

Jester Park Conservation Center
Concept Master Plan



Considerations for Site Selection

- Relationship with woodlands and prairie
- Preferred road alignment addresses prairie concerns
- Limited site impact (pre-disturbed flat site)
- Limited exposure
- Residential views
- Maximizes view of surrounding landscapes

Jester Park Conservation Center
Concept Master Plan



Considerations for Site Development

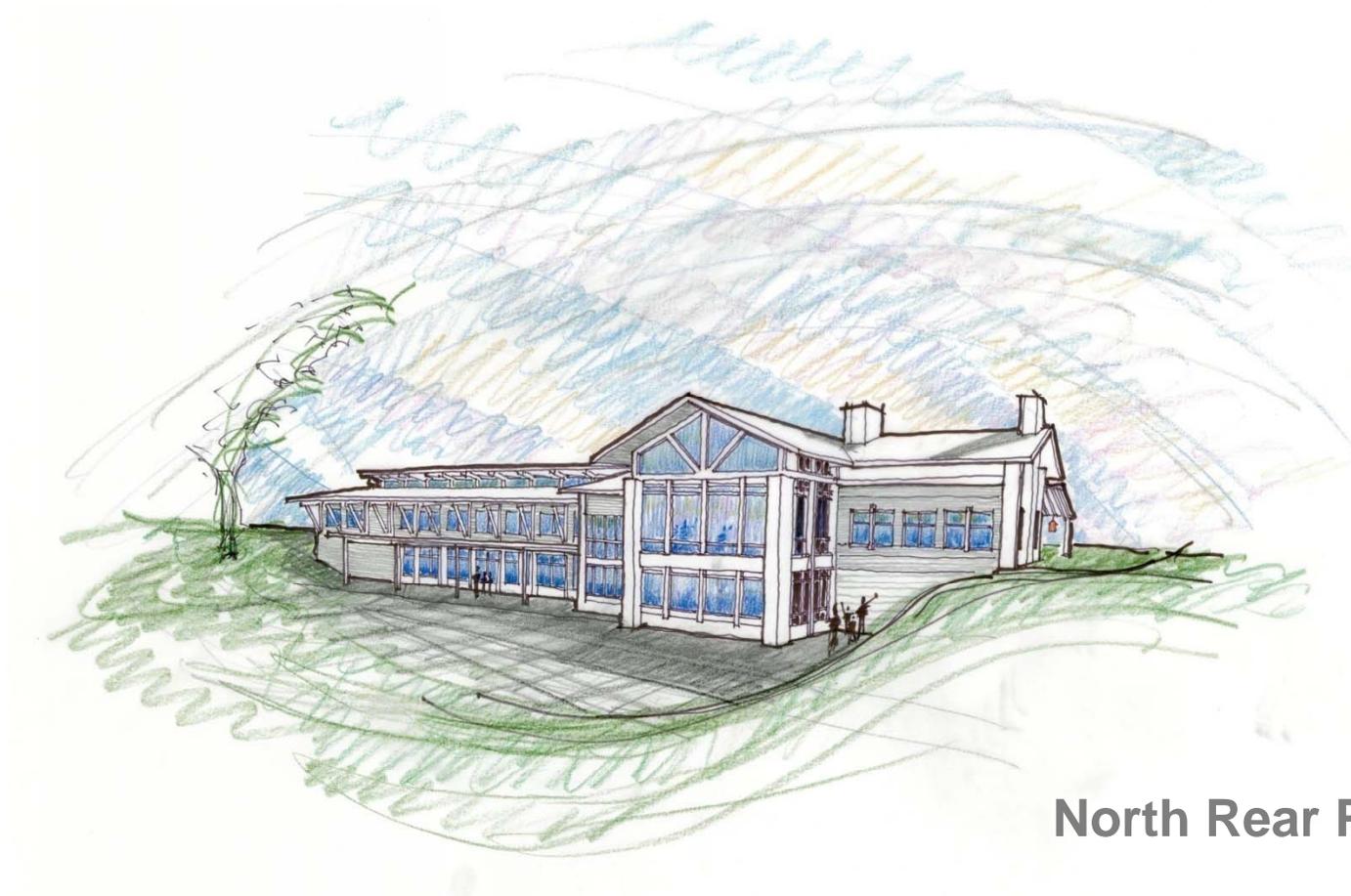
- Accessibility to the Center
- Blends with surrounding landscape
- Rain gardens and bio-retention cells
- Safe & easy to navigate walkways and parking
- Safe and efficient bus access
- Maximizes interpretive opportunities
- Provides a variety of spaces

