Waiting: Sidewalk Sheds and Urban Identity

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THESIS STATEMENT

In New York City, a sidewalk shed is a structure that covers a sidewalk immediately adjacent to a site under construction in order to protect pedestrians from falling debris. There are currently about 9,000 sheds in the entire city, with a lifespan of about 300 days. In total, all of the sidewalk sheds take up about 1,000,000 feet of space.¹ Their existence is unwanted but inevitable, and, over the last four decades, these sheds have become an integral part of the City’s identity. This thesis proposes an intervention that allows the shed to better engage with the general public, particularly the City’s homeless population. By making the sidewalk shed a permanent architectural feature rather than a temporary safeguard, the existence of the shed becomes an opportunity to increase the amount of occupiable space in a densely populated area. In this thesis, the New York City Building Code serves as a set of formal and functional constraints, and the design solution is an intervention that results from loopholes and exceptions within, and even alterations of, the code.

According to a census taken in September 2019, approximately 62,000 homeless people in New York City have been sleeping in shelters each night.² This intervention on the sidewalk sheds would thus address a relevant issue by turning the sidewalk sheds into housing for the homeless, who would normally sleep on the ground underneath the sidewalk shed. Another intervention would involve editing the code so that sidewalk sheds are required to serve as a display for public art. In both cases, the sidewalk shed becomes a multifunctional object that enhances the environment and contributes to a new identity for the City.

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¹ “Active Sidewalk Shed Permits” Database, New York City Department of Buildings
² NYC Department of Homeless Services and Human Resources Administration and NYCStat shelter census
BACKGROUND

In 1980, one year after the death of a woman by falling debris, New York City passed Local Law 11 in order to increase sidewalk shed regulations. This law, which is still in place today, requires an inspection of New York City building facades once every five years. After 2008, in particular, there has been a spike in the number of sidewalk sheds due to the increase of residential and commercial buildings going up in New York. Since city building officials do not set a specific deadline for owners to make repairs and take down their scaffolding, many sidewalk sheds stay up for years, even decades. The City’s oldest sidewalk shed, located at 409 Edgecombe Avenue, has been up for more than twenty years.

In New York City, homelessness has become a crisis, with the number of homeless nearly doubling in the last decade. Modern homelessness in New York City began in the late 1970s following a decrease in the number of single-room housing units (SROs), as well as the deinstitutionalization of thousands of mental health patients during this time. Homeless people may prefer the street to the homeless shelter due to the crowdedness and restrictive nature of a shelter. However, they may run the risk of getting their baggage stolen if they have any.

Studies have shown that stable, long term housing assistance is the best solution for homelessness, as well as the right to shelter. Thus, this project proposes shelter, increased amounts of public space, and artwork as a means of positively influencing the city’s identity.
Mud Sills
Steel Columns
Light Cage
S4 x 7.7 JR Beams
W8 x 10 Steel Beams
Corrugated Steel Panel
Connectors
Flanks
S4 x 7.7 JR Beams
W8 x 10 Steel
Light Cage
Clamp
Steel Column
Mud Sills
Cross Bracing Steel Beams
Steel Beams

Unexploded:

Exploded and Annotated:
*All plan wall thicknesses are 1'*
Precedent Studies

   <https://www.archdaily.com/420787/schaustelle-j-meyer-h-architects/> ISSN 0719-8884

   <https://www.archdaily.com/875599/acola-store-vao/> ISSN 0719-8884

SCHAUSTELLE | J. Meyer H. Architects

Acolá Store | Vão

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   <https://www.archdaily.com/875599/acola-store-vao/> ISSN 0719-8884
3307.6 Sidewalk sheds. Sidewalk sheds shall be provided as required by this section to protect pedestrians from construction or demolition operations and to provide shelter to those who need it.

3307.6.1 Permit. No sidewalk shed shall be installed without a permit in accordance with the requirements of Chapter 1 of Title 28 of the Administrative Code.

3307.6.2 Where required. A sidewalk shed shall be installed and maintained to protect all sidewalks, walkways, and pathways within the property line of a site, and all public sidewalks that abut the property, as follows:

1. Sidewalks, walkways, or pathways to be located immediately below a scaffold, mast climber, or chute. The sidewalk shed shall be installed prior to the installation of such equipment and shall not be removed until such equipment has been dismantled and/or removed from the site.

2. When a structure higher than 40 feet (12.19 m) is greater is to be constructed, or the sidewalk, walkway, or pathway is within a perpendicular distance from the new structure that is equal to or less than half the height of the new structure. The sidewalk shed shall be installed when the structure reaches the planned height.

3. When a portion of a façade over 40 feet (12.19 m) above curb level is to be constructed, altered, maintained, or repaired, or a vertical or horizontal enlargement is to occur at a height over 40 feet (12.19 m) above curb level, and the sidewalk, walkway, or pathway is within a perpendicular distance from the structure that is equal to or less than half the height of such façade work or vertical or horizontal enlargement.

