



MANCHESTER PAVILION

Design-Build Backyard Renovation with Pavilion & Hardscape/ Pittsburgh, PA / 2025
AFTERHOURS Design Collaborative

The project site is a 20' x 24' urban residential rear yard enclosed on four sides and roughly oriented to the cardinal directions: to the east, a 3-story multi-family historic brick structure; to the north and west, a 6'-6" tall CMU wall; to the south, the 3-story primary residence. Access to the yard is via a narrow 30"-wide exterior walkway within the existing structure's setback to the east. Given the existing home's somewhat limited interior gathering space, the owner sought to expand the living area of the home via a new "back porch"—he envisioned a covered outdoor space for relaxing, entertaining, and, specifically, enjoying an evening fire during a summer rain.

The design, which amounted to a full rehab of the rear yard, leverages the gritty textures and spatial enclosure of the existing property while introducing an ensemble of new elements to create a holistic experience that is harmonious with its site and more than the sum of its parts. The project, which can be considered "fully custom" and is well-built from quality materials, was designed, detailed, priced, permitted, and built by AFTERHOURS in 7 months for \$74,500 and is a demonstration of the level of detail and design sophistication that can be achieved when design and build are unified as one.

As with many of our projects, the idiosyncratic form and detailing grew as a direct response to the specific opportunities and constraints of the site. The proximity of adjacent buildings dictated that the new structure be located as far north as possible to maximize solar access for the patio. In doing so, the structure reinforces the bounds of the site—increasing the sense of enclosure and domain—and itself acts as a privacy screen from the neighboring buildings. The west end of the structure rests on an existing CMU wall to avoid additional column foundations which would have conflicted with an extant sewer line there. At the east end, two new columns are positioned inward from the property line to conform to setback requirements while reinforcing the arrival axis set up by the existing access walkway to the east. The structure's longitudinal beams extend eastward to near contact with the neighboring brick wall, helping to frame a "forecourt"—or narthex—which is left open to the sky. This modestly ceremonial entry space connects heaven to earth: rain water collected by the roof is directed by a slender galvanized steel scupper to a planted reclaimed clay brick catch basin that emerges from grade. A square copper panel, which gains a natural patina from the splash of roof run-off, is mounted at eye level to the north wall directly in line with the east walkway, piquing curiosity from passerbys on the street and serving as a deliberate invitation to the project: you see it and it sees you, squarely.

The asymmetrical butterfly roof was selected for its natural ability to address multiple project objectives at once. Given that a solid roof was required—as opposed to a pergola—for rain cover, opening up the structure to the south allows direct sunlight to reach the patio during the cooler months while also providing adequate shading during the summer. This gesture also creates a form which "looks back" at the existing dwelling—specifically the kitchen sink window—, giving a welcome presence to an otherwise uninspired view. Locating the gutter away from the north property line avoided conflict with the adjacent structure there while also affording the opportunity to celebrate the collection of rainwater.

On the whole, the specific form and detailing of the project are intended to provoke curiosity and inspire questioning about the design and make-up of the built environment around us. Buildings are uniquely capable of documenting and reflecting the value systems of those who conceive of and construct them. By observing the many decisions embedded in buildings of the past, we may be connected with the hearts and minds of their creators and the continuous body of human thought and desire within which we all participate and contribute. We are able to ask, "Why?" and to encourage answers to the ever-pertinent question, "How ought we build?"—indeed, "How ought we be?" Too few buildings of our time dare even encourage us to look closely, perhaps because they are afraid of what we may find...

Years
Design 2025
Construction 2025

Design
AFTERHOURS: Garrett Rauck

Design Consultants
Structural Engineer: Christopher Kim, House and Building Engineering

