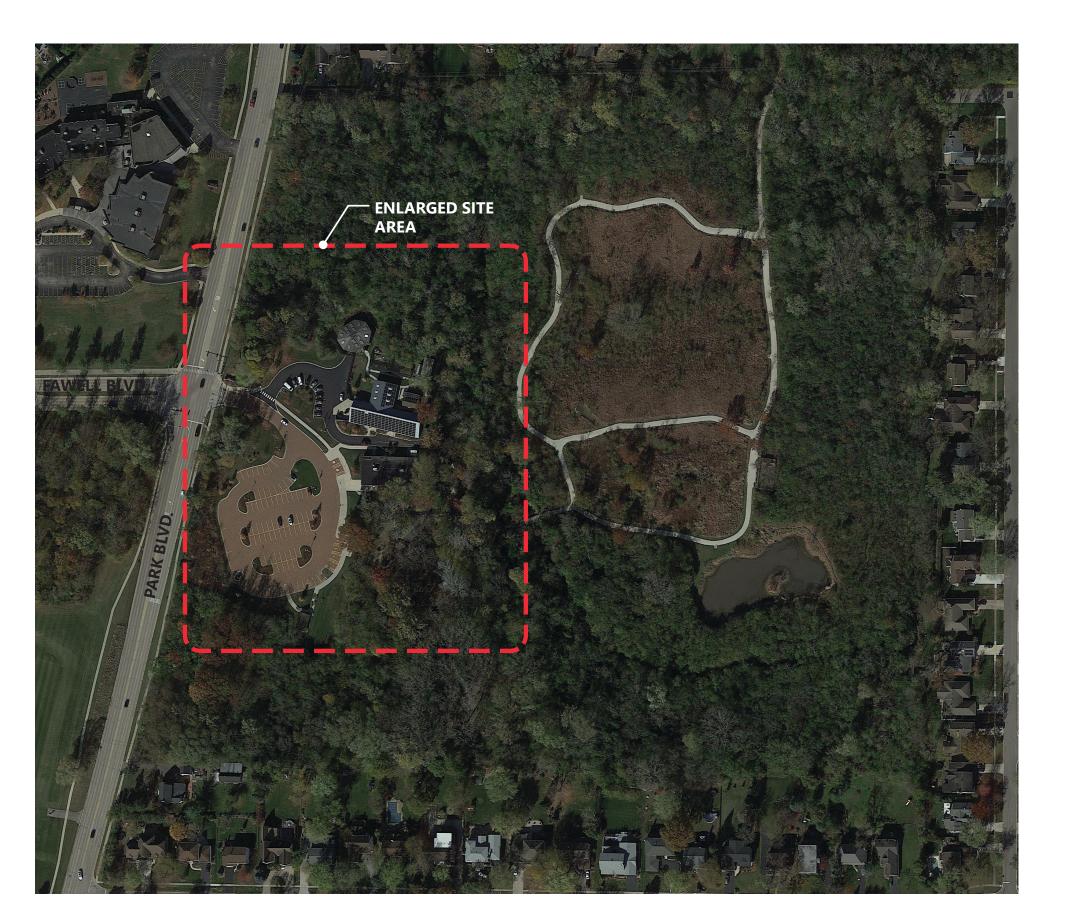


# DUPAGE COUNTY FOREST PRESERVE | WILLOWBROOK WILDLIFE CENTER SCHEMATIC DESIGN PROGRESS UPDATE 08.17.2021









## WILLOWBROOK WILDLIFE CENTER EXISTING SITE AERIAL

WILLOWBROOK WILDLIFE CENTER | 08.17.2021

## ENLARGED SITE Eliminate Tráil AREA Interpretive Node Enclosures A EN Observation Node Research Enclosures New Clinic & Eliminate Trail Visitor Center



