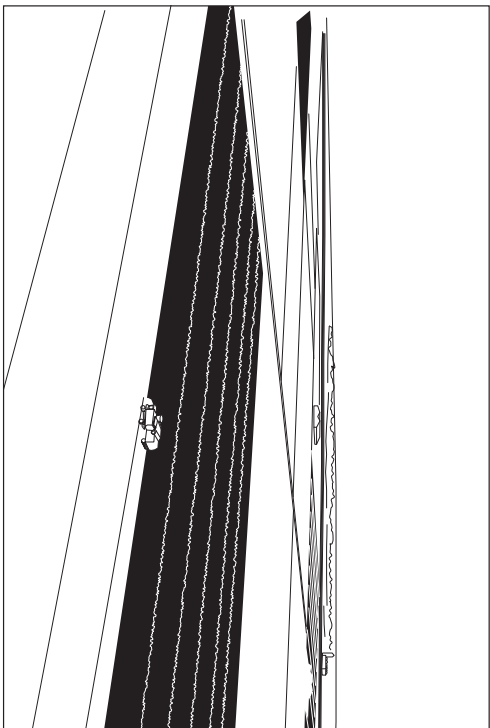
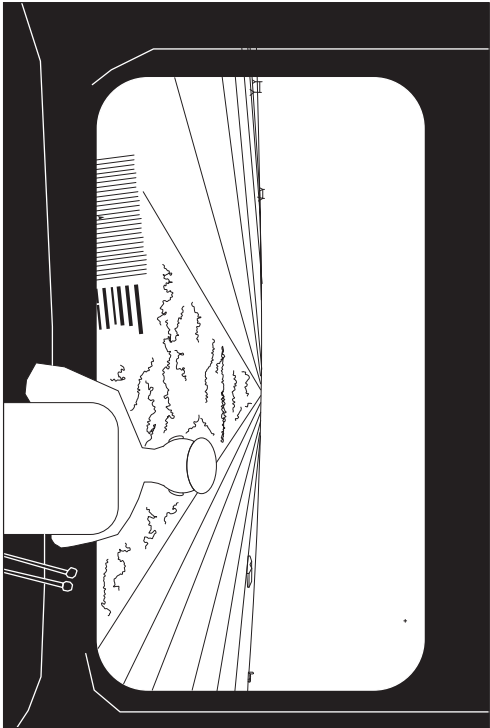


This contribution reintroduces the face-to-face interaction within the trading process, catalyzing a paradigm shift in the Dutch potato production mode quantitatively and qualitatively.

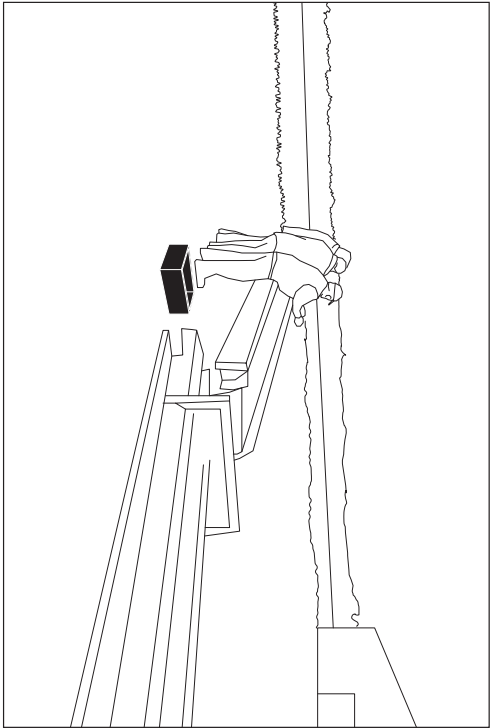
5



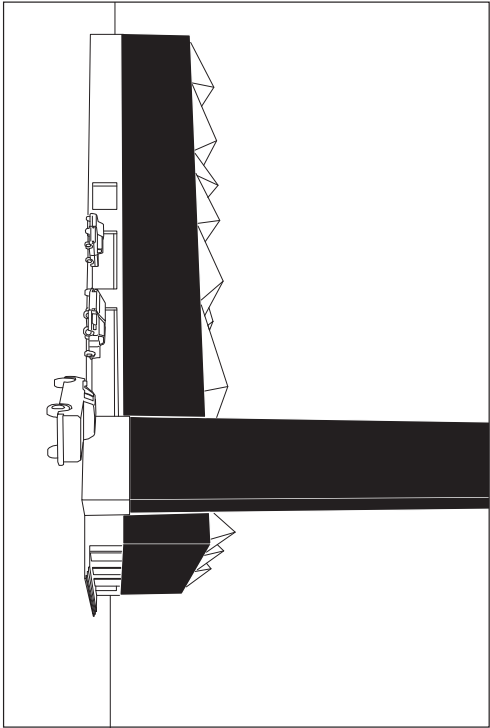
Extreme weather events and diseases are forcing the Dutch potato farmers to subdivide their plots to grow more private robust varieties as means to disperse risk and increase the margin. A new potato wholesale market is built responding to the new production mode.



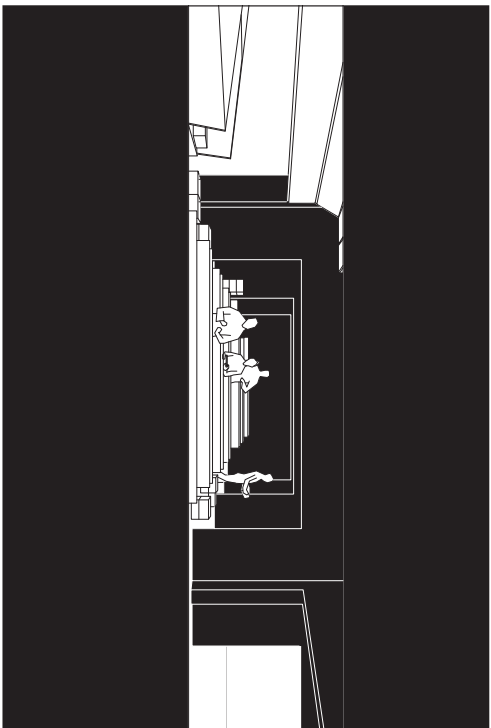
Thanks to precise farming advancements, potato growers carefully plan their field, cultivating several varieties to reach the max profitable composition.



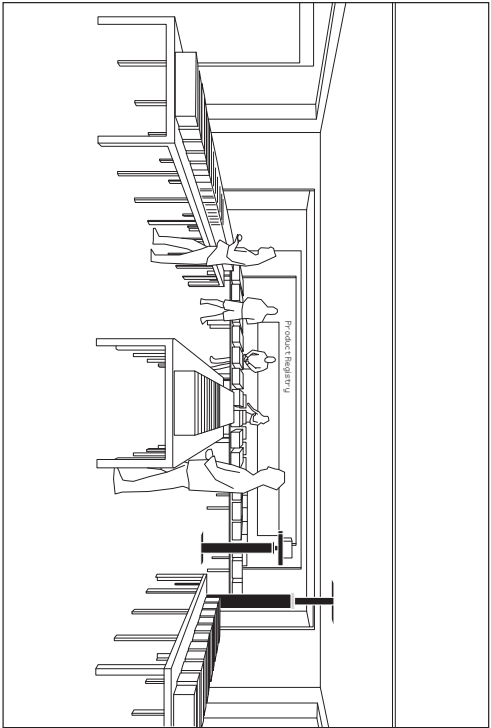
During the harvest season, farmers sort their fresh potatoes and prepare sample crates—representative crates of batches of varieties ready for sale—to bring to the wholesale market for auctions.



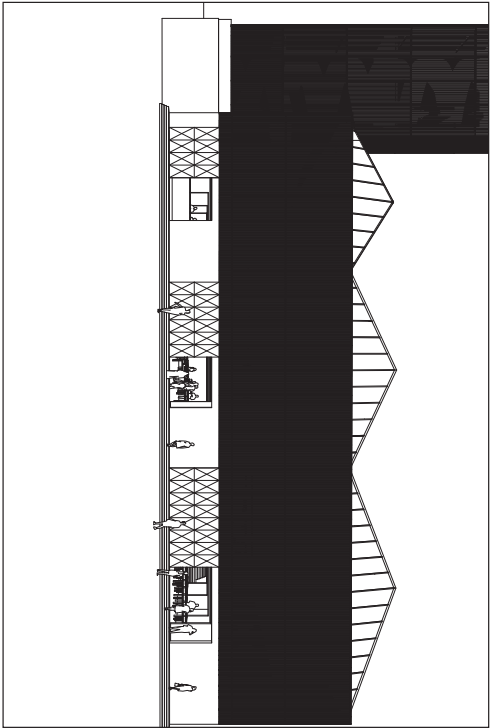
The potato grower's truck arrives at the wholesale market and parks at one of the loading docks.



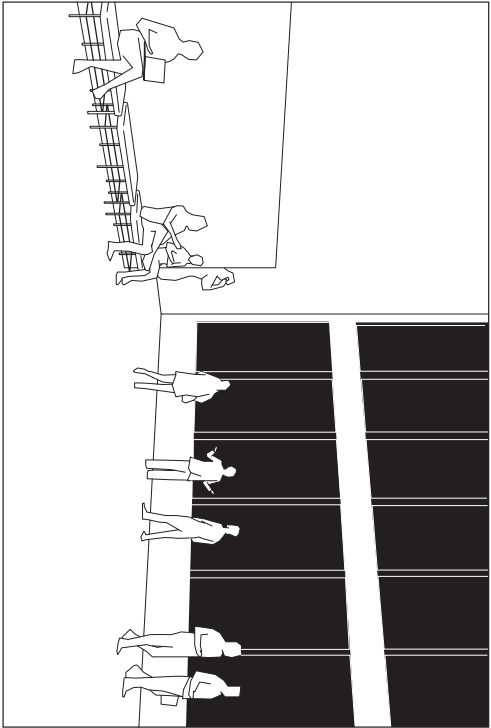
Before the crates are put on display, they are examined in a designated area to specify their varieties, qualities, and market channels. Potato Growers will receive a red trade card specifying where their products will be auctioned.