Construction
AFTERHOURS: Garrett Rauck, Bailey Hall

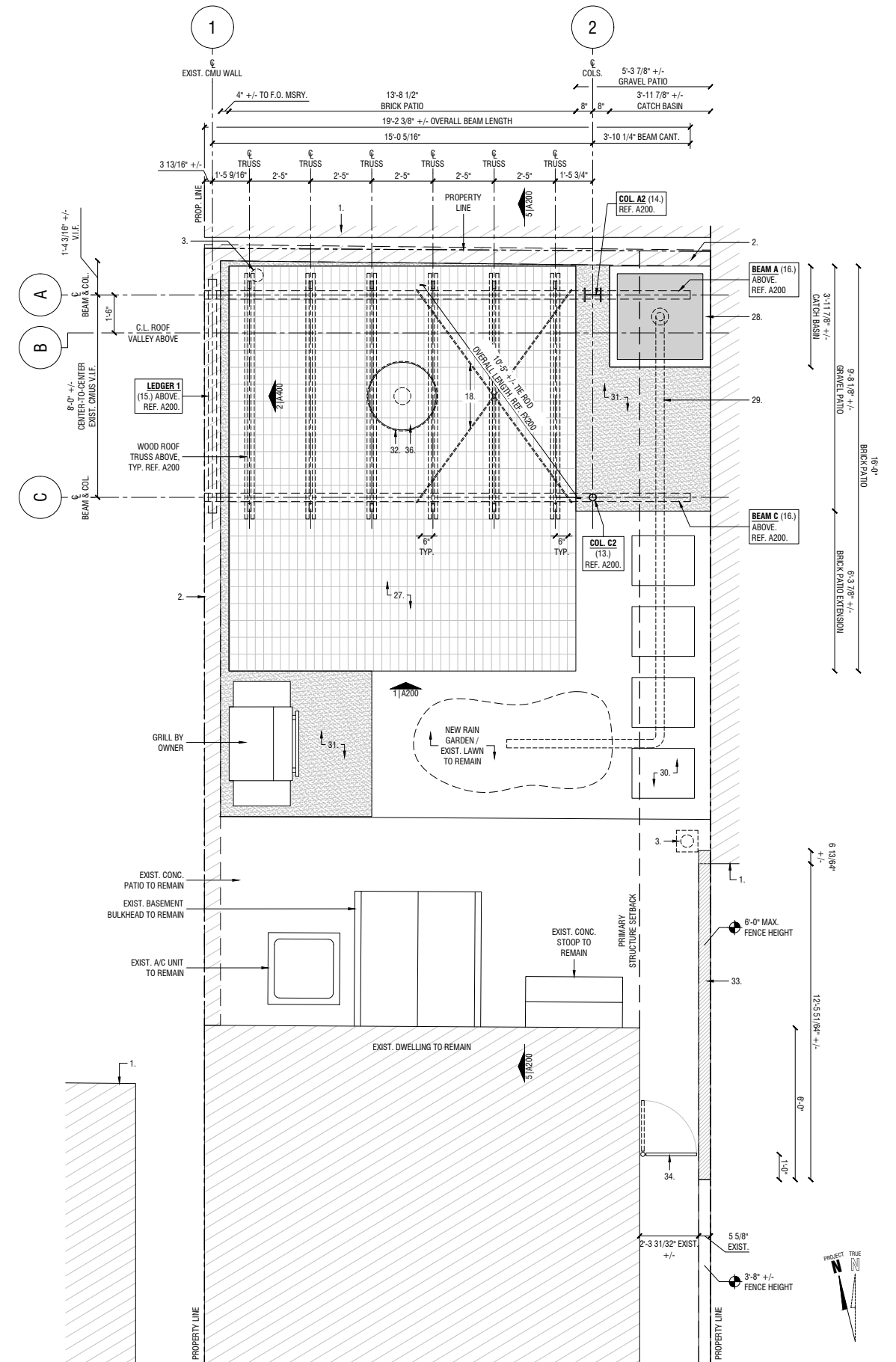
Fabricators
Structural Steel Fabrication: Woodward, Inc.
Light Metal Fabrication: Welded Sheet Metal Manufacturing LLC; Peace It Together, LLC



