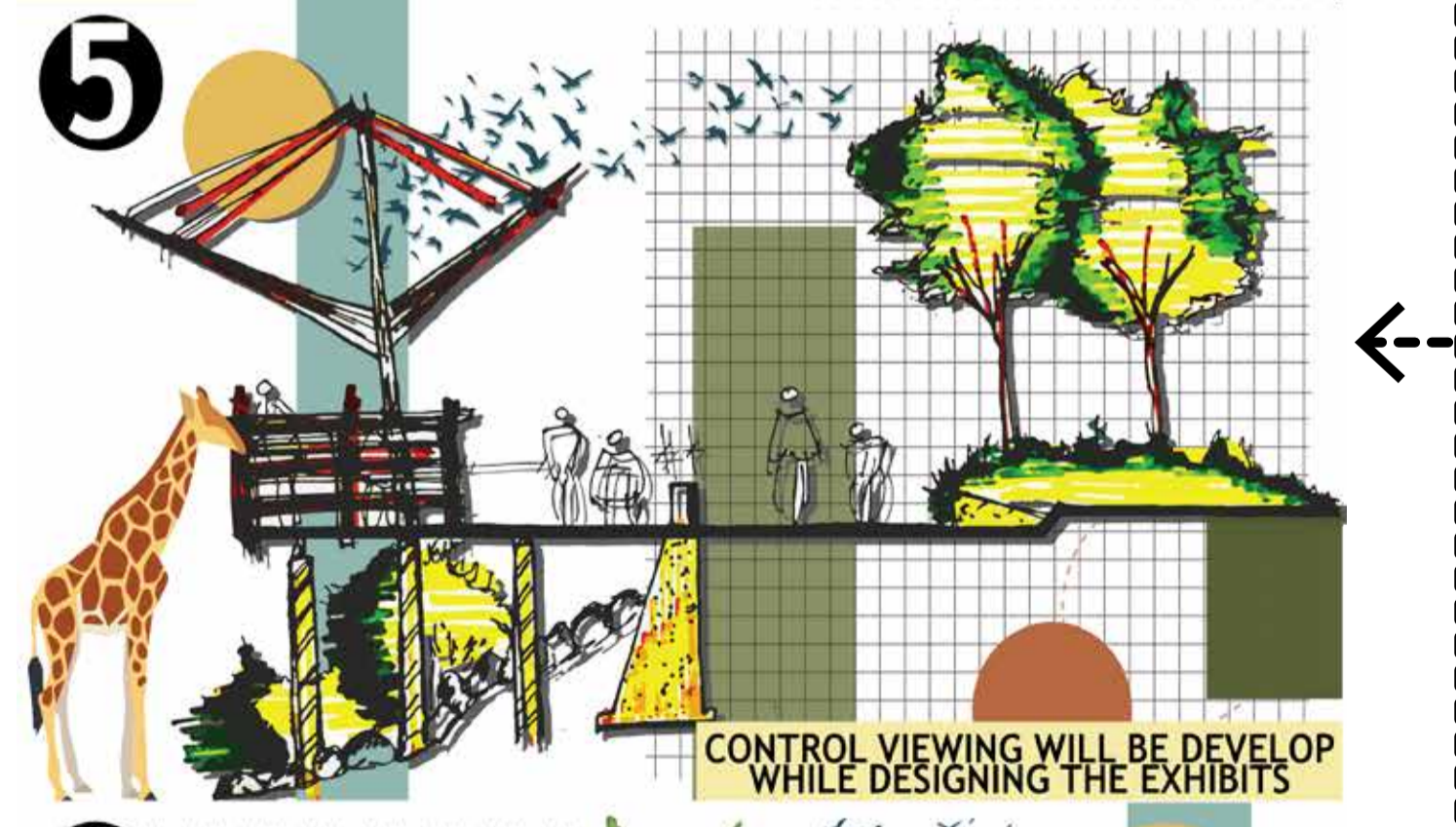
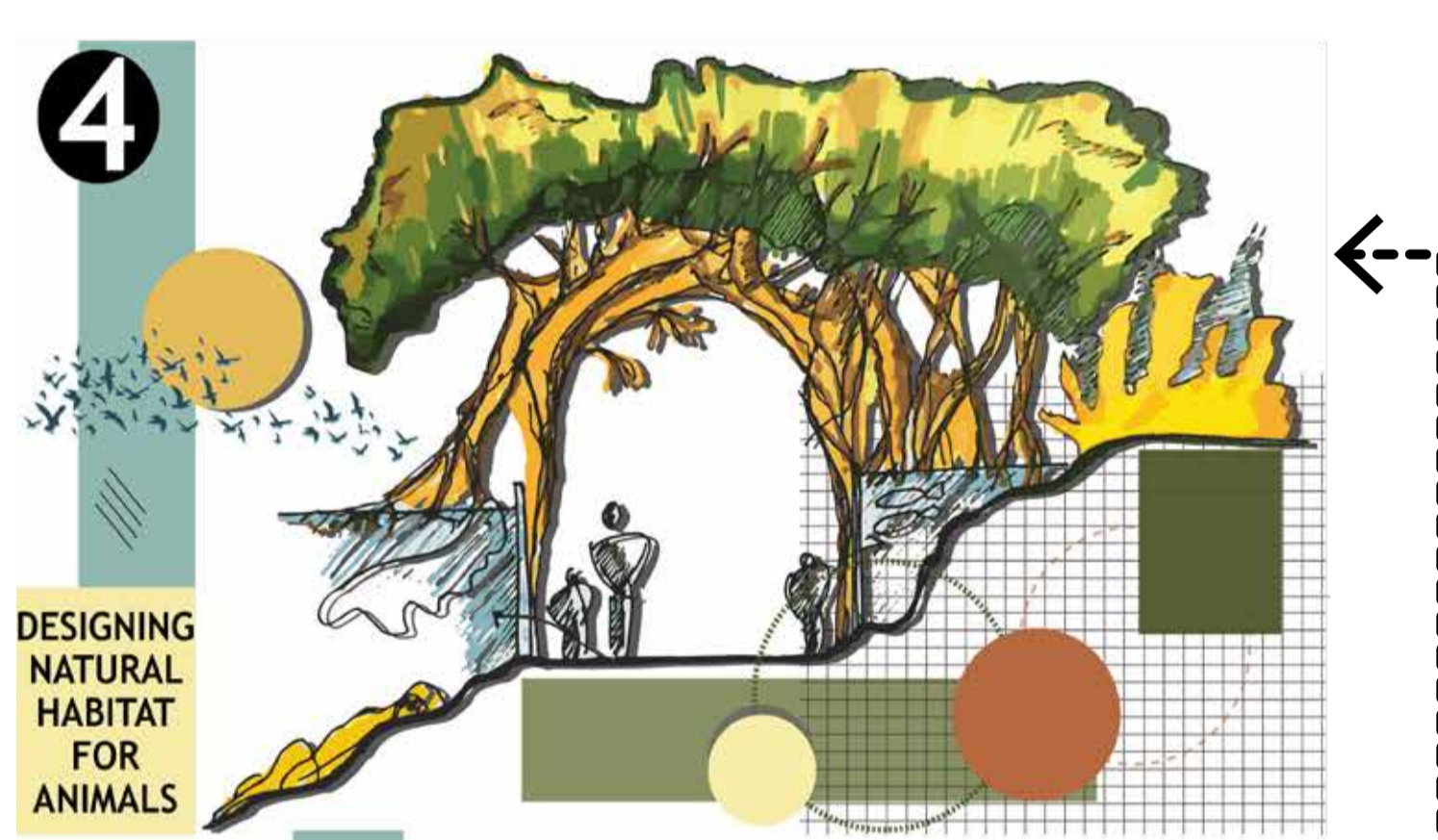
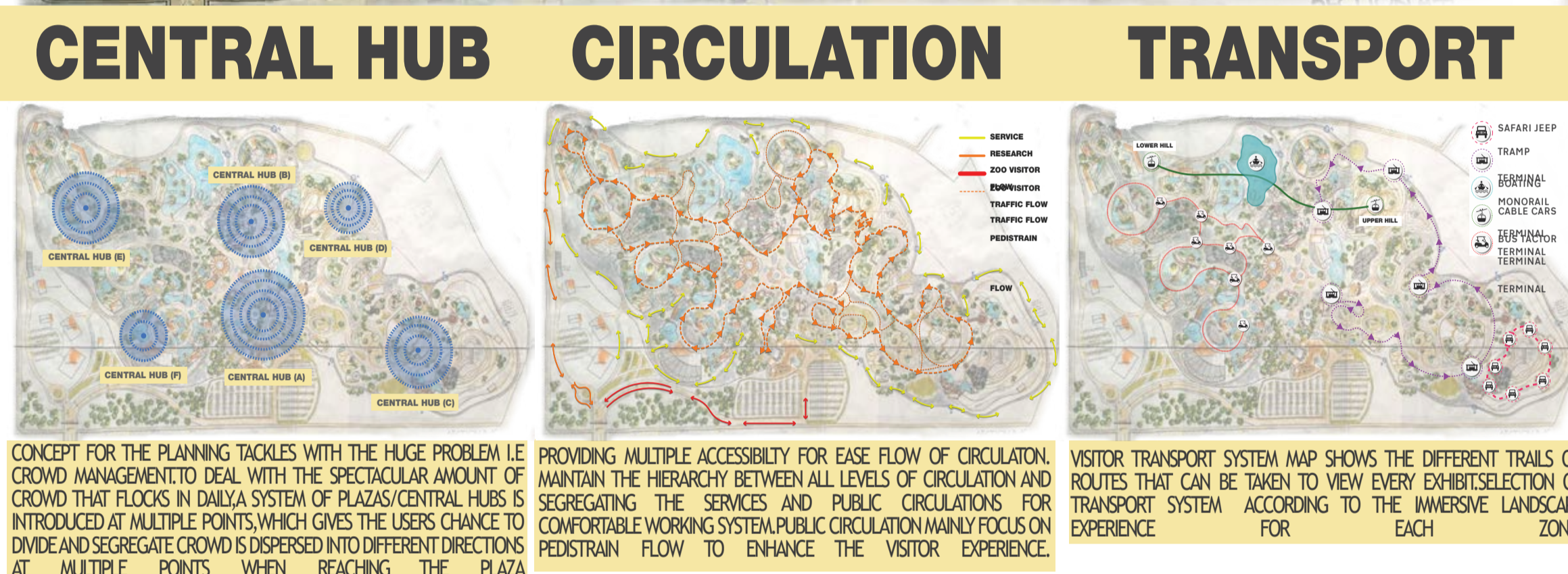
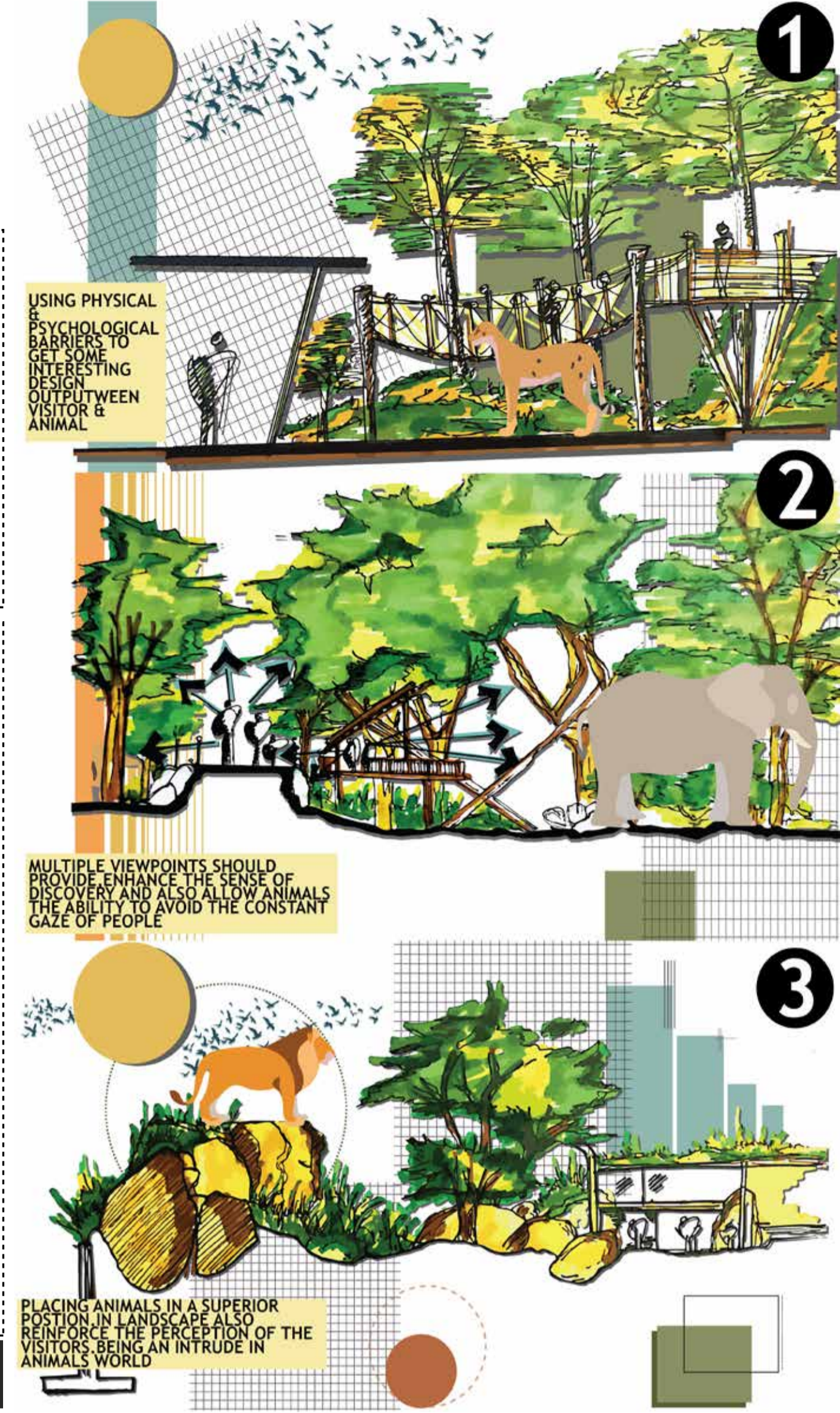
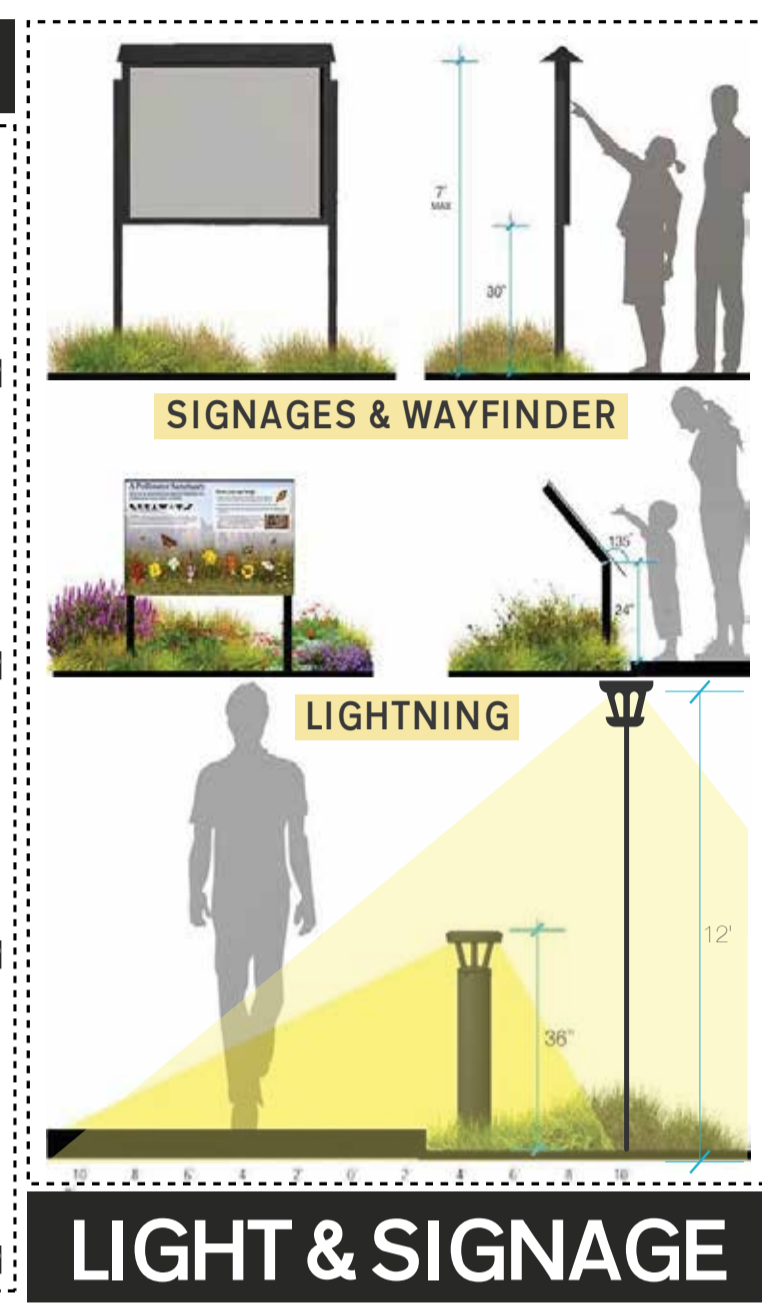
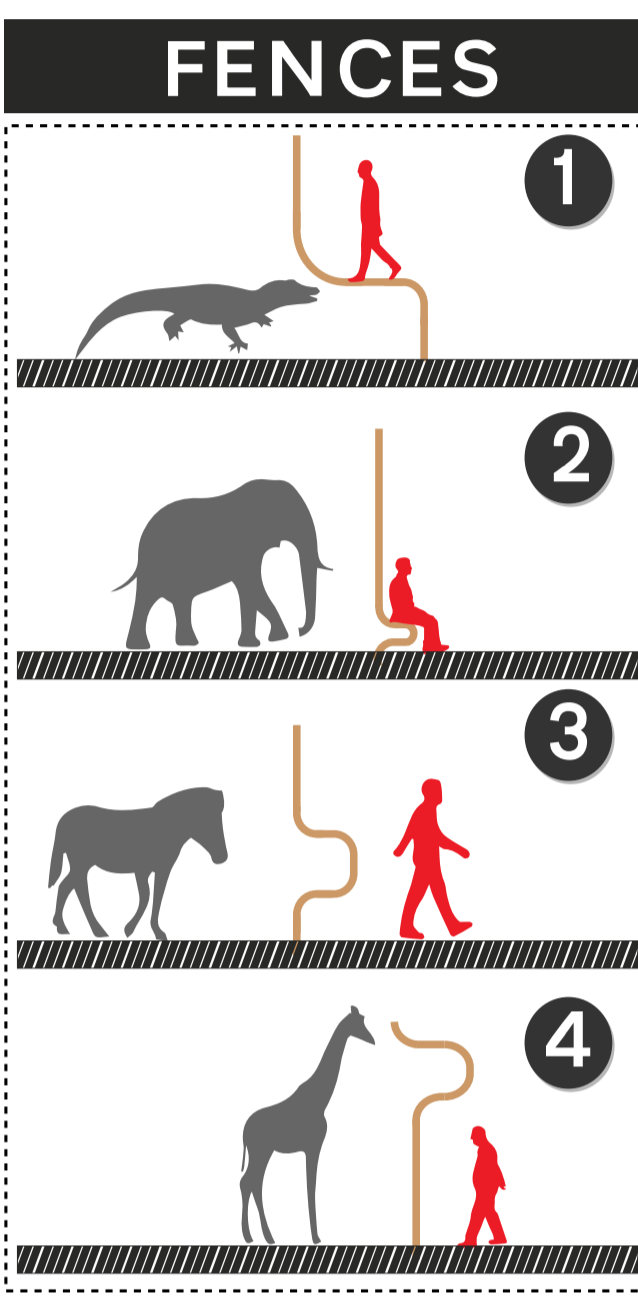
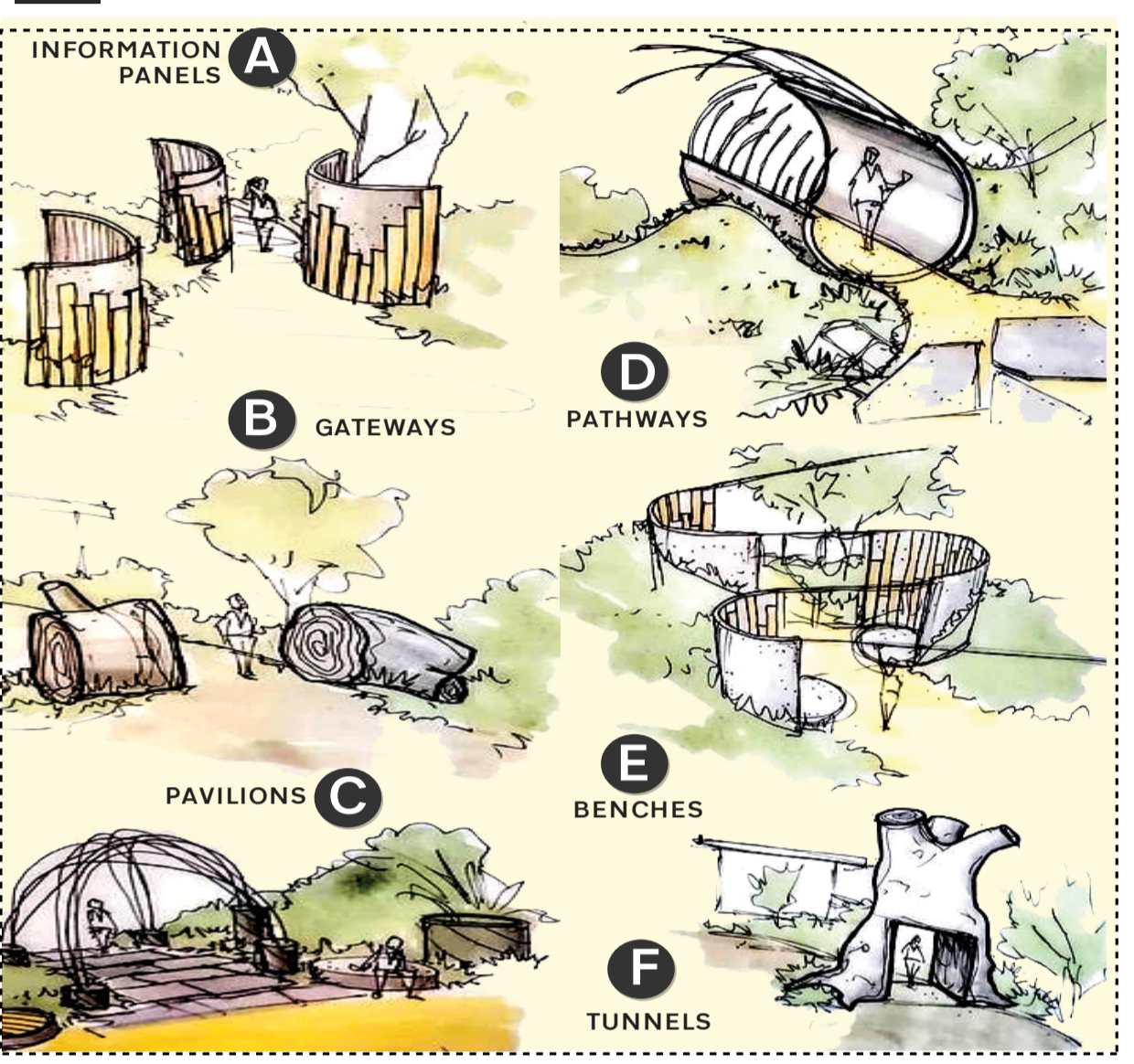