Sample crates are placed on the ground floor of the wholesale market, waiting to be fitted to the upper floor by hydraulic elevators.



On the other hand, buyers enter the building from a perpendicular angle. They examine and test the quality of exhibit samples while updating their purchasing lists.



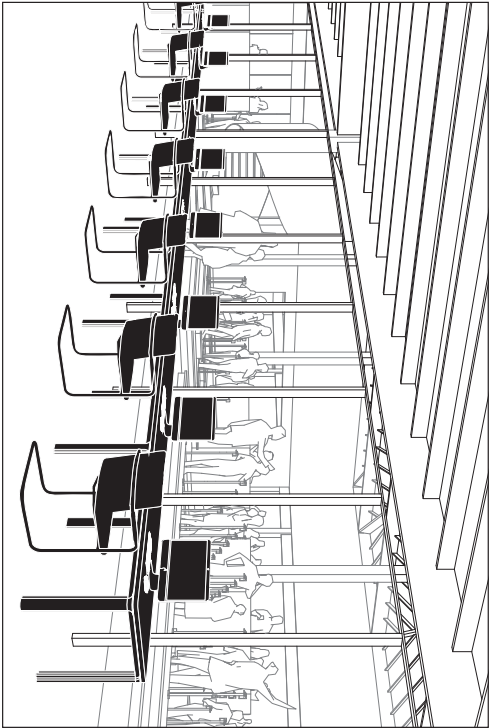
At the opposite end of the showroom, members ascend through stairs to the main lounge, where they further proceed to the trading floor.



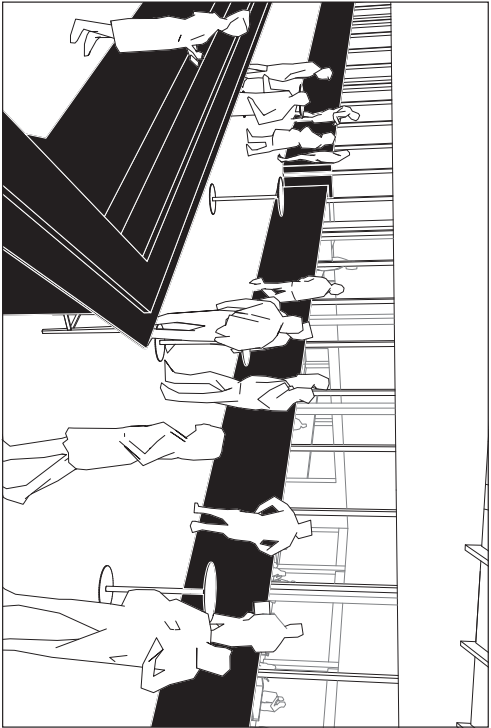
All auctions start at 5 o'clock sharp in the morning!



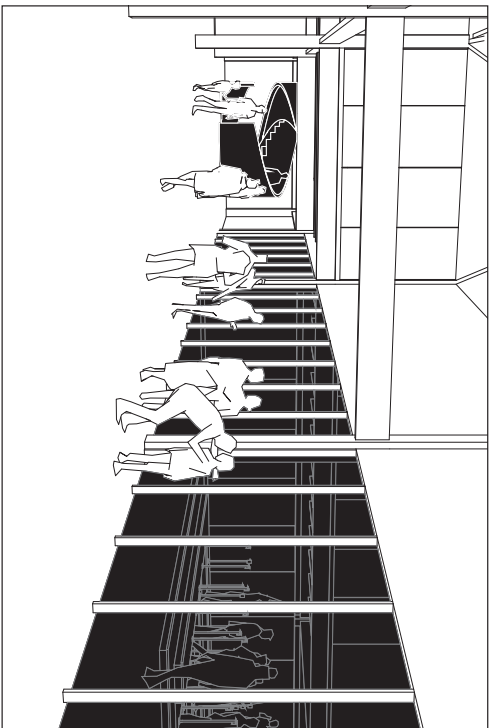
In the auction pit, a potato crate is brought up and placed in the center. An auctioneer stands by it, conducting the process of selling and buying. The auction clock in the front displays product's identity code, current price, and buyer who wins the bid.



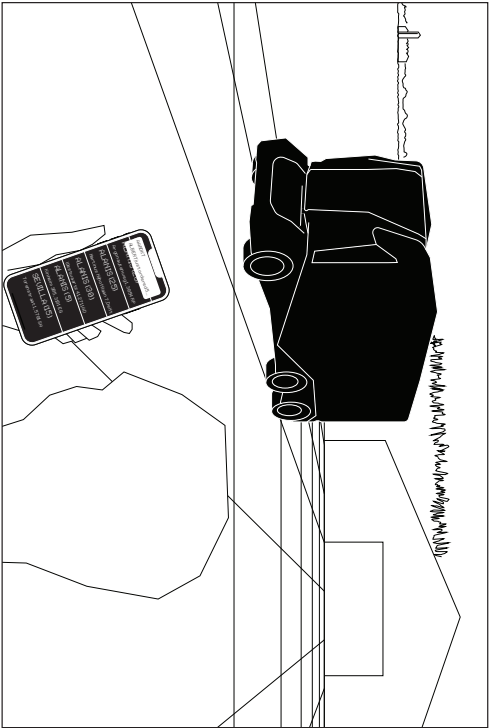
All the information produced on the trading floor are stored and published in real-time at the archive next to the trading floor. The transparency of data plays a crucial role in building trust in the market.



Above the trading floor, a cafe sits on the mezzanine level, where members can exchange information about potato supply chain with a clear sight of the giant quotation board surrounding the entire space. Members also come here to watch and study the market trend. Farmers predict certain varieties that will be popular next year and calculate the cost of growing and storing.



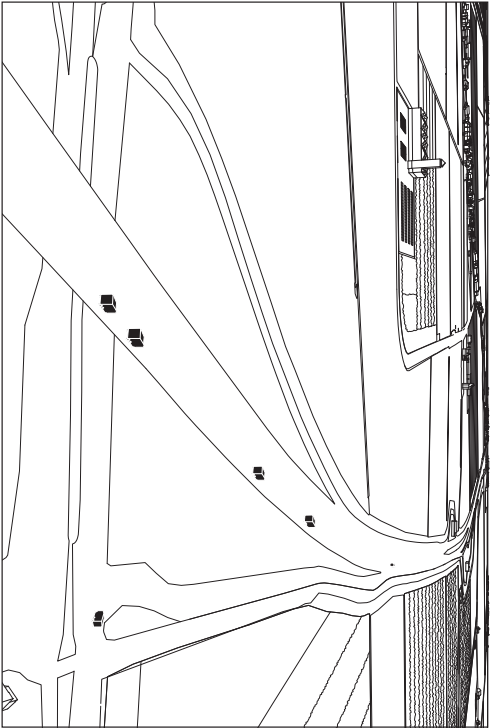
Due to an increasing pescatarian society, per capita consumption of meat is set to drop to the lowest levels. To accommodate the growing demand for shrimps, a new White Pacific Shrimp network connected to the existing North corridor for crustaceans will produce 78,500,000 tons of fresh land-harvested shrimps per year eliminating the bycatch provoked by traditional fishing.



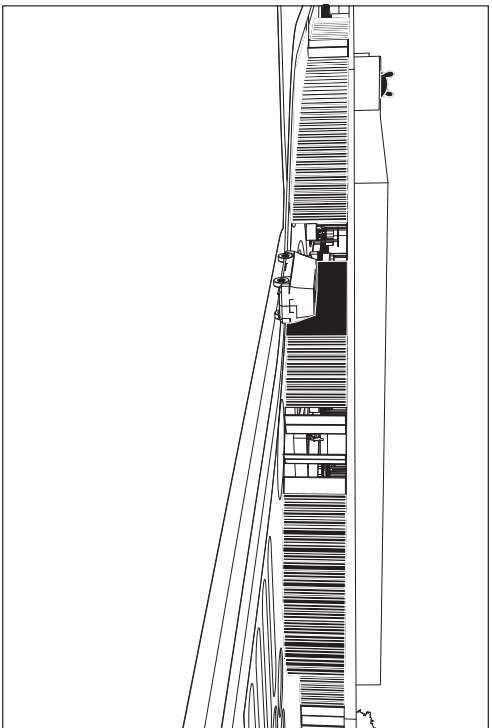
Meanwhile, on the farm, once the deal is settled, workers receive delivery details and start to load crates onto a waiting truck of the buyer.



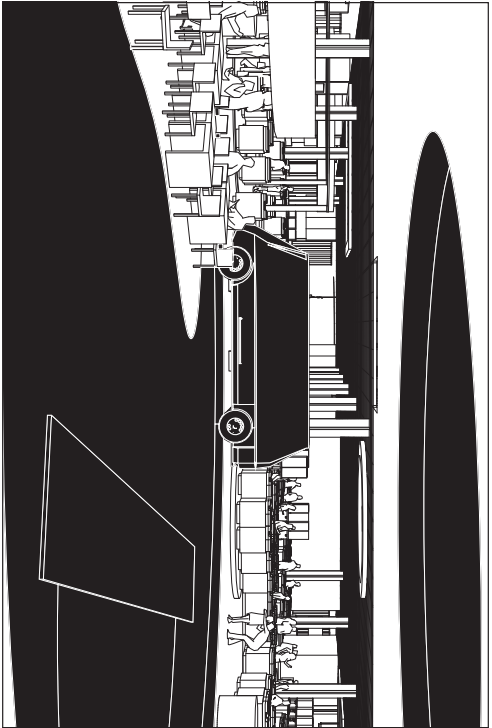
The truck leaves the farm and enters the highway system in the Dutch rural area.



