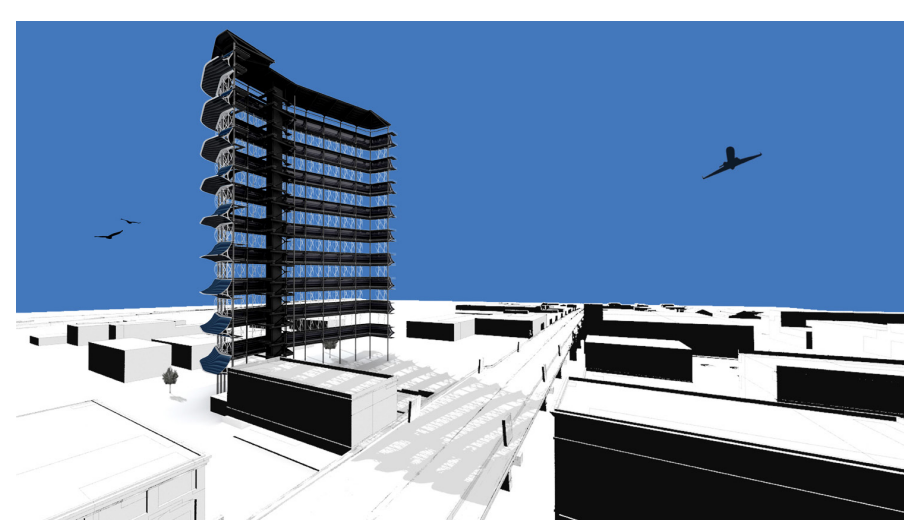
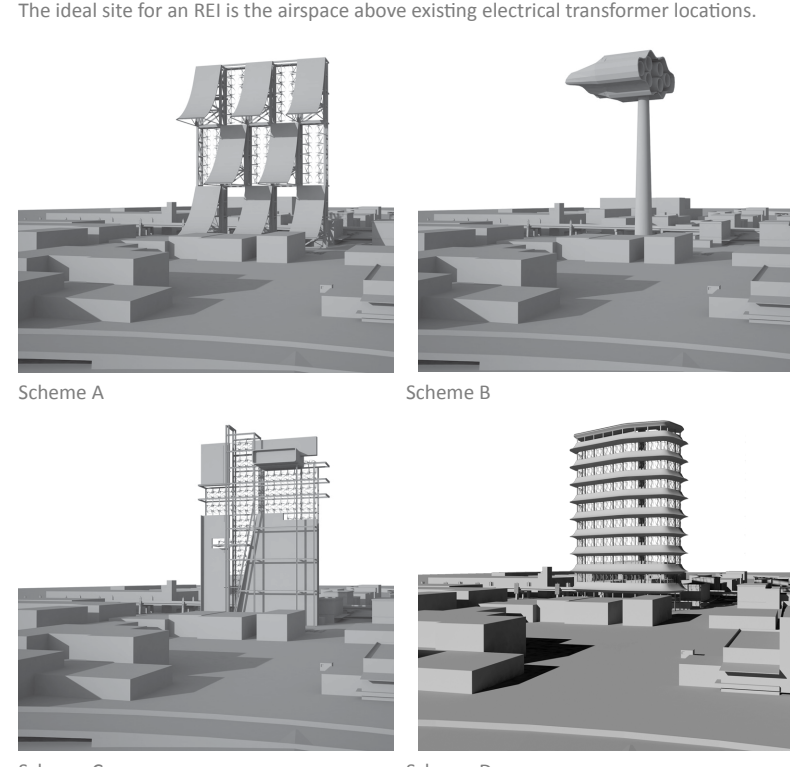
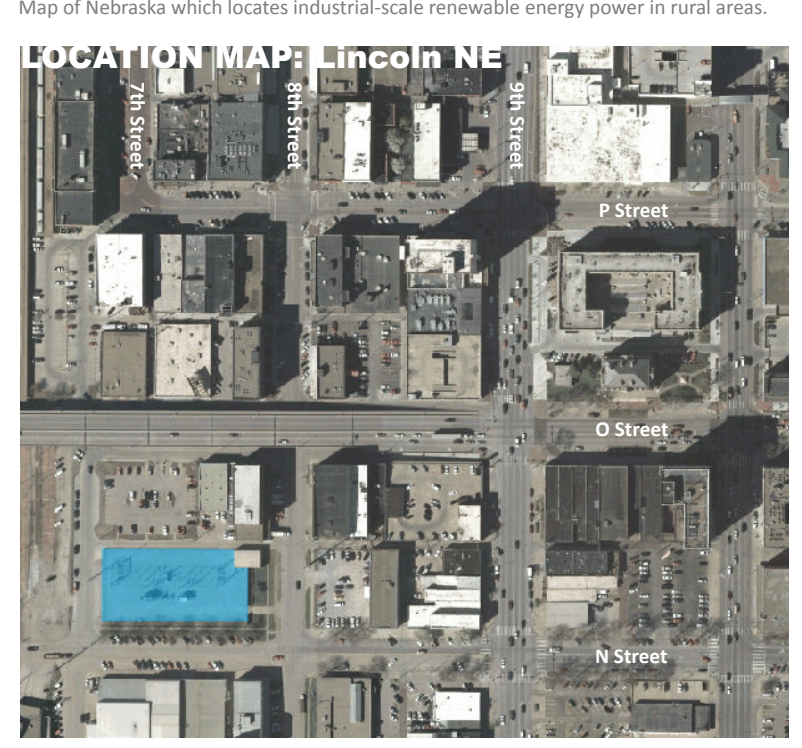