- ANIMAL SHELTERS (1.6%)
- (400SQFT) TOILETS - (1000SQFT)
- EATERIES - (6000SQFT)
- RESTAURANT RAMP & SKY WALKS (5.3%)
- FACILITIES (0.07%)
- (150SQFT) BOATING - (135SQFT)
- ROPE WAY - (600SQFT)
- SAFARI MONORAIL -

SCALE 0 100 300 600

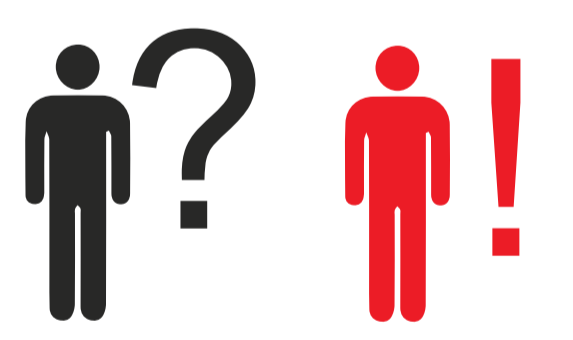


MISCELLANEOUS

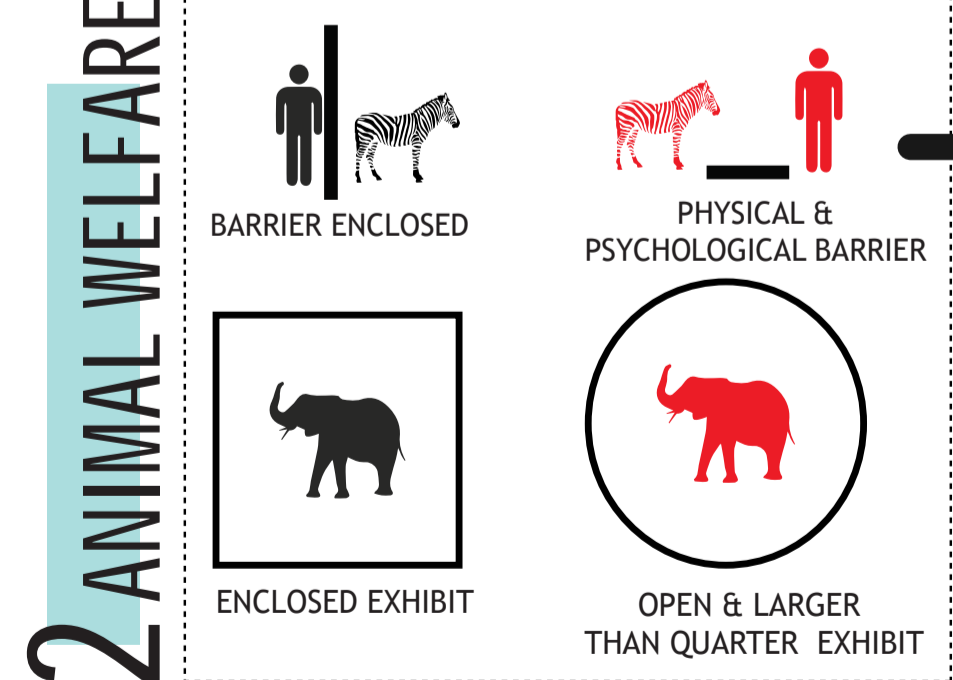


LANDSCAPE IMMERSION

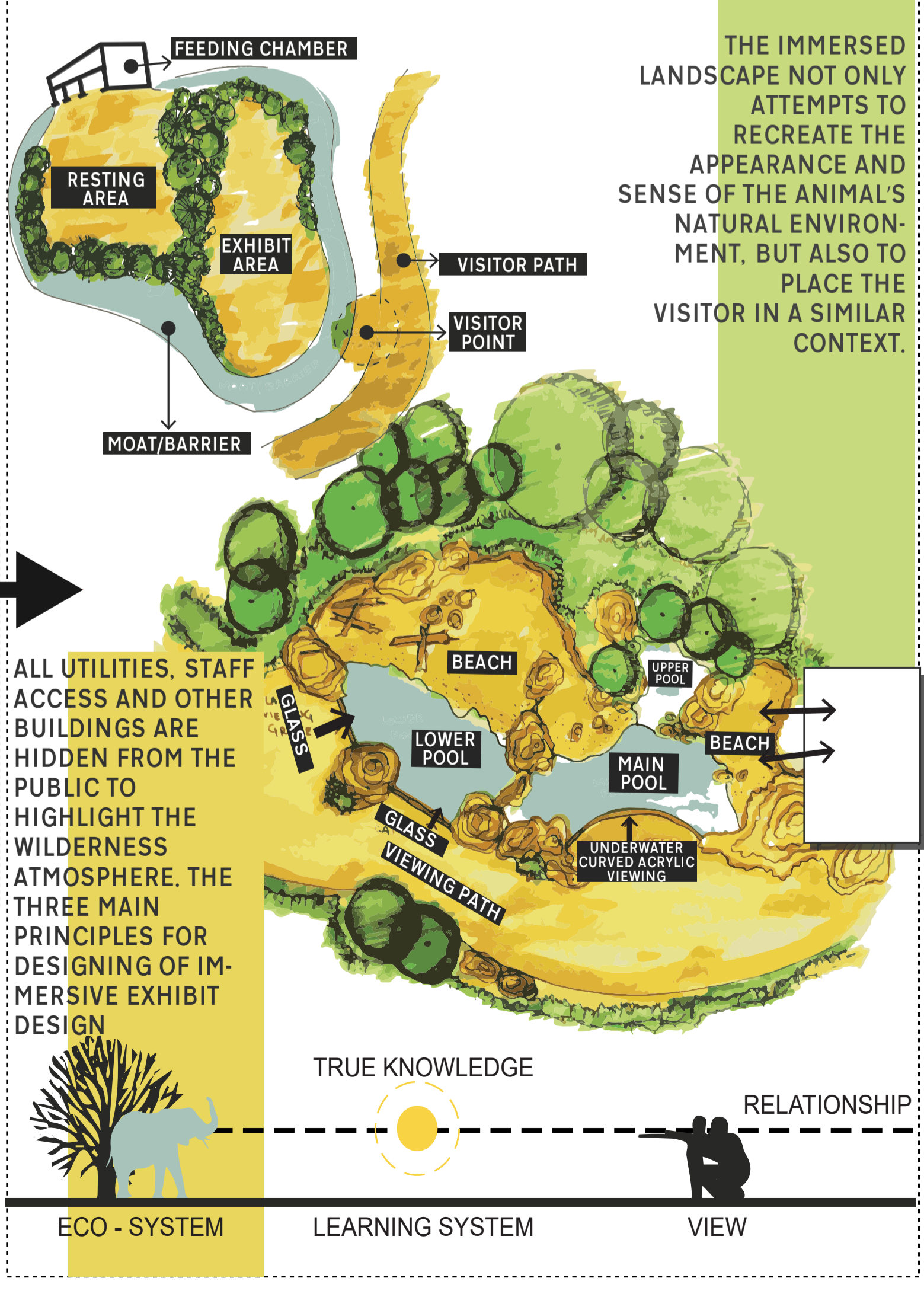
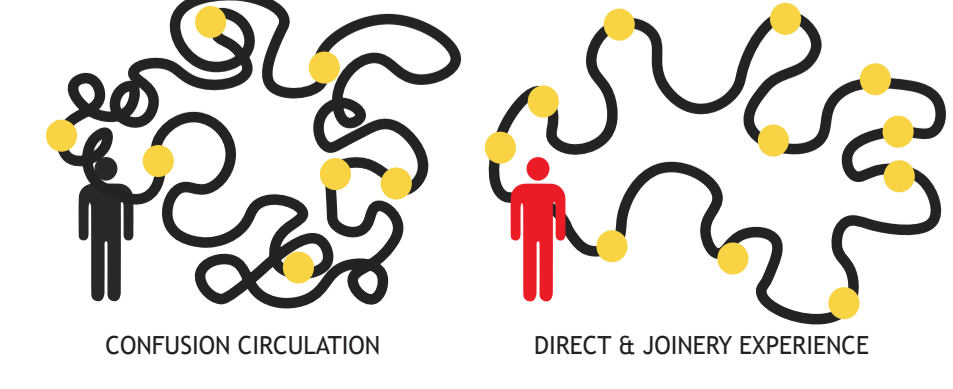
"LANDSCAPE IMMERSION" IS A TERM COINED TO DESCRIBE EXHIBITS IN WHICH VISITORS SHARE THE SAME LANDSCAPE (BUT NOT THE SAME AREA) WITH THE ANIMALS.



1 USER EXPERIENCE



"AN ANIMAL CANNOT BE ISOLATED, EVEN CONCEPTUALLY, FROM THE PARTICULAR ENVIRONMENT TO WHICH IT HAS BECOME ADAPTED DURING EONS OF GEOLOGIC TIME WITHOUT A SERIOUS MISUNDERSTANDING OF ITS TRUE NATURE"
-MARY AKELEY (1936)



LANDSCAPE STIMULATION



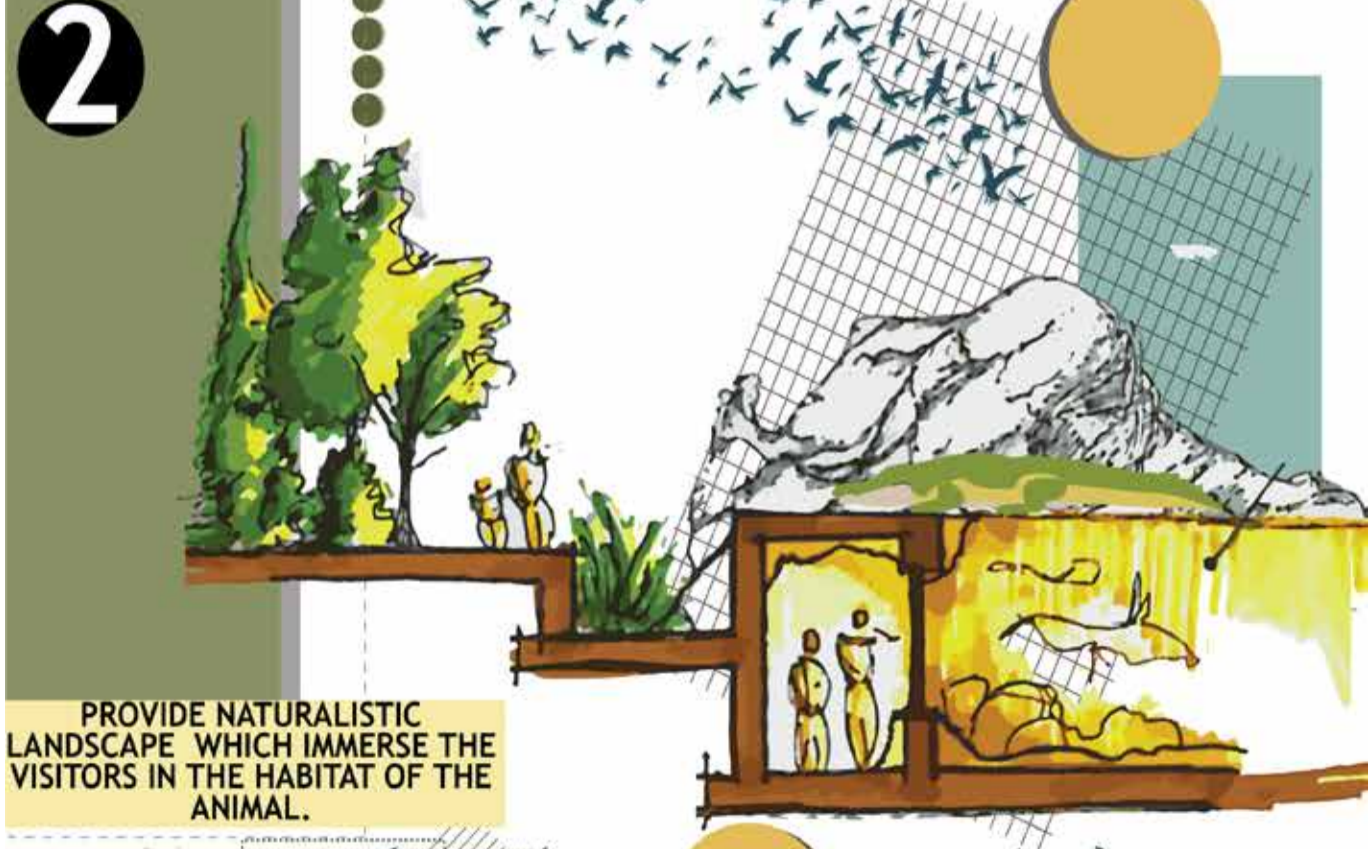
CONTINUITY

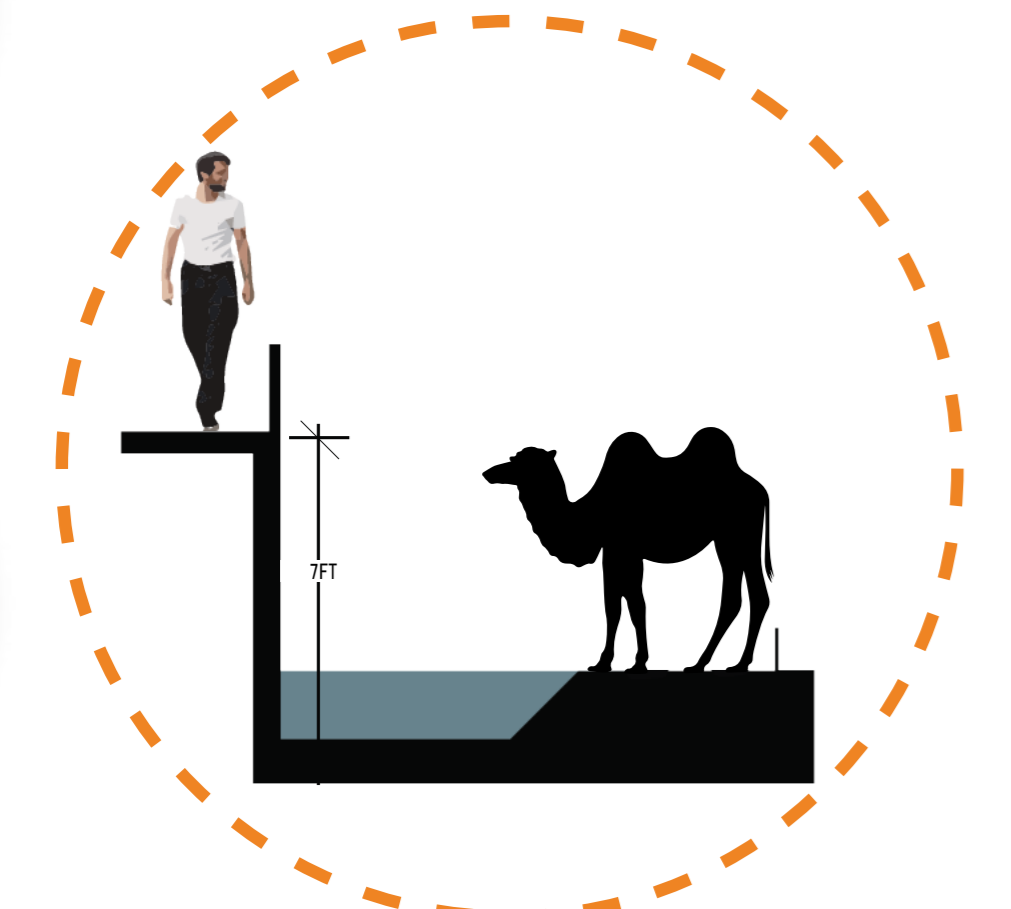


CONSISTENCY



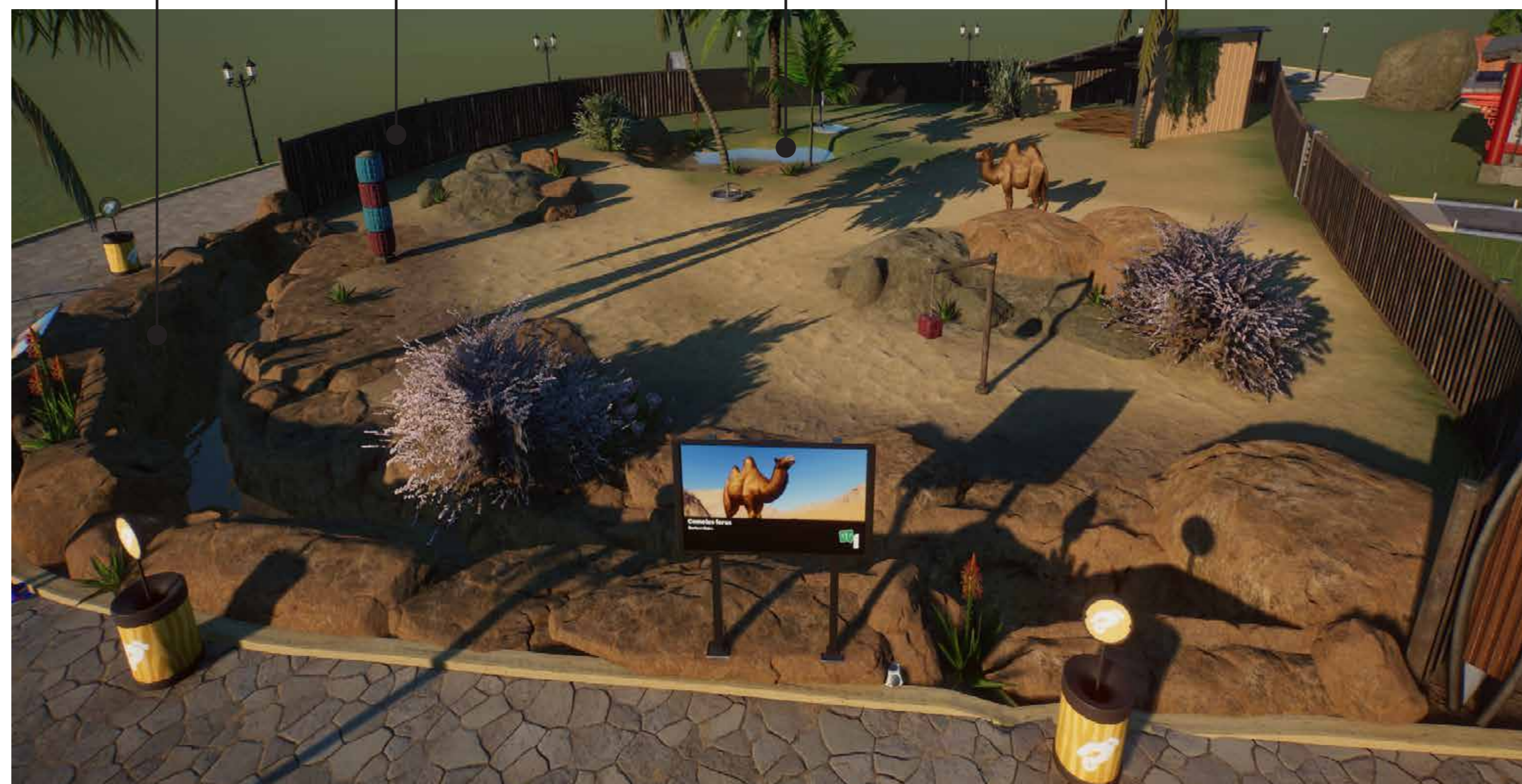
SUPPORTING CONCEPTS





SECTION A-A

WET MOAT
WOODEN BARRIER
POND
FEEDING CHAMBER



ISOMETRIC VIEW OF THE CAMEL EXHIBIT FROM VISITOR VIEWING POINT (ZONE I)



