



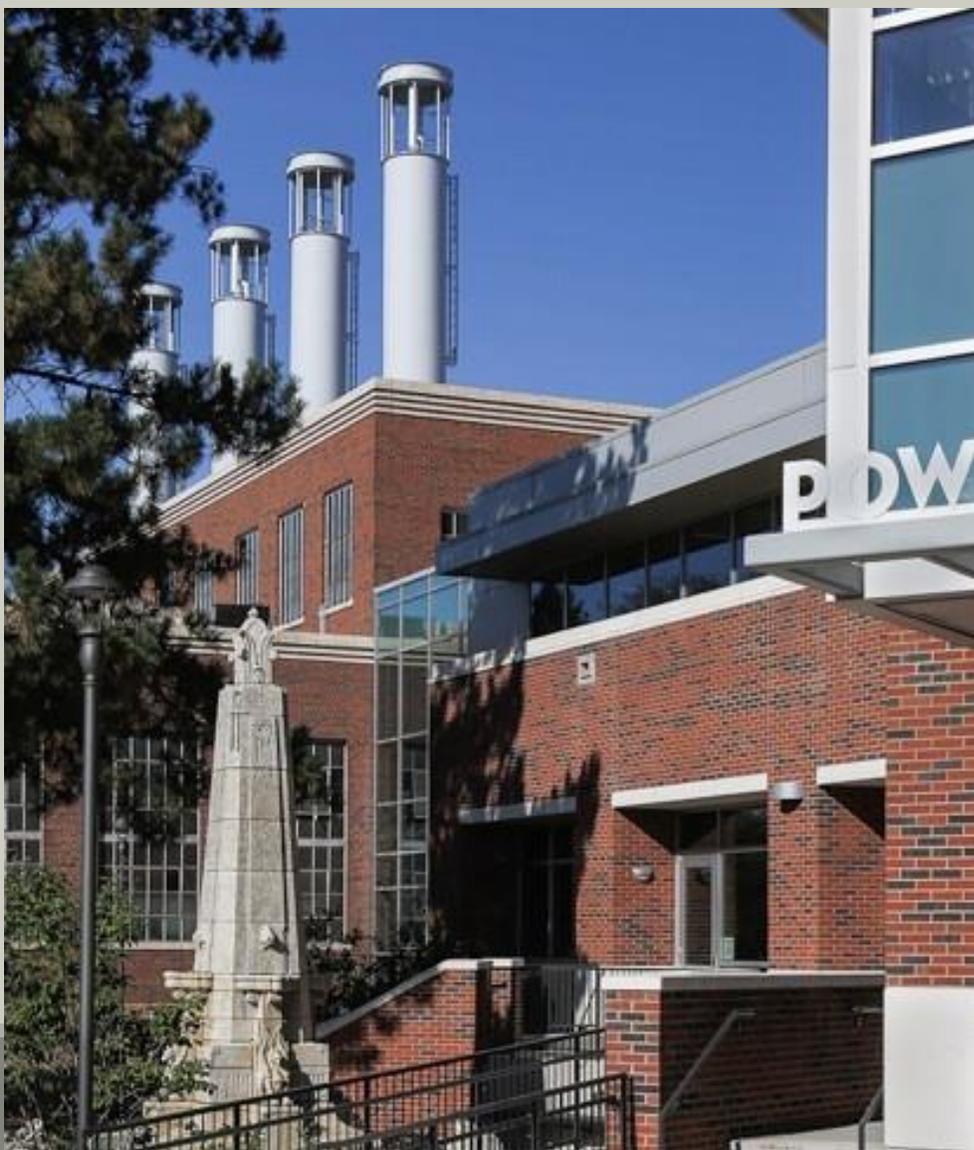
# POWERHOUSE ENERGY CAMPUS

COLORADO STATE UNIVERSITY



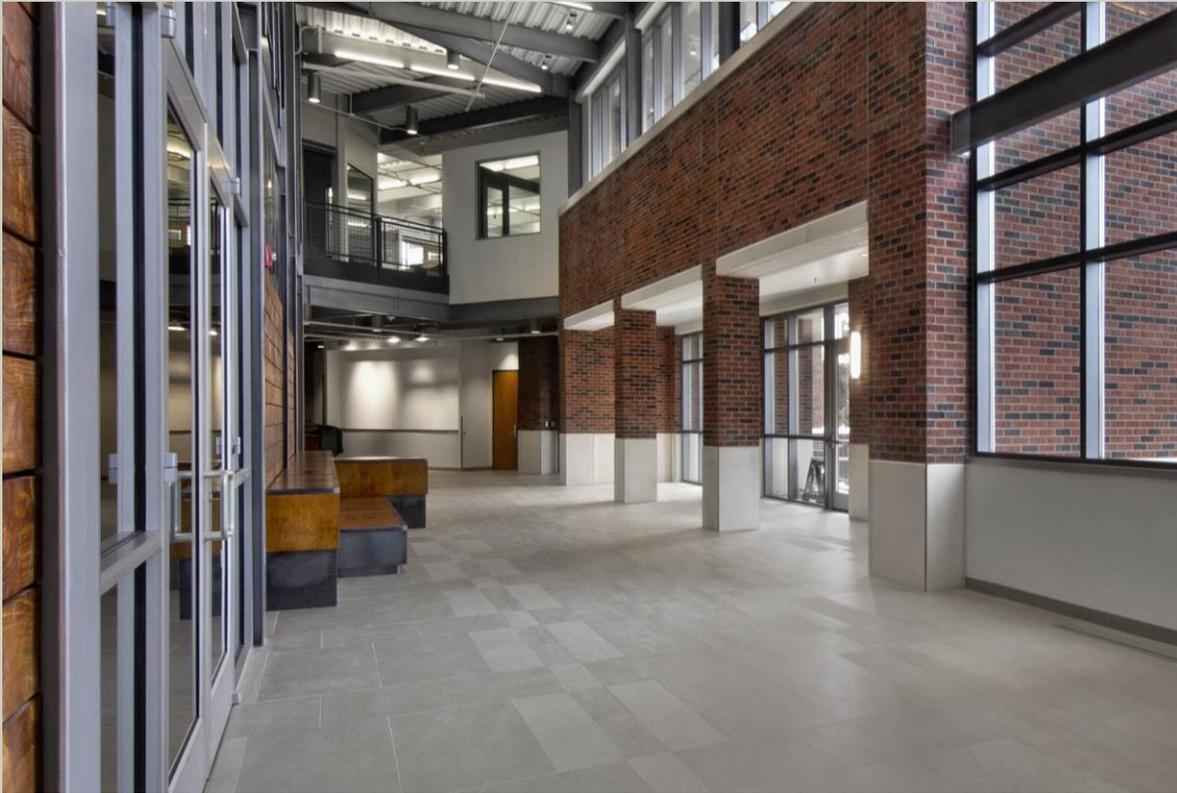