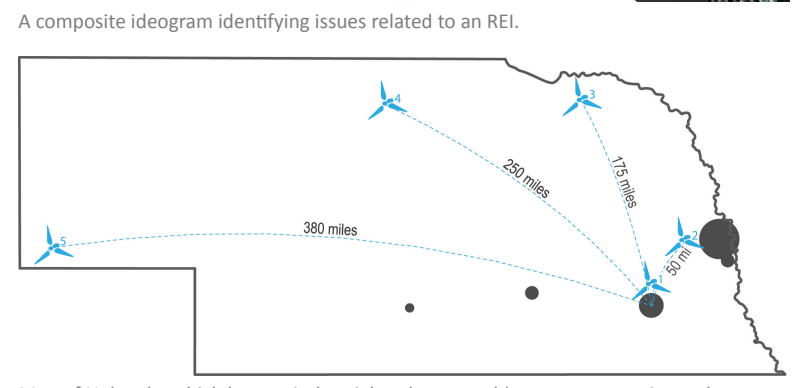
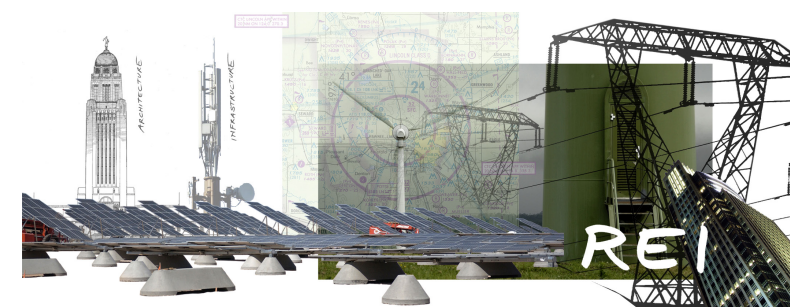
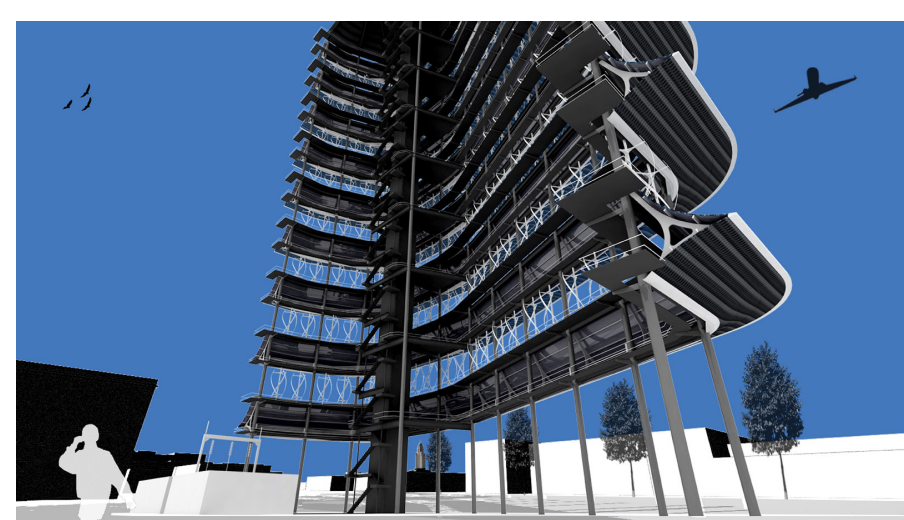


