

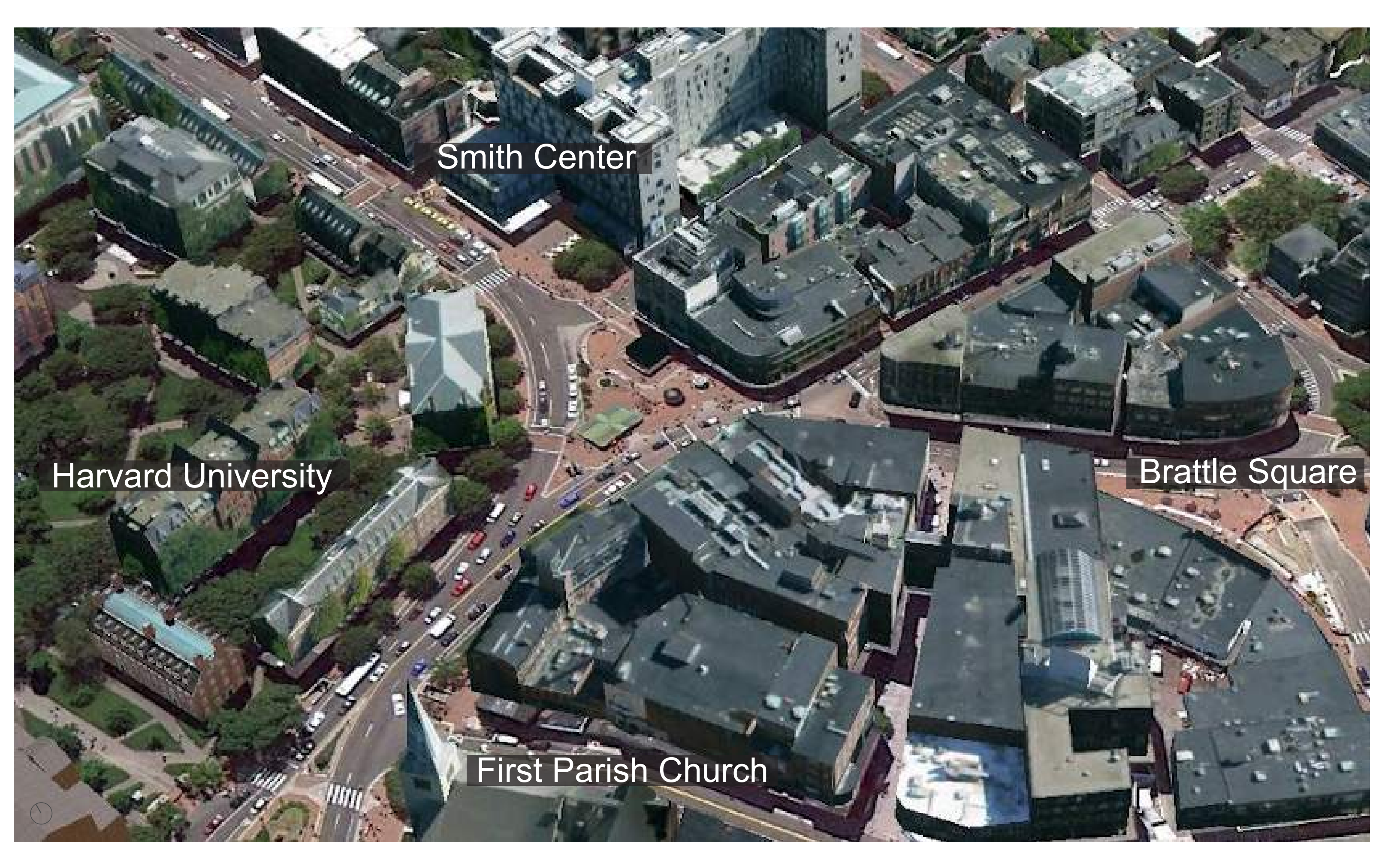
Touloukian Touloukian Inc.

Architecture & Urban Design

Historic Harvard Square Kiosk

Informational presentation about the status of kiosk and plaza design and re-use study