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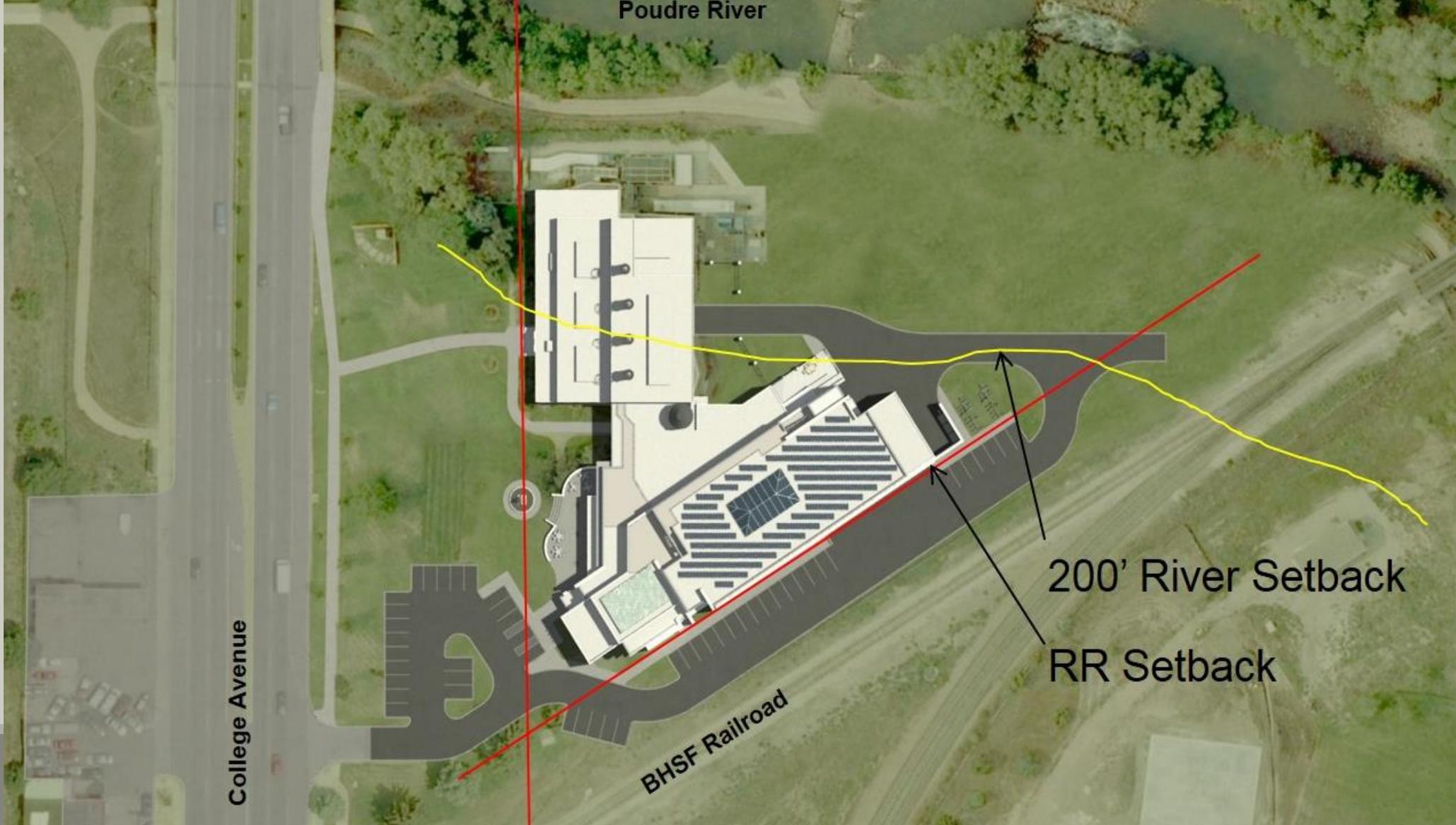