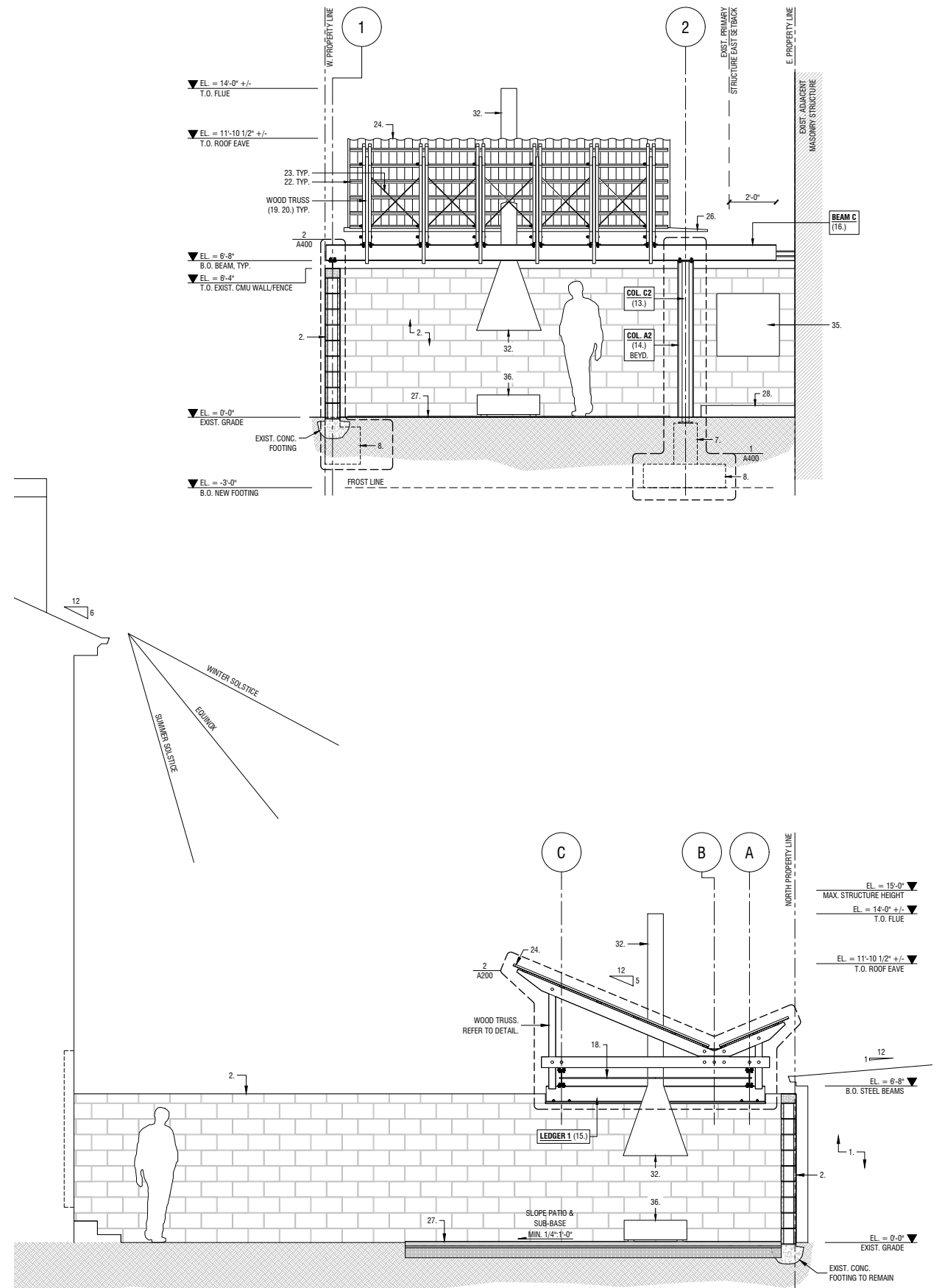
(Above, top) Existing rear yard, view from east walkway looking north. The roof forms of the adjacent buildings were certainly influential to the new structure. (Above, middle) Preliminary schematic rendering, aerial view looking northwest. (Above, bottom) Preliminary schematic plan. (Opposite) View of completed structure, looking north toward "forecourt".



