ARCHITECTURAL R E C O R D

Calatrava's World Trade Center Transit Hub Finally Opens

The nearly \$4 billion project was first estimated to cost \$2.2 billion. March 3, 2016 Joann Gonchar, AIA

This afternoon, in time for New York's evening rush, Santiago Calatrava's World Trade Center Transportation Hub finally made its public debut. But after more than a decade of construction, little fanfare marked the milestone for the much delayed, nearly \$4 billion project, which was originally slated to open in 2009 and at first estimated to cost \$2.2 billion. Instead, the client, the Port Authority of New York & New Jersey, removed some of the construction barriers, giving people access one of several street level entry points and one end of the almost-complete main hall. The space, known as the Oculus, is the centerpiece of a sprawling network of underground connections among the WTC's office towers and a station for the PATH train to New Jersey, which the agency says will serve 100,000 commuters per day.



The hub is expected to be more complete this spring, when some of its 365,000 square feet of retail space is fit out and a city-blocklong pedestrian tunnel running east will open, linking the World Trade Center with Fulton Center and its 11 subway lines.

But even in its current, not-quite finished state, the Oculus's interior should wow people who pass through the elliptical, cathedrallike space. Its gleaming white steel ribs soar 160 feet and during daylight hours the sun streams through glazing between the boneshaped structural elements and down from a 330-foot-long central skylight, making it hard to believe that the pristine white marble floor sits two stories below the street.

One part of the hub that is more fully functional is an underground concourse that leads west to the former World Financial Center (now Brookfield Place), open since October 2013. The pedestrian passageway relies on a similar language as the Oculus, with white marble floors and walls and arched steel elements that provide the 460-foot-long, double-story passageway with a graceful rhythm. Its electric illumination, which bounces light off the ceiling, emphasizes the structural components and gives the whole space an inviting, almost ethereal, glow.

Unfortunately, the hub's subterranean drama doesn't translate into coherence above grade. Outside, the Oculus ribs transform into outstretched wings that in Calatrava's first schemes pivoted in order to open the glazed skylight. Although the operable skylight survived value engineering, the moveable wings did not. But kinetic or fixed, these elements are too literal—intended to suggest a flying dove. Plus, the building, which has been likened to everything from a stegosaurus to a porcupine to a Thanksgiving turkey carcass, is ill at ease on its site. Not only is its biomorphic form at odds with the fiercely rectilinear geometry of its surroundings. The spiky creature is hemmed in with little breathing room—wedged between Rogers Stirk Harbour + Partners' WTC Tower 3 rising just to the south and Bjarke Ingels's WTC 2 planned for the plot to the north. From the outside, the Oculus reads more like a beached whale than a bird about to take flight.

This above-ground, idiosyncratic expression may be forgiven, however, if the Oculus's interior is used as Calatrava envisioned it. He has referred to it as a "piazza for New York," where people will gather or sit with a cup of coffee, in addition to circulating through on their way to the train. But with so little of it accessible, and with none of the retail that will ring its perimeter yet open, it is hard to know if commercial activity will compete with, or complement, his grand civic gesture.