REIS: RENEWABLE ENERGY INFRASTRUCTURES

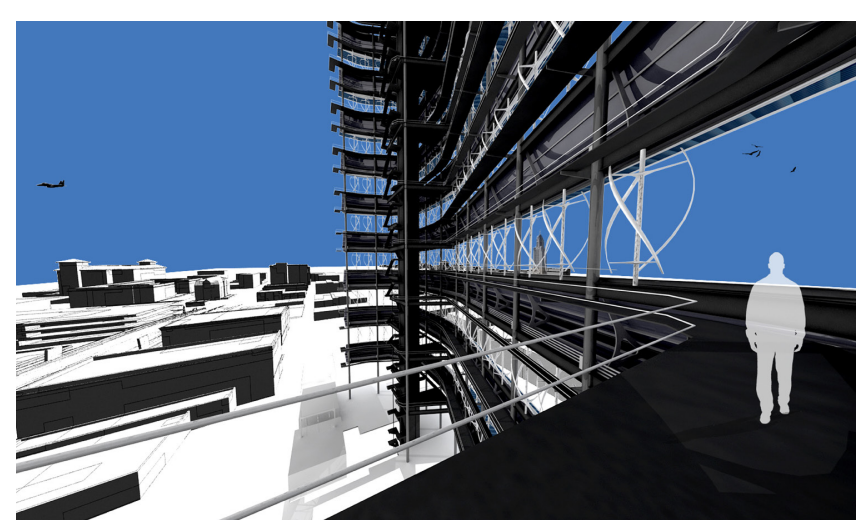
Designers have historically played a role as technological innovators. As such, our design-led research team is looking to apply design thinking skills to a problem that involves energy production, energy transmission, and urban living. An REI generates renewable energy megawatts (MW) at an industrial scale through the simultaneous harnessing of wind, solar, and geothermal resources within an integrated, holistic, and free-standing facility positioned in an urban environment. An REI is not a retrofit of a pre-existing architectural condition, but rather is conceived as a new typology to be owned and operated by an electrical utility for servicing users in high-population areas. We are in an advantageous position to consider this design problem and are assessing the full design requirements involved in such a proposal. We are not interested in a speculative endeavor and therefore are cataloging industrial-scale power technologies while generating multiple plausible design options for hybridizing solar, wind, geotechnical and (if applicable) hydrological technologies into a single, holistic, infrastructural entity. Our project deliverables yielded require working with the State of Nebraska's various public power districts in the design of (3) site-specific, technically-plausible REI solutions of escalating scale; Columbus NE (population 21,595), Lincoln NE (population 251,624) and Omaha NE (population 438,646). We are finding our preliminary design to have the technological potential of generating 124 MW of renewable energy.



View from Old City Hall, overlooking the West "O" Street bridge.