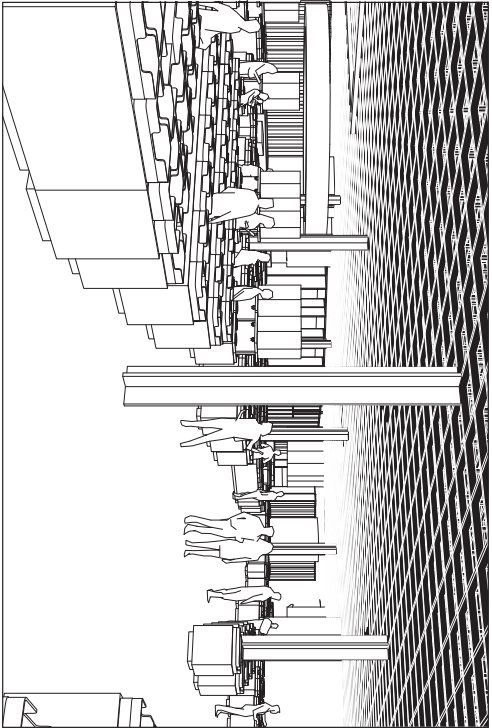
Trucks, carrying potatoes bought by Albert, go onto the motorway A27—the highway that runs through the entire region—and drive to Martinus Nijhofflaan.



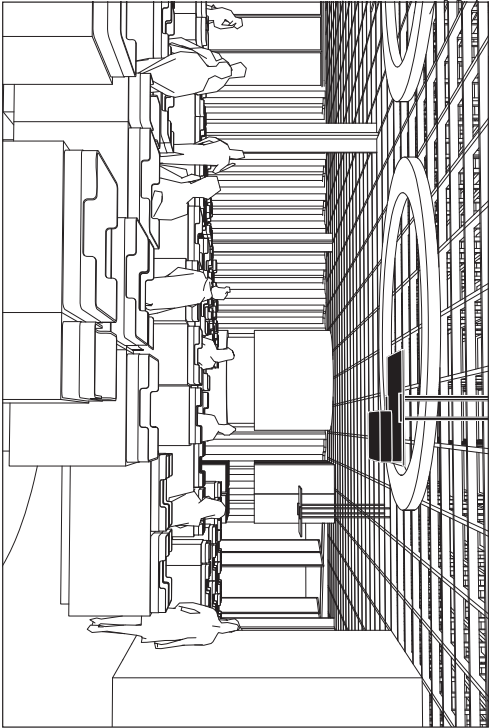
The destination of trucks is Martinus Nijhofflaan in Delft—a newly developed residential area of the historical town. The growing in population facilitates the need for a new supermarket that incorporates the food supply, local business, and community space.



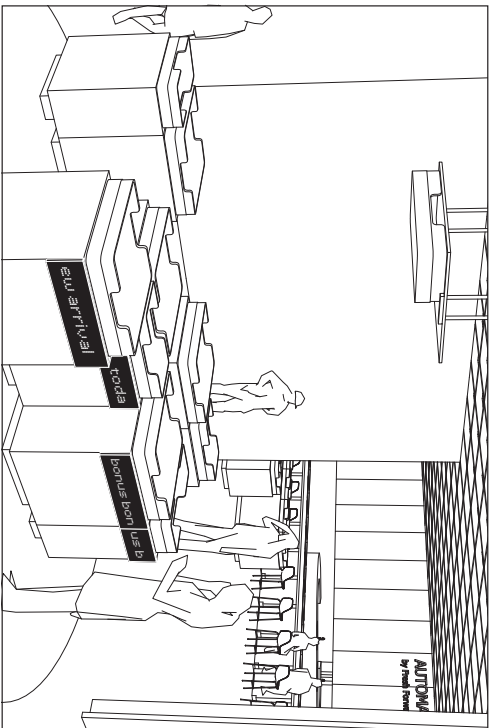
Truck with potatoes slowly drives onto the loading area of Albert next to the Ocado distribution system core. The Ocado robot unloads potatoes to crates from the truck while calculating the price combination of the day and informing the customers in the supermarket.



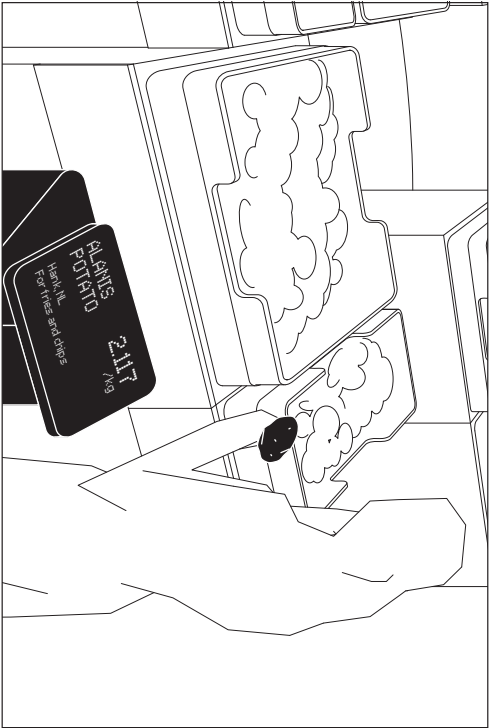
Potatoes are sent to different areas to be displayed by selections of Albert, based on their varieties, price, and quantities. While only some potato crates are displayed on supermarket shelves, the others are organized and stored on the ceiling. The Ocado system automatically determines the number of crates on the sales floor as means to control the price and maintain the flexibility of the floor plan.



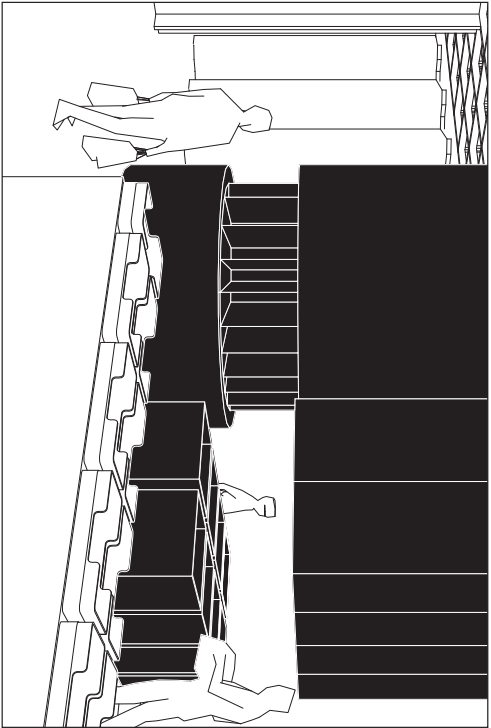
Upon reaching the designated spot, the Ocado robot slowly drops down the crate. The ritual of distributing products within the supermarket arises the customers' attention.



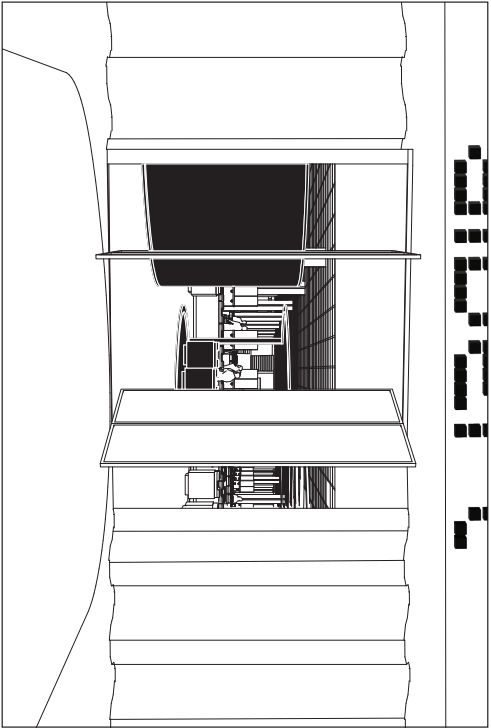
Each day, Albert's potato specialists purchase different varieties and quantities of potatoes, hence, the price fluctuates. The dynamic pricing mechanism facilitates a rising awareness of the provenance of potatoes. Customers compare potatoes of different types, from different farms, and with different volumes.



Customers—either searching in the smart cart interface or approaching the shelf—get the information of the potatoes. Owing to the check-out system built in the smart cart, customers scan and weigh their potatoes while putting them into the cart.