Cambridge Historic Commission Presentation



Smith Center

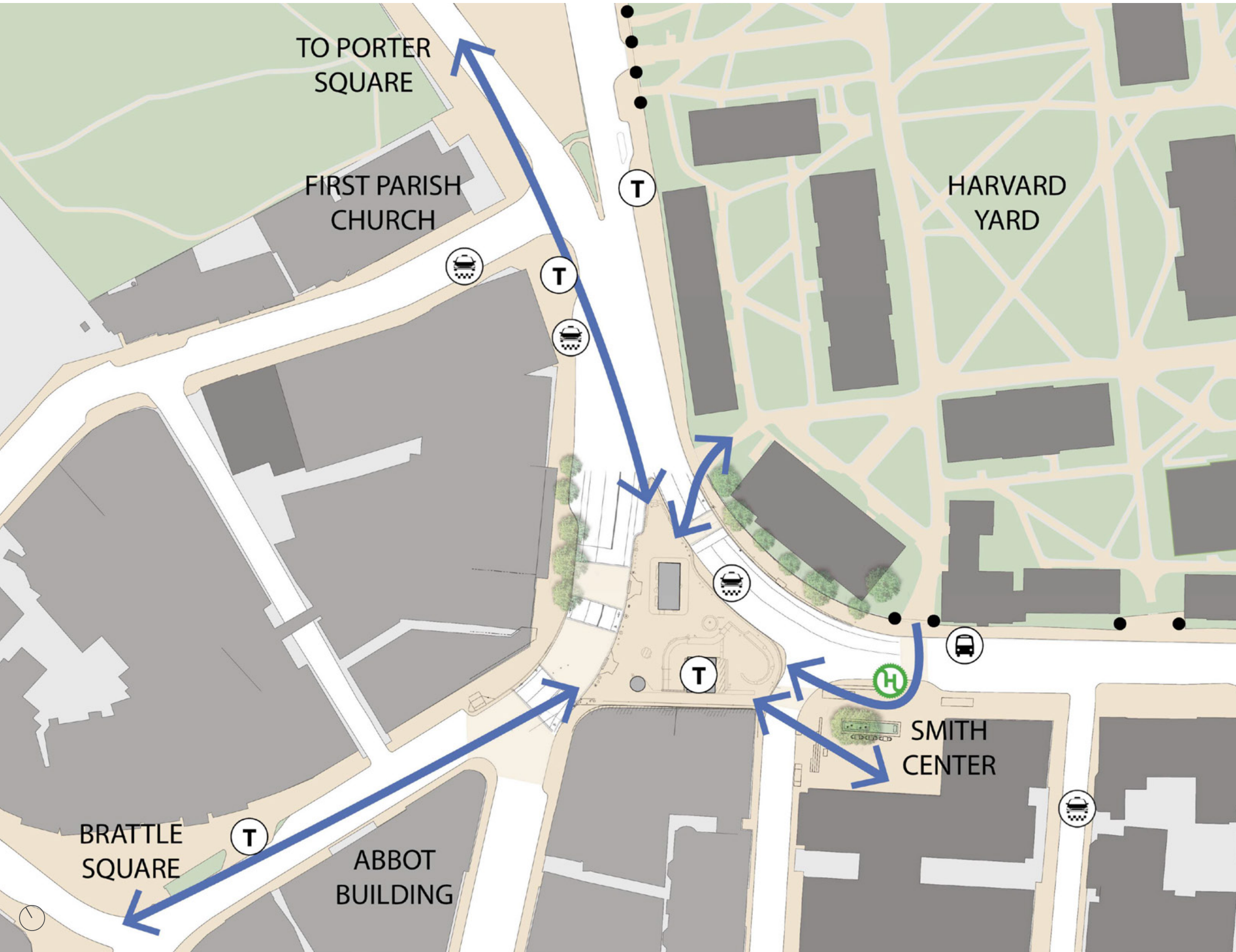
Harvard University

Brattle Square

First Parish Church

CONNECTIVITY DIAGRAM

- PEDESTRIAN CIRCULATION
- MBTA STATION
- TAXI STAND
- HUBWAY STATION





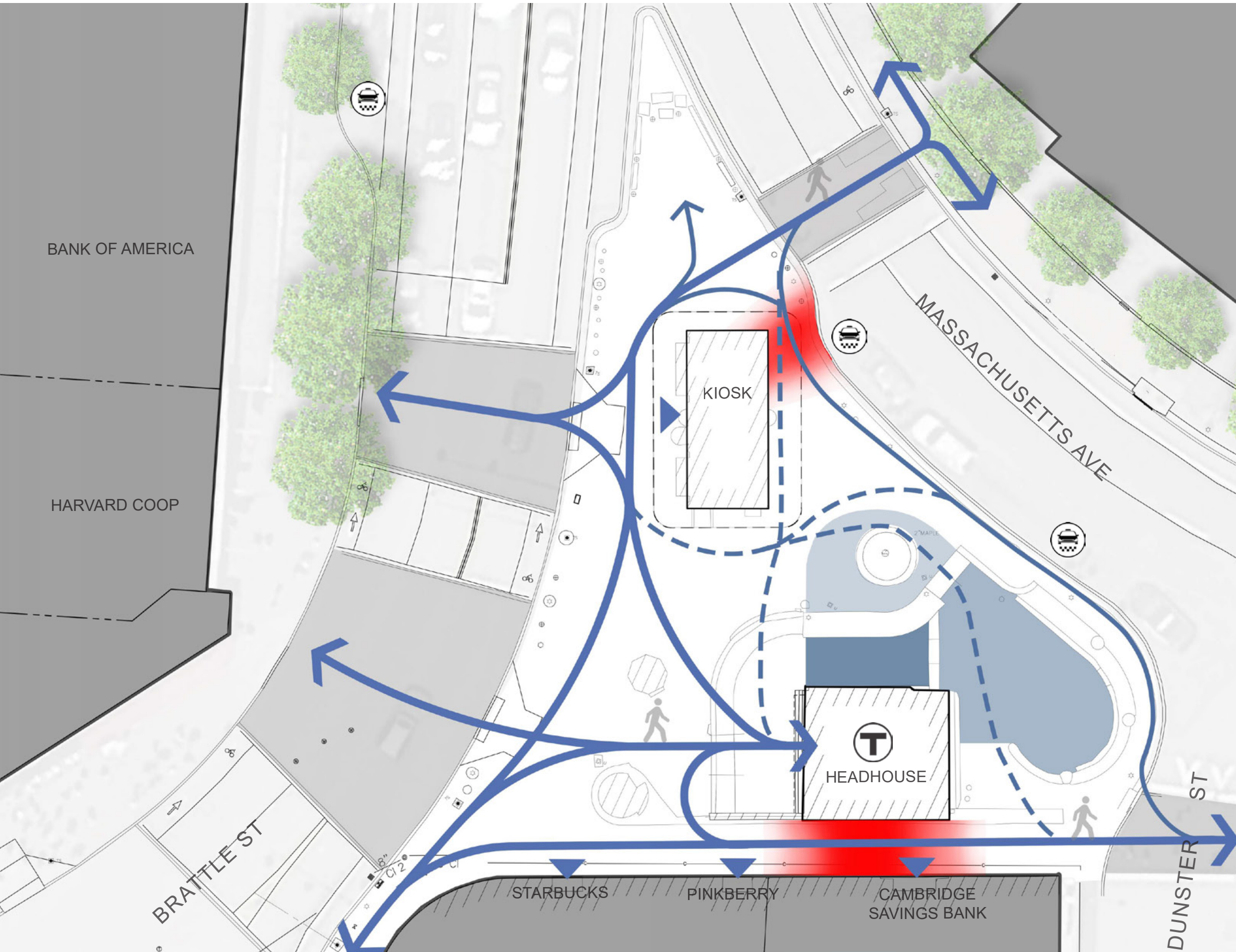
BY REMOVING SOME OF THE "CLUTTER" FROM WITHIN THE PLAZA (WALLS, STAIRS, PLANTERS, LIGHT POLES, INFO KIOSK), A LARGER MORE FLEXIBLE SPACE IS POSSIBLE

EXISTING CONDITIONS



STEPS AND RETAINING WALLS WILL BE REQUIRED TO ADDRESS THE GRADE CHANGE BETWEEN MASS AVE AND THE PLAZA.

