SITE PLAN

1. Main Entry Porch
2. Group Entry Porch
3. Bus Drop-Off
4. Service Yard Access
5. Paved Parking Lot (69)
6. Picnic & Play
7. Outdoor Patio
8. Exterior Gathering Terrace
9. Bird Watching
10. Turtle Pond Connection
11. Screened Service Yard
12. “Threshold” Prairie
13. Forest “Threshold”
14. Existing Picnic Shelter
15. Existing Trail Connection
16. Raptor Cages
Approach from the South
Outdoor Patio for Gathering
Outdoor Terrace Gathering Space
Energy Goals and Strategies
ZERO ENERGY IS AN ONGOING BALANCING ACT

1 – Reduce building energy use as much as possible in design
2 – The remaining energy needed is covered by renewable site resources
3 – Continue to fine tune the operation of the building over its life
Building Carbon Emissions - Comparison

Westwood Hills Carbon Emissions

- Baseline Building (Code Envelope and Four-Pipe Fan-Coil w/ electric boiler): 264,000 lbs/yr
- Baseline Building (Code Envelope and Four-Pipe Fan-Coil w/ Gas Boiler): 179,000 lbs/yr
- Current Design (High performance envelope with GSHP system) - HP DHW: 81,000 lbs/yr

98,000 lbs/yr carbon emissions reduction from energy efficiency strategies

Assumptions
- Electricity: 805 lbs/MWh
- Natural Gas: 11.7 lbs/Therm

Calculation assumes 100% of energy is sourced from Xcel Energy

Analysis does not include energy from Photovoltaic generation

Natural Gas emissions factor is not estimated to change in future

Xcel has reduced electricity emissions 34% since 2005 and forecasts a 45% reduction from 2005 in 2021

Exhibit Design Concepts
Next Steps

• June – August 2018
  Construction Documents (Preparation of plans and specifications)

• September or October 2018
  Request Council to approve construction documents including plans and specs and authorize bids

• Late November or December 2018
  Approve bids and authorize the project

• Spring 2019
  Construction begins as soon as weather permits

• Fall 2020
  Construction is complete including deconstruction of current building