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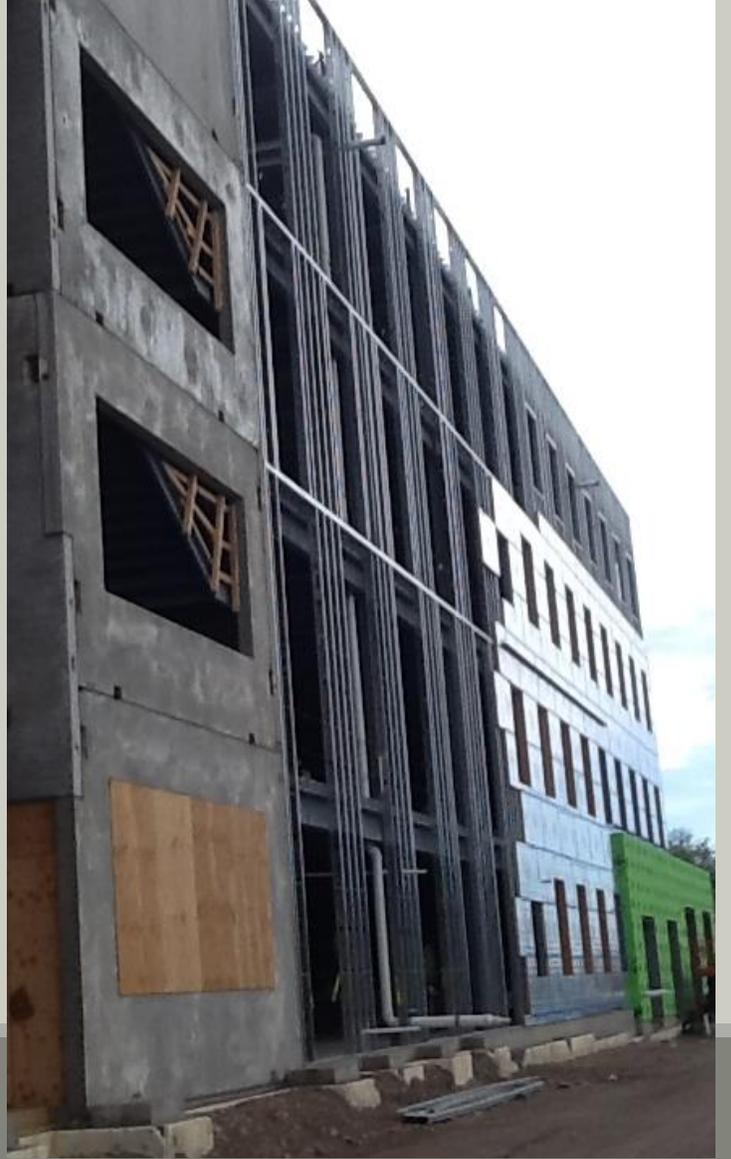
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