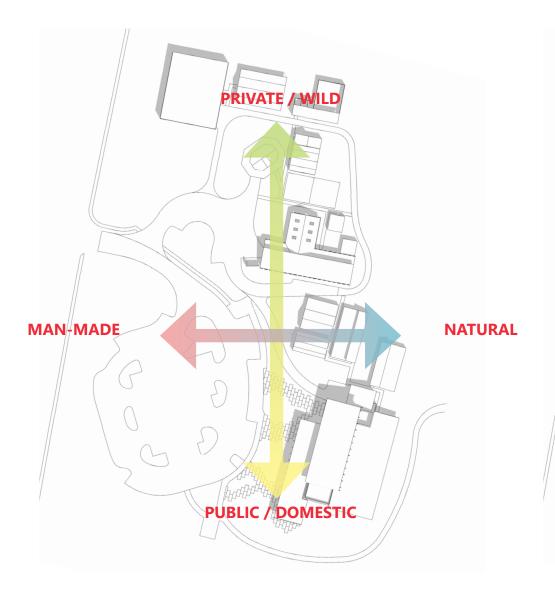
FAWELL BLVD.

PARK BLVD.

### WILLOWBROOK WILDLIFE CENTER PROPOSED SITE DIAGRAM

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### **1. A CONTINUUM OF EXPERIENCES FOR ALL INHABITANTS**

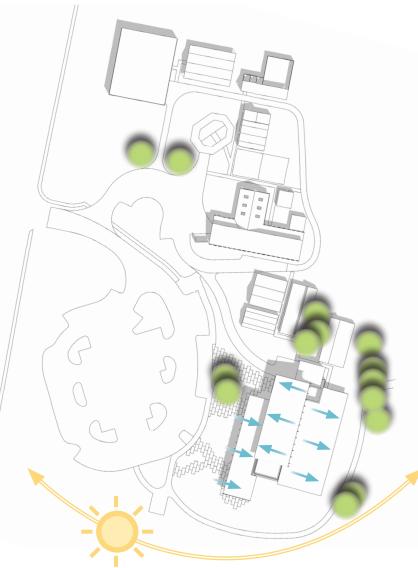


The layout of the facility should blur interior environment with the outdoors to allow inhabitants to experience and connect with nature. As animals move through the facility they can gradually work their way towards autonomy to survive independently in the wild.



### 2. SUPPORTING SUSTAINABILITY

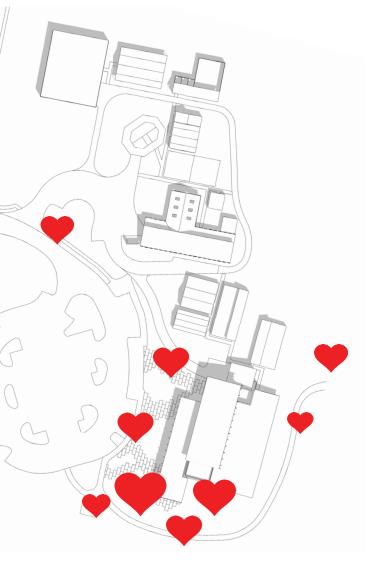
### 3. ENGAGE AND INSPIRE HARMONY WITH OUR ECOSYSTEM



From the orientation of the site components and the careful consideration of the site conditions to the engineering of each element, the new facility should embrace sustainability and act as a leader in the field of sustainable development.

Create an atmosphere that inspires the public and staff to live in harmony within our ecosystem and act as good stewards of our environment.