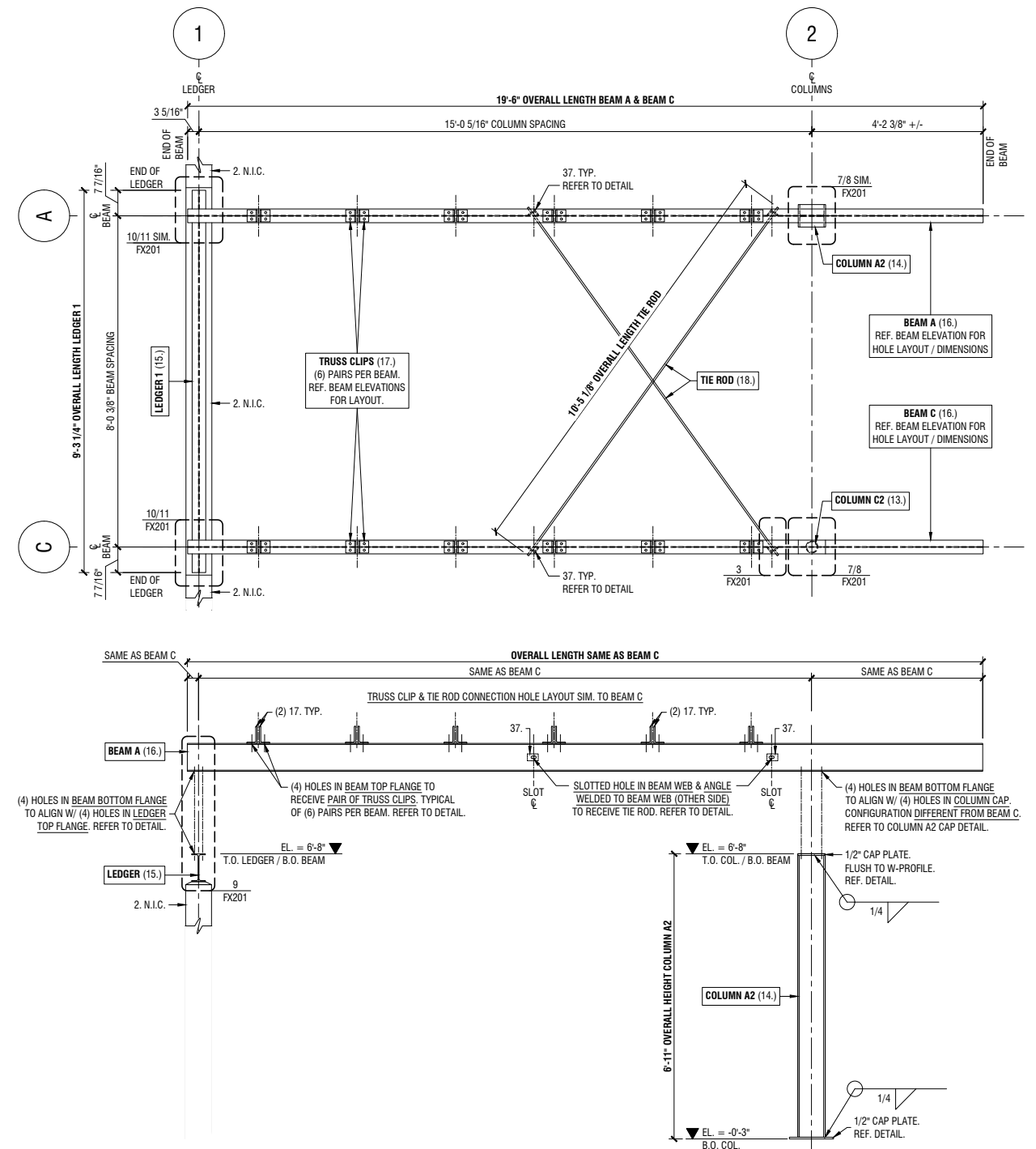
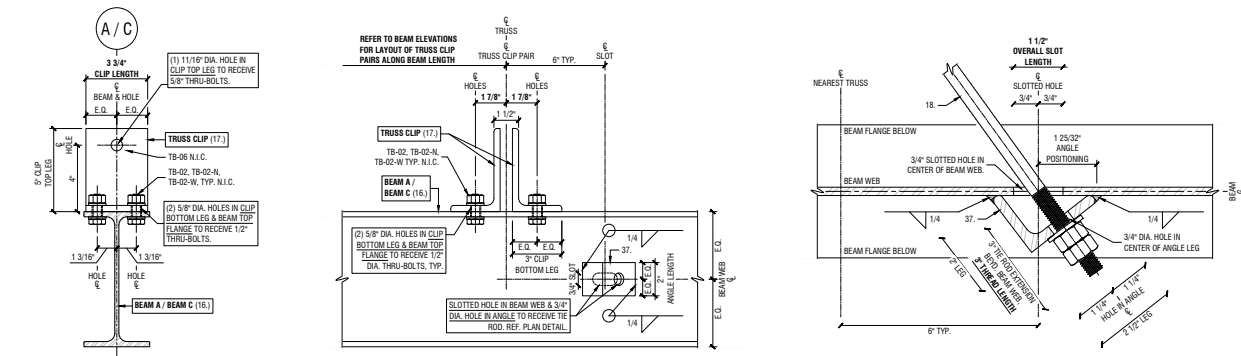
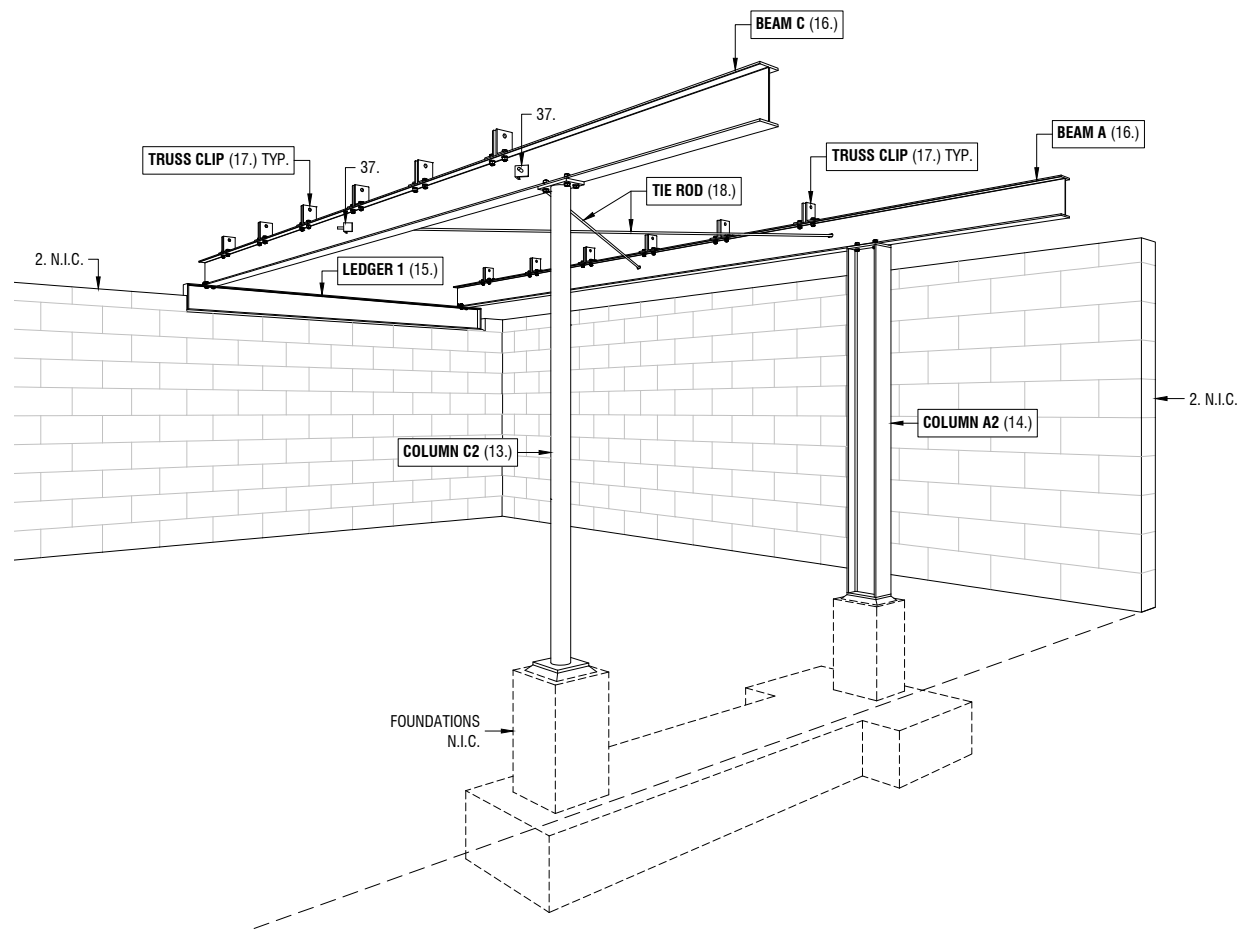
View of nearly-completed structure and patio, looking north.



Construction Plan. Access walkway along east property line shown at right.



South Elevation and Transverse Section. The butterfly roof allows direct sunlight to reach the patio during the cooler months while providing summer shading. The structure plays a game of weight and weightlessness: the visual mass of the structure—created from the rhythm and articulation of the truss roof framing—is intentionally set above the elevation of the existing block wall, giving the feeling of a floating mass overhead. The flue, suspended from the roof by stainless steel cables and guiding the hearth's flame, mediates the domains of heaven and earth—Holy Ghost?



(Top) Excerpts from structural steel shop drawings for fabrication. (Bottom) Construction photos of steel receiving and erection.



(Bottom) New access gate and privacy fence made from salvaged steel gate frame, wood truss prototype, and assorted project offcuts. (Opposite) Detail of horizontal steel tie rods and underside of galvanized steel valley gutter.