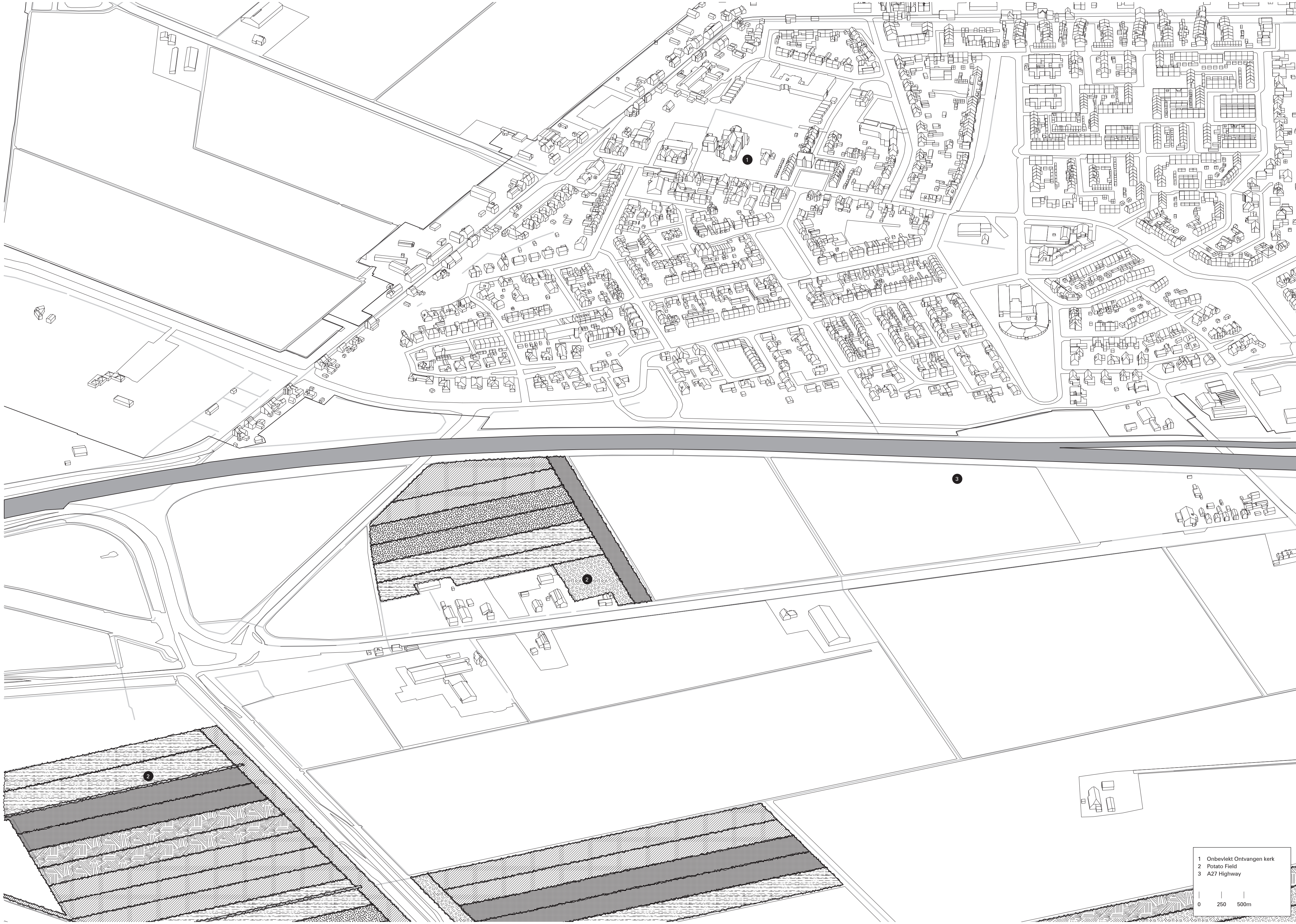
With the application of non disposal packaging and pick-up service, the potatoes, with their original dirt coat, can have a longer shelf life and got to customers' hands faster than centralized distribution center.



The dynamic supply system of Albert creates new product display combination—such as fresh produce with luxurious products—driven by customer experience and real estate strategies. The uncanny juxtaposition therefore gives the supermarket of the future a new civic presence.

The spatial sequence unfolds the trading process of robust potato varieties, directly from the fields to the supermarket shelves.

1/9

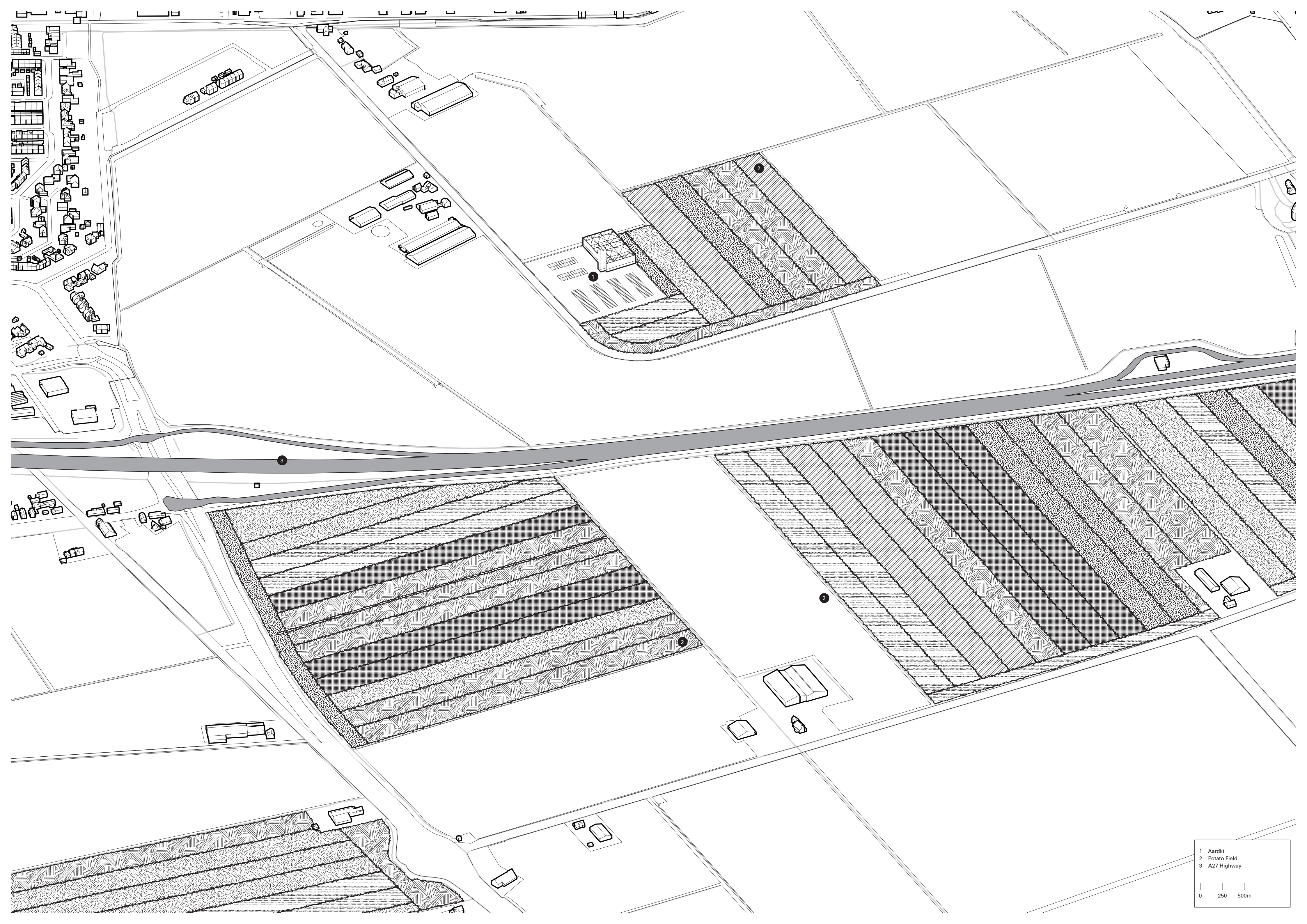


- 1 Onbevlekt Ontvangen kerk
- 2 Potato Field
- 3 A27 Highway

0 250 500m

A panorama positions the contribution in the center point of its catchment area, representing a new type of architecture related to food trade with its watch tower and translucent facade.