### DESIGN CONCEPTS

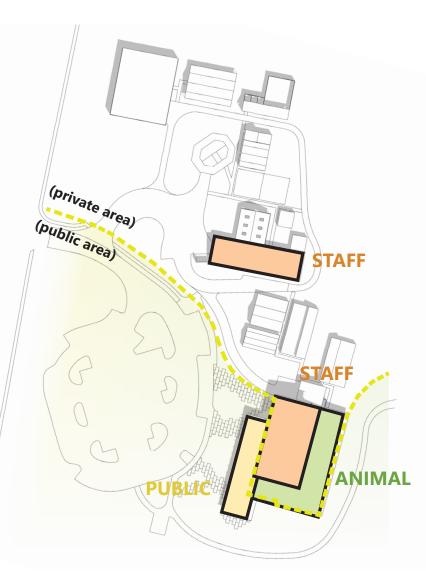




### **1. OUTDOOR PROGRAM ORGANIZATION**

## RAPTOR CARNIVORE (private area) MAMMAL (public area) TURTLE SONG BIRD WATERFOWL

### 2. INDOOR PROGRAM ORGANIZATION

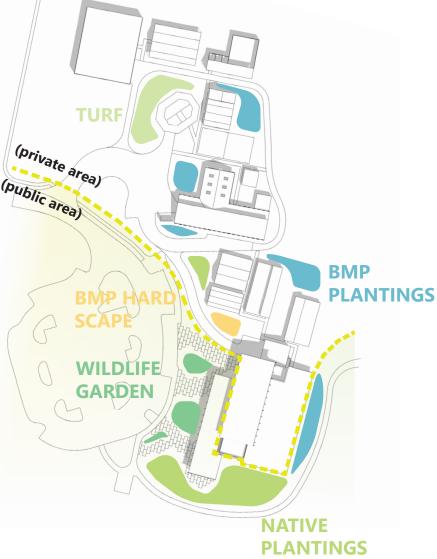




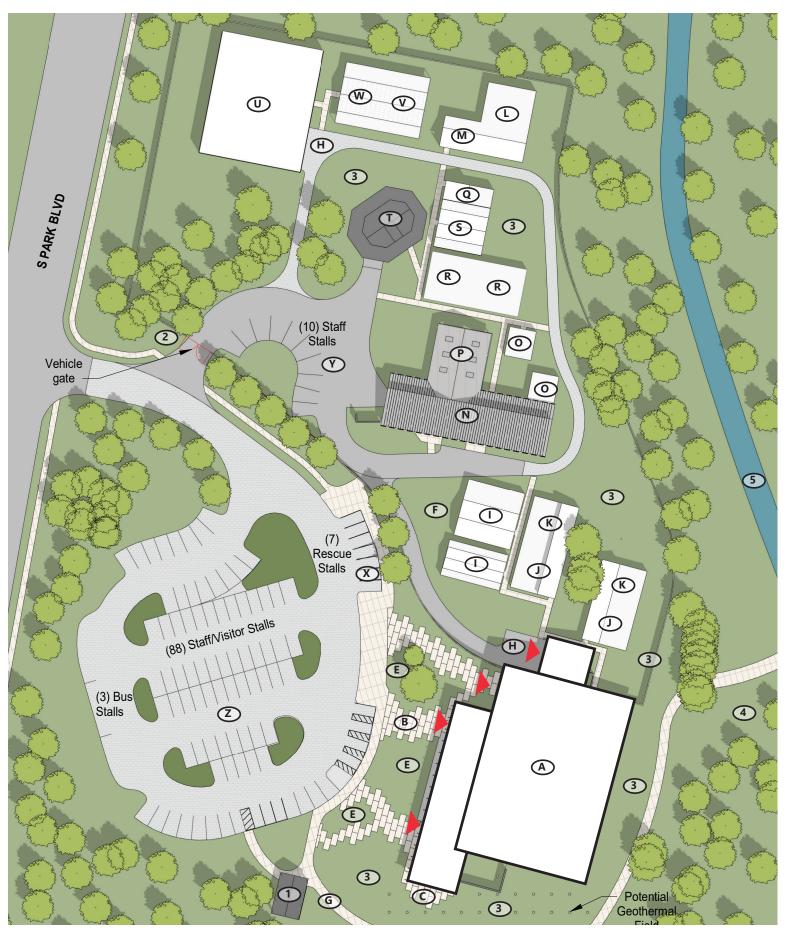
(public area)

### SITE ORGANIZATION

### **3. LANDSCAPE ORGANIZATION**









- Clinic and Visitor Center
- Entry Plaza
- © Outdoor Learning
- Outdoor Rehabilitation & Isolation Runs
- (E) Wildlife Gardens
- (F) Native Buffer Garden
- Reconfigured Interpretive Trail
- (H) Service Drive
- Song Bird Housing (Including Resident)
- ① Day Duck and Aquatic Mammal Ponds Enclosure
- (K) Large Waterfowl Enclosure
- Large Carnivore Enclosure
- M Large Carnivore Transitional Enclosure
- Turtle Enclosure
- Existing Mammal Enclosure
- Resident Carnivore Enclosure
- Existing Enclosure
- Small Carnivore Transitional Enclosure
- ① Existing Raptor Barn
- Raptor Flight & Raptor Transitional Barn
- W Resident Raptor Outdoor Enclosure
- S Expanded Rescue Parking
- (Y) Existing Staff Parking
- Existing Visitor / Staff Parking
- ① Existing Shelter
- Fencing w/ Gates
- (4) Wetland
- **(5)** Glen Crest Creek