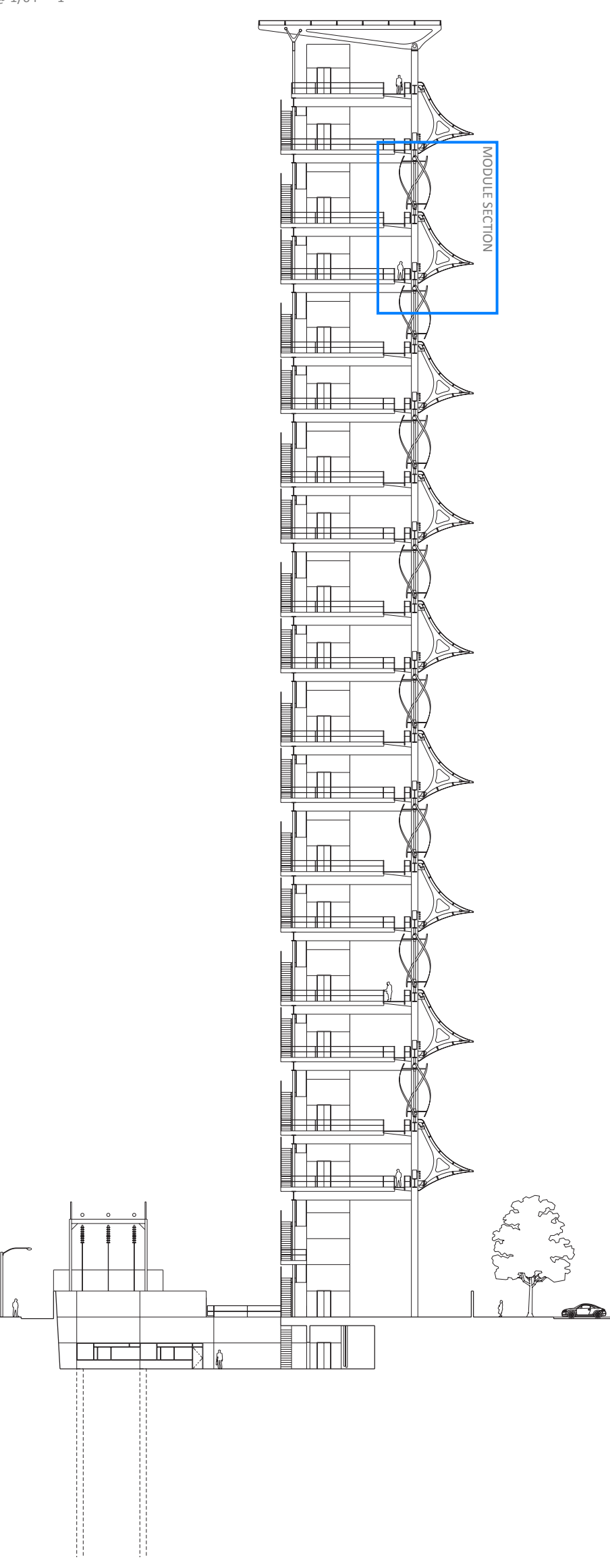


View from street level.