EXISTING CONDITIONS



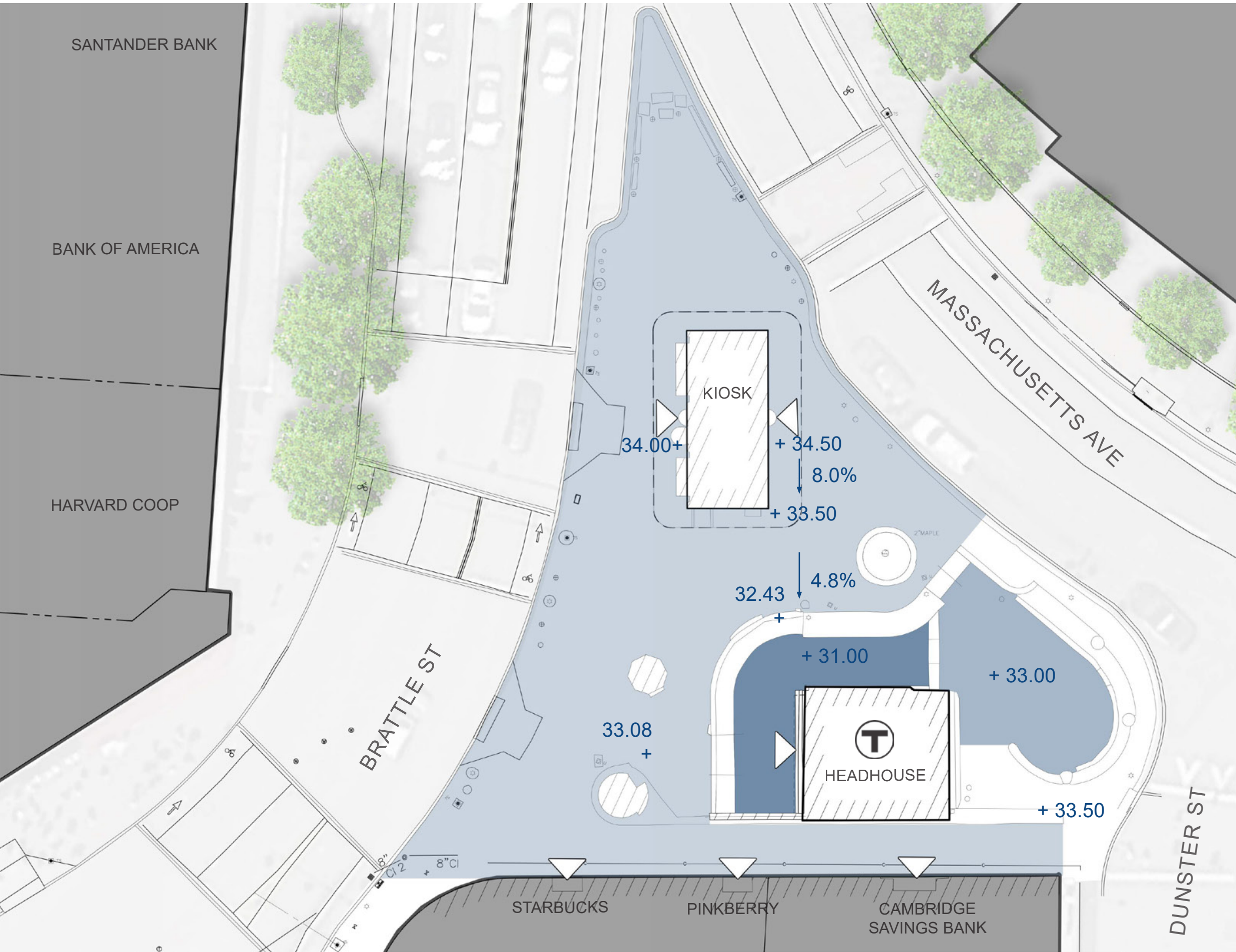
PEDESTRIAN CIRCULATION

- MAJOR
- MINOR
- OCCASIONAL
- PINCH POINT

HEAVY PEDESTRIAN CIRCULATION THROUGHOUT THE PLAZA LIMITS GATHERING OPPORTUNITIES

THE AREA WITH THE LEAST CIRCULATION IS SUBDIVIDED BY WALLS AND STEPS AT THREE DIFFERENT ELEVATIONS

POTENTIAL TO RECONFIGURE THE WALLS AND STEPS, CREATING ONE LARGER, FLEXIBLE SPACE



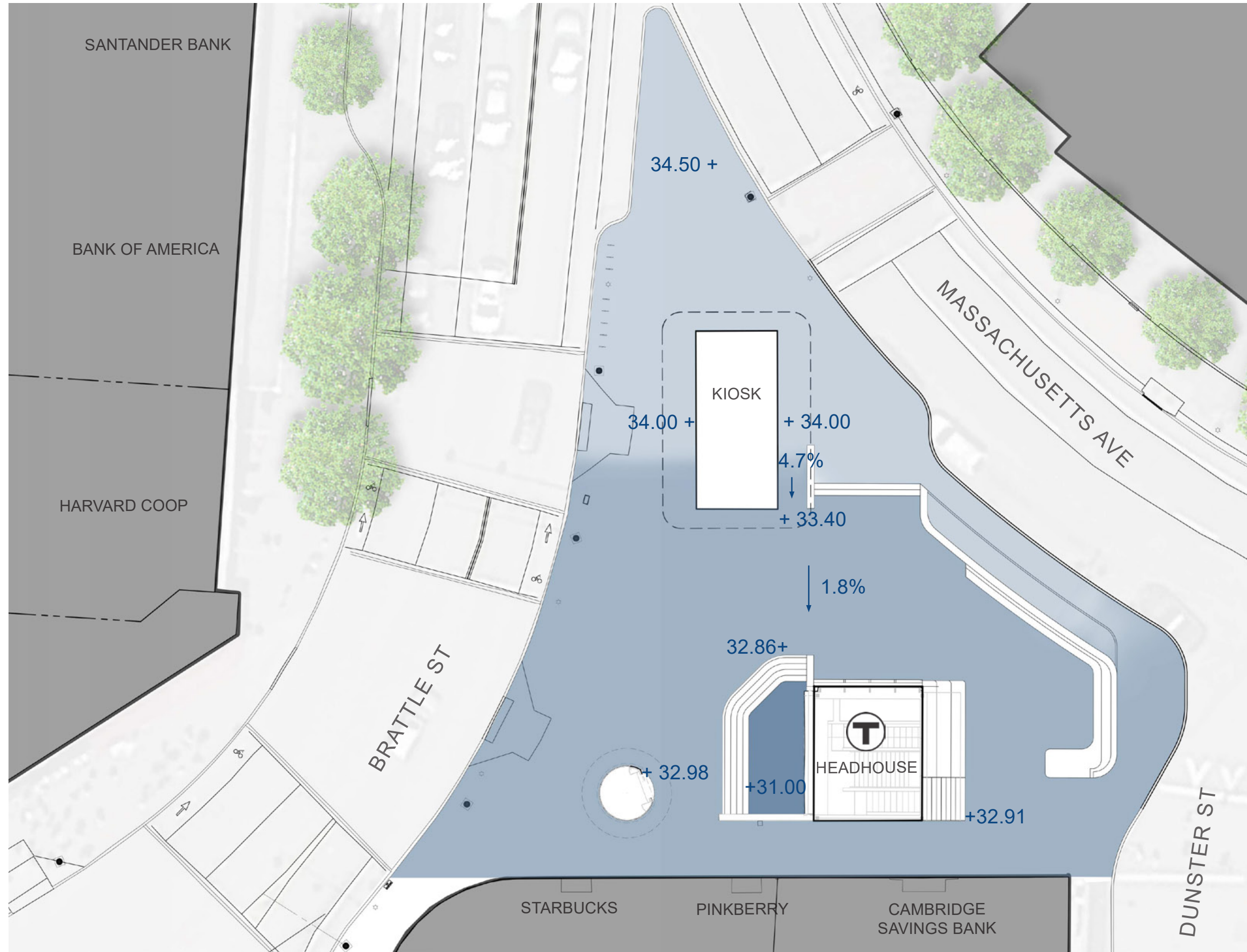
EXISTING ELEVATION

- UPPER
- INTERMEDIATE
- LOWER

PLAZA IS SUBDIVIDED INTO THREE LEVELS LIMITING CIRCULATION AND USAGE

WEST SIDE OF KIOSK IS 6" HIGHER THAN EAST SIDE RESULTING IN A STEP DOWN OUT OF KIOSK

EXISTING PLAZA SLOPES ARE NOT COMPLIANT WITH CURRENT ADA/MAAB REGULATIONS



PROPOSED ELEVATION

- UPPER
- INTERMEDIATE
- LOWER

RECONFIGURED STEPS AND WALLS
CREATE ONE LARGER GATHERING
SPACE AT INTERMEDIATE LEVEL

KIOSK ELEVATION IS LOWERED 6"
PROVIDING UNIVERSAL ACCESS TO
BOTH EAST AND WEST ENTRANCES

PLAZA SLOPES ARE COMPLIANT WITH
CURRENT ADA/MAAB REGULATIONS





PROPOSED ELEVATION DIAGRAM



LOWERING THE FINISH FLOOR ELEVATION OF THE KIOSK WILL IMPROVE ADA ACCESSIBILITY

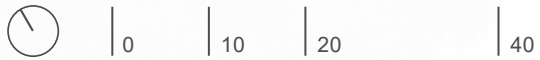


TREE PLANTING AREAS

-  PROPOSED TREE LOCATION
-  ADEQUATE SOIL DEPTH FOR FLUSH STREET TREES

STREET TREES PLANTED IN A FLUSH PERMEABLE PAVING CONDITION REQUIRE APPROX. 4' DEPTH FROM FINISH GRADE TO TOP OF STRUCTURE

PROPOSED TREES WERE LOCATED OUT OF CIRCULATION ROUTES WHERE THEY COULD FRAME VIEWS TO THE KIOSK



SANTANDER BANK

BANK OF AMERICA

HARVARD COOP

BRATTLE ST

MASSACHUSETTS AVE

DUNSTER ST

KIOSK

T
HEADHOUSE

STARBUCKS

PINKBERRY

CAMBRIDGE SAVINGS BANK

TERRACED SEATING FEATURE

 TERRACED SEATING

POTENTIAL FOR A TERRACED SEATING FEATURE OVER THE EXISTING SLOPED BRICK WALL. MUST BE REVIEWED AND APPROVED BY THE MBTA AND DETERMINED STRUCTURALLY FEASIBLE.



POTENTIAL TERRACED SEATING FEATURE



- TREES IN PERMEABLE PAVERS
- TABLES AND CHAIRS
- PLANTERS TO BUFFER THE PLAZA
- REMOVE ONE TAXI SPACE TO AMELIORATE PINCH POINT
- LOWER FINISH GRADE OF KIOSK FOR ACCESSIBILITY
- TREES IN PERMEABLE PAVERS
- RETAINING SEAT WALL
- TABLES AND CHAIRS
- LEVEL FLEXIBLE PLAZA SPACE
- WIDENED SIDEWALK
- TERRACED SEATING FEATURE
- RECONFIGURED STAIRS
- NEW GLASS MBTA ELEVATOR







HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018



HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018

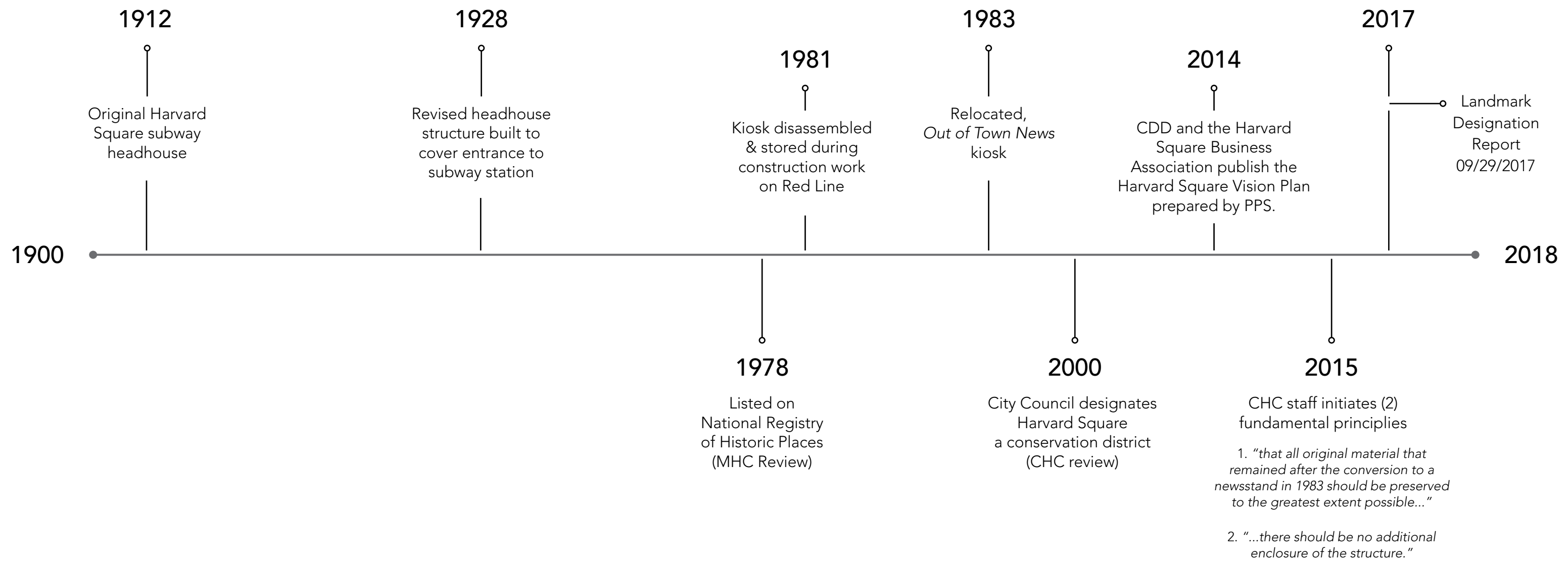
Harvard Square Kiosk

1. Historic Preservation Approach
2. Kiosk Program Use Options
3. Kiosk Signage and Touchscreen Options
4. Kiosk Mechanical System Options
5. Kiosk Ventilation Grille



Harvard Square - 1970's
HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018