Jester Park Conservation Center
Preliminary Design Sketches



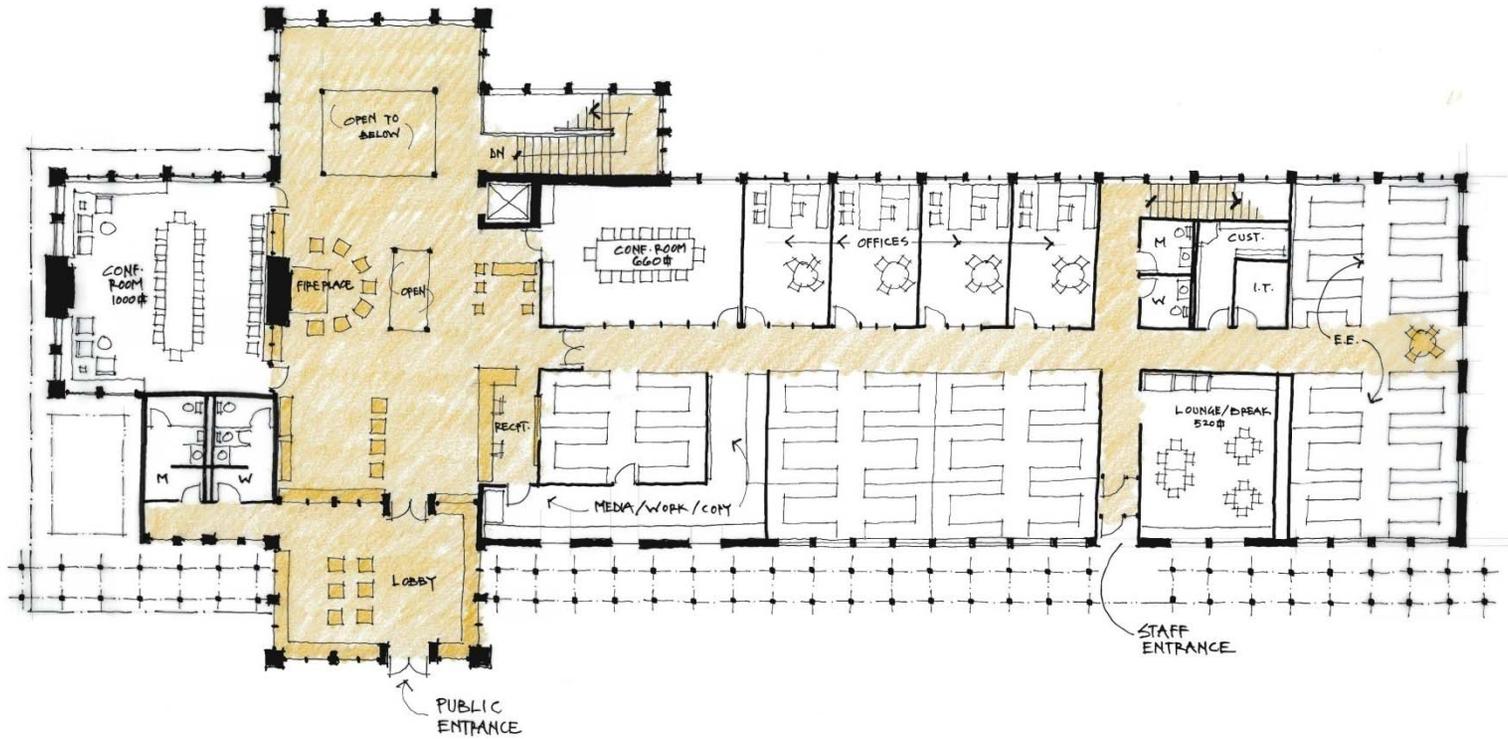
South Entrance Perspective

Jester Park Conservation Center
Preliminary Design Sketches



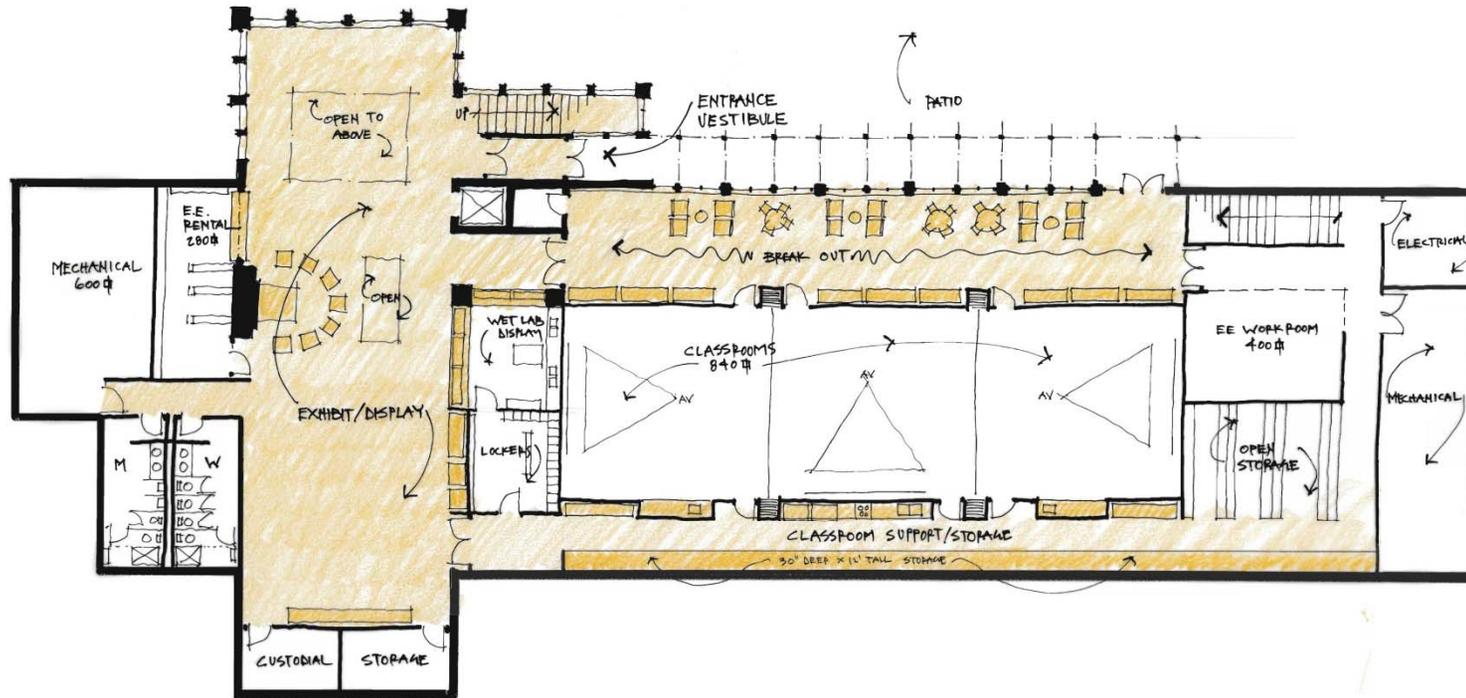
North Rear Perspective

Jester Park Conservation Center
Building Diagrams- Upper Level



Front Entrance Level

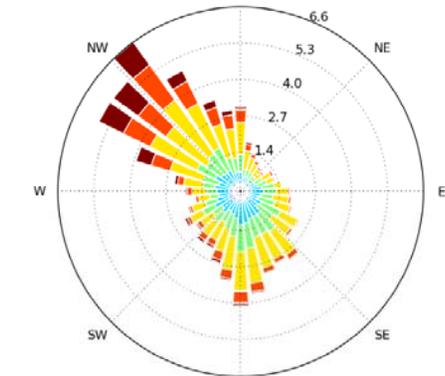
Jester Park Conservation Center
Building Diagrams- Lower Level



Rear Walk Out Level

Jester Park Conservation Center

Sustainability



THE WEIDT GROUP Conservation Center

0.00 20.00 40.00 60.00 80.00 100.00 kbtu/sf

Heat (red), Cool (blue), Fan/Pump (green), DHW (yellow), Lights (purple)

25% to 30%
40% to 45%
65% to 70%
75% to 80%

Note: Energy use and savings are based on a benchmark building in this climate zone and are provided to assess project goals in the pre-design stage. Actual savings will depend on design decisions and building operations.

	Total Kbtu/sf	Opt 1	Opt 2	Opt 3	Opt 4	Notes
Benchmark Energy Use	75 to 92					
Strategies: Pre-design Savings Estimate	Savings					