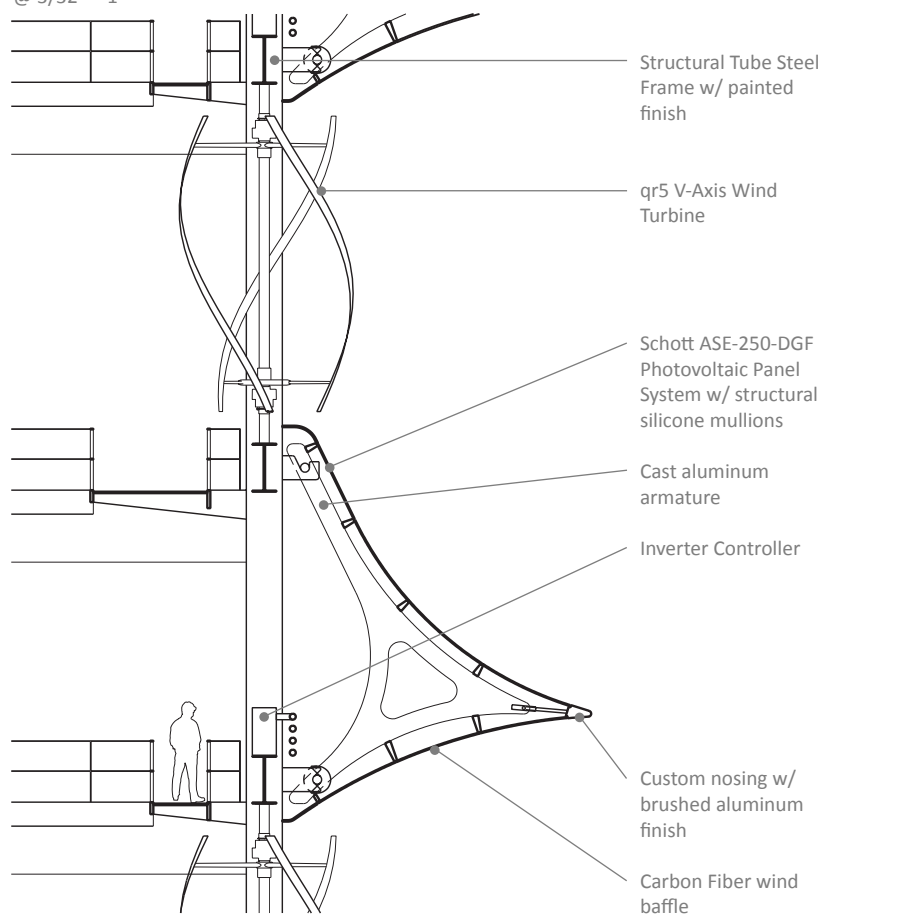


View from service walkway.

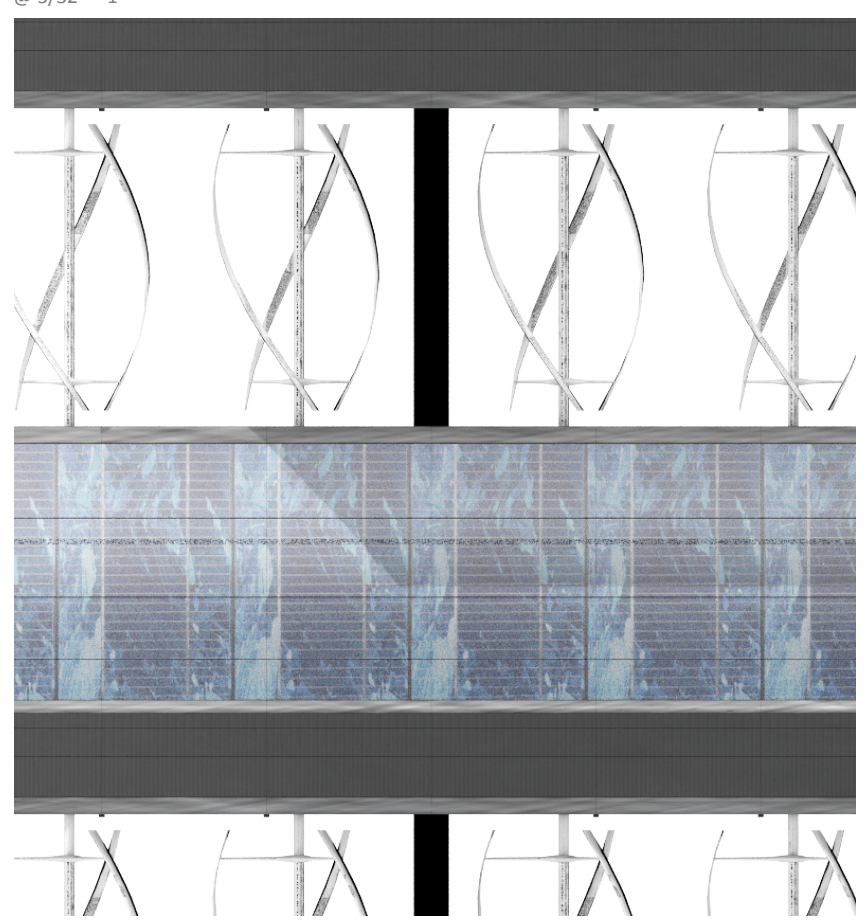
SECTION @ 1/64" = 1'



MODULE SECTION @ 3/32" = 1'



MODULE ELEVATION @ 3/32" = 1'



SITE PLAN @ 1/64" = 1'