Timeline



"Original" Kiosk



Harvard Square Kiosk - 1977

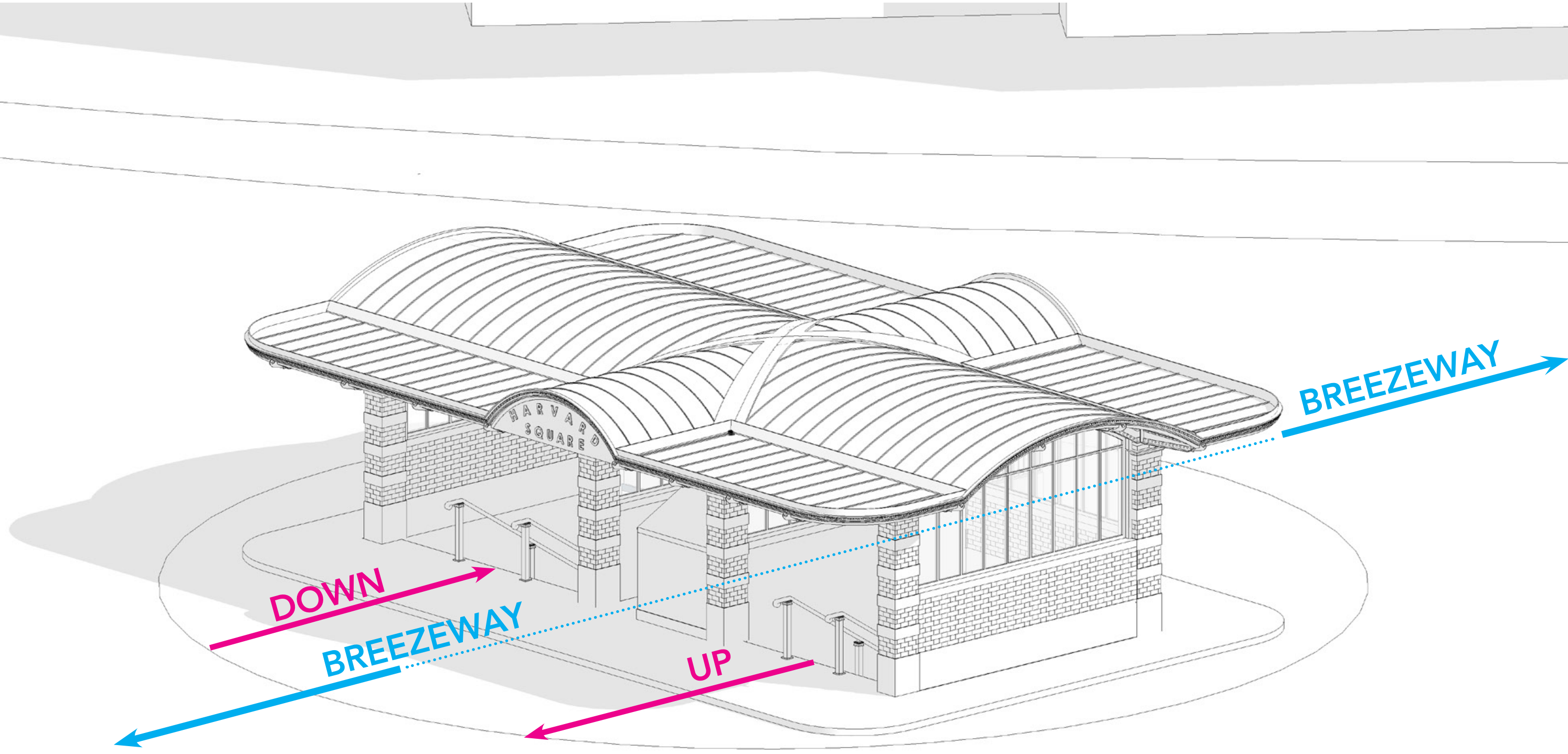


Harvard Square Kiosk



Harvard Square Kiosk

"Original" Kiosk

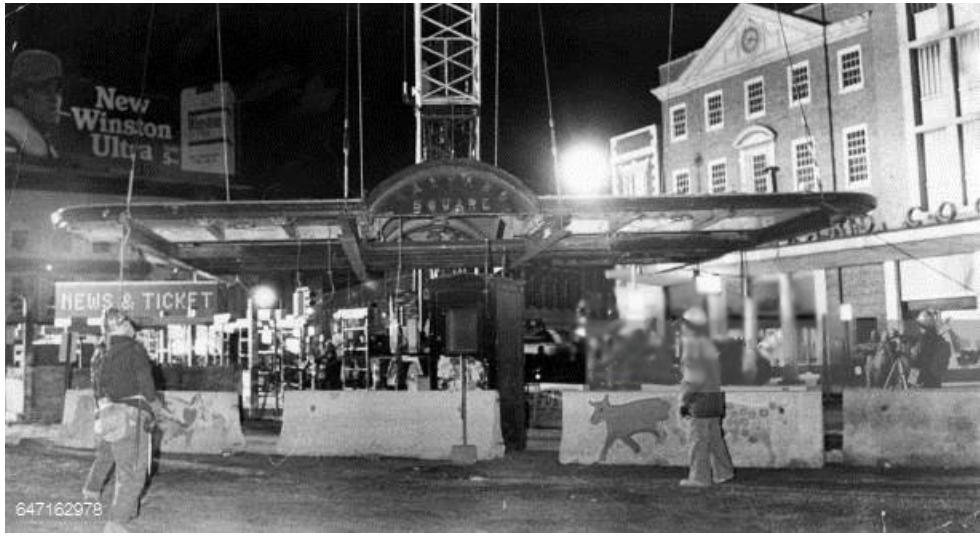
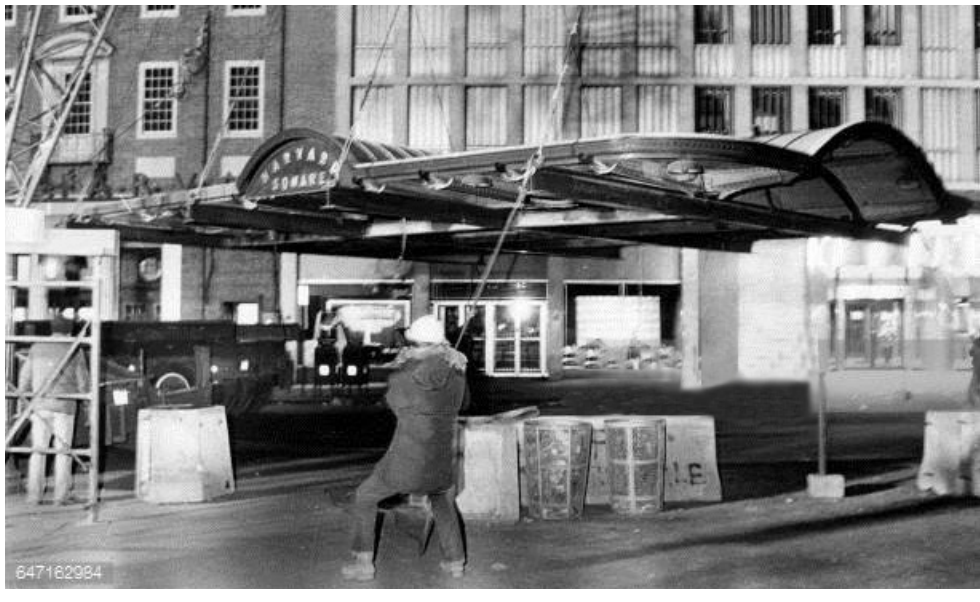
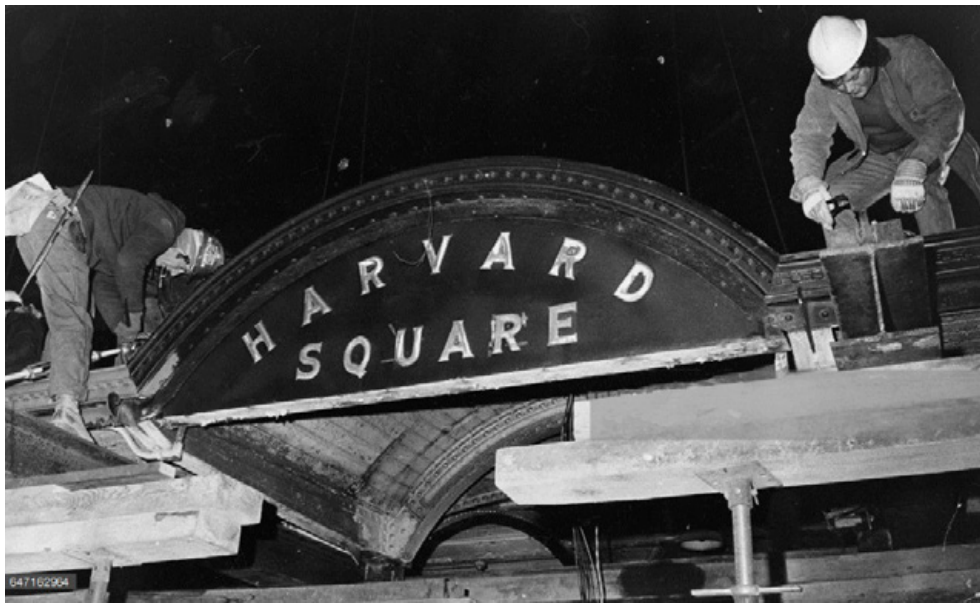


Harvard Square Kiosk - with MBTA Access

HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018

1983 Kiosk

"...all original material that remained after the conversion to a newsstand in 1983 should be preserved to the greatest extent possible, and that there should be no additional enclosure of the structure."



1983 relocation of kiosk roof & structure (photo credit: Boston Globe)

moving of kiosk roof & structure (photo credit: Boston Globe)

Today's Kiosk



Southwest
HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018

Today's Kiosk



West
HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018

Today's Kiosk



South
HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018

Today's Kiosk



East
HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018

Today's Kiosk



North
HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018

Recommendation from Final Landmark Designation Report Dated 11/30/17

Final Landmark Designation Report Harvard Square Kiosk 0 Harvard Square, Cambridge, Mass.

Exterior Alterations



Harvard Square Kiosk, 2016

CHC photo

Summary

The Harvard Square Kiosk, constructed in 1927-28 by the Massachusetts Department of Public Utilities and reconstructed by the Massachusetts Bay Transportation Authority and adaptively reused as a newsstand in 1981-84, is significant for its architecture and method of construction and for its associations with the suburban and commercial development of Cambridge in the 19th and 20th centuries. It is a rare and distinctive example of a specialized early twentieth-century transportation structure that has been adaptively reused for commercial purposes. The kiosk is significant for its associations with architects Blackall, Clapp & Whittemore and M.I.T. civil engineering professor Charles B. Breed. The building is also culturally significant as the central identifying structure in a commercial area associated with Harvard University.

The Historical Commission received a petition seeking landmark designation of the kiosk in September 2016. Although the structure was already protected by the Harvard Square Conservation District under Ch. 2.78, Art. III of the City Code, the Commission voted to initiate the requested study on November 3, 2016. The proposed designation was reviewed at public hearings on September 7 and October 5, 2017. The Final Landmark Designation Report and recommendation were finalized on October 23, 2017 and submitted to the Cambridge Planning Board, which declined to comment. The current version includes recently-received information about the history of the kiosk, but the conclusions and recommendations are unchanged.