Massing/Orientation						
Building Size						
Number of floors		2	2	2	2	
Building Aspect Ratio (Length/Width)						
3 to 1 along East-West Axis	0 to -1					
2 to 1 along East-West Axis	0 to -1					
1 to 1	0					
2 to 1 along North-South Axis	0 to -1					
3 to 1 along North-South Axis	0 to -2					
Window to wall area						
20% window to wall	2 to 3					
30% window to wall	0 to 1					
40% window to wall	-1 to -2					
50% window to wall	-2 to -4					
60% window to wall	-4 to -6					
Daylighting	percent daylighting	80%	80%	80%	80%	
Automatic daylighting controls	kBtu/sf sav	5 to 7	5 to 7	5 to 7	5 to 7	
Envelope Properties						
Wall						
R-15 wall assembly	1 to 2					
R-20 wall assembly	1 to 2					
R-25 wall assembly	1 to 3					
Roof						
R-30 roof assembly	3 to 4					
R-40 roof assembly	4 to 6					
R-50 roof assembly	5 to 7					
R-60 roof assembly	6 to 8					
Standard roof	0					
White roof	0 to -1					
Vegetated roof	0 to -2					
Thermal Mass						
Steel frame	0					
Steel frame w masonry	0 to 1					
Heavy masonry	0 to 1					
Infiltration						
High infiltration/operable windows	0 to -1					