2/9

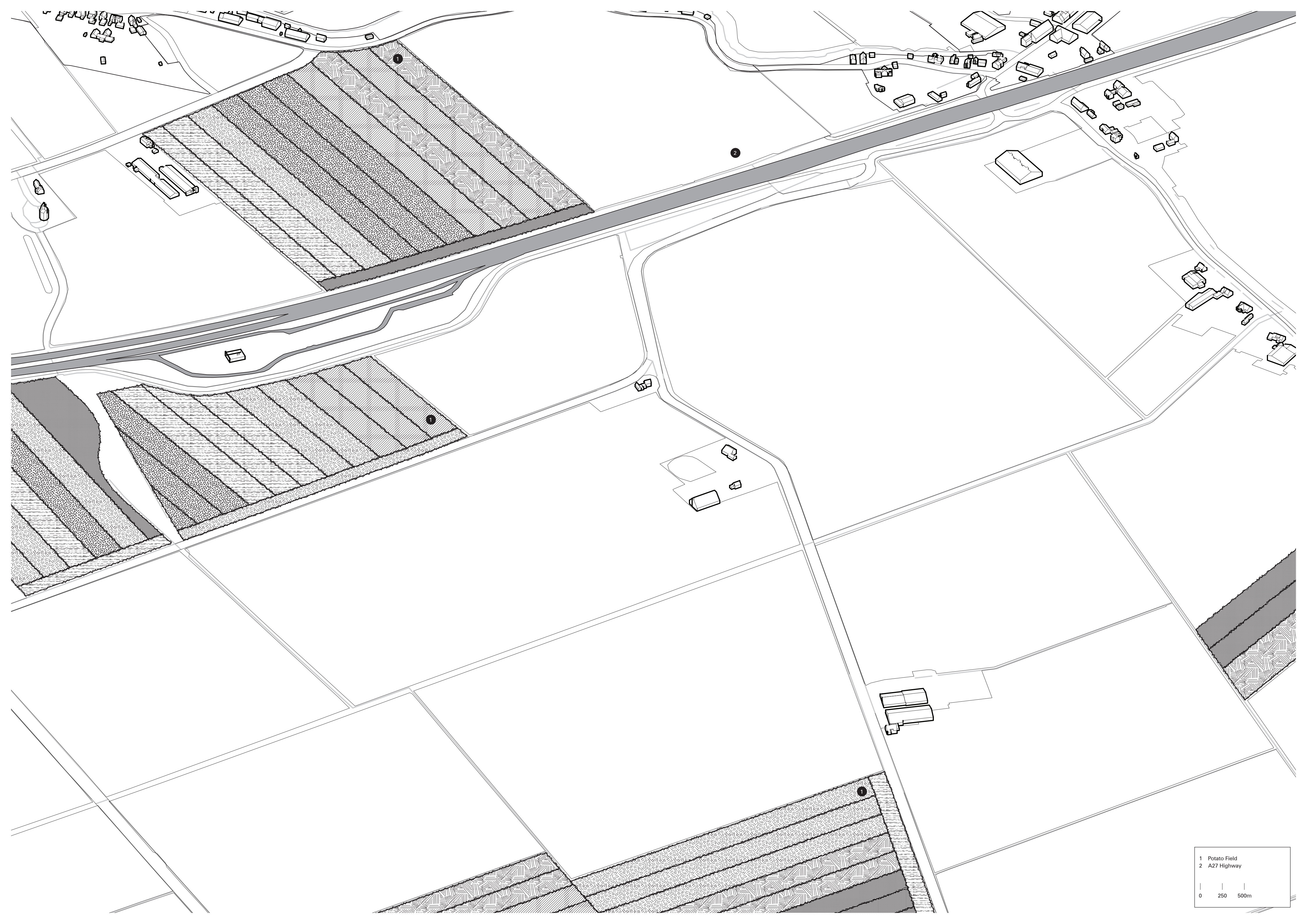


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3 A27 Highway

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2/9

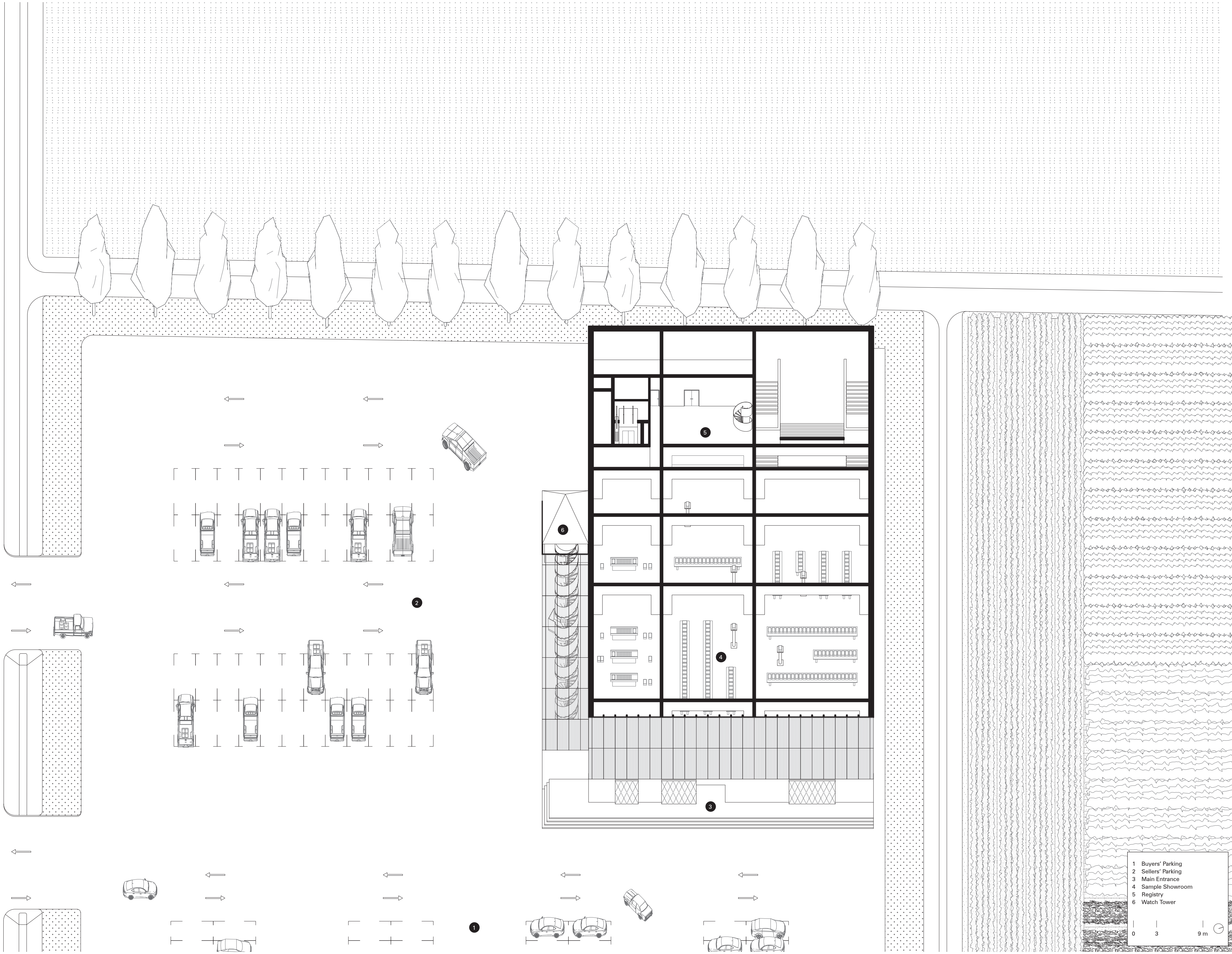


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2/9

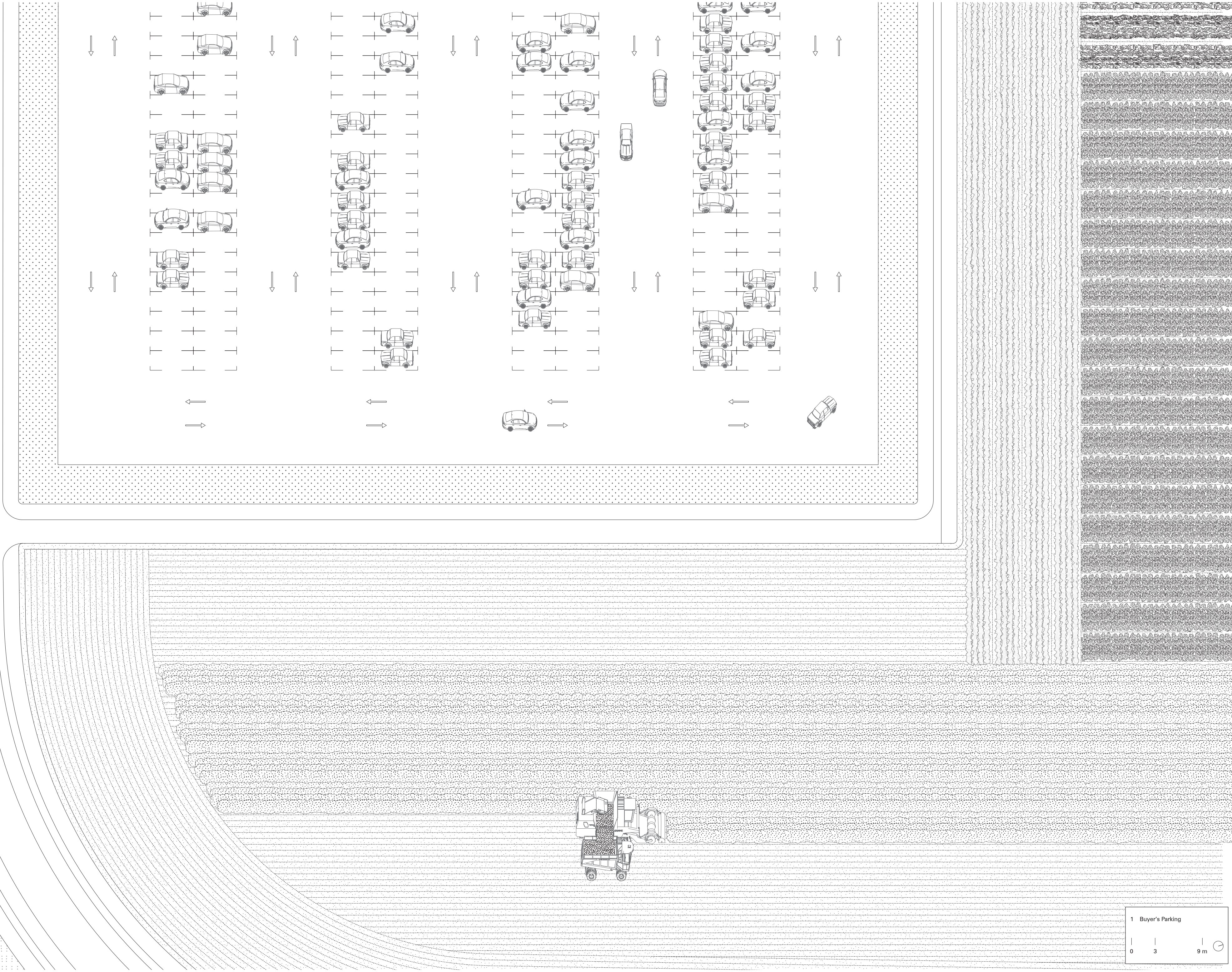


1 Buyers' Parking
2 Sellers' Parking
3 Main Entrance
4 Sample Showroom
5 Registry
6 Watch Tower

0 3 9 m

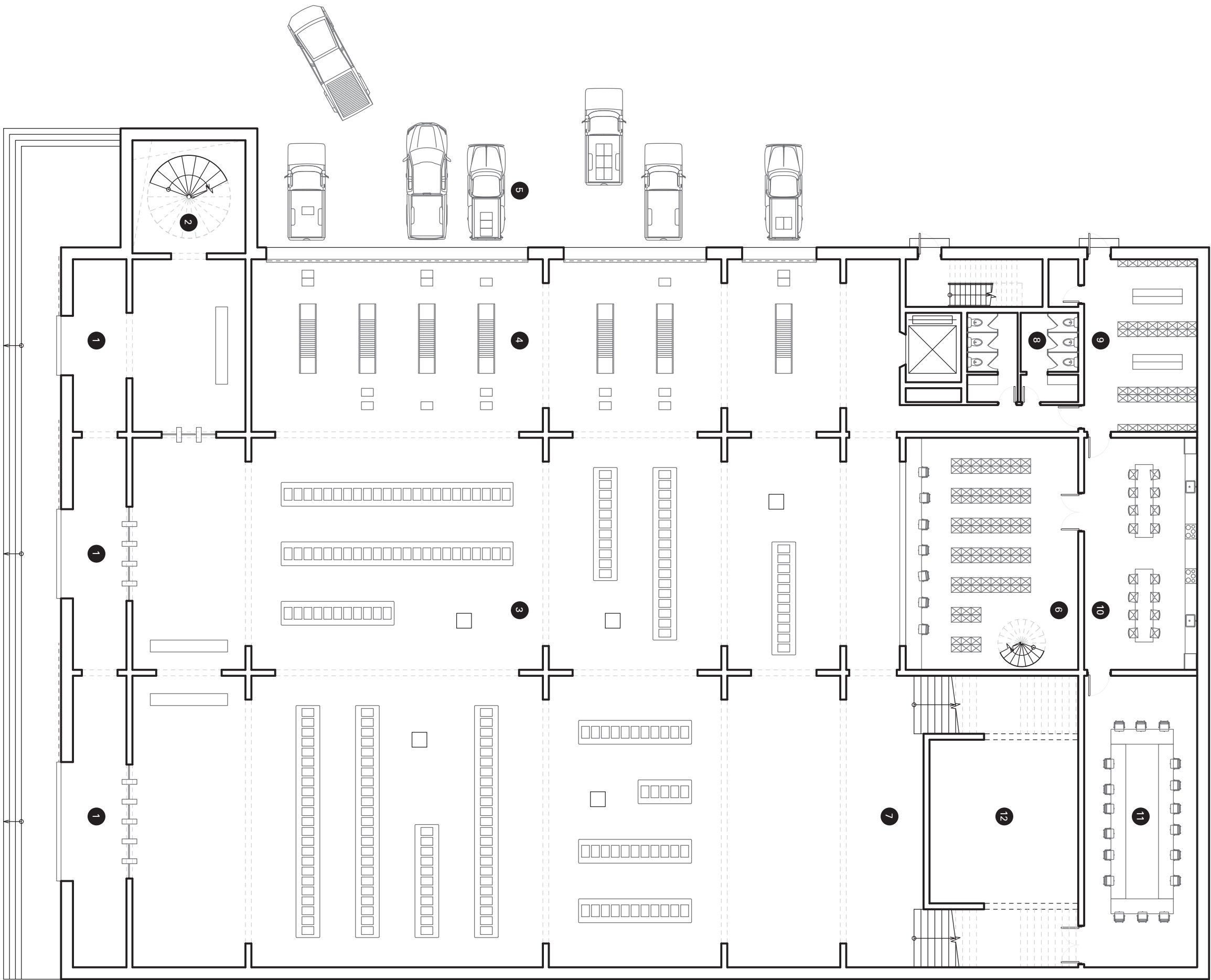
An axonometric drawing shows the front facade of the contribution in relation to its internal spatial structure. Flows of supply (potato sample crates) and demand (buyers) confront each other perpendicularly, and ascending to the trading floor.

3/9



An axonometric drawing shows the front facade of the contribution in relation to its internal spatial structure. Flows of supply (potato sample crates) and demand (buyers) confront each other perpendicularly, and ascending to the trading floor.