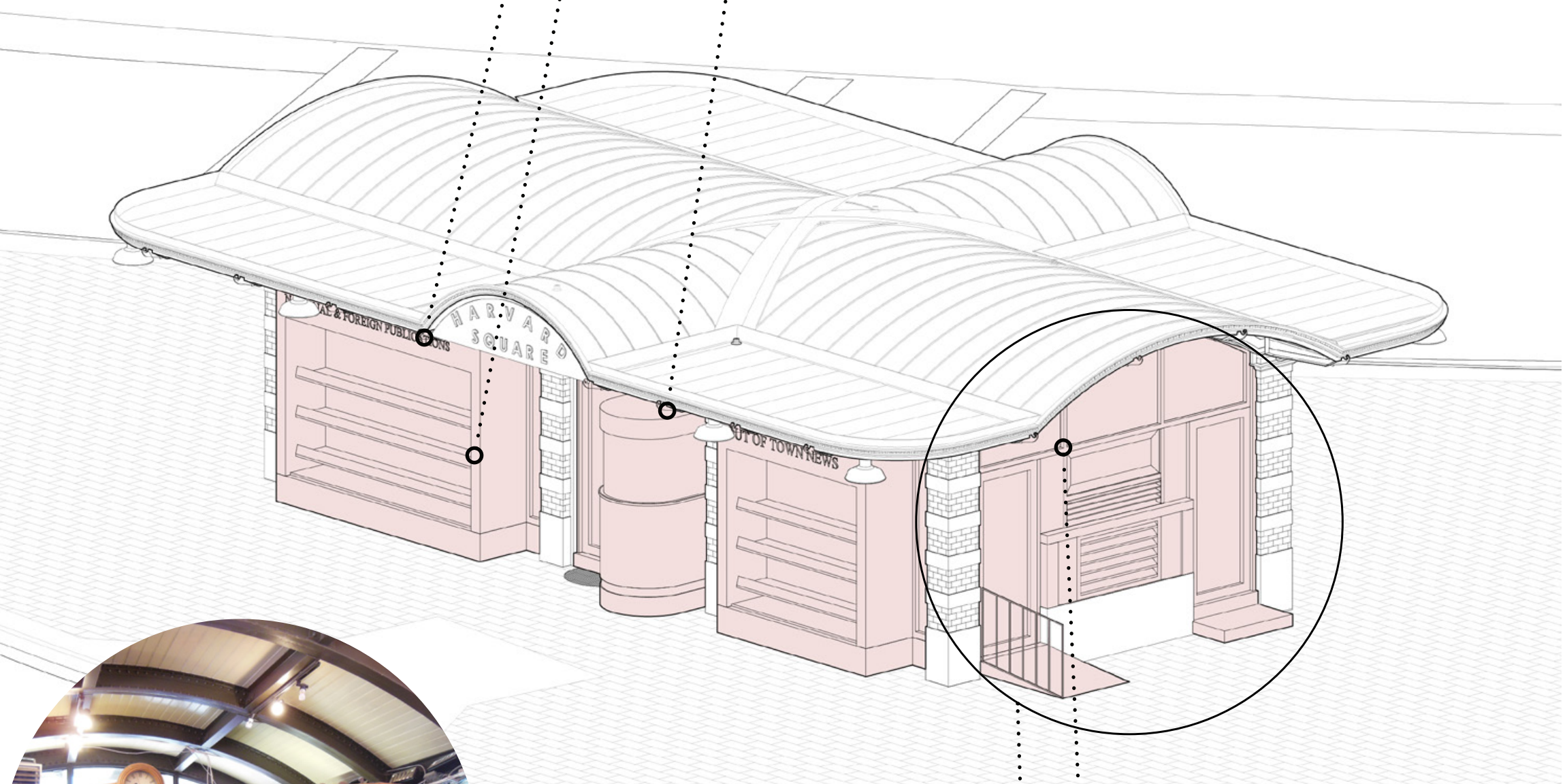
Designation of the Harvard Square Kiosk will enhance the Historical Commission's current jurisdiction over alterations to the publicly-visible exterior features of the building. Proposed alterations will still require Historical Commission issuance of Certificates of Appropriateness, Non-Applicability, or Hardship. The historical background in this report is intended to increase awareness of the history and significance of the building, while the proposed goals and guidelines will inform future decisions about alterations.

Charles Sullivan
Cambridge Historical Commission
November 30, 2017

- a. Masonry
 - b. Roof
 - c. Fenestration
 - d. Utilities
 - e. Lighting
 - f. Signs
 - g. Paint Colors
 - h. Accessibility
- ### 3. Interior Features

Existing Kiosk Today

- "Out of Town News" signage
- news stands & magazine racks
- exterior suspended curtain tracks



present day kiosk - exterior



present day kiosk - exterior



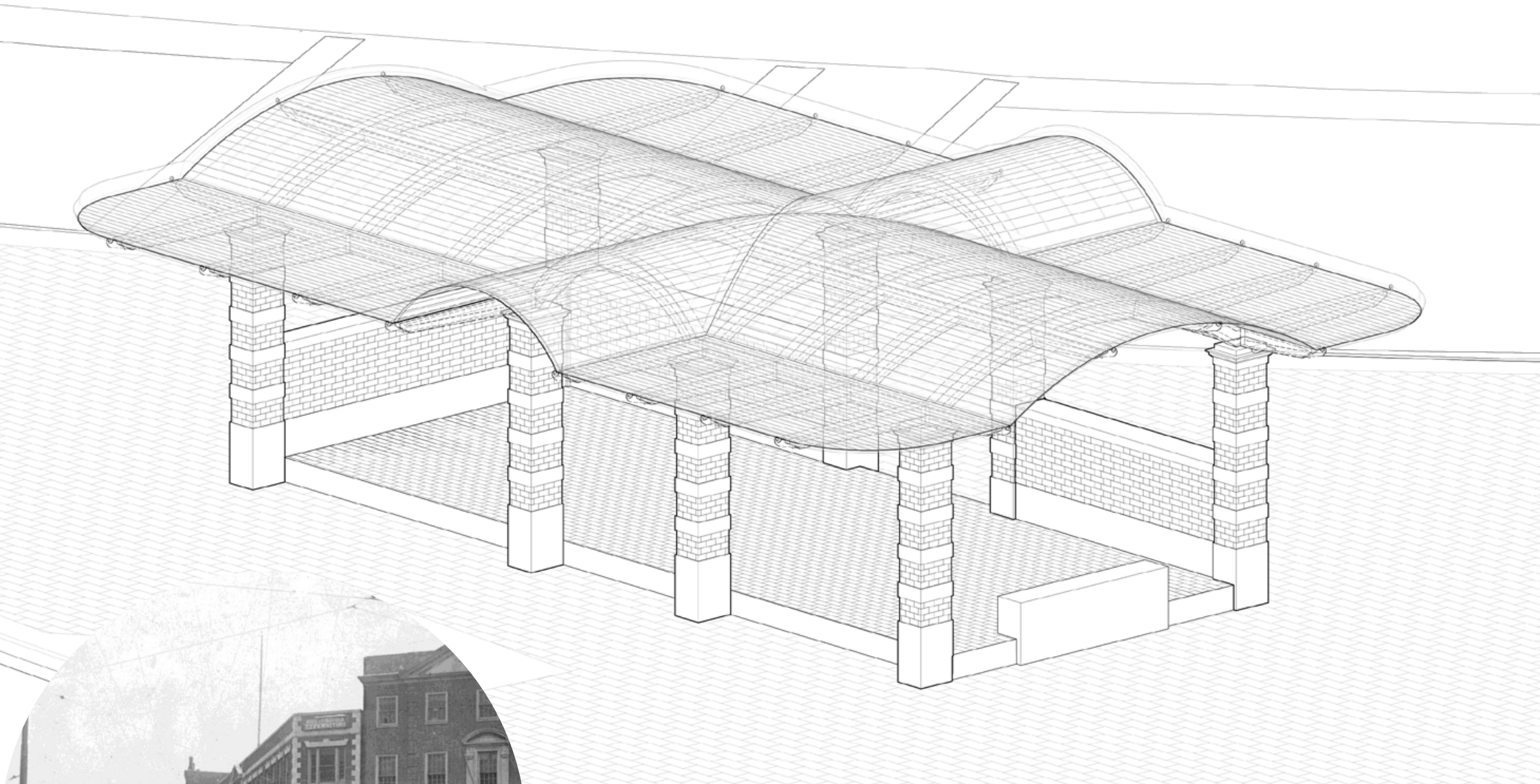
present day kiosk - interior

- interior
- interior casework & electrical room
- select interior light fixtures
- interior heating & cooling systems

- aluminum framed storefronts
- south elevation fenestration, vents, doors & ramp

1983 Relocated Kiosk

What are the original "bones"?



original kiosk - 1928



original kiosk - 1961

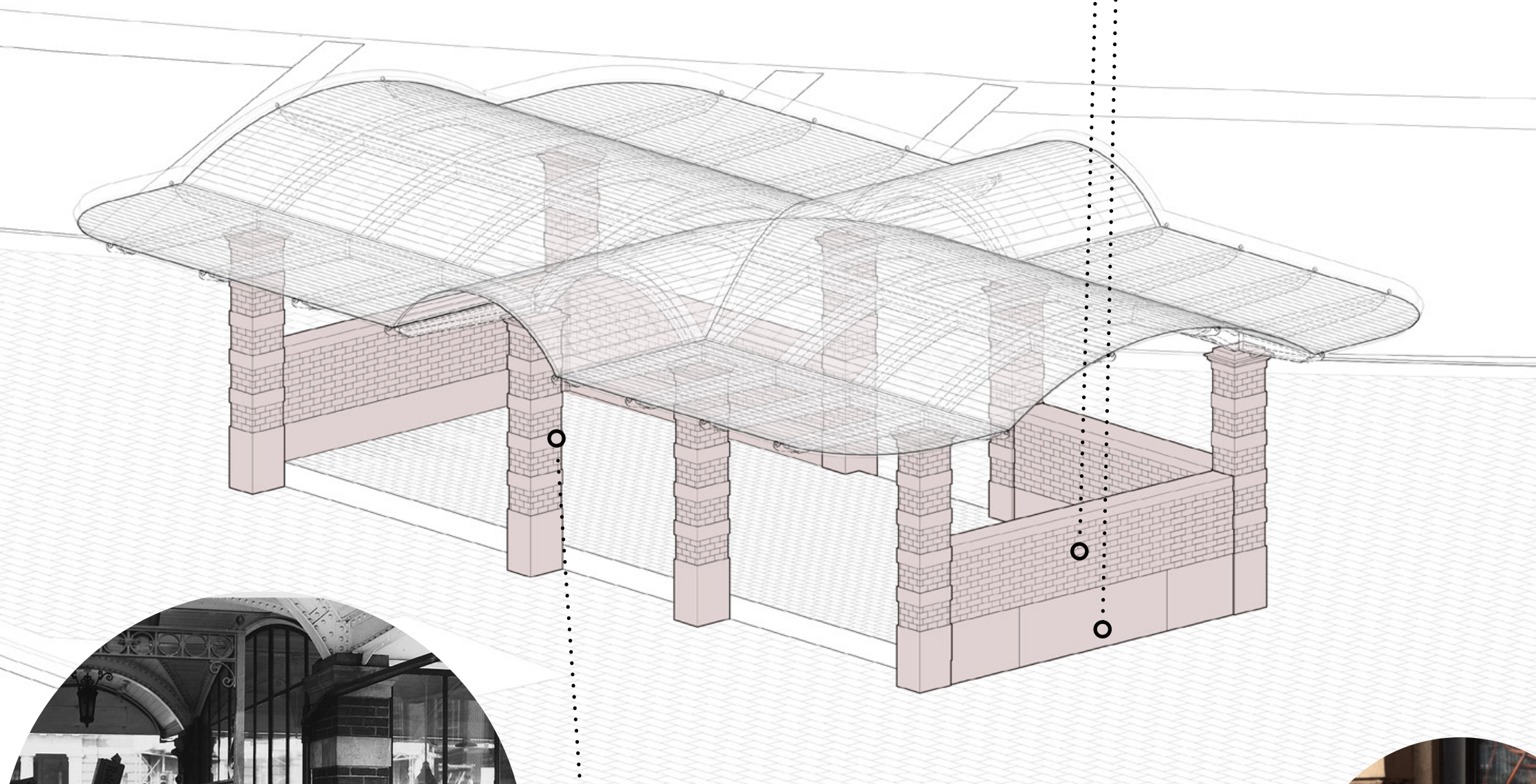


original kiosk - 1950's

HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018

Guidelines for Treatment of the Landmark

Masonry - Brick, Limestone & Granite



reconstruction of continuous low wall across south elevation



original kiosk

HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018

..... repair brick & limestone



window system interface



repointing of mortar joints to maintain color, texture and profile of original joints

Guidelines for Treatment of the Landmark

Test Pit Location



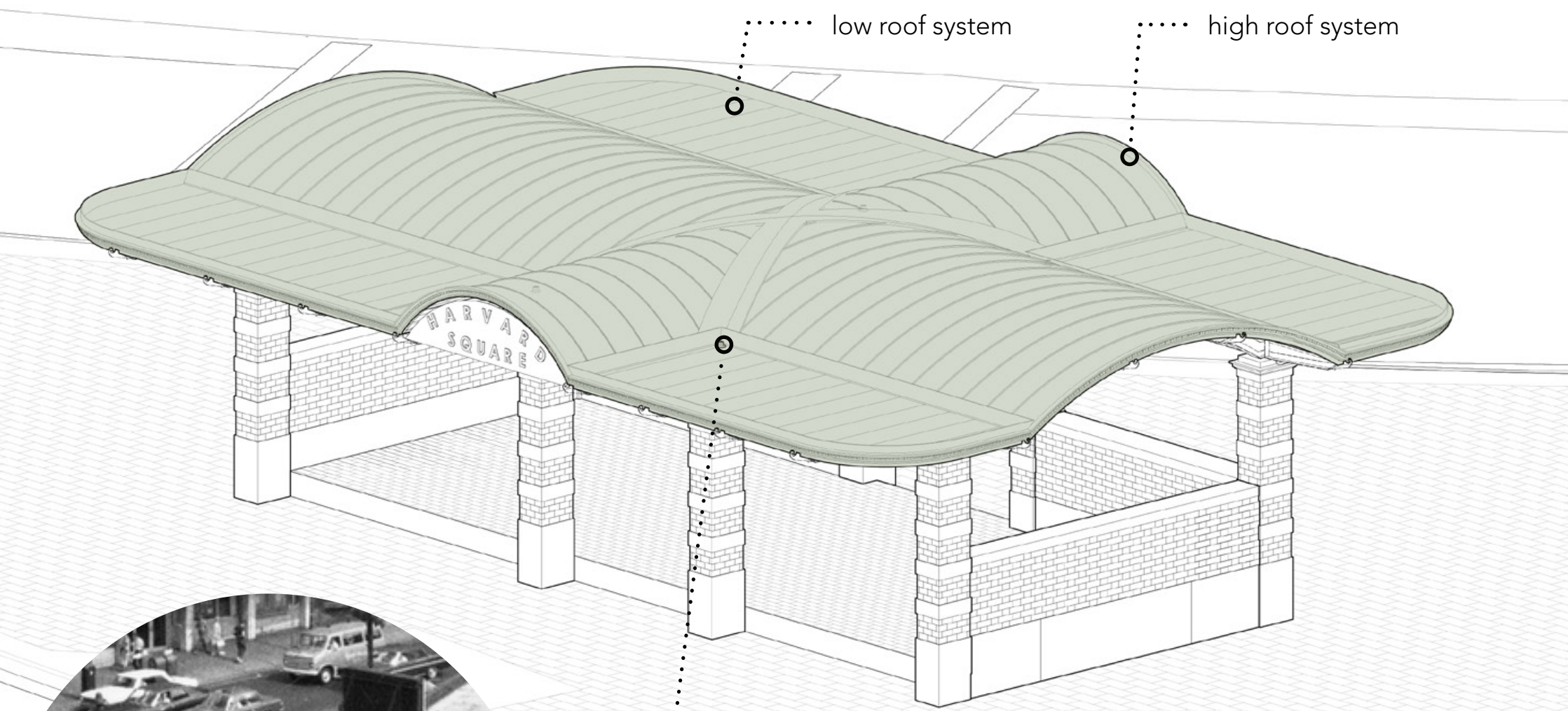
Test Pit Photograph



Area of Potentially Exposed Granite

Guidelines for Treatment of the Landmark

Roof



replacement of standing seam copper roof & allow for thermo dynamic movement

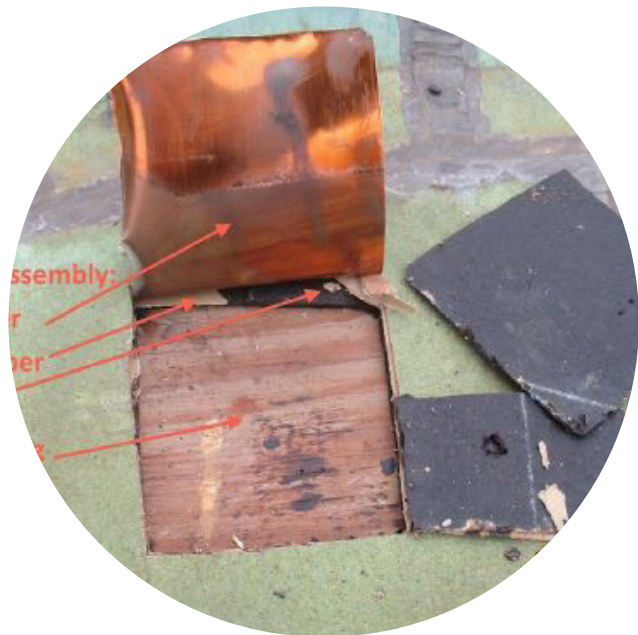


original kiosk - 1970

roof drain system



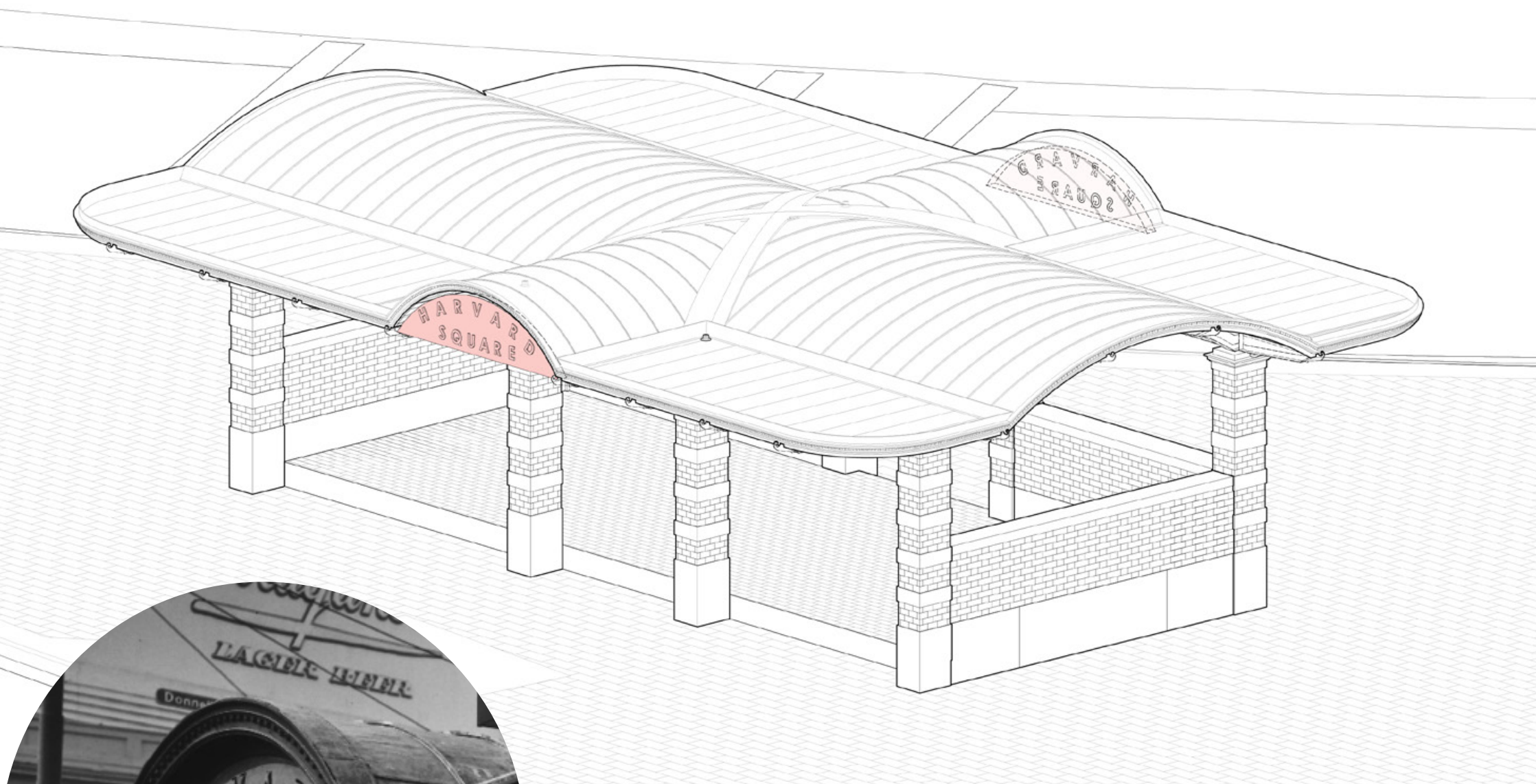
replacement of perimeter dentilled fascia to 1927 details (where necessary)



replace wood sheathing where necessary & install new insulation between sheathing and copper roof.

Guidelines for Treatment of the Landmark

Signage



The back-lit semi circular signs should be restored with vacuum formed translucent red letters matching the originals.



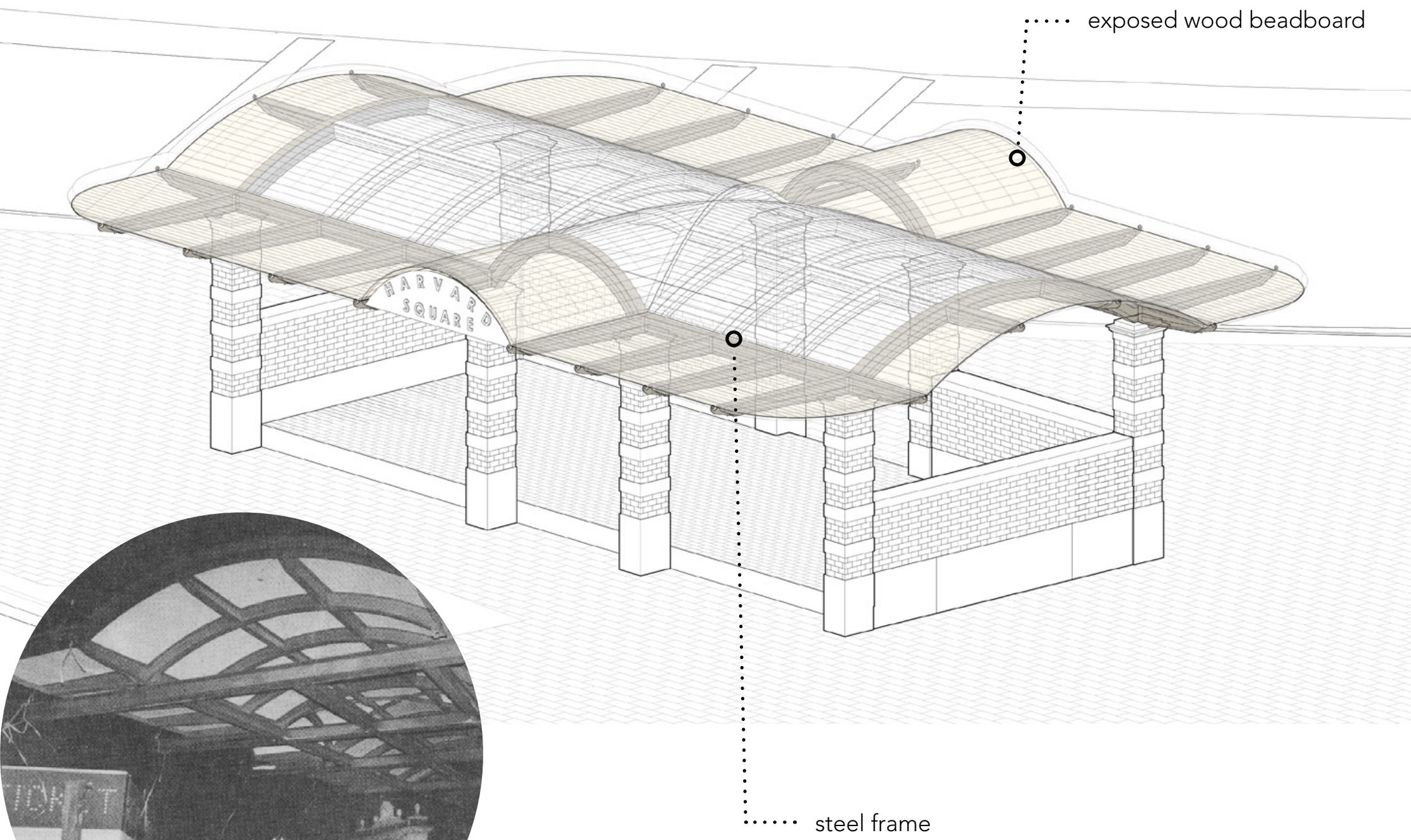
original signage - 1950's



removal of all commercial advertising and clutter not original to the 1928 kiosk design.

Guidelines for Treatment of the Landmark

Steel support & wood sheathing



restoration / replacement of exposed beadboard



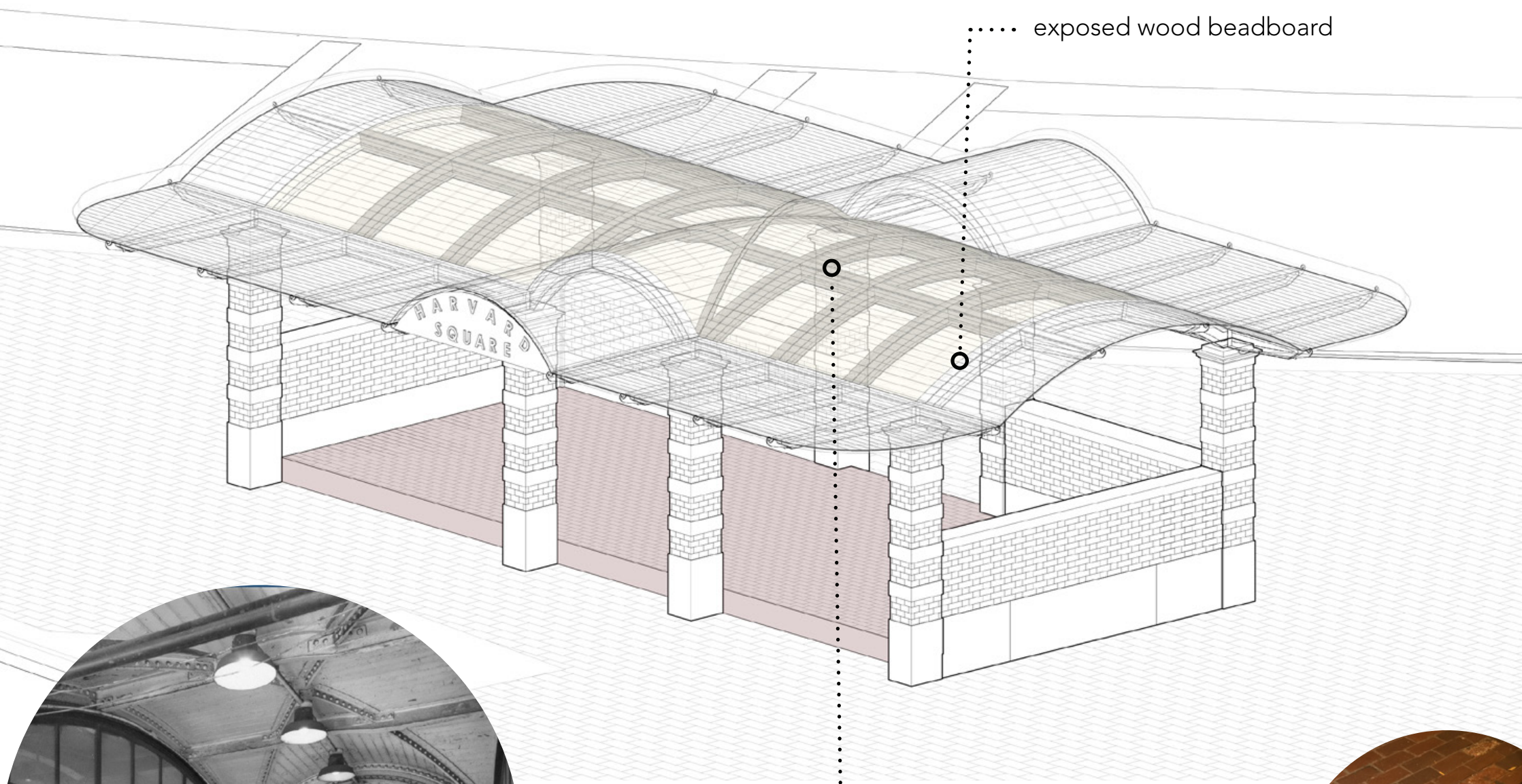
re-installation of original kiosk roof - 1983



clean structural members for removal of rust and paint, to be repainted in the historic color

Guidelines for Treatment of the Landmark

Interior Features



preserve exposed wood beadboard & riveted iron structure



original breezeway - 1977
HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018



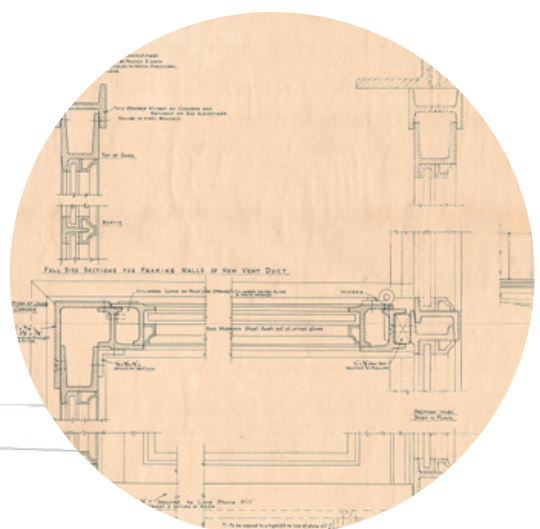
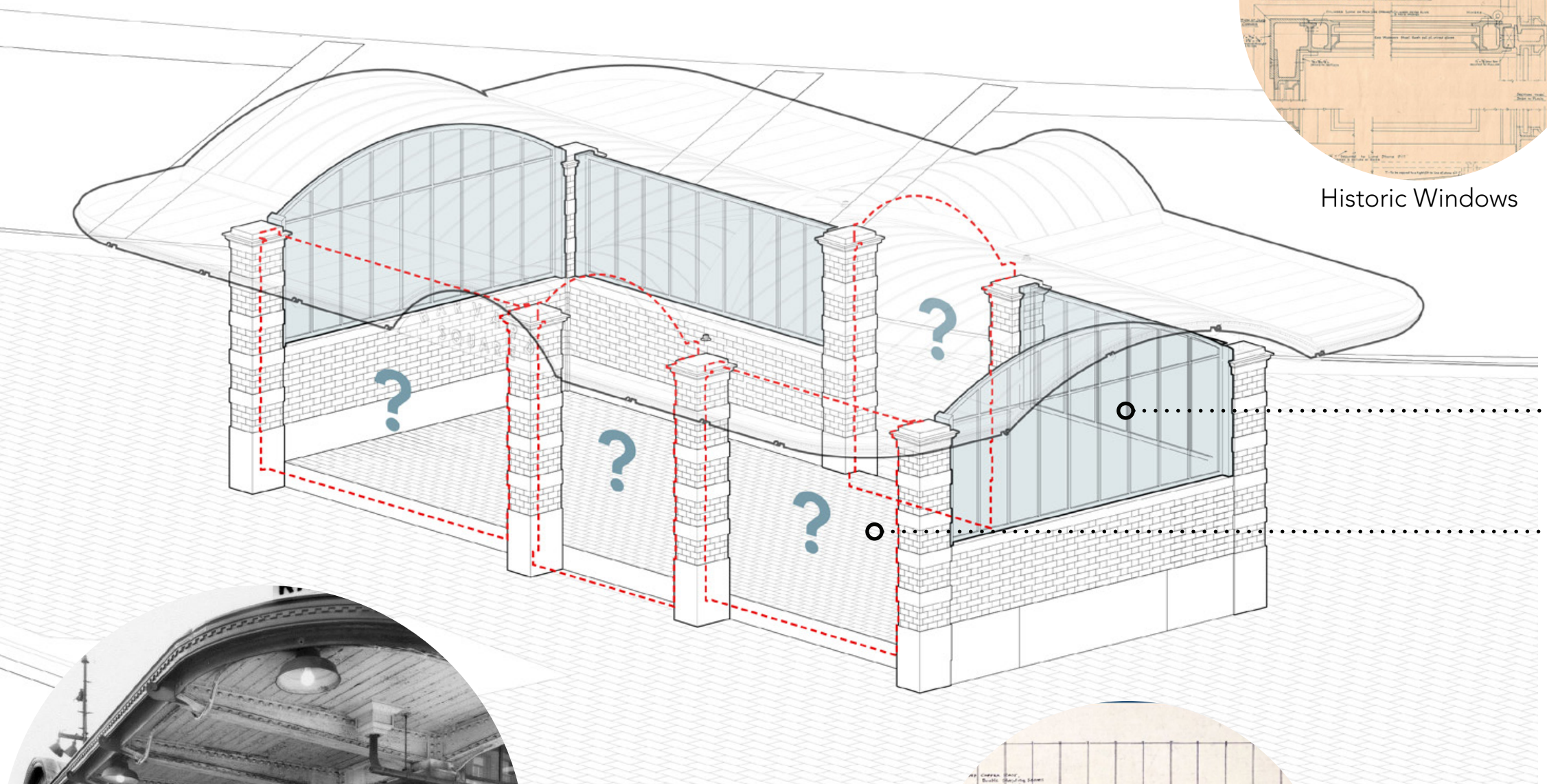
address MAAB compliant brick floor



height of casework should not exceed the perimeter brick walls

Guidelines for Treatment of the Landmark

Fenestrations



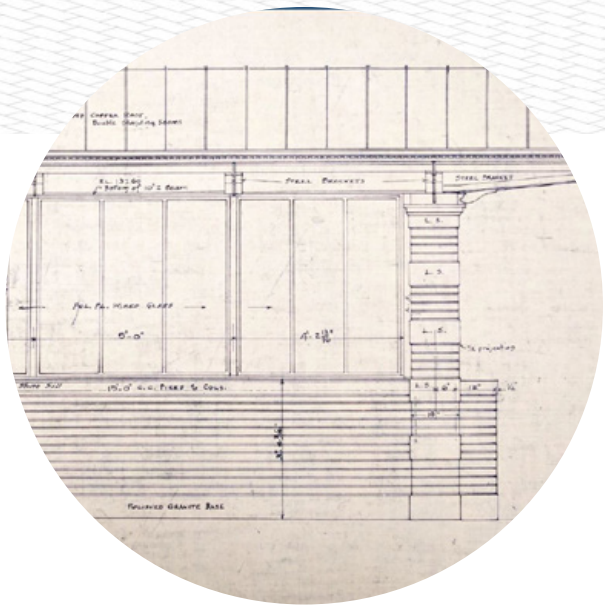
Historic Windows



restore glass to original wire glass with thin dimensions of the original mullions.



original entrance into train



Historic Elevation



removal of magazine racks. openings to be filled with glazing.

Kiosk and Plaza Relationships



aerial view of Harvard Square
HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018

Exterior Envelope Equation

$(\text{Interior Use} + \text{Exterior Use}) \times \text{Historical Significance} / \text{Surrounding Site} = \text{Highest and Best Exterior Envelope for Flexible and Adaptable Uses}$



How opportunities relate to the use of the plaza and building.

Uses

We realize that each plaza space will be supported differently based on the programmatic use of the kiosk and that the facade should respond accordingly.

Plaza

Daily Uses

- Seating areas

Temporary Uses

- Table games
- Performance / Events
- Interactive installations (ex: public piano; artistic sculpture/seating)
- Family activities (ex: storytelling; face painting)
- Tabling for community groups
- Outdoor markets (selling books, art, and/or food)
- Civic Functions
- Board Games
- Street Performers
- Tour Groups

Kiosk

Daily Uses

- Visitor Information Center
- News
- Interior "flex" space

Temporary Uses

- Family activities
- Performance / Events
- Civic Functions
- Social Seating
- Board Games
- Art exhibit
- Collection of clothing/food donations
- Small lecture/roundtable style event (ex: book talk)
- Sampling of products
- Historical exhibit



Consolidated: variety of rotating events

- * flexible and adaptable spaces
- * grow and change with the community, local business and visitor interests.

Kiosk Uses

Daily Uses



Visitor Information



News

Temporary Uses



Family Activities



Civic Functions



Social Seating



Board Games



Performance/Events

Daily Uses: Visitor Information & News Content



Test Fit Use Scenario's

Daily Uses



Visitor Information



News