The sidewalk shed shall be installed prior to the commencement of work at a height greater than 40 feet (12.19 m) above curb level. Such shed shall not be removed until the building is unoccupied, all exterior work has been completed, and the shed is brought to within 1 inch (25 mm) of the face of the building or structure, the deck shall be brought to within 1 inch (25 mm) of the face of the building or structure, the opening into the street shall be filled. All openings created by the removal of the sidewalk shed shall be temporarily sealed, except for the entrance to the sidewalk or street.
Seating below the shed. All sheds shall have embedded seating underneath the lower deck. All sheds will become occupiable, with multiple single-occupancy rooms that are free to the public.

3307.6.4 Deck. The deck of the sidewalk shed shall serve as a green roof composed of sedum or similar plants equivalent material and shall be capable of sustaining the loads required by Section 3307.6.4.2. The deck shall be solid, or shall consist of planking laid close and made tight. Where the edge of the sidewalk shed abuts a building or structure, the decking shall be brought tight to the face of the building or structure.

3307.6.10 Founding. The surface upon which the shed rests shall be capable of supporting the design loads of the sidewalk shed, including any item placed or stored upon the shed.

3307.6.11 Color. Sidewalk sheds shall display artwork by up and coming artists in the City.

3307.6.5 Installation, adjustment, maintenance, repair, use, inspection, and removal of sidewalk sheds. Sidewalk sheds shall be installed, adjusted, maintained, repaired, used, inspected, and removed in accordance with the following requirements.

3307.6.5.1 Safe condition. Sidewalk sheds shall be maintained in a safe condition and used in a manner that eliminates hazards to the public. Any hazardous conditions or defects discovered with the sidewalk shed shall immediately be brought to the attention of the permit holder for the shed.

3307.6.5.2 Supervision of installation, adjustment, repair, and removal. The installation, adjustment, repair, or removal of a sidewalk shed shall be performed under the supervision of a competent person designated by the permit holder for the sidewalk shed.

3307.6.5.3 Responsibility for maintenance and use. Sidewalk sheds shall be maintained and used by the general contractor, or where there is no general contractor, the contractor causing the work to be performed, or where there is no active work, the building owner.

3307.6.5.4 Storage or placement of items. No item shall be stored or placed upon a sidewalk shed unless such shed has been designed for such storage or placement in accordance with Section 3307.6.2.2.

Where such shed has been so designed items shall be stored or placed only in the area designated on the drawings for storage. Any item placed or stored upon a sidewalk shed shall be secured in a manner to prevent displacement, movement, or wind, and shall be distributed so as not to exceed the design limits of the sidewalk shed.

3307.6.5.5 Cleaning and maintenance. The decks of sidewalk sheds shall be broom swept and cleaned of material daily. No dirt or dust is allowed on the site. The green roof shall be inspected and watered daily to ensure healthy and adequate growth.

3307.6.5.11 Notification of removal. The permit holder for the shed shall notify the department no more than two business days following the complete removal of a sidewalk shed.

THESIS PROJECT DESCRIPTION

In my project, the sidewalk shed becomes a permanent feature that engages the public through more than just baseline protection. The front face of the sidewalk shed will display artwork, rather than a hunter green facade. The decision to include artwork is inspired by the City Canvas initiative by the New York City Department of Cultural Affairs.¹

The upper deck, while still protecting from falling debris, will also serve as a roof garden to attract bees and help clean up the air. By increasing the height of the shed and turning the space behind the metal parapet into an occupiable set of rooms, the sidewalk shed becomes a site of shelter. While this space would be elevated to allow for passage underneath, the upper rooms will still be accessible through the use of ramps and stairways. The space underneath the lower deck is thus left open for public seating. Most of the materials will remain the same as those of the original sidewalk shed as a way of referencing the formal elements of the New York City vernacular.

¹ “City Canvas,” NYC Cultural Affairs, City of New York.
The artwork on the shed is a sample from "Legendary" by Amber Art and Design featuring Tatyana Fazlalizadeh. Completed in 2013, this street art is located on 512 S. Broad St in Philadelphia. This piece is an example of the type of artwork that would be put on display with the new sidewalk sheds.
ANNOTATED BIBLIOGRAPHY


An interactive map of all of the active sidewalk sheds in New York City, organized by size and age. This map is updated on a daily basis.


A two act play in which two men ponder the philosophies of life while waiting for a third man named Godot.


A study of time and its effects on contemporary society.


A detailed account of the sidewalk shed on 409 Edgecomb Avenue, the history of the shed, and the large-scale impact that these sheds have had on the urban fabric of New York City.

BIBLIOGRAPHY


“City Canvas.” ArtBridge, https://art-bridge.org/citycanvas/.


