



AGAINST THE GRAIN

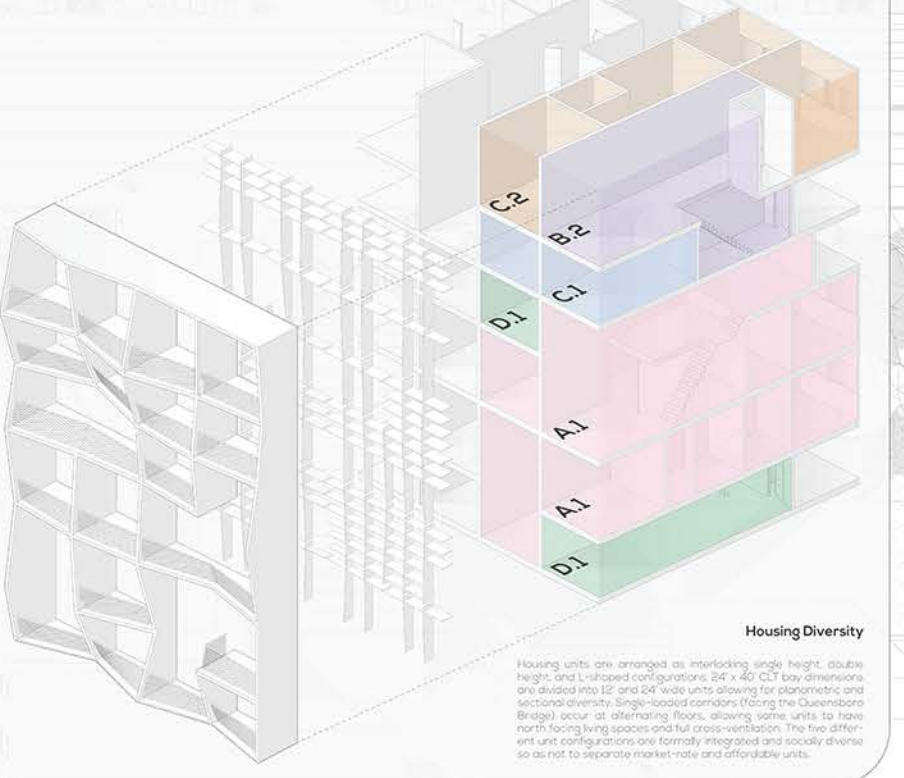
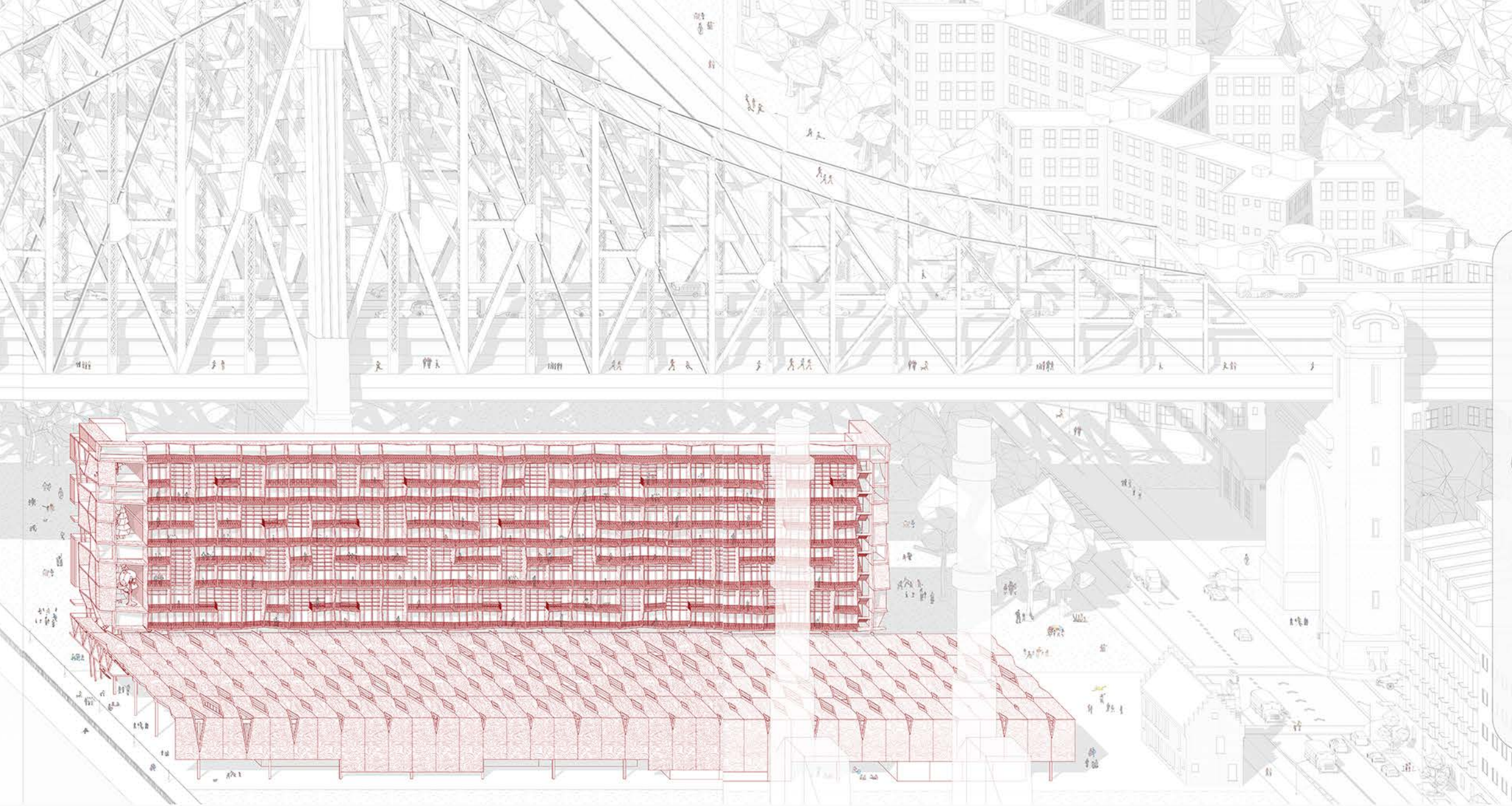
ADAPTING WOOD FOR A CITY OF STEEL AND CONCRETE