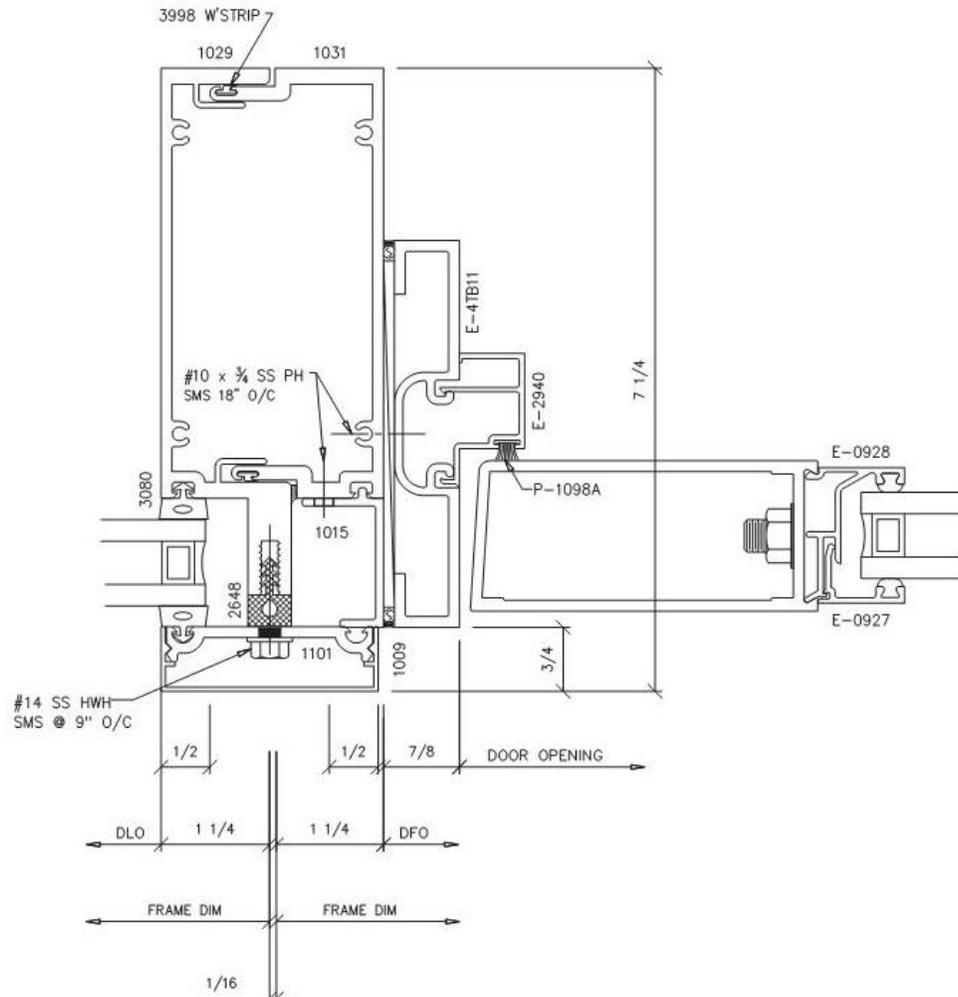
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### Vision glazing and frames specifications:

- a. Serious "Tri-Pane" C366 + HM88 or Equal.
- b. Outer light: 3/16" Cardinal 366 (#2) or Equal
- c. Argon Interspaces (low conductivity steel spacers): 2 @ .525" Argon
- d. Central Suspended Coating: Single HM88 (#4)
- e. Inner Light: 3/16" Clear
- f. U - Value: 0.133
- g. R - Value: 7.5
- h. Summer U - Value: 0.135
- i. SC (Shading Coefficient): 0.276
- j. SHGC (Solar Heat Gain Coefficient) 0.24 or Better.
- k. Tvis (Daylight Transmission): 56%
- l. Reflectivity - Exterior: 13%
- m. Reflectivity - Interior: 16%
- n. LSG (Light/Solar Gain + Tvis/SHGC) Ratio: 2.3
- o. Winter (0/70DegF/15mph Wind) NFRC Glass Temperature: 62 Deg F
- p. Summer Glass Temp (estimated - reduced insolation): 84 Deg F
- q. Interspaces (1/2") (low conductivity steel spacers): Argon (90%)
- r. Acoustic Performance (STC - estimated): 37 (provide STC value for frame and glazing assembly).
- s. Overall Thickness: 1 3/8"
- t. UltraViolet Blockage (to 380 nm): 99.9%
- u. Overall system (including frame and glass) Max U = 0.216.





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## Consulting Team:

Mechanical Engineering: AE Associates - Alicia Thorpe, P.E.

Electrical / Plumbing Engineering: SRB Consulting Engineers - Larry Smith

Lighting / Daylighting Consultant: Clanton and Associates - Dane Sanders, Josie Wratten

Colorado State University Mechanical Engineering Department: Dr. Bryan Willson, Dr. Morgan DeFoort, Kirk Evans, Mac McGoldrick

Architectural Design and Building Construction: The Neenan Company, Bob Hosanna – Architect, Fred Roberts – Energy modeling, Sergio Ortiz – Project Manager, Bob Meserve – Project Executive, Travis Huppert – Field Superintendent

## Contributing Team Members:

Owners Representative: JPL Development, Jeff Jensen

City of Fort Collins's Integrated Design Assistance Program (IDAP): Gary Schroeder - Energy Services Engineer & Ken Mannon - Project Manager

Electrical Contractor: Gregory Electric, Rod Bryant

Hydronic Contractor: Lind's Plumbing, Jeff Makepeace