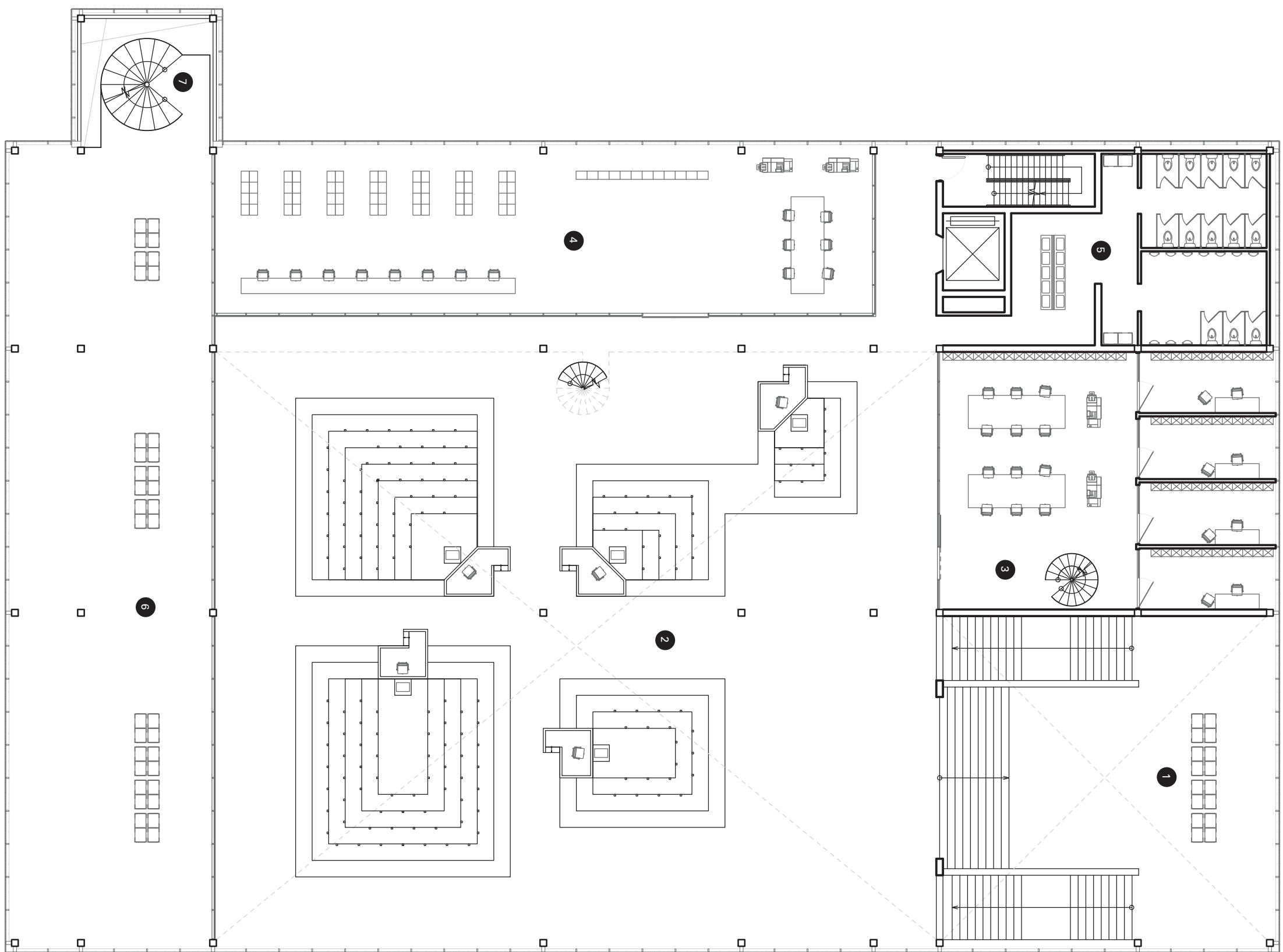
3/9



- 1 Vestibule
 - 2 Watch Tower Stairs
 - 3 Sample Showroom
 - 4 Sorting & Grading
 - 5 Loading Dock
 - 6 Product Registry
 - 7 Main Stairs
 - 8 Staffs Restroom
 - 9 Lockers
 - 10 Staffs Kitchen
 - 11 Meeting Room
 - 12 Mechanical Room
- 0 1 2 5m

The ground floor is a potato showroom divided into cells of different dimensions that differentiate the dynamic potato product combination brought to the market every day.

4/9



1 Lounge

2 Trading Floor

3 Audit / Office

4 Archive

5 Members' Restroom

6 Visitors' Gallery

7 Watch Tower Stairs

0

1

2

5m

The trading floor contains five auction pits surrounded by complementary spaces, including the auctioneers’ office, data archive, and the visitors’ gallery. Each is designed according to the market volume of the potato varieties.