BUILDINGS ARE VESSELS – a familiar phrase in architecture. But rather than thinking of the vessel as a container, receptacle, vault, or precious ark for objects, our aim is to redefine it as a conduit for movement, circulation, transmission, and distribution. Like blood in vessels or arteries of the body, this project imagines the flows of people in and through the program for community wellness, the steady march of toddlers entering and exiting the early childhood center, and the ebb and flow of people who take up residence in one of its affordable housing flats.

Trees are vessels as well – drawing nutrients from the earth and pulling carbon from the atmosphere. Outstretched canopies and spreading roots are connected by the soft, outer layers of the trunk, which function as a highway for the exchange and neutralization of carbon.

Our project incorporates two approaches derived from wood's unique cellular organization. First, the cross-grain nature of wood inspires the density and packing of the 10-story cross-laminated timber housing wing. 24' structural bays are arranged as parallel bearing walls. The south face of this floating structure carries verandas of varying size and shape while simultaneously providing skyline views and sun protection. Second, the parallel organization (running with the grain) of the wellness and early childhood programs are situated beneath a horizontal canopy constructed of parametric and perforated 40' x 12' CLT planks, allowing light to pass into the spaces below.

Against the Grain also challenges the conventions of current CLT construction by reconsidering panel and wall shapes that adapt more readily to the building program and outward formal expression. Working within these conventions we hope to reshape and push the limits of customary cross-laminated timber construction.



Housing Diversity
Housing units are arranged as interlocking single height, double height, and L-shaped configurations. 24' x 40' CLT bay dimensions are divided into 12' and 24' wide units allowing for planometric and sectional diversity. Single-loaded corridors (along the Queensboro Bridge) occur at alternating floors, allowing some units to have north-facing living spaces and full cross-ventilation. The two different unit configurations are formally integrated and socially diverse so as not to separate market-rate and affordable units.