80

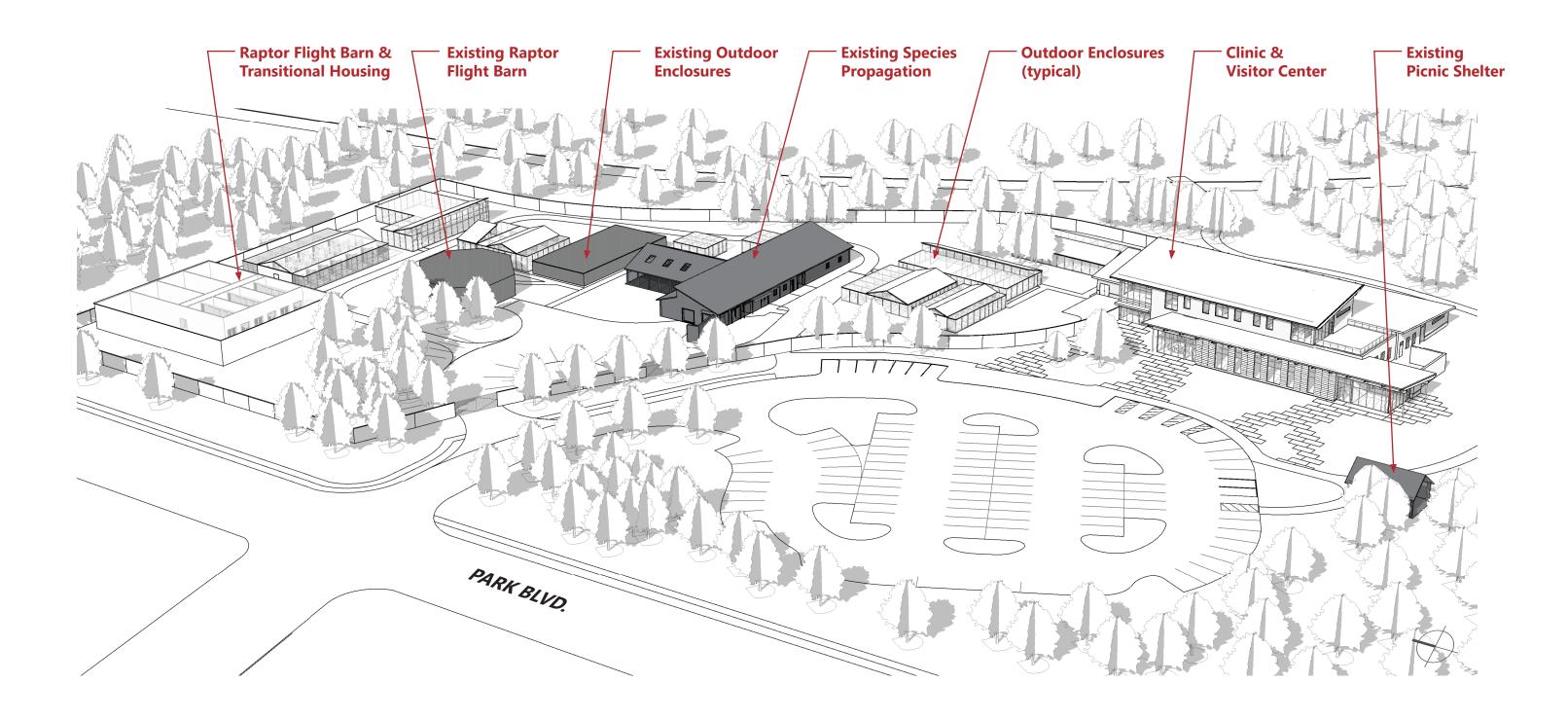
160

### ENLARGED SITE AREA

- N Existing Species Propagation Building
- **V** Resident Raptor Outdoor/Indoor Enclosure