5/9

- 1

Sorting & Grading
- 2

Sample Showroom
- 3

Hydraulic Elevator
- 4

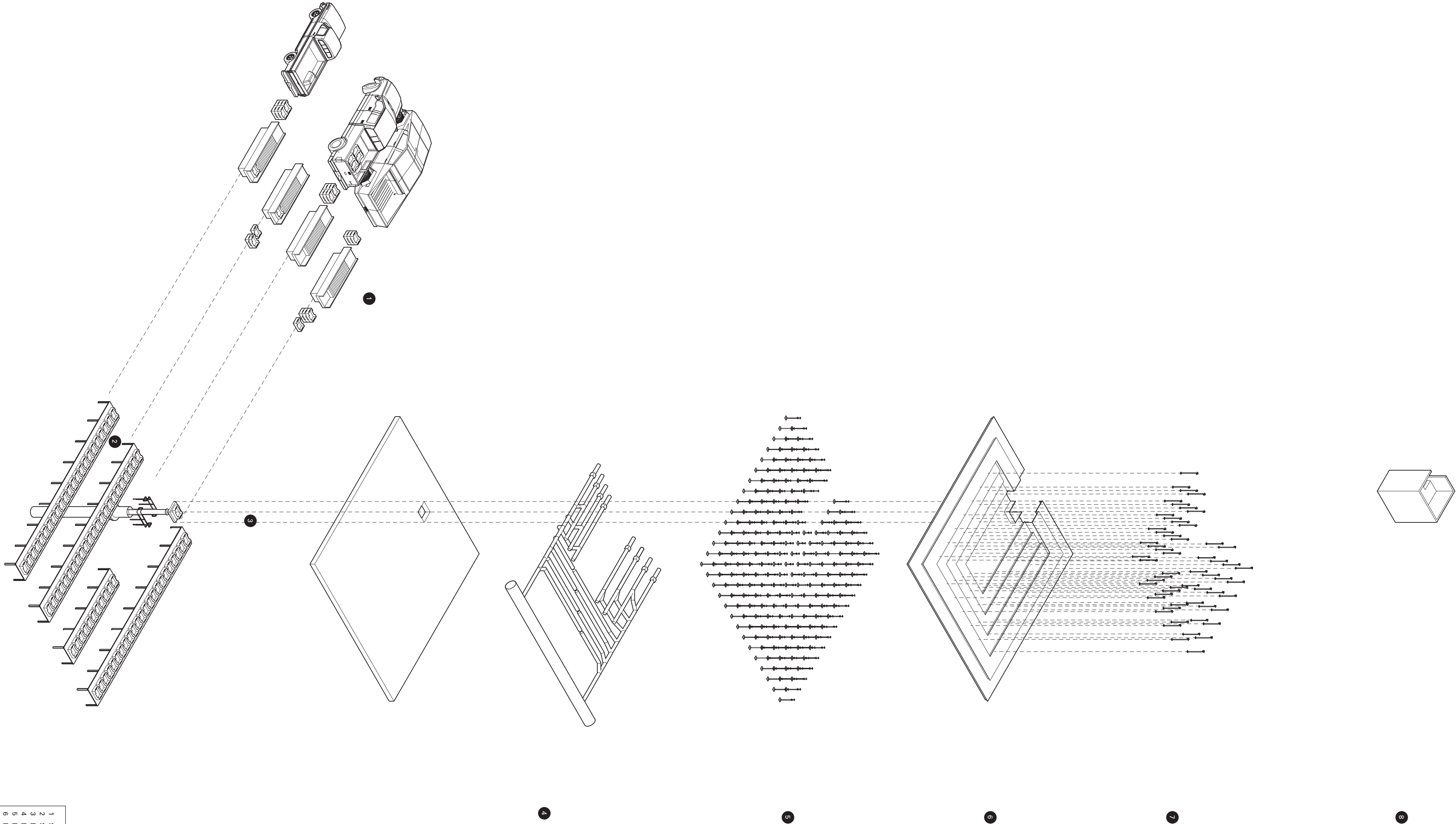
Pedestals
- 5

HVAC System
- 6

Flooring Deck
- 7

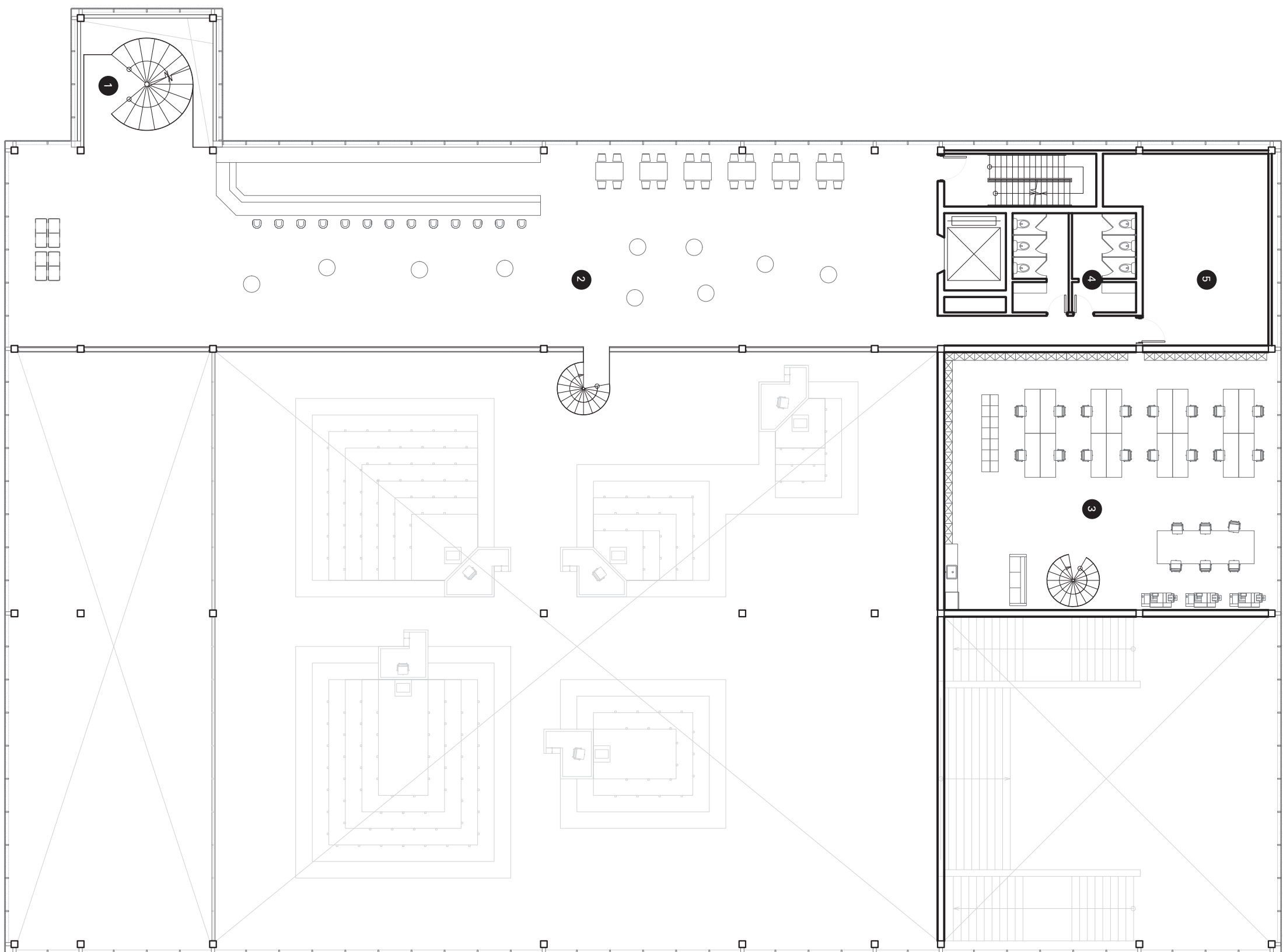
Bidding System
- 8

Auctioneer's podium



An isometric drawing illustrates the anatomy of the auction pit. The auction pit is a set of descending steps with product presence and the auction clock as main focal points. Every buyer uses the bottom on the pole to place their bid.