VIEWS FROM SHELTER OF CAMEL EXHIBIT



VIEWS FROM VIEWING POINTS OF CAMEL EXHIBIT

TRAMP MONORAIL TERMINAL

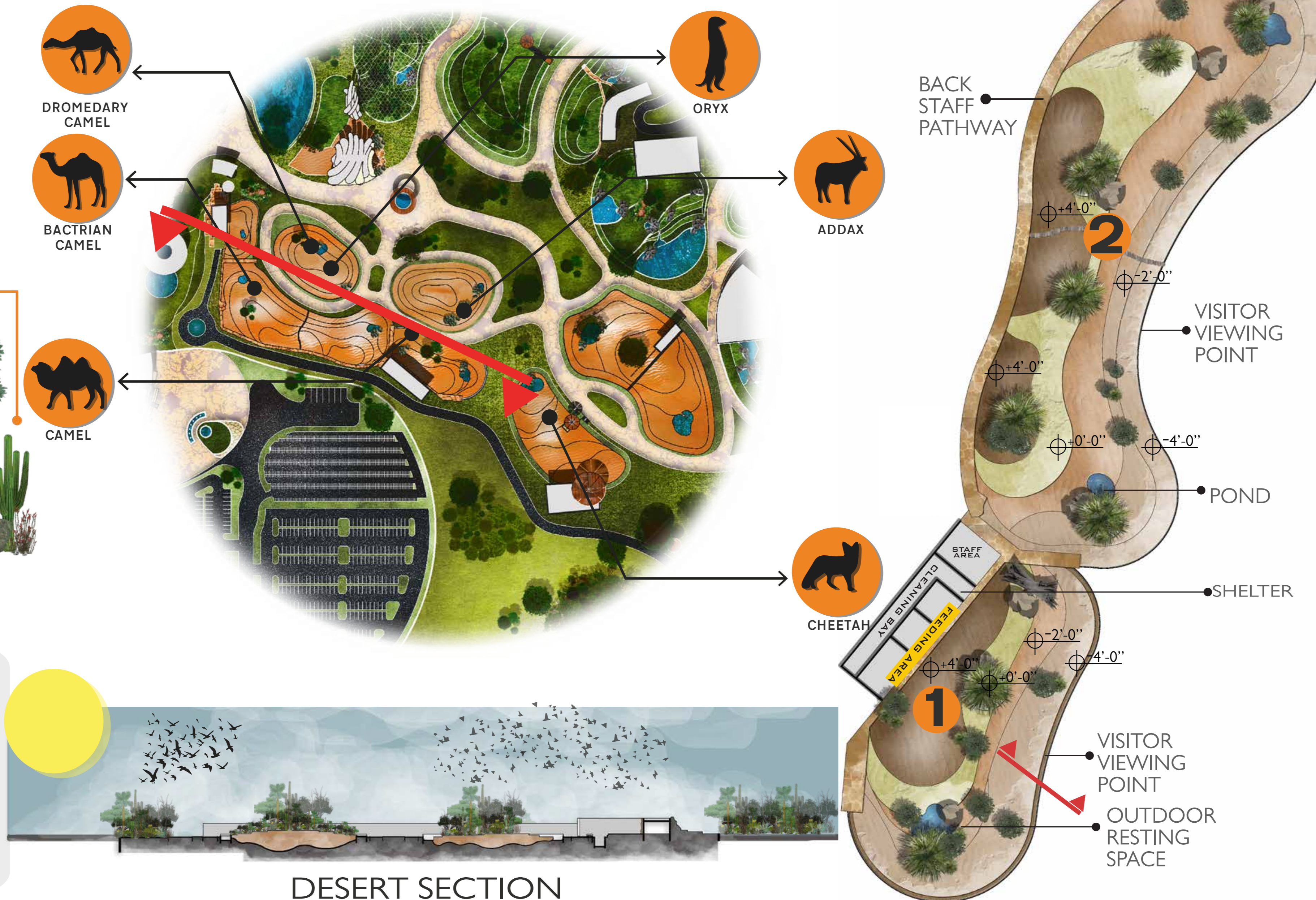
ALOE VERA, AMERICAN AGAVE, BARREL CACTUS, BEAVERTAIL CACTUS, BISHOP'S CAP CACTUS, CACTUS, DEAD JOSHUA TREE, DESERT GRASS, LEAFLESS TREE, REALY, TROM, PALM TREES, VELVET MESQUITE



FOLIAGE BELONGING TO THE DESERT BIOME GOES IN THIS CATEGORY.

DESERT

DESERTS ARE EXTREMELY DRY ENVIRONMENTS THAT ARE HOME TO WELL-ADAPTED PLANTS AND ANIMALS. THE MAIN TYPES OF DESERTS INCLUDE HOT AND DRY DESERTS, SEMI-ARID DESERTS, COASTAL DESERTS, AND COLD DESERTS. THIS BIOME HAS A LAYER OF SOIL THAT CAN EITHER BE SANDY, GRAVELLY, OR STONY, DEPENDING ON THE TYPE OF DESERT. DESERTS USUALLY GET AT MOST 50 CENTIMETERS OF RAINFALL A YEAR, AND THE ORGANISMS THAT LIVE IN DESERTS ARE ADAPTED TO THIS EXTREMELY DRY CLIMATE. THE LONG, DRY SUMMERS IN SEMI-ARID DESERTS ARE FOLLOWED BY WINTERS WITH SOME RAIN. SEMI-ARID DESERTS ARE FOUND IN NORTH AMERICA, GREENLAND, EUROPE, AND ASIA.



DESERT SECTION

CAMEL



ARCHITECTURE AND LIFESTYLE

- DOMESTIC BACTRIAN CAMELS (OR CAMELUS BACTRIANUS) ARE LARGE UNGULATES NATIVE TO CENTRAL ASIA. THEY HAVE TWO HUMPS AND THICK SANDY-COLORED WOOL COATS, ALTHOUGH THEY CAN ALSO BE DARK BROWN OR WHITE.
- THE DOMESTICATED CAMELS ARE NOT ENDANGERED OR THREATENED, AND THE POPULATION REMAINS

HERBIVOROUS
LENGHT : 6.6FT TALL AT THE SHOULDER WITH AN EXTRA 12IN OF HEIGHT ADDED BY THEIR HUMPS, & MALES ARE SIGNIFICANTLY LARGER THAN FEMALES.

FOOD ENRICHMENT: GRAZING BALL FEEDER-HANGING GRAZER FEEDER.SMALL BARREL FEEDER
HABITAT ENRICHMENT: GRAB BALL-HERB SCENT MARKER,ICE BLOCK-RUBBING PILLAR-SCOTS PINE/TAMARIND SCRATCHING TREE.



VEGETATION TYPE THAT GROWS UNDER HOT, SEASONALLY DRY CLIMATIC CONDITIONS AND IS CHARACTERIZED BY AN OPEN TREE CANOPY (I.E., SCATTERED TREES) ABOVE A CONTINUOUS TALL GRASS UNDERSTORY (THE VEGETATION LAYER BETWEEN THE FOREST CANOPY AND THE GROUND). SAVANNAS ARE A TRANSITIONAL BIOME, NOT REALLY A FOREST AND NOT REALLY A DESERT – JUST SOMEWHERE IN BETWEEN. THIS HABITAT IS HOME TO MANY DIFFERENT SPECIES OF PLANTS AND ANIMALS AROUND THE WORLD, AND IN AFRICA IT IS HOME TO THE LARGEST LAND MAMMAL IN THE WORLD – THE AFRICAN ELEPHANT.

SAVANNAH

SAFARI JEEP TERMINAL

TRAMP MONORAIL TERMINAL

FOLIAGE BELONGING TO THE SAVANNAH BIOME GOES IN THIS CATEGORY.



ACACIAS (THOM), BAOBAB TREE, CAMEL THORN (SLICE), AURORA DEIGNS, JARRAH TREE, KAROO THORN, QUEEN PALM, RAIN TREE, SAL TREE, UMBERALLA THRON



ELEPHANT



ARCHITECTURE AND LIFESTYLE

- SIZE OF ENCLASURE SHOULD BE HUGE BECAUSE OF MAMMOTH SIZE OF THE ANIMAL.
- OBJECTS OF PLAYFUL NATURE, FURNITURE & VEGETATION SHOULD BE PRESENT.
- ELEPHANTS LOVE TO SWIM, THUS A HUGE WATERBODY SHOULD BE PRESENT.

HERBIVOROUS SPECIES: LARGEST MAMMAL
 LENGTH : 18FT-21FT
 WEIGHT: 100KG WHEN BORN

MIN BARRIER HEIGHT: 14FT. WIDTH-13FT.
 35 INCH OVERHANGS AT AN ANGLE OF 35-45 DEGREE
 WET MOAT SPEC. 26 FT WIDE, 16FT DEEP.
 PREFERABLY V-SHAPED
 AREA-MIN AREA REQUIRED FOR 1:1 ANIMAL-10763SQFT.
 1614 SQFT PRE ADDITIONAL ANIMAL

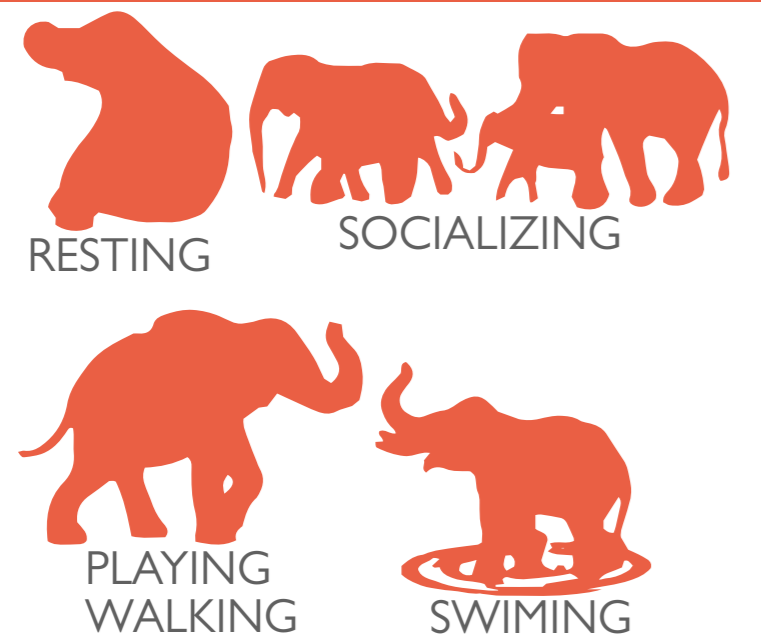
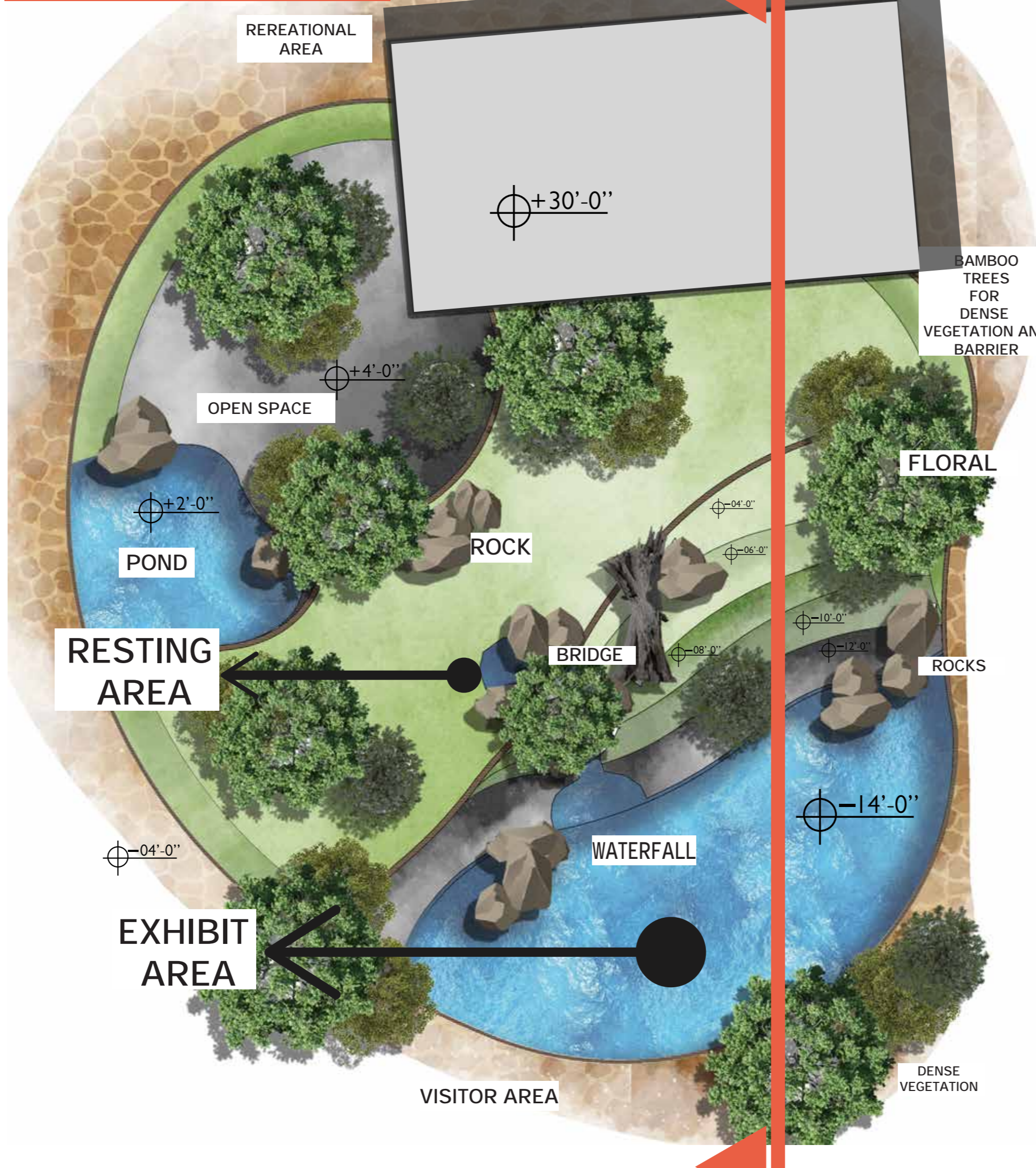
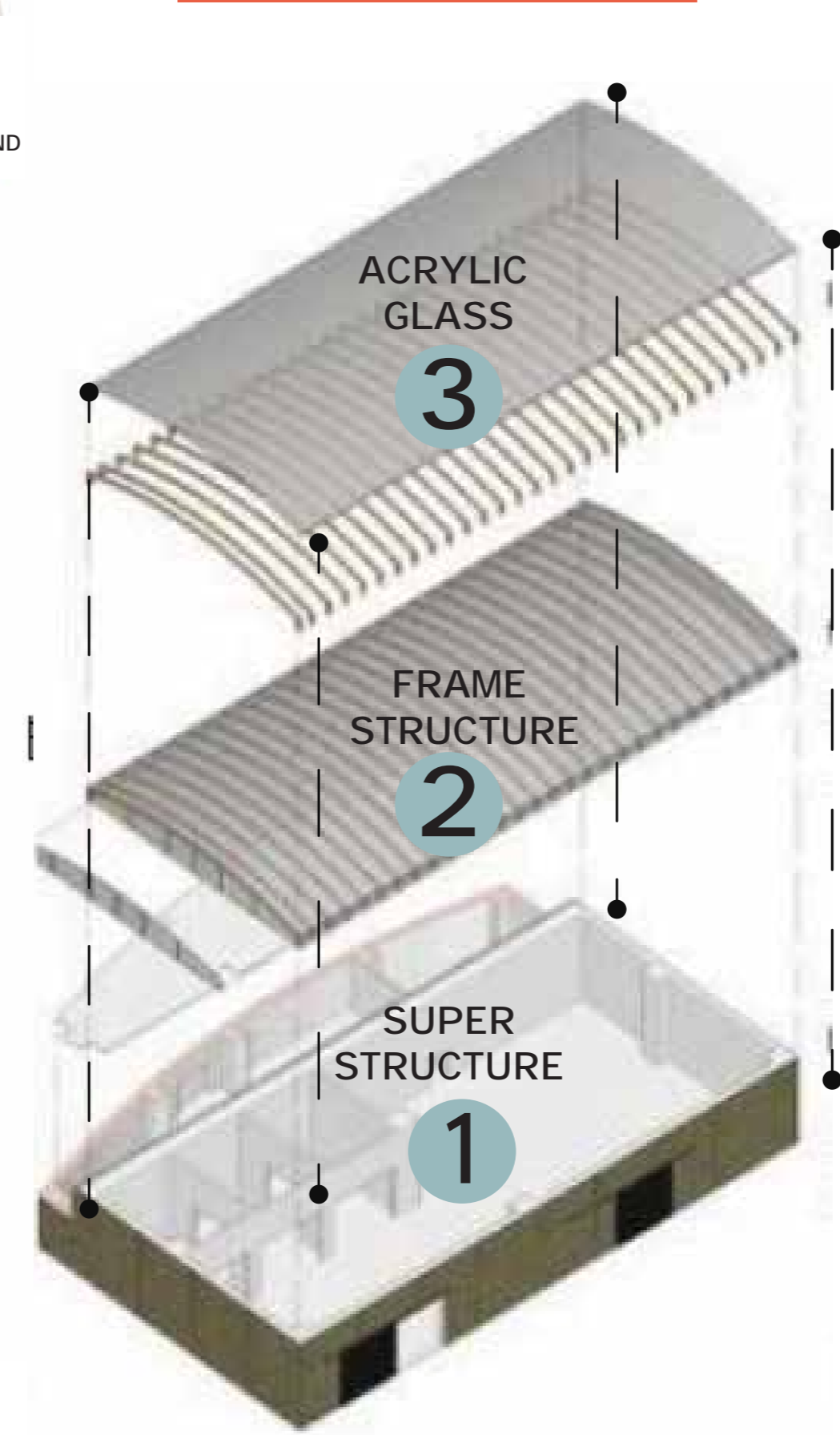


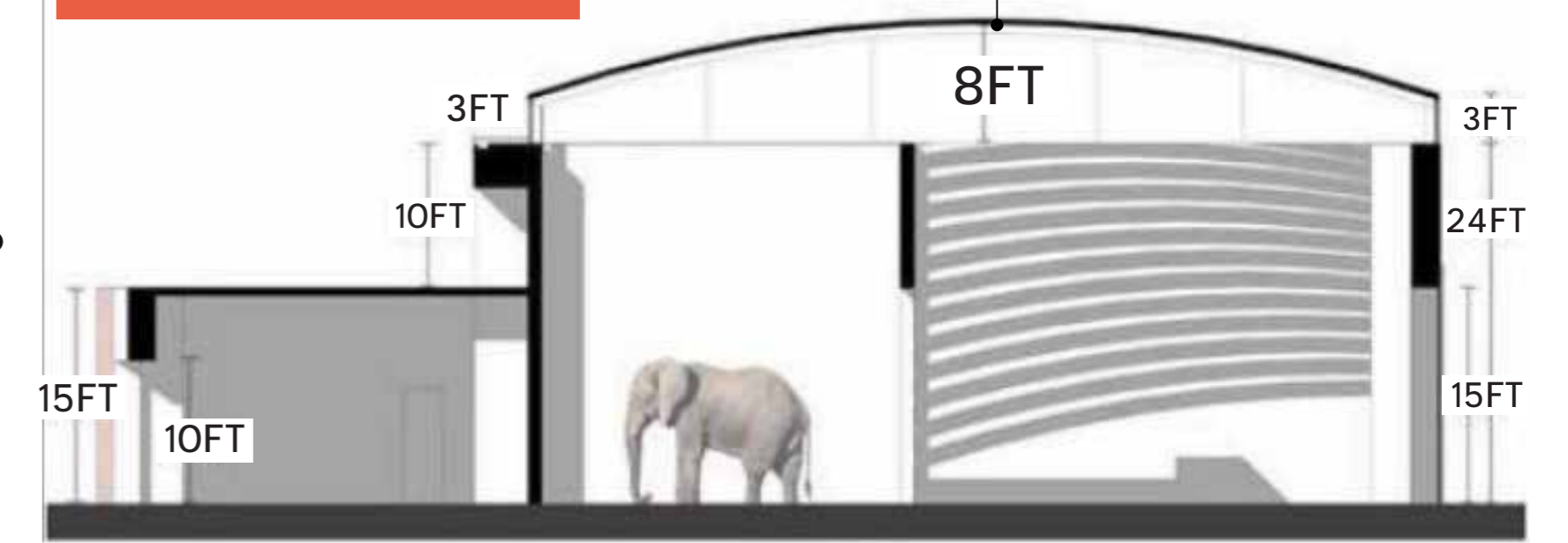
EXHIBIT PLAN



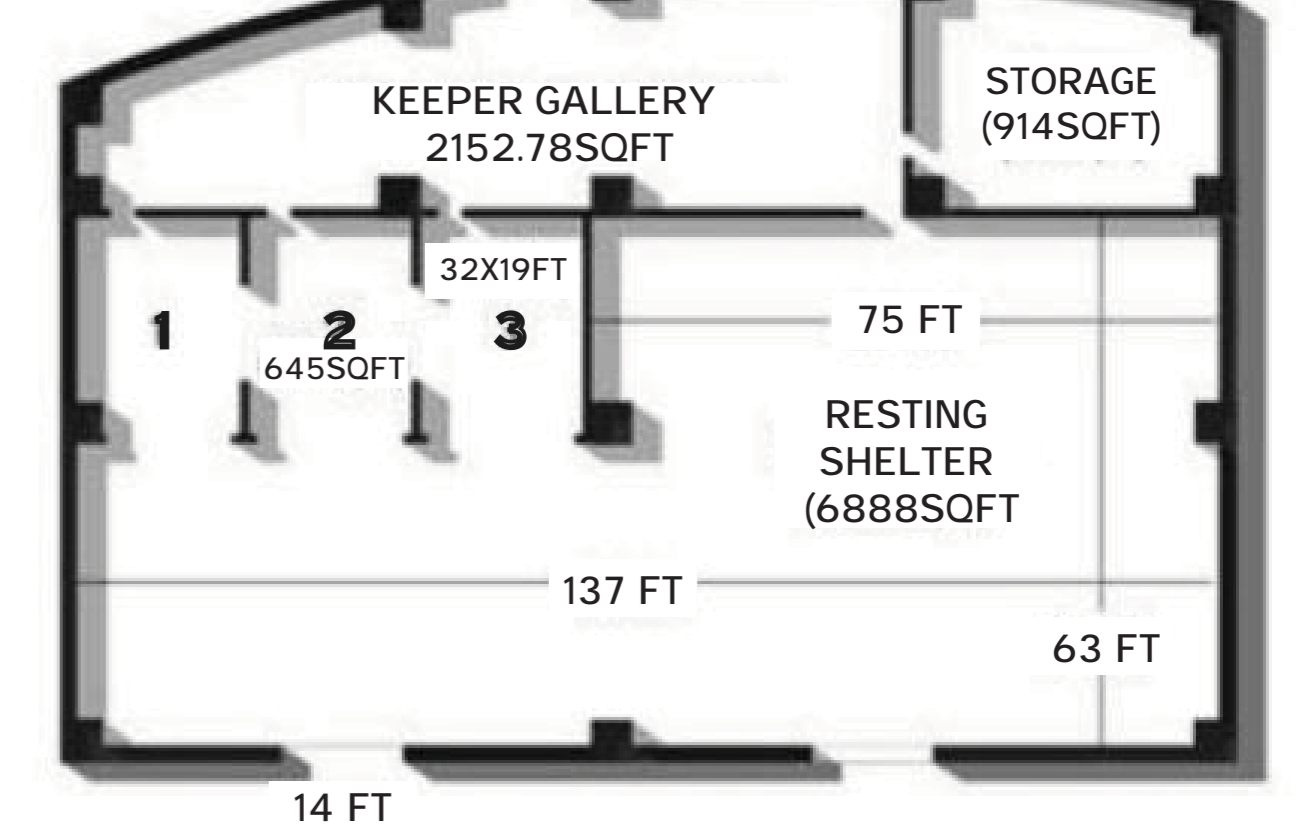
SECTION A-A"

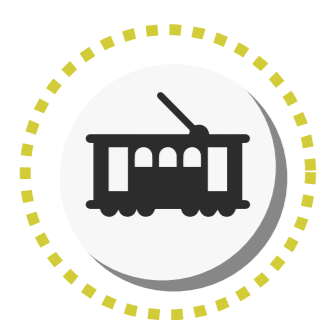


SECTION



PLAN





TRAMP MONORAIL TERMINAL

AUSTRALIAN

HERE ARE THREE MAJOR BIOMES IN AUSTRALIA. EACH HAS ITS OWN ORGANISMS AND CLIMATE. THIS CONSISTS OF A CLOSED-CANOPY RAIN FOREST OR EUCALYPTUS FORESTS WITH MOUNTAIN ASH AND GUM TREES. THE COLD TROPICAL RAINFORESTS IN THE MELBOURNE AREA WERE SPECTACULAR. MARSUPIALS INCLUDE: KOALAS, OPOSSUMS, PLATYPUS, FLYING FOXES, AND LYRE BIRDS. THIS IS TYPICALLY, A GRASSLAND OR WOODLAND AREA. INHABITANTS INCLUDE: EMUS, RED KANGAROOS, RABBIT BANDICOOTS, AND PARROTS. THIS AREA IS TYPICALLY BARREN OF VEGETATION AND DESERT VARIETIES OF EUCALYPTUS AND ACACIA. ANIMALS LIVING HERE INCLUDE: THE MARSUPIAL MOLES, DEVIL LIZARDS, AND PARAKEETS

FOLIAGE BELONGING TO THE AUSTRALIAN BIOME GOES IN THIS CATEGORY.



ACACIAS, ALEXANDER PALM, BLACK WATTLE BOAB, BULRUSHES, BUNYA PINE TREE, CASUARINA, COCONUT PALM, COMMON REED (FLUSH), LOE VERA, AMERICAN AGAVE, BARREL CACTUS, BEAVERTAIL CACTUS, BISHOP'S CAP CACTUS, CACTUS, DEAD JOSHUA TREE, DESERT GRASS, LEAFLESS TREE, RELAY, TROM, PALM TREES, VELVET MESQUITE

RED PANDA



ARCHITECTURE AND LIFESTYLE

- FOOD ENRICHMENT: FORAGE BOX ENRICHMENT · DOG BALL · TREE FORAGER
- HABITAT ENRICHMENT: SMALL BALL · RUBBING PAD · CARDBOARD BOX · WIND CHIMES · HERB SCENT MARKER · SMALL ICE BALL ENRICHMENT · GIFT BOX ENRICHMENT · SMALL BALL · COLOURFUL · RUBBER DUCK
- RED PANDA DOESN'T BENEFIT FROM SHARING SPACE WITH OTHER SPECIES.

HERBIVOROUS: SMALL MAMMAL
LENGTH : 1FT-2FT
ARBOREAL LIFESTYLE

FENCE GRADE 2 CLIMB PROOF
FOLIAGE: BAMBOO, MAPLE LEAVES AND BARK,
FRUIT & VEGETABLES
BIOME: TAIGA & TEMPERATE



BAMBOO



INSECTS



FLOWERS



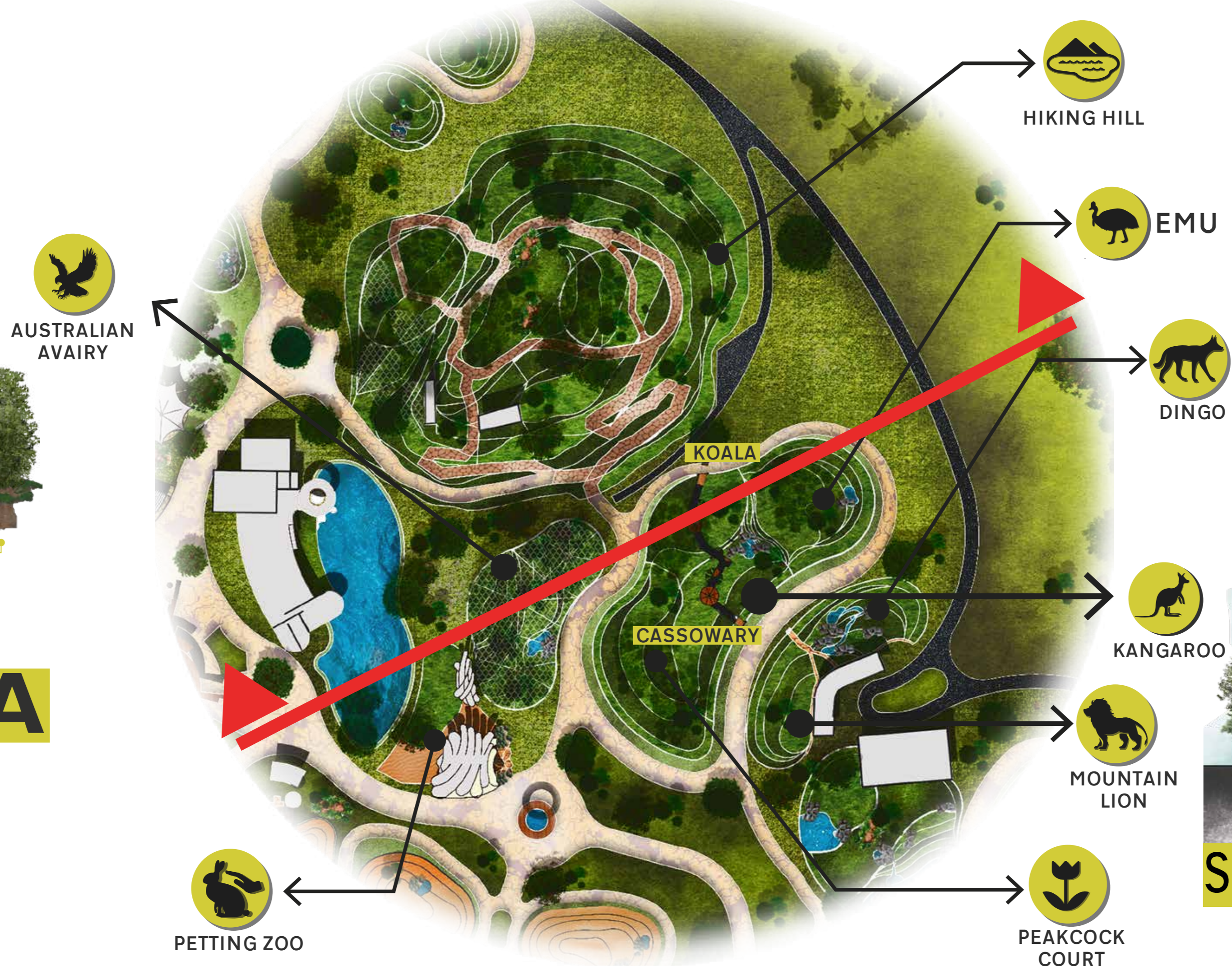
FRUITS



EGGS



AUSTRALIAN SECTION



MATERIAL



STRUCTURE

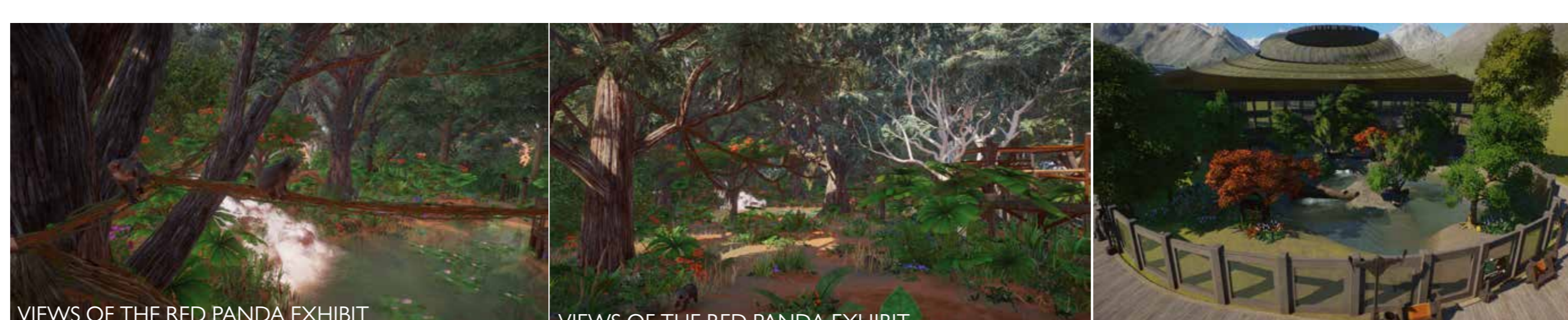
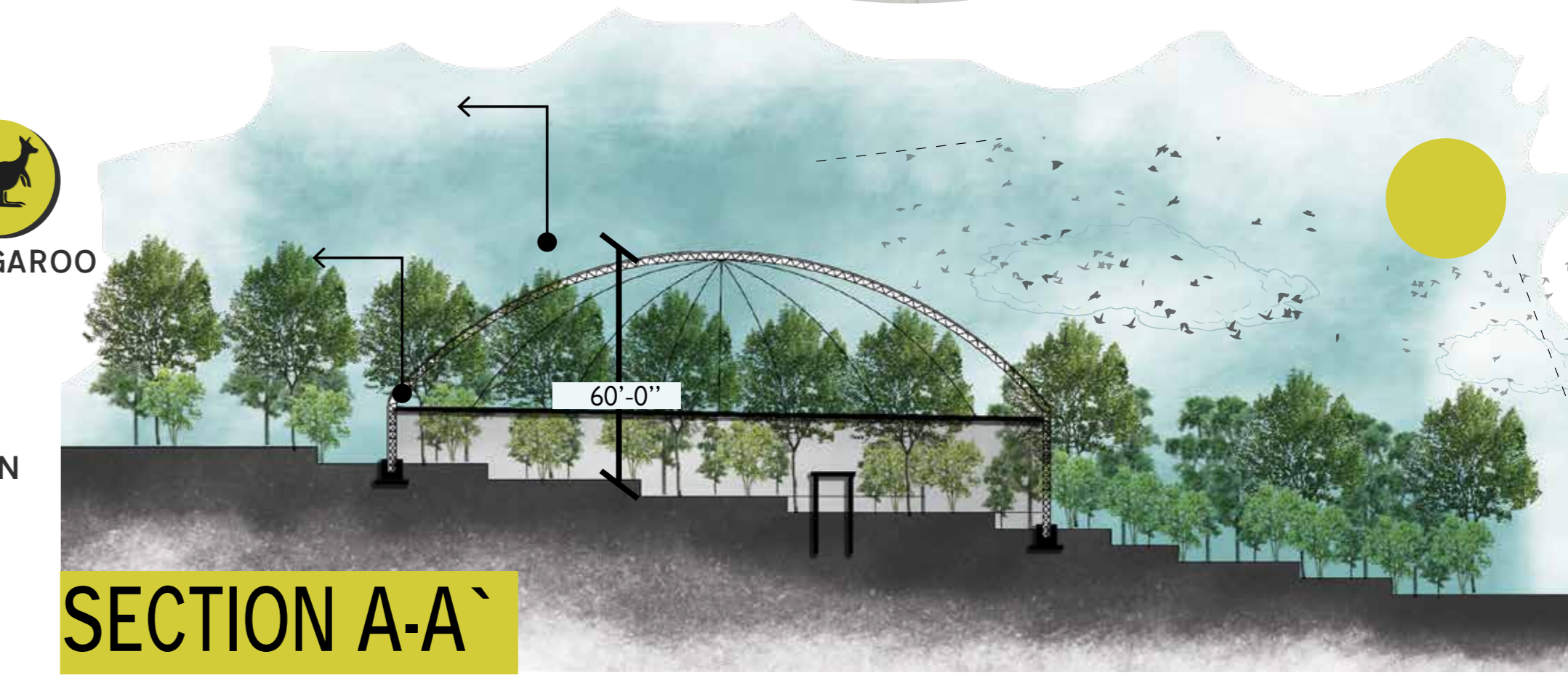
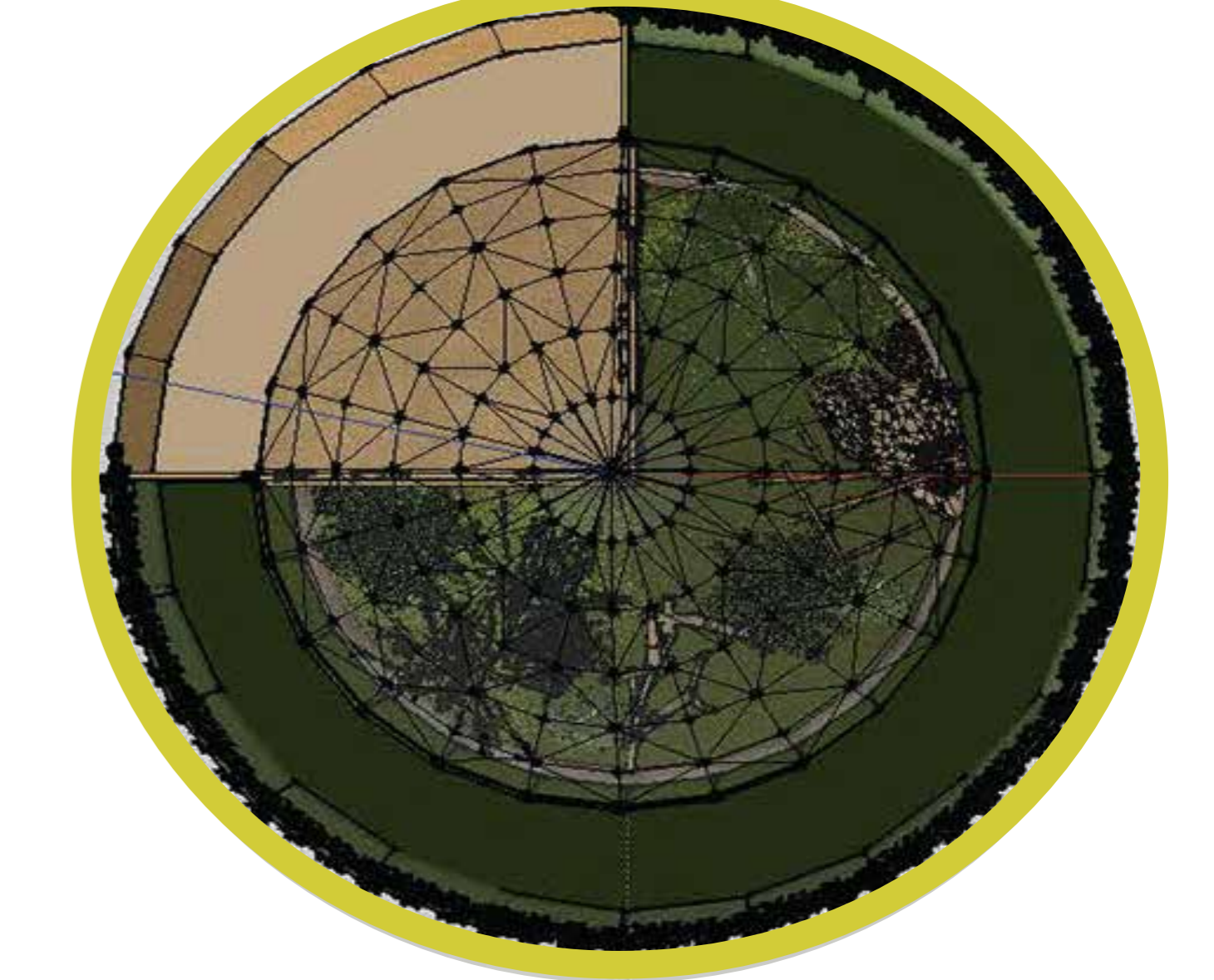
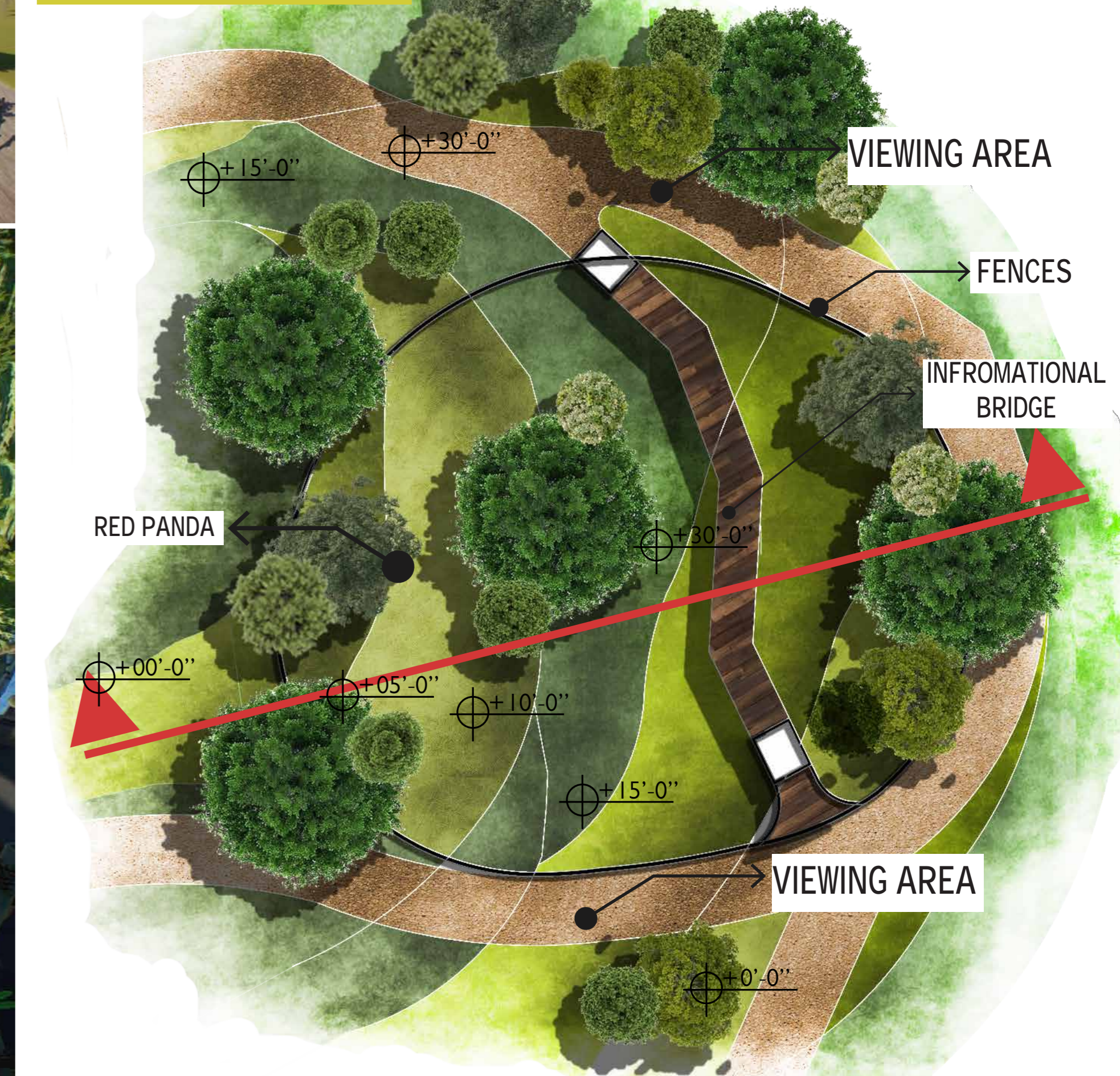


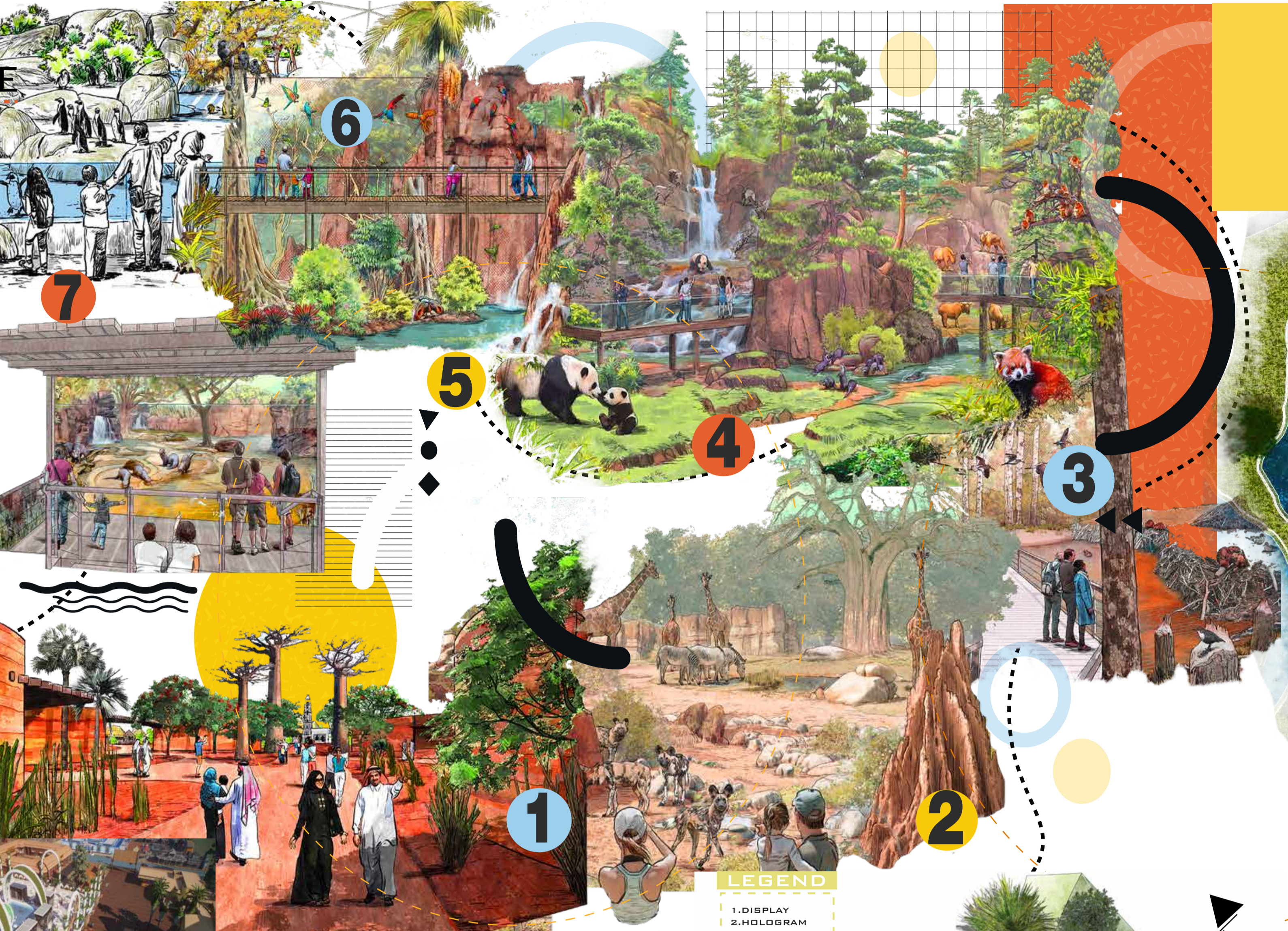
EXHIBIT PLAN



IMMERSIVE EXPERIENCE JOURNEY

THE DESIGN OF THE ZOO ALSO OPTIMIZES THE HUMAN EXPERIENCE. DIFFERENT REGIONS FOLLOWED BY A TRAIL WILL GIVE VISITORS A VARIETY OF PERSPECTIVES INTO THE HABITAT, AND ALLOW FOR A FULL SENSE OF IMMERSION WITHIN NATURE. BARRIERS AND FUNCTIONAL SPACES ARE CAREFULLY HIDDEN OR INTEGRATED INTO THE LANDSCAPE, GIVING BOTH GUESTS AND THE ANIMALS A NATURAL, NON-DISTRACTING VIEWING CONDITION. ARCHITECTURE IS LIKE PORTRAITURE. TO DESIGN A HOME FOR SOMEONE IS LIKE CAPTURING THEIR ESSENCE, THEIR CHARACTER AND PERSONALITY IN BUILT FORM. THE PROJECT WILL ATTEMPT TO "INTEGRATE AND HIDE BUILDINGS" WITHIN THE LANDSCAPE. UPON ENTERING THE ZOO, VISITORS CAN EITHER ENTER A LARGE CENTRAL SQUARE ALLOWING THEM TO GET A GENERAL OVERVIEW OF THE LAYOUT OF THE PARK. FROM THIS CENTRAL ELEMENT, VISITORS CAN ACCESS DIFFERENT AREAS OF THE ZOO.

CENTRAL PLAZA



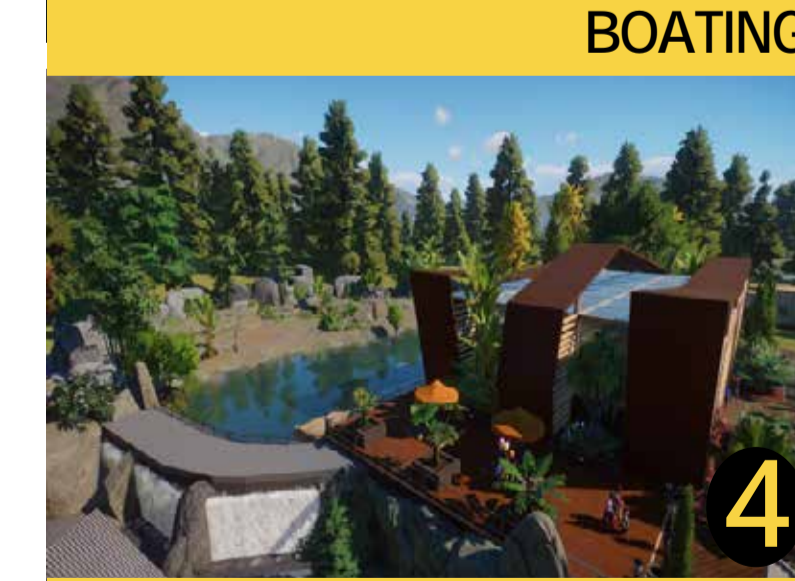
1 PLAYING GROUNDS



2 PICNIC SPACES



3 BOATING



4 RESTURANT LAKE SIDE



5 ENTRANCE BUILDING



6 CENTRAL PLAZA SQUARE



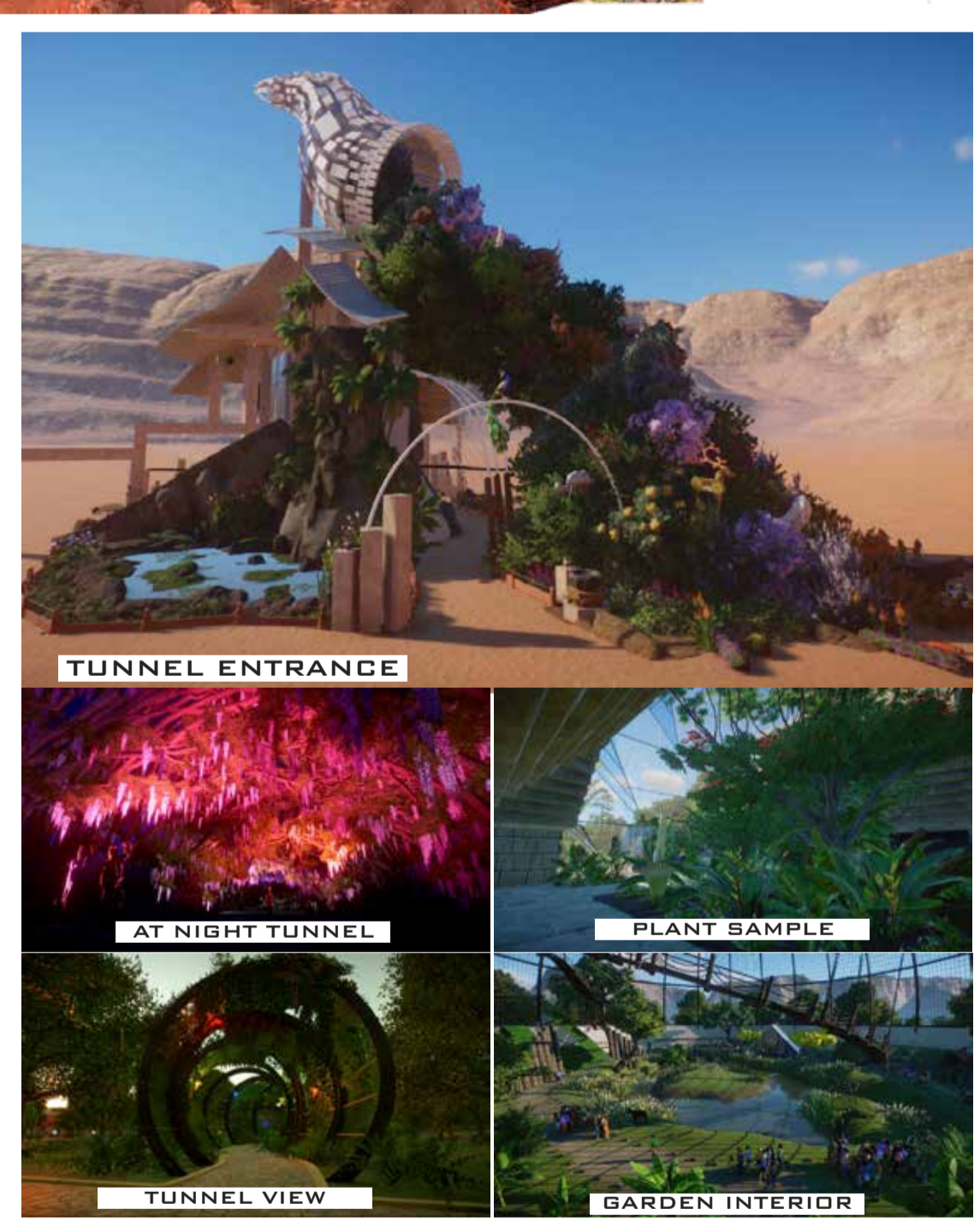
TUNNEL ENTRANCE



8 LAKE SIDE SITTING

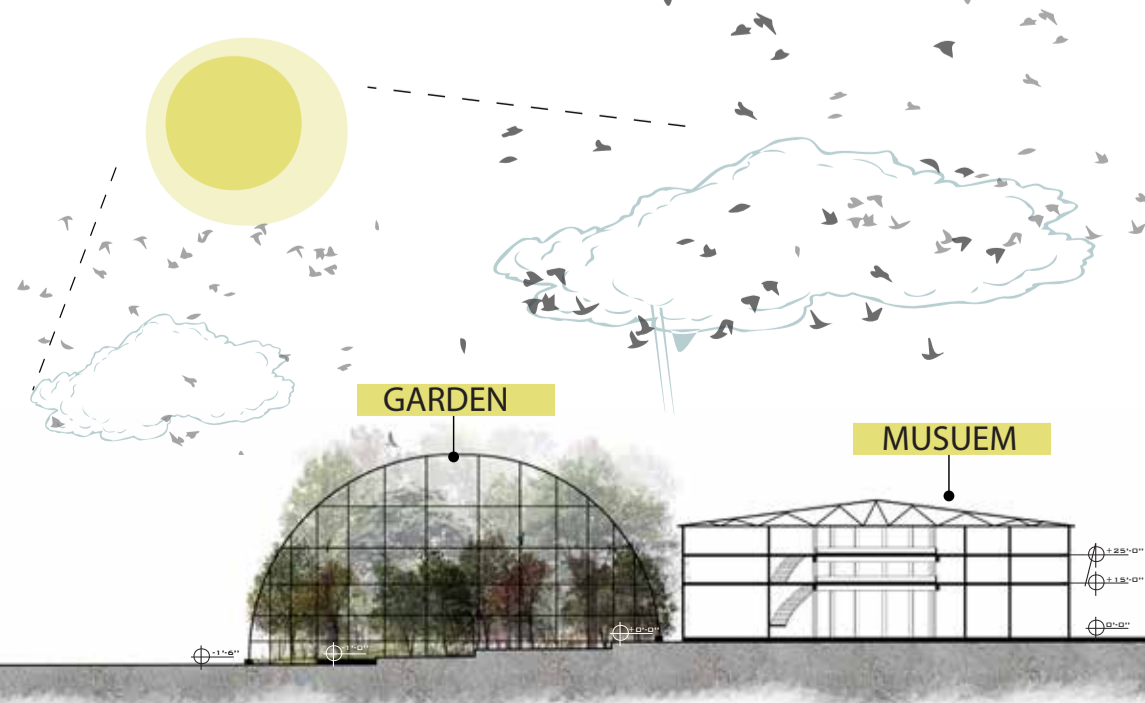
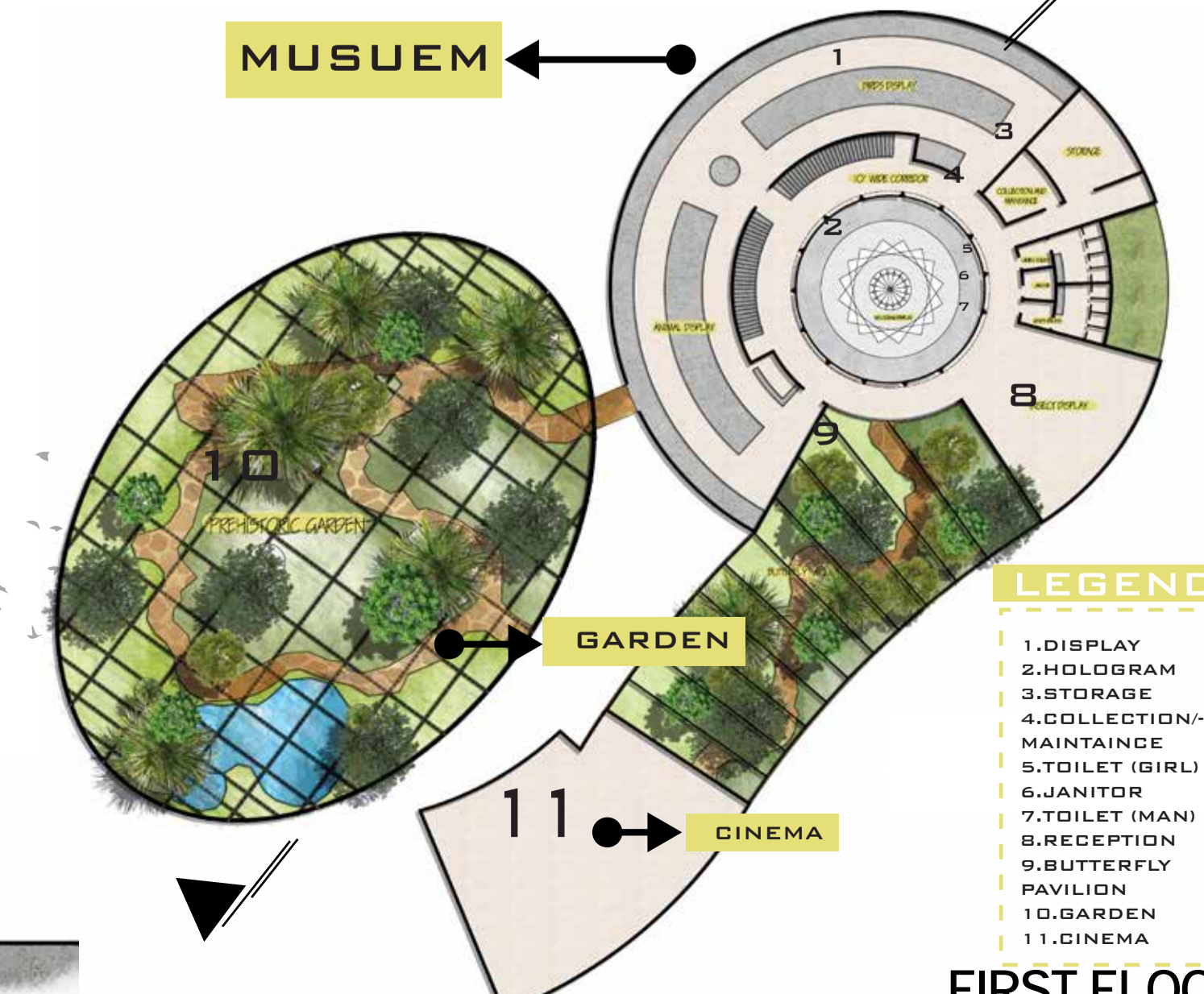
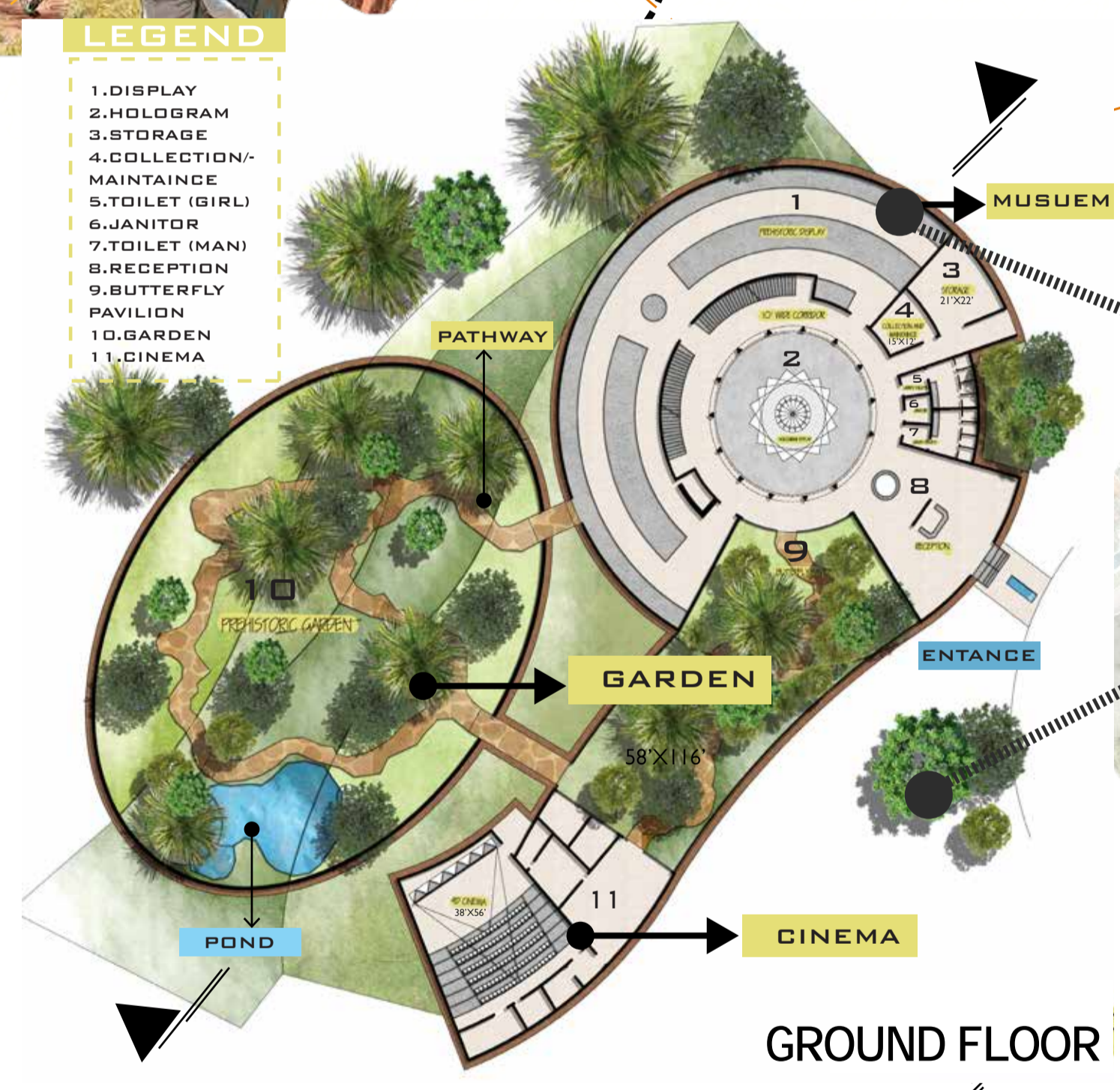


9 WATER FOUNTAIN



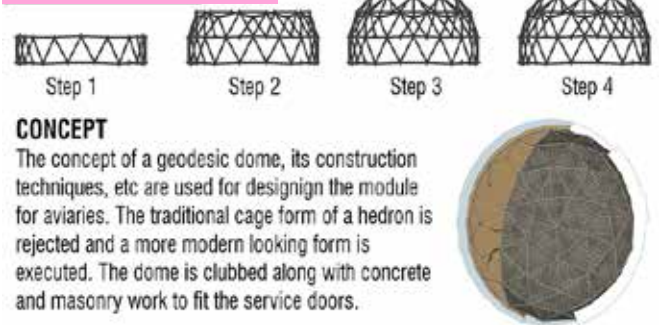
LEGEND

- 1. DISPLAY
- 2. HOLOGRAM
- 3. STORAGE
- 4. COLLECTION/MAINTAINANCE
- 5. TOILET (GIRL)
- 6. JANITOR
- 7. TOILET (MAN)
- 8. RECEPTION
- 9. BUTTERFLY PAVILION
- 10. GARDEN
- 11. CINEMA

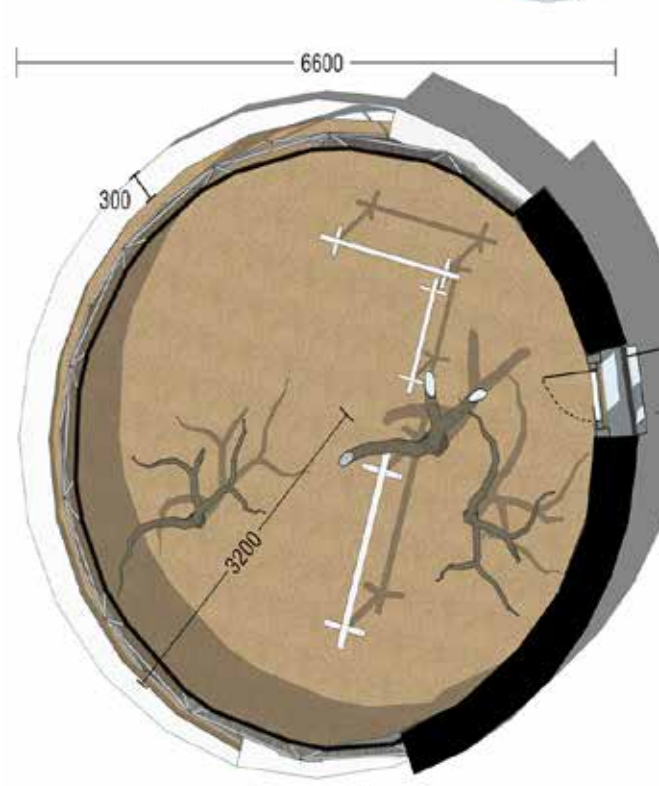


STRUCTURE

GEODESIC DOME

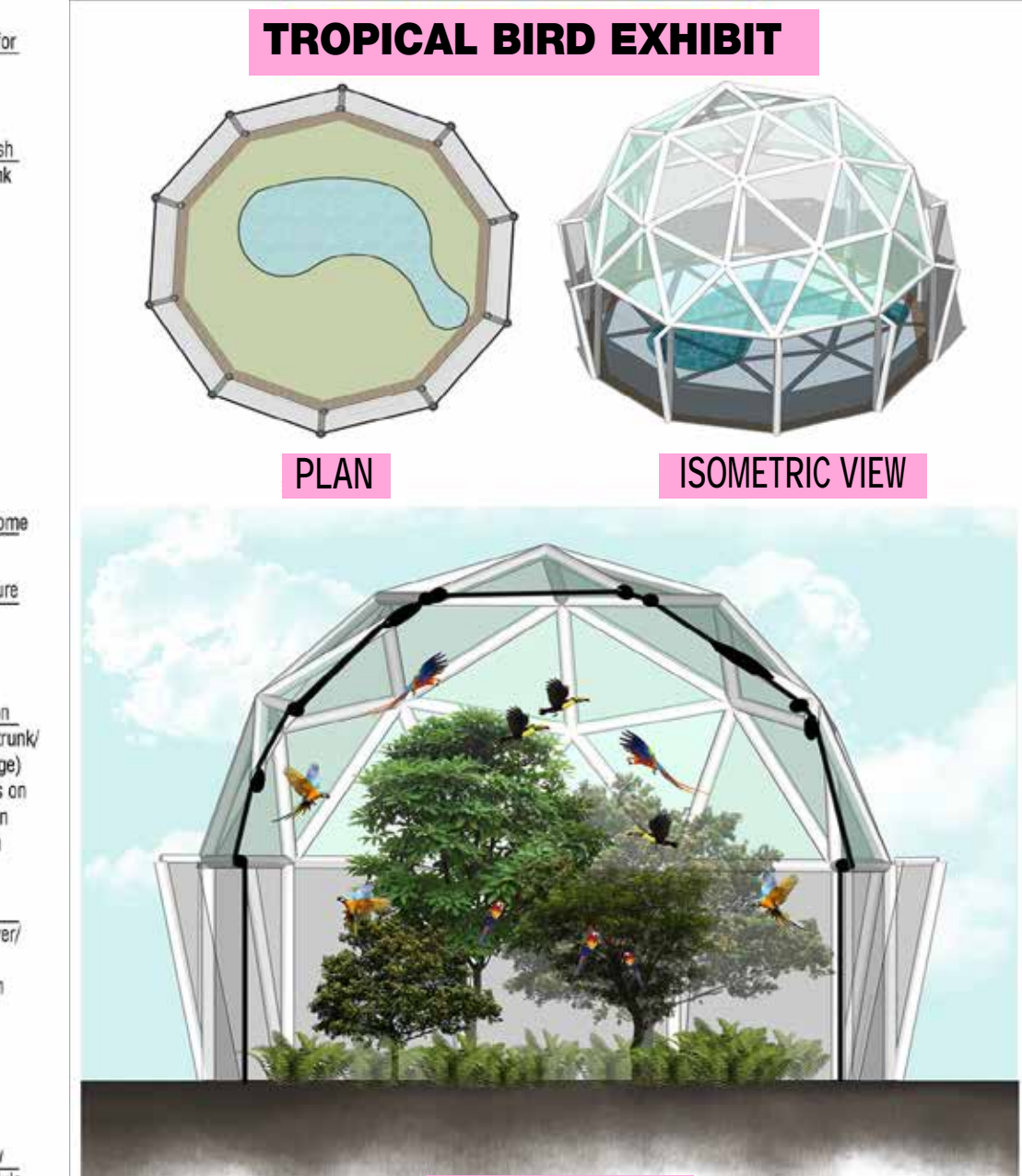
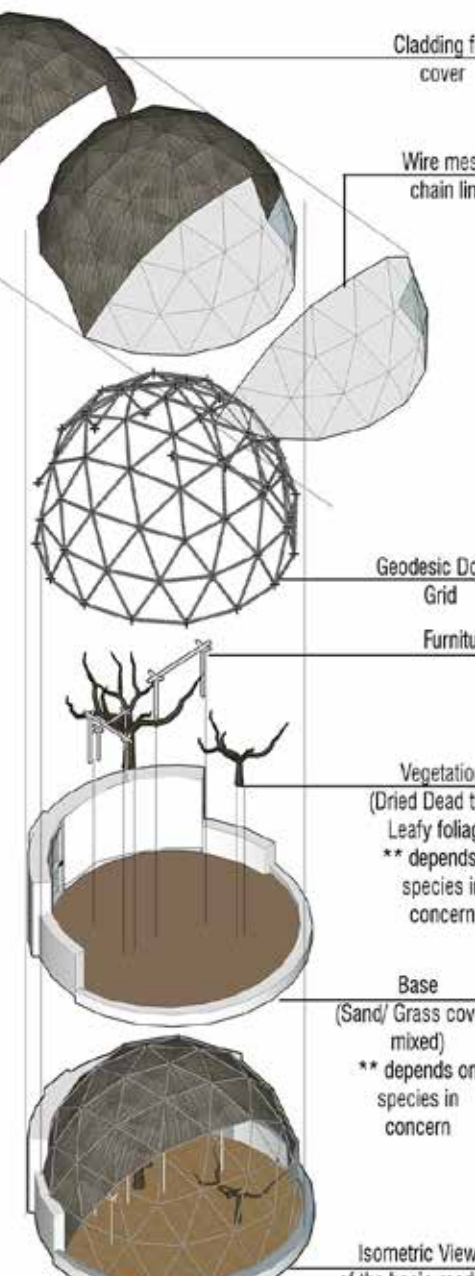


CONCEPT
The concept of a geodesic dome, its construction techniques, etc are used for designing the module for aviaries. The traditional cage form of a hedron is rejected and a more modern looking form is executed. The dome is slatted along with concrete and masonry work to fit the service doors.



SHELTER PLAN

ISOMETRIC VIEW



PLAN

ISOMETRIC VIEW

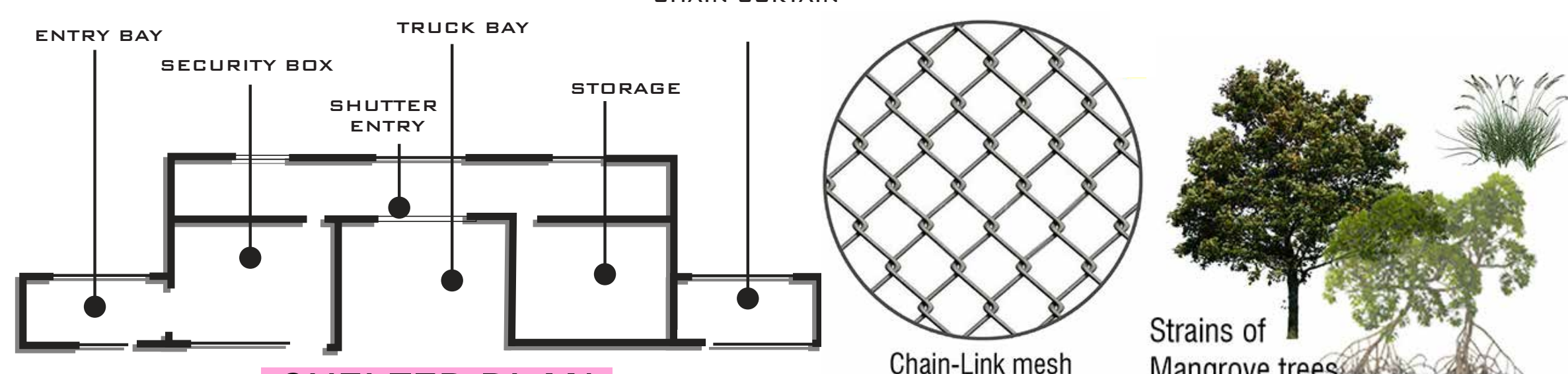
SECTION



SIDE ELEVATION

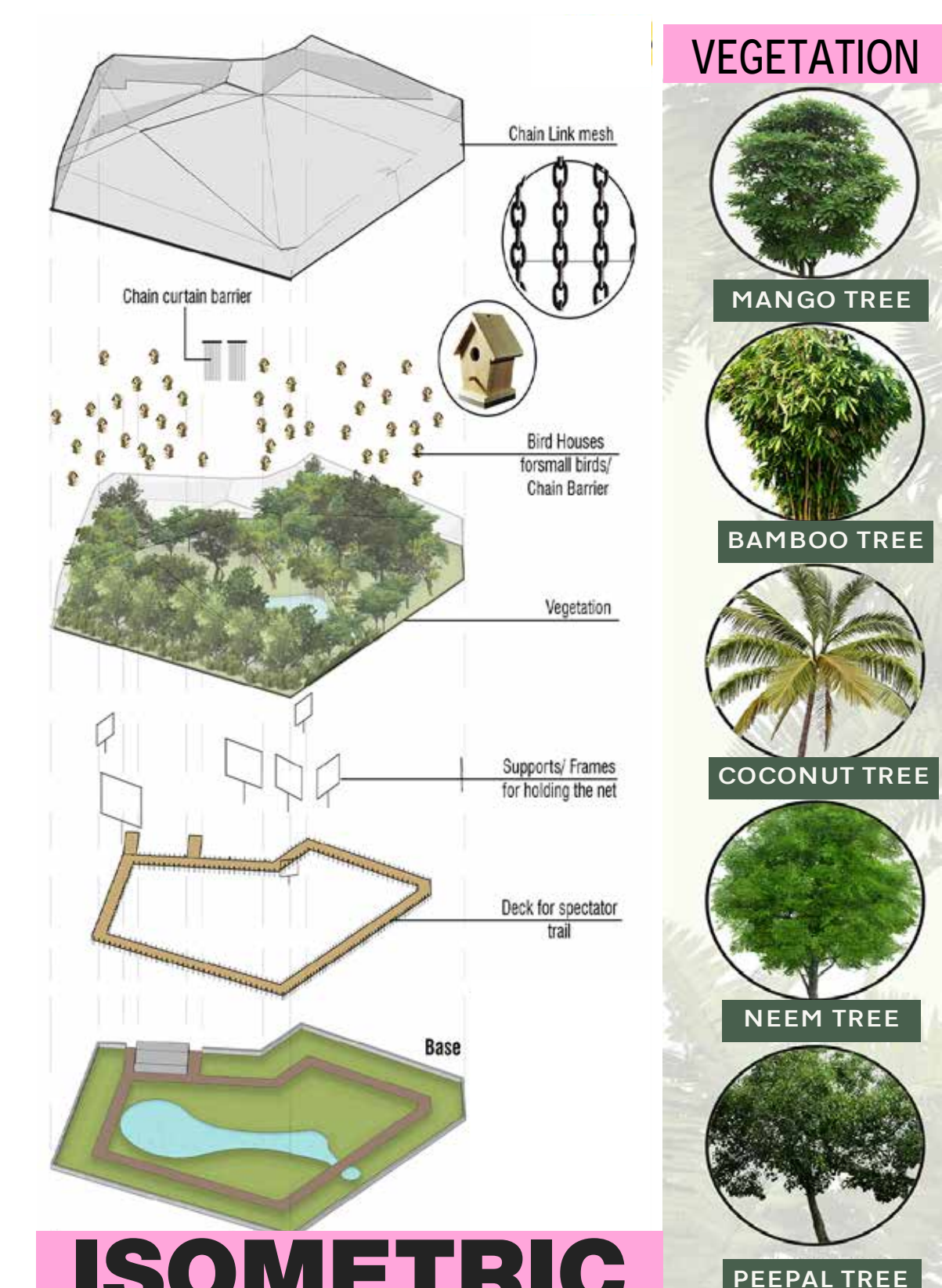
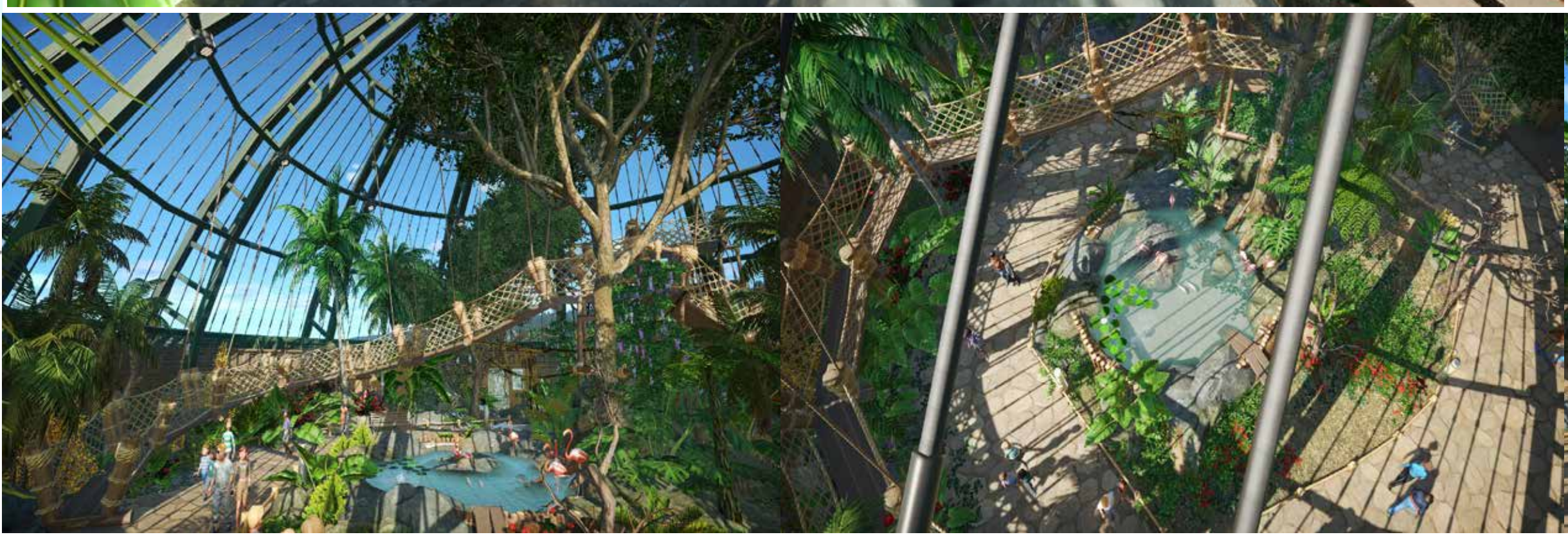
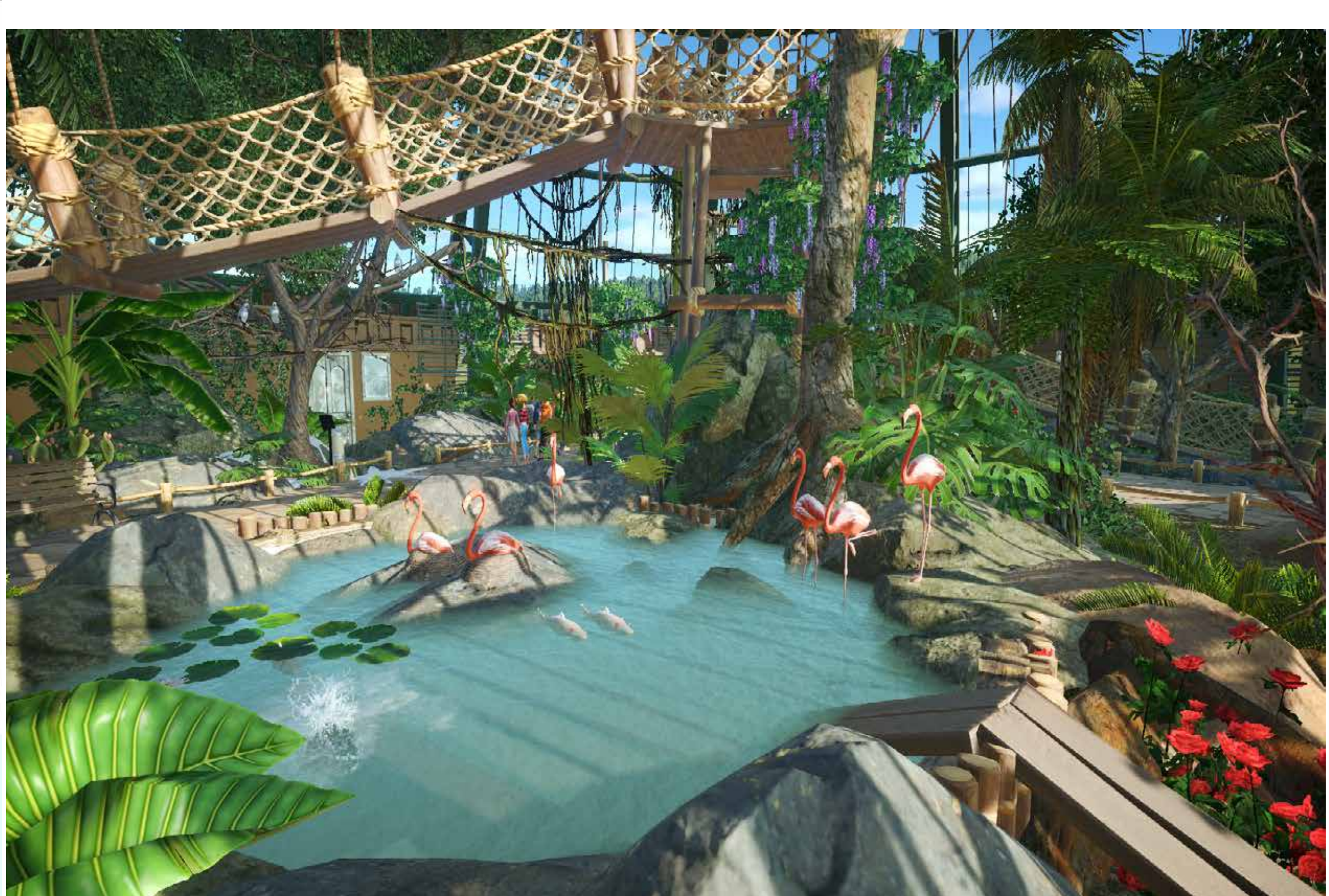
FRONT ELEVATION

SECTION



SHELTER PLAN

Chain-Link mesh (galvanized)
Strains of Mangrove trees

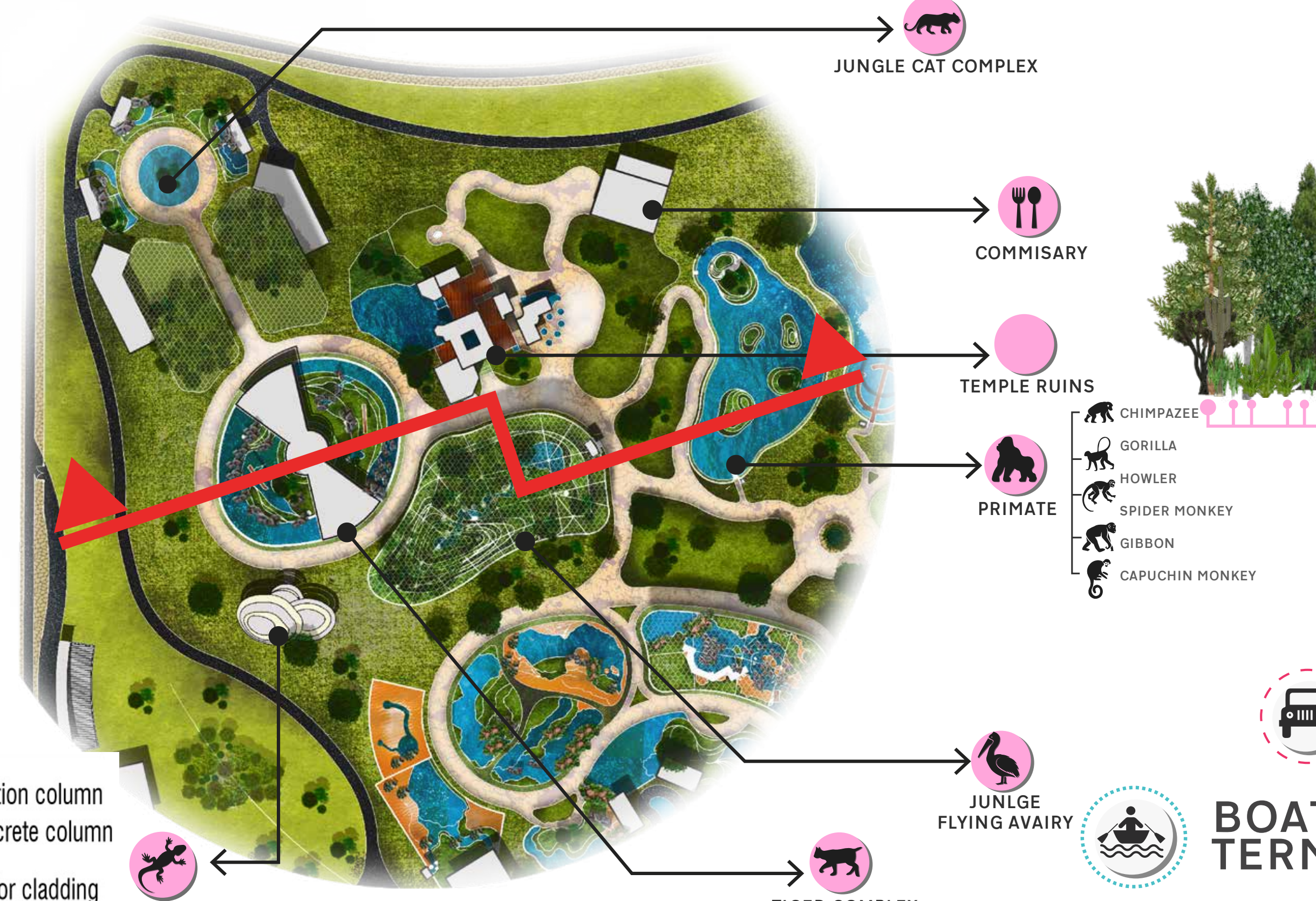
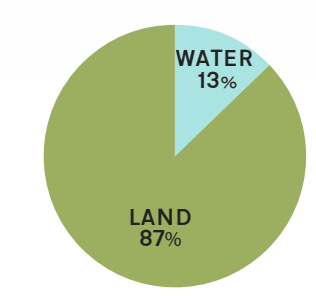


ISOMETRIC

VEGETATION



EXHIBIT PLAN



FOLIAGE BELONGING TO THE WETLAND BIOME GOES IN THIS CATEGORY



ANUBIAS HASTIFOLIA, OHIA' LEHUA, ACAI PALM, AFRICAN TEAK, ANUBIAS NANGI, ARAUCARIOXYLON, BANANA PLANT, BLACK LOCUST TREE, CASSAVA, CHILI PLANT, DEAD EGERIA, ELEPHANT EAR, GEIGER TREE



JUNGLE SECTION

JUNGLE BIRD AVAIRY

Steel I section column
Main Concrete column

Bamboo for cladding

Thatch layer acts as a shock absorber.

Clamps for attaching the bamboo

SAFARI JEEP TERMINAL

BOATING TERMINAL

CABLE CARS TERMINAL

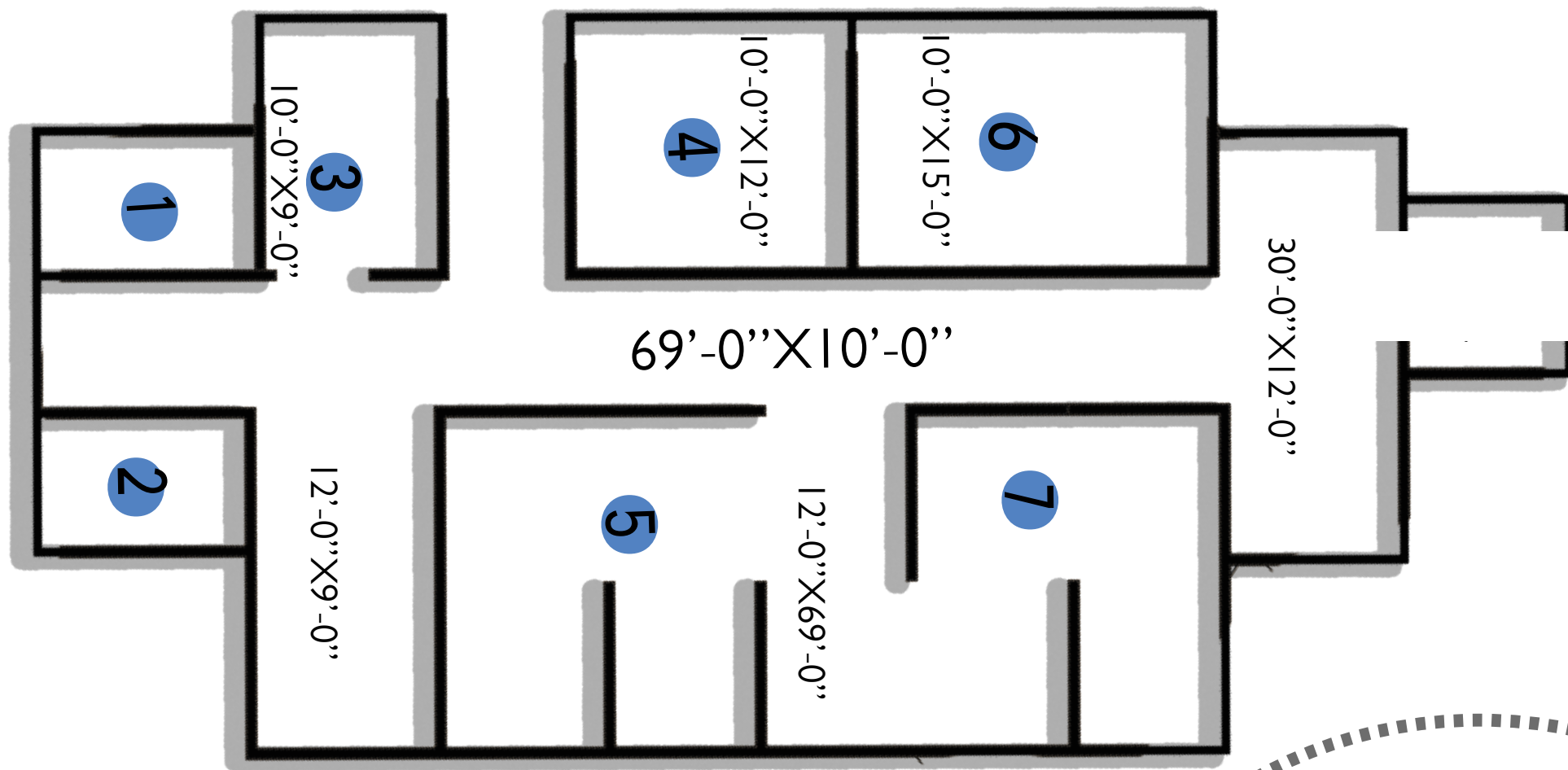
JUNGLE

THE TROPICAL RAINFOREST IS A HOT, MOIST BIOME WHERE IT RAINS ALL YEAR LONG. ... BECAUSE OF THE SMALL AMOUNT OF SUNLIGHT AND RAINFALL THESE PLANTS RECEIVE, THEY ADAPT EASILY TO HOME ENVIRONMENTS. THE BOTTOM LAYER OR FLOOR OF THE RAINFOREST IS COVERED WITH WET LEAVES AND LEAF LITTER.

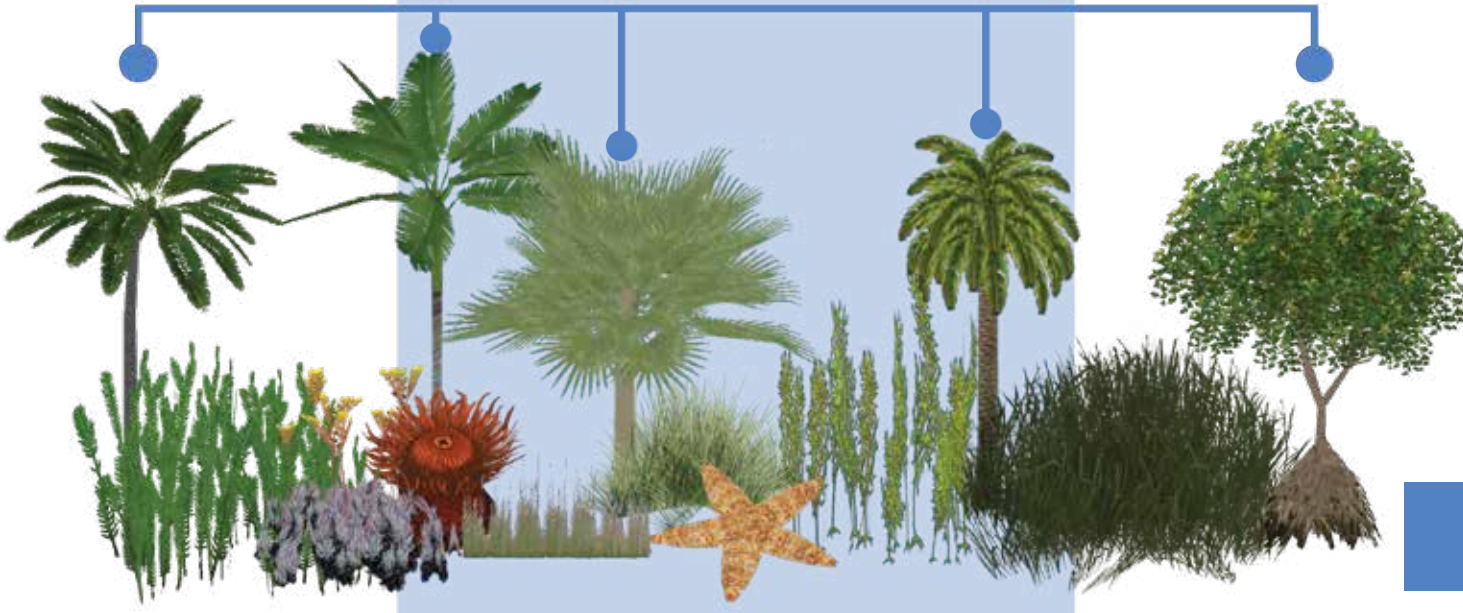
SHELTER PLAN

LEGEND

- 1.STORAGE
- 2.EQUIP ROOM
- 3.PROPS ROOM
- 4.CHECKUP/OURANTINE
- 5.INDOOR SHLETER
- 6.NURSERY
- 8.ENTRANCE



ECHIUM VULGARE , ROSMARINUS OFFICINALIS
 ERYNGIUM VARIIFOLIUM ARMERIA MARITIMA,
 CRAMBE MARITIMA , ERIGERON GLAUCUS 'SEA
 BREEZE, MULLEIN, CABBAGE PALM, ELIJAH BLUE



FOLIAGE BELONGING TO THE AQUATIC BIOME GOES IN THIS CATEGORY.

SECTION A-A"

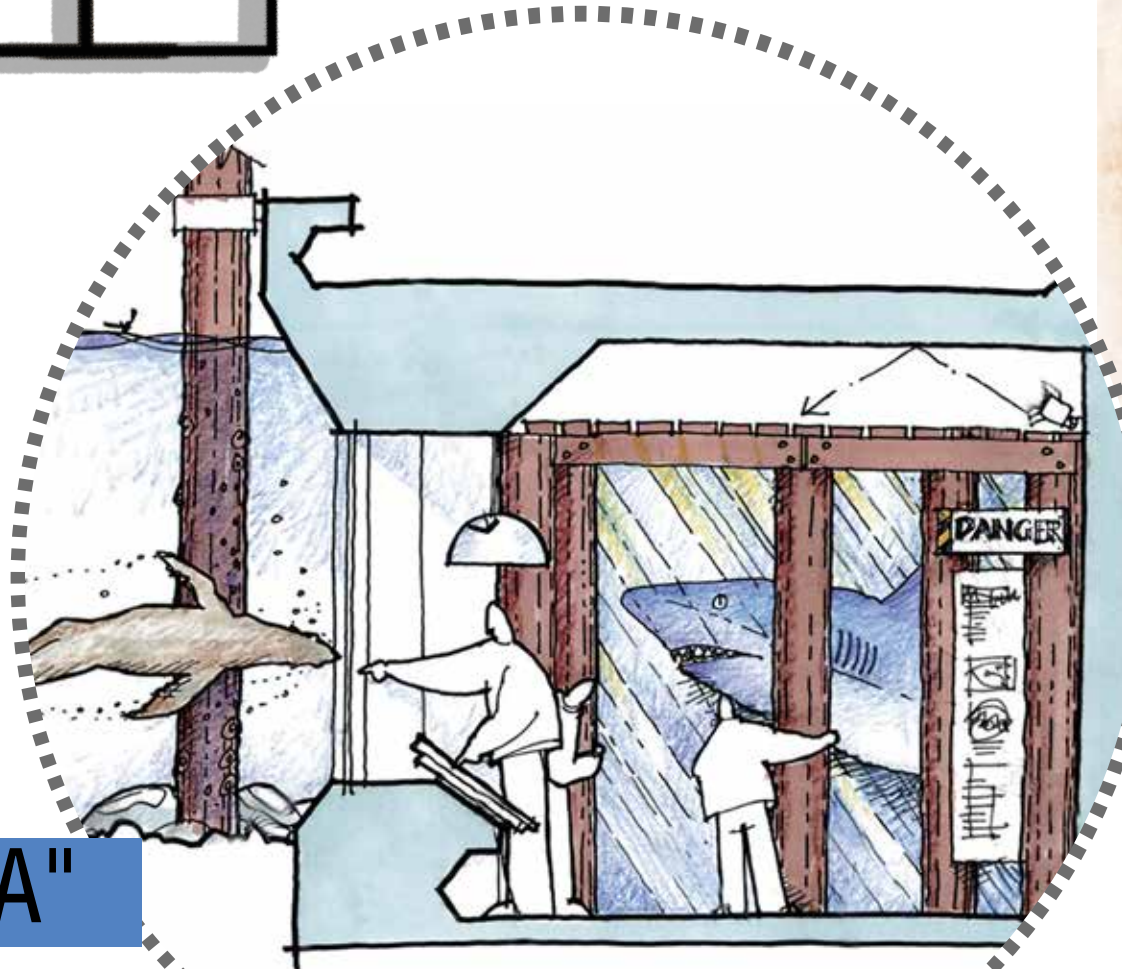
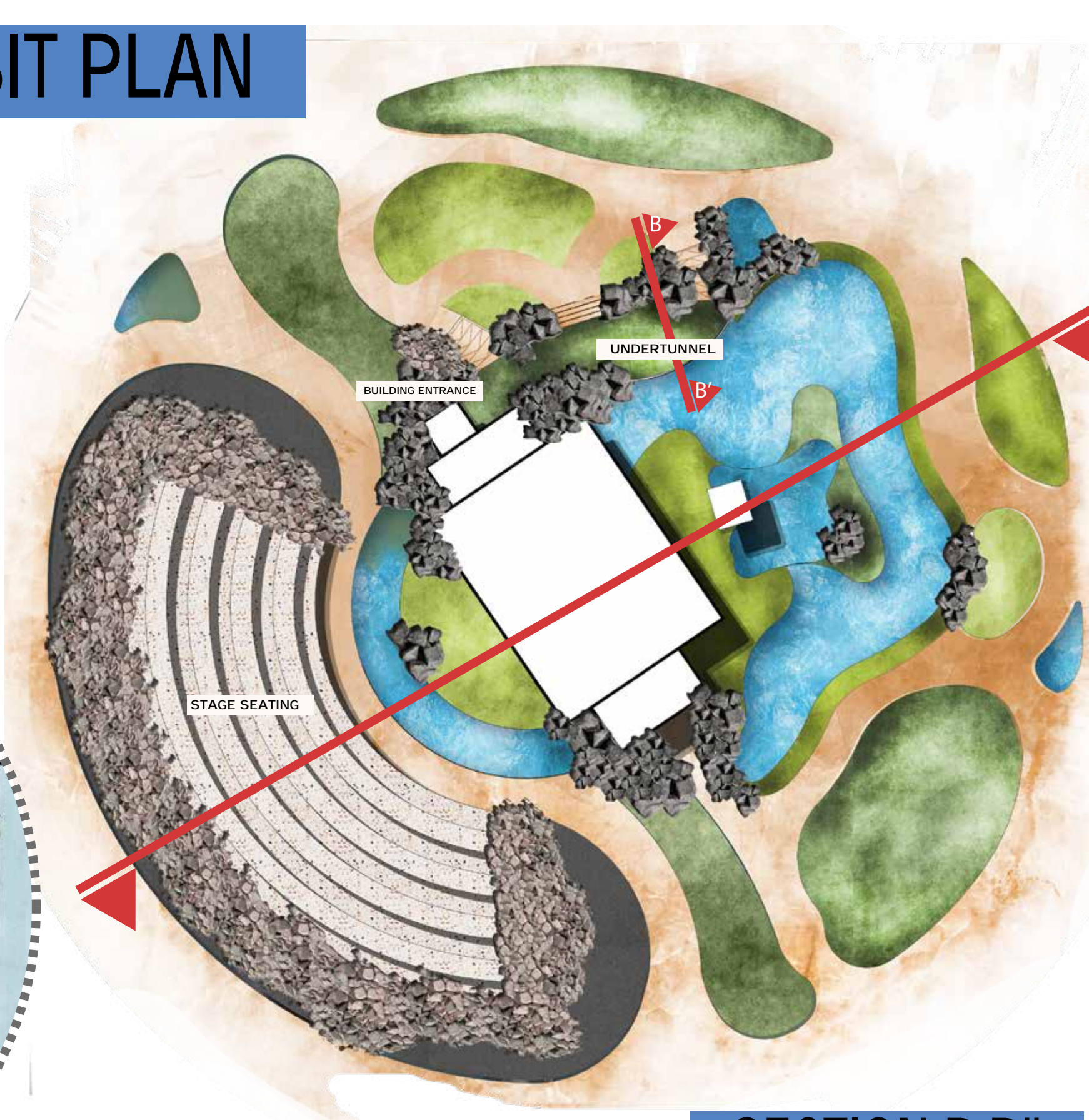
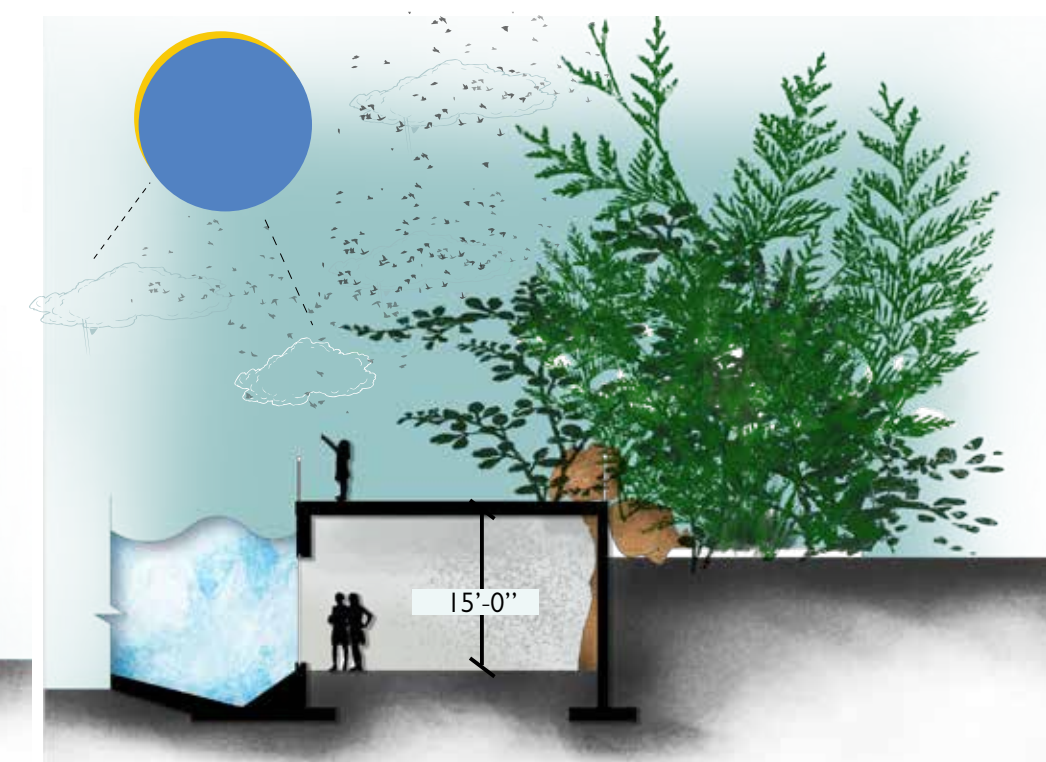


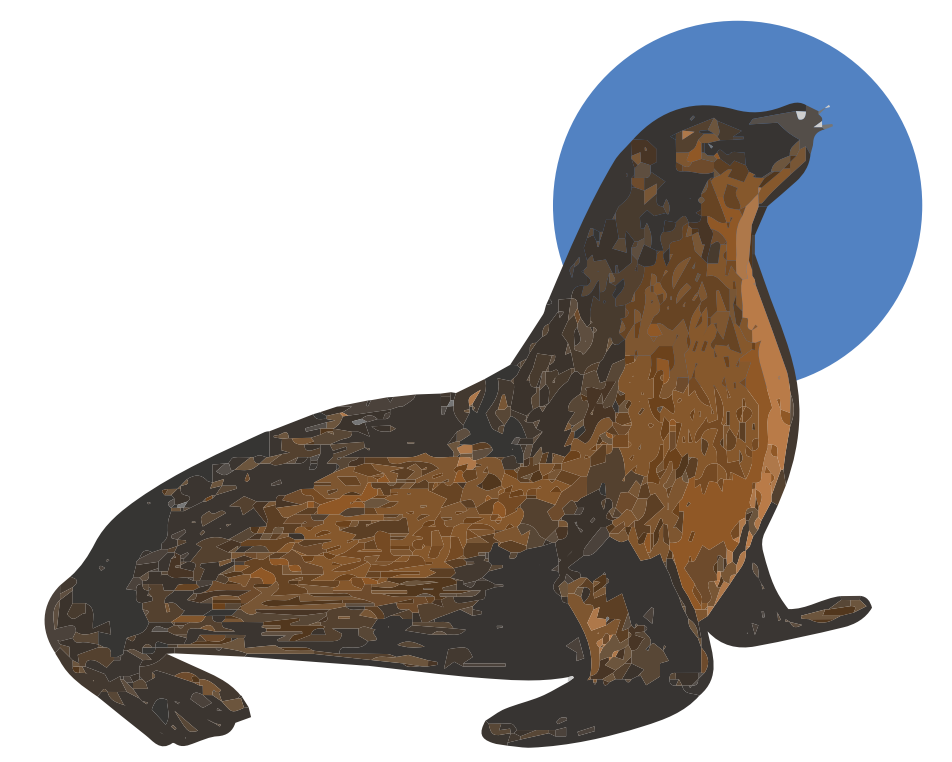
EXHIBIT PLAN



SECTION B-B"



SEA LION

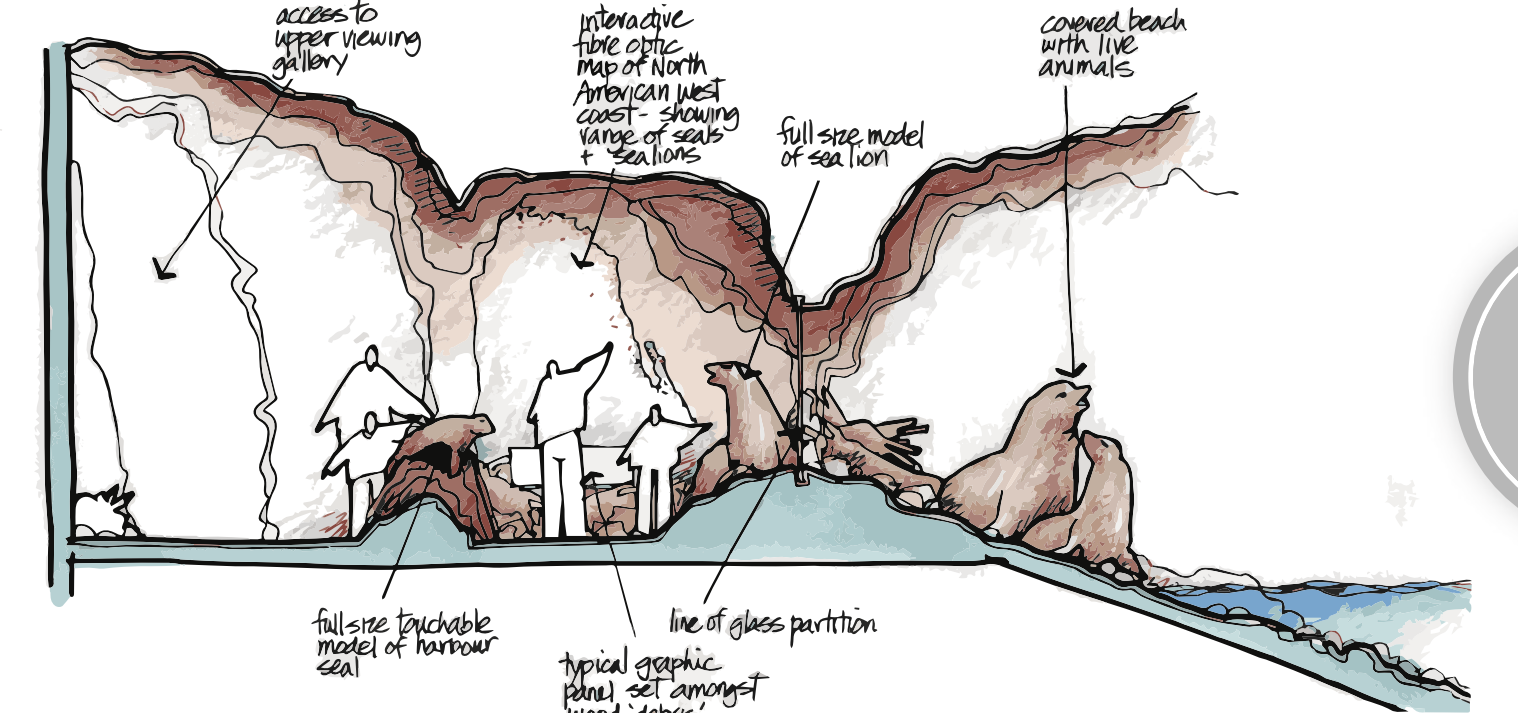


ARCHITECTURE AND LIFESTYLE

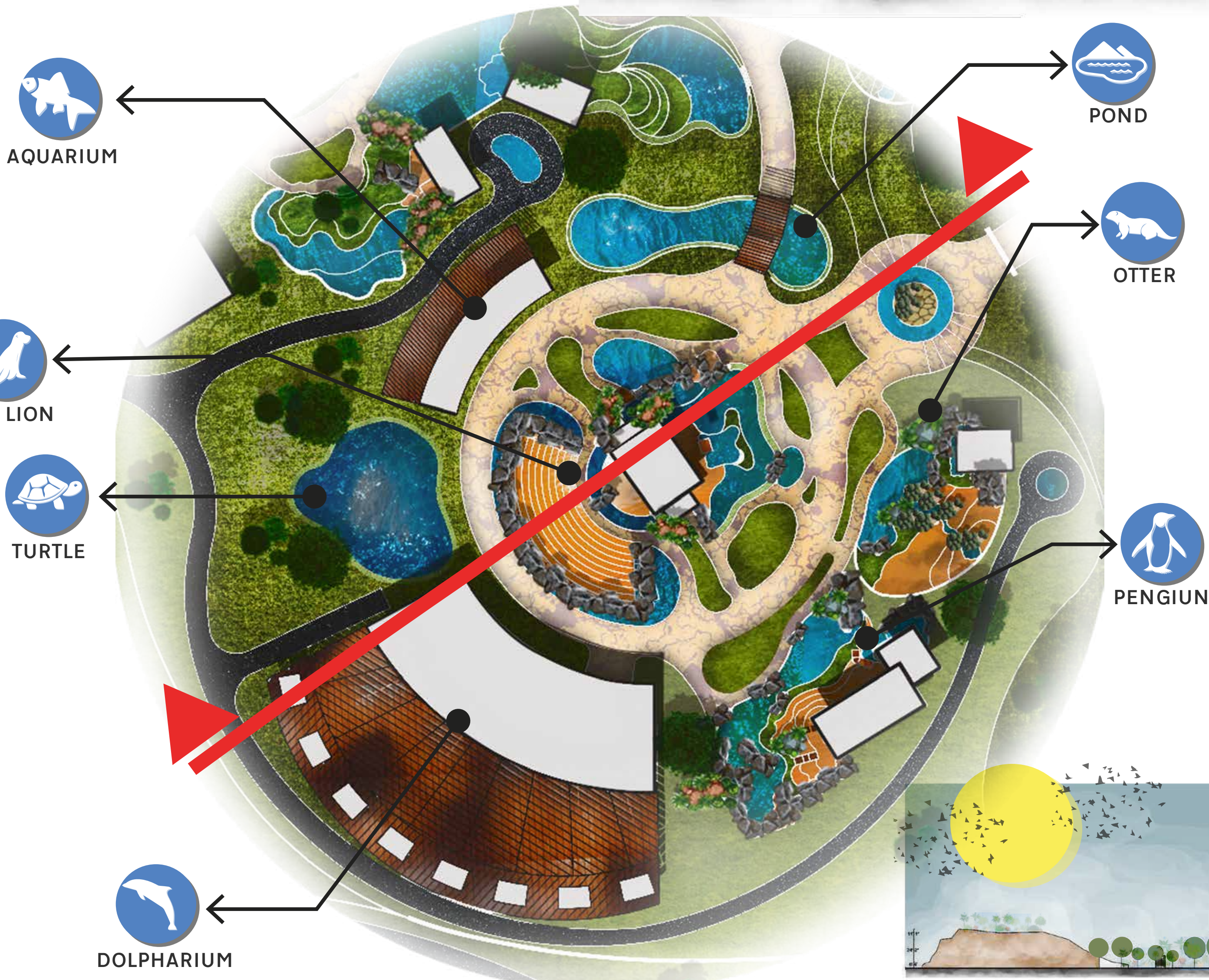
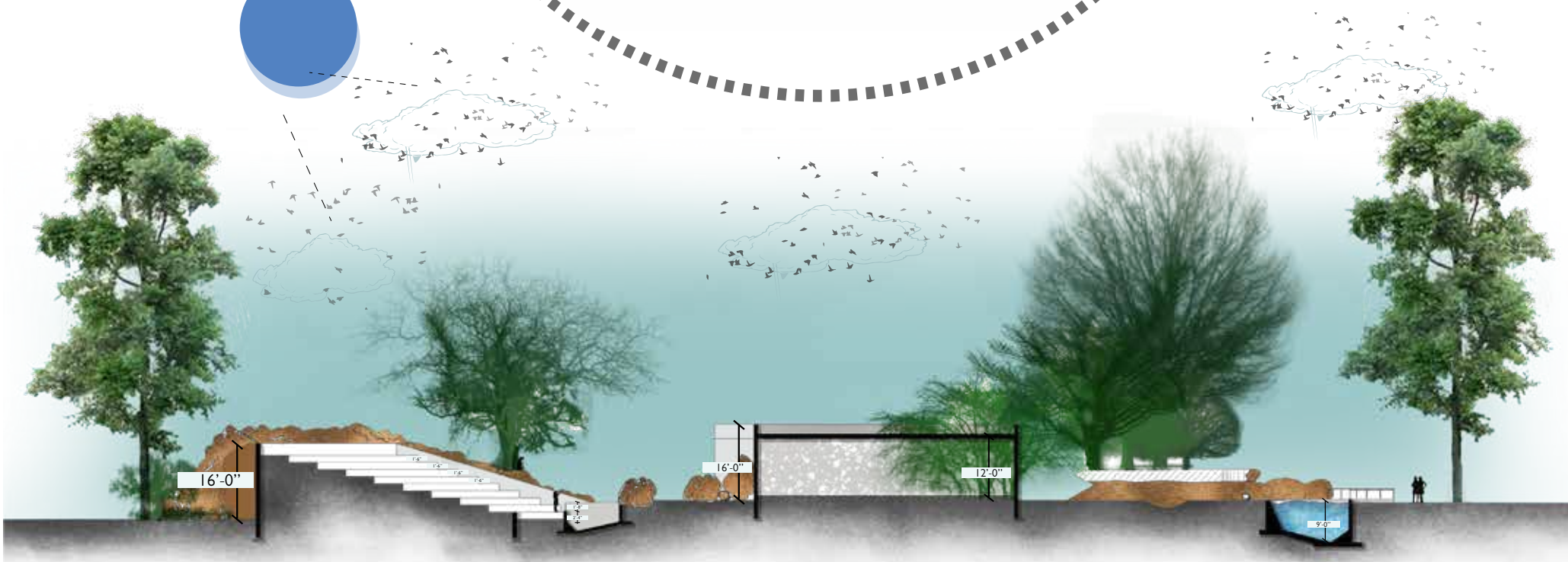
- FENCE GRADE:2
- LAND AREA:656FT2
- WATER AREA:984FT2
- FEEDING STATIONS:FOOD TRAY,WATER PIPE
- FOOD ENRICHMENT:UNDERWATER BOX, FEEDER,BLOCK OF FROZEN FISH
- HABITAT ENRICHMENT:LARGE BALL,LARGE SNOW BALL,SKITTLE,SNOWMAN SKITTLE ENRICHMENT,SPRINKLER ,RUBBER DUCK, PLATFORM FLOATS

HERBIVOROUS:OMNIVORES INCLUDING FISH
 LENGTH : 3FT-6FT
 AQUATIC LIFESTYLE

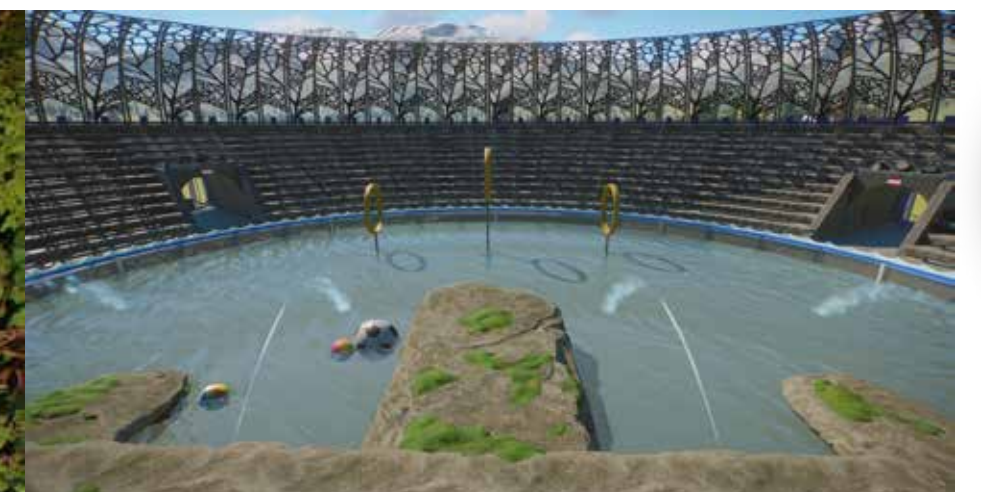
MALES MEASURE UP BETWEEN 7.59FT AND 9.57FT IN LENGTH AND WEIGHT 451-814LB, WHILE FEMALES MEASURE BETWEEN 6.27FT-7.59FT IN LENGTH AND WEIGHT 352-550LB.
 GREY SEALS HAVE BEEN KNOWN TO DIVE AT DEPTHS OF 300M.THEIR AVERAGE DIVE DEPTH IS 70M.



BUS FACTOR TERMINAL



BIRD EYE VIEW OF THE SEA LION EXHIBIT SHOWS ENRICHMENTS



SEATING VIEW FROM THE STAGE



INDOOR EXHIBIT



UNDERGROUND TUNNEL

AQUATIC SECTION

AQUATIC

THE COASTAL BIOME IS THE COMBINATION OF ECOSYSTEMS THAT EXIST ALONG THE COAST, WHICH INCLUDE MANGROVES, "RESTINGAS", DUNES, BEACHES, ISLANDS, ROCKY SHORES, BAYS, SWAPS, CORAL REEFS, AMONG OTHERS COASTAL ECOSYSTEMS INCLUDE HIGHLY BIODIVERSE MARINE COMMUNITIES THAT VARY DEPENDING ON LOCAL TOPOGRAPHY AND CLIMATE. EXAMPLES OF COASTAL ...