- (3) Native Landscape / BMPs

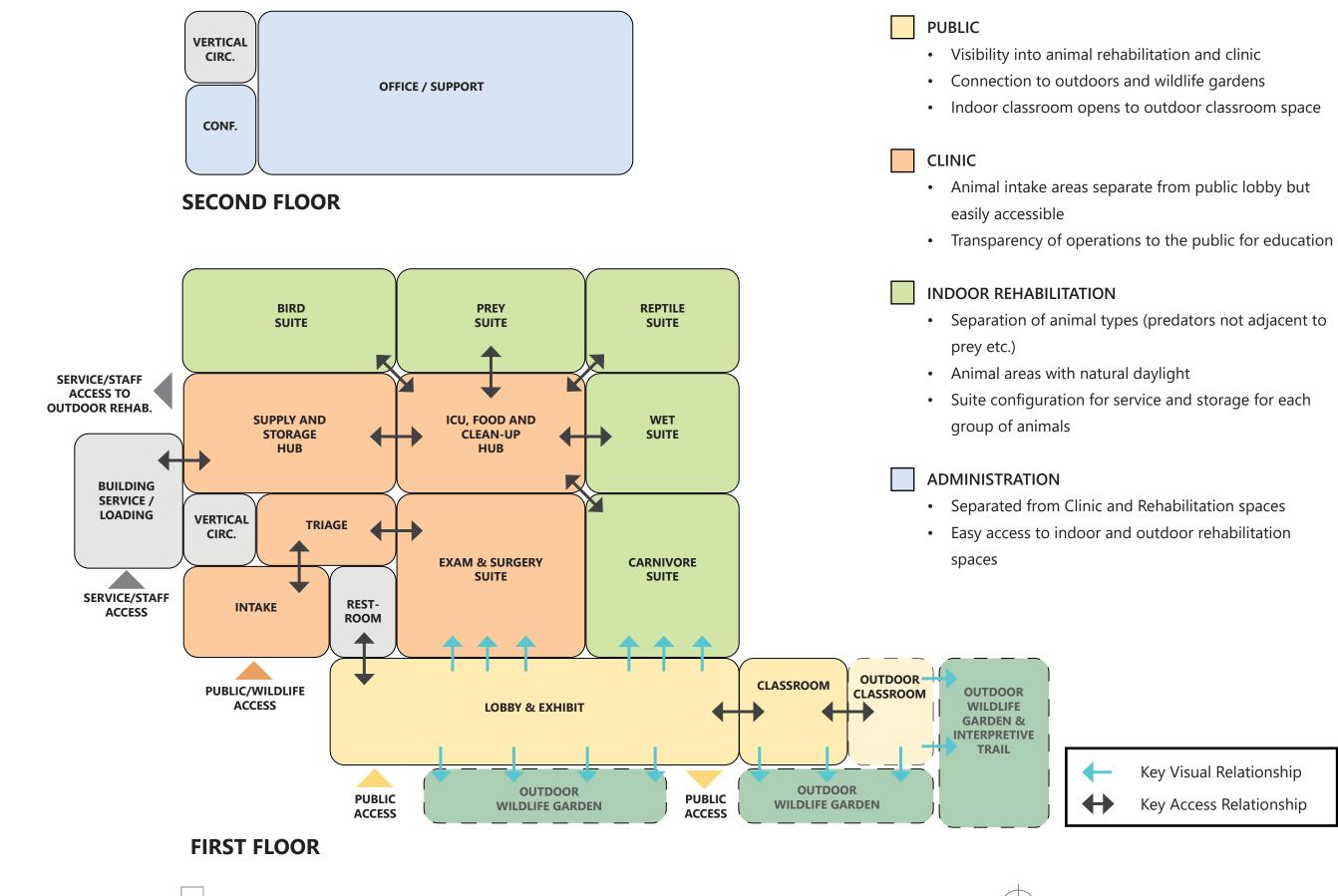






### PROJECT MASSING

### FLOOR PLAN DIAGRAM & FEATURES









- **3** BIRD FRIENDLY GLASS
- 4 FIBER CEMENT SIDING
- **5** SUNSHADE / BIRD DETER DEVICE





6 CASEWORK MATERIAL

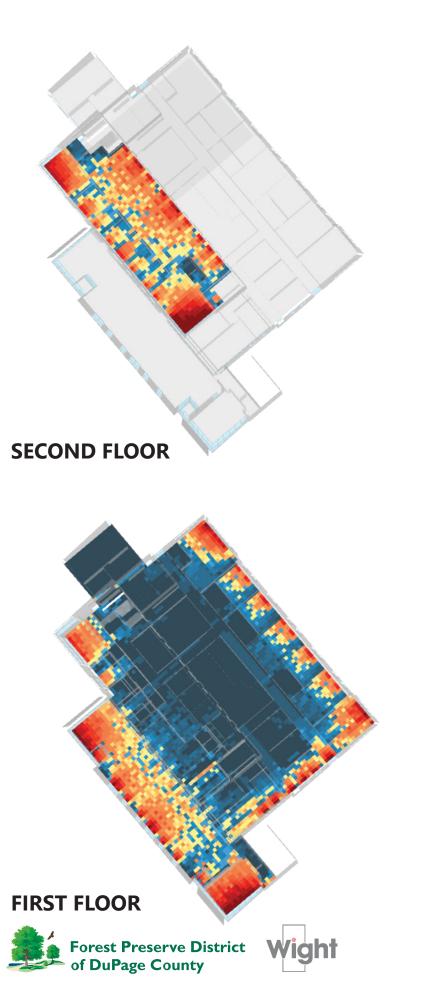
### **PROJECT MATERIALS**

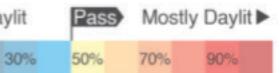
### SPATIAL DAYLIGHT AUTONOMY STUDY

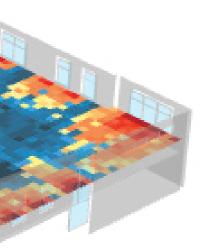
### ▲Never Daylit

### 10% 3

Spatial Daylight Autonomy (sDA) measures spaces that receive 30fc of light for at least 50% of the day. For the project this calculates to 24% which does not meet the recommended minimum of 55%. The shortfall is primarily due to having internal spaces without windows. The required close spatial relationships of the project drive the compact layout and daylight preference has been given to areas consistently