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1

Watch Tower Stairs

2

Members' Cafe

3

Office

4

Restroom

5

Storage

0

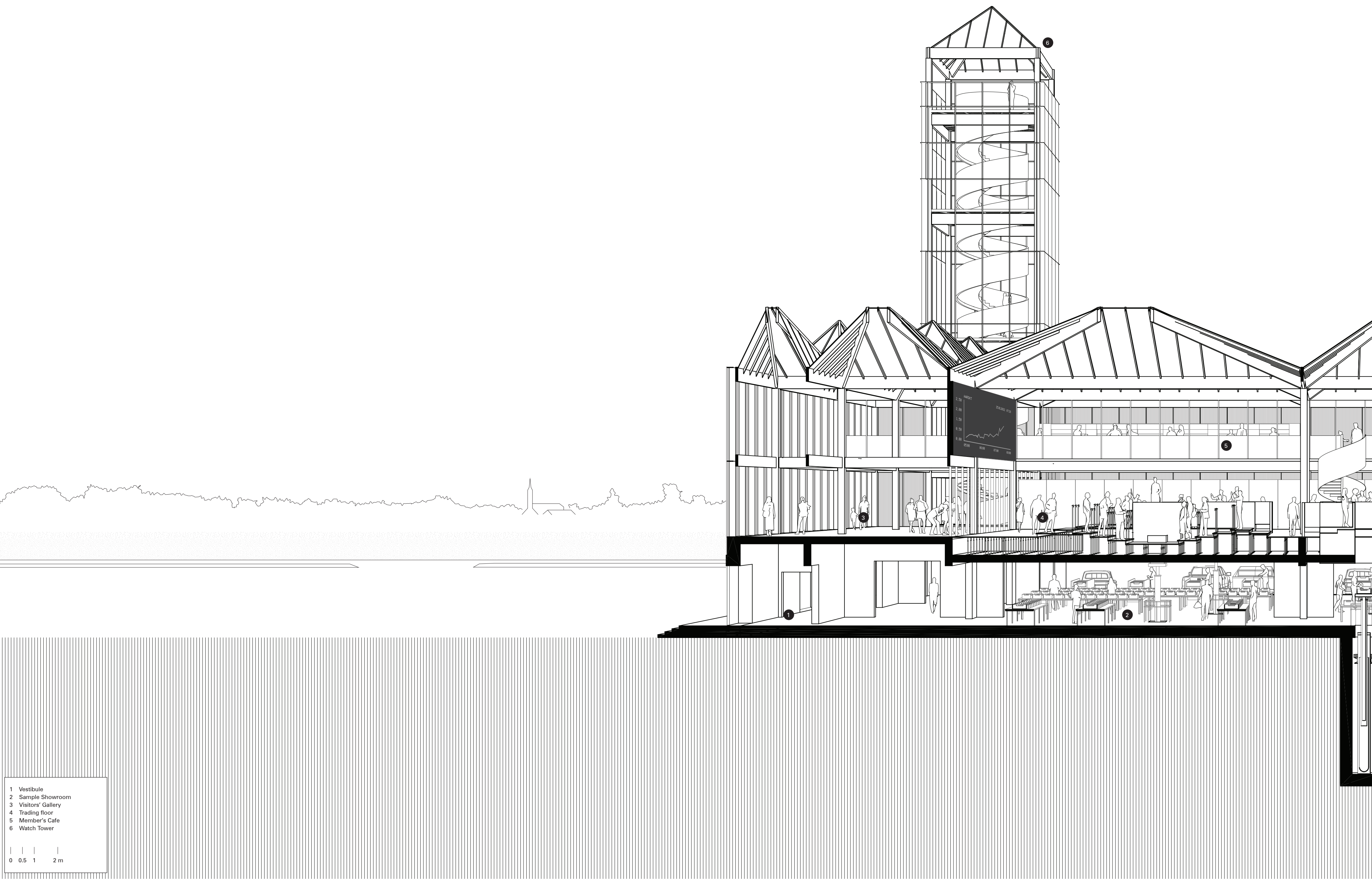
1

2

5m

The mezzanine level functions as a social level where buyers and sellers meet directly. Elevated from the trading floor, auction members can observe shifting market trends and exchange information on potato cultivation and trading.

7/9



1 Vestibule

2 Sample Showroom

3 Visitors' Gallery

4 Trading floor

5 Member's Cafe

6 Watch Tower

0

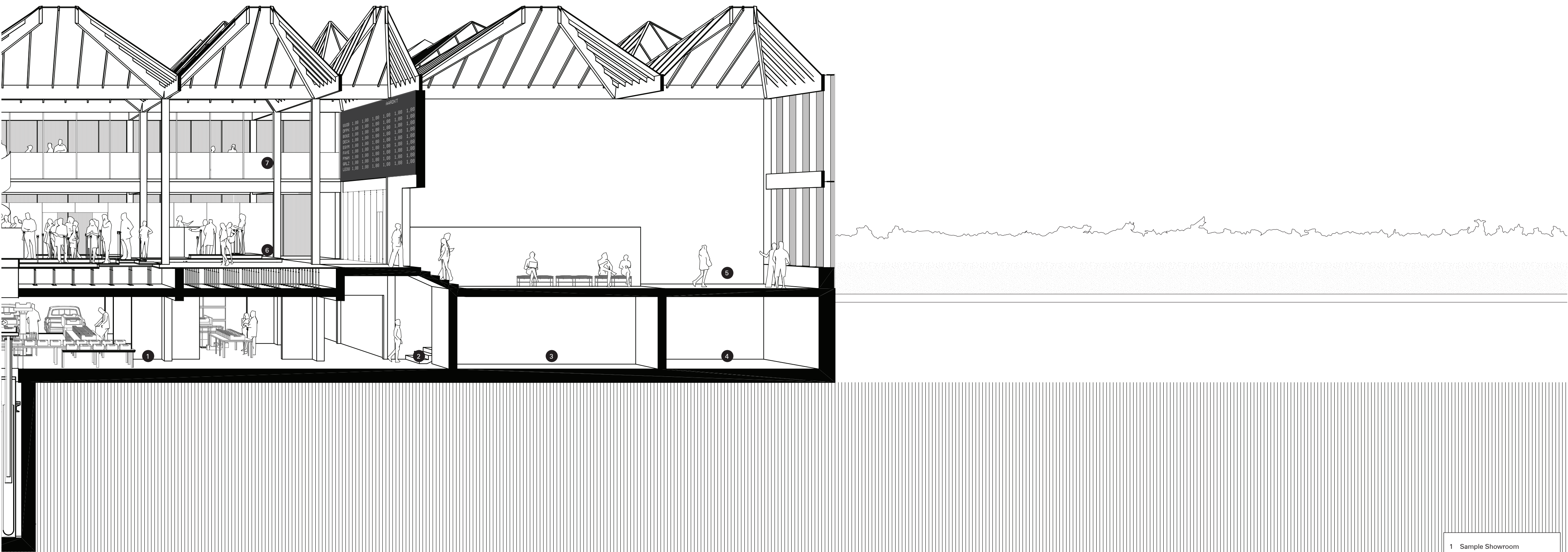
0.5

1

2 m

The sectional perspective cutting through the building renders the spatial sequence of trading potatoes, from examining samples to bidding in open outcry auctions.

8/9

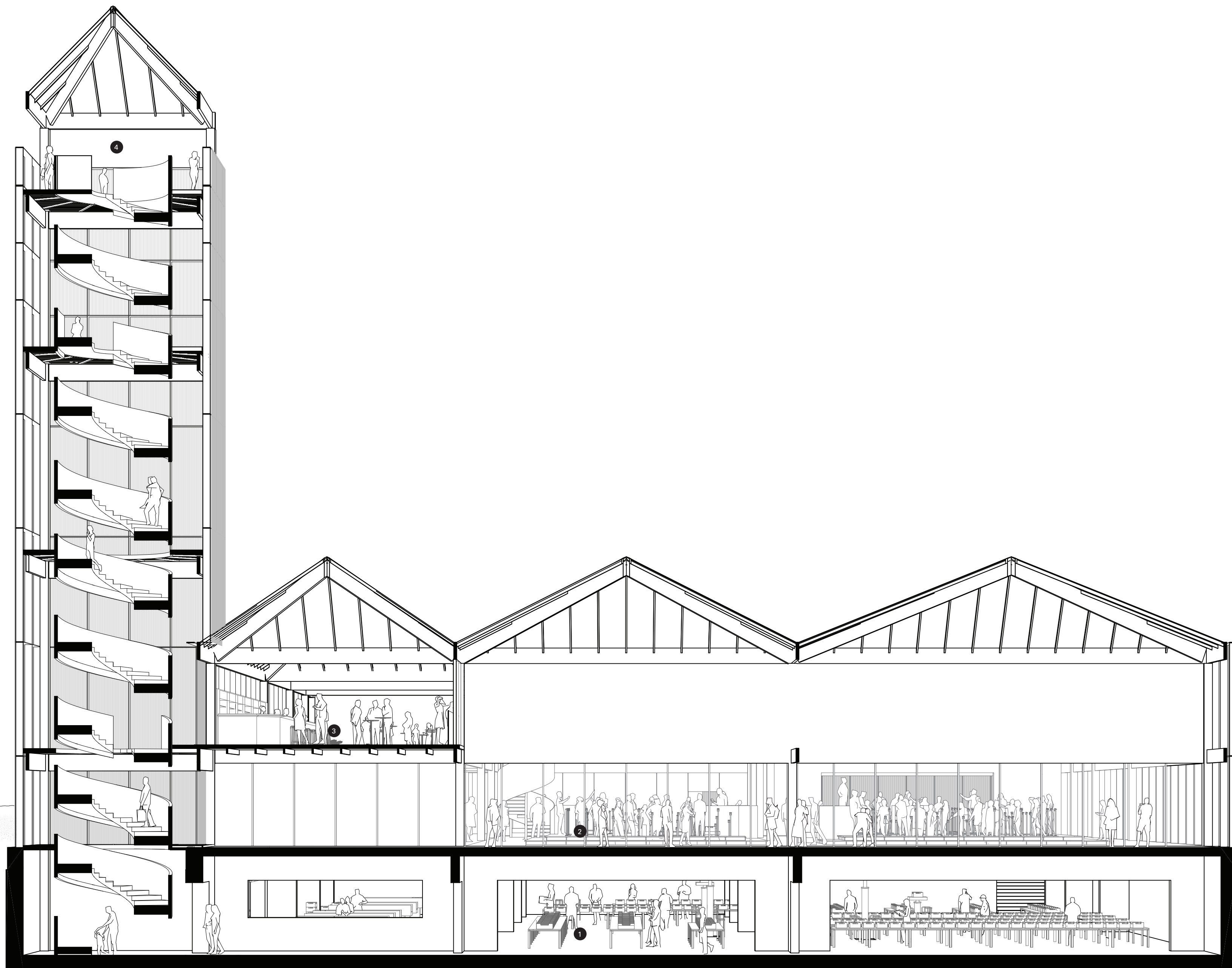


- 1 Sample Showroom
- 2 Main Staircase
- 3 Mechanical Room
- 4 Meeting Room
- 5 Lounge
- 6 Trading Floor
- 7 Members' Cafe

0 0.5 1 2 m

The sectional perspective cutting through the building renders the spatial sequence of trading potatoes, from examining samples to bidding in open outcry auctions.

8/9



- 1 Sample Showroom
- 2 Visitors' Gallery
- 3 Members' Cafe
- 4 Observatory

0 0.5 1 2 m

The sectional perspective shows the watch tower, serving as a civic form within the territory and connecting all the public spaces around the trading event

9/9