occupied with people and animals. Solatube or borrowed lites may be used to further enhance daylight within the interior of the building.







### **Features included within the project:**

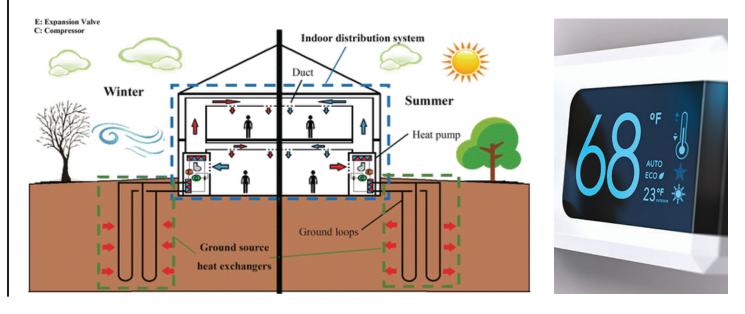
- NATIVE & DROUGHT TOLERANT PLANTINGS
- BMPS FOR STORM WATER POLLUTION PREVENTION AND
  RAINWATER CONTROL
- HEAT ISLAND REDUCTION
- SOLAR-READY STRUCTURE AND INFRASTRUCTURE
- BIRD FRIENDLY GLASS
- HIGH PERFORMANCE BUILDING ENVELOPE
- DAYLIGHT OPTIMIZATION
- LOW-VOC MATERIALS
- RECYCLED MATERIALS
- LOW EMBODIED CARBON MATERIALS
- HIGH EFFICIENCY MECHANICAL SYSTEMS
- LOW-FLOW PLUMBING FIXTURES
- REDUCED LIGHTING POWER DENSITY
- DARK SKY LIGHTING DESIGN

### **Potential features for future inclusion:**

- GEOTHERMAL
- RAINWATER HARVESTING
- PHOTO VOLTAIC PANELS









### SUSTAINABLE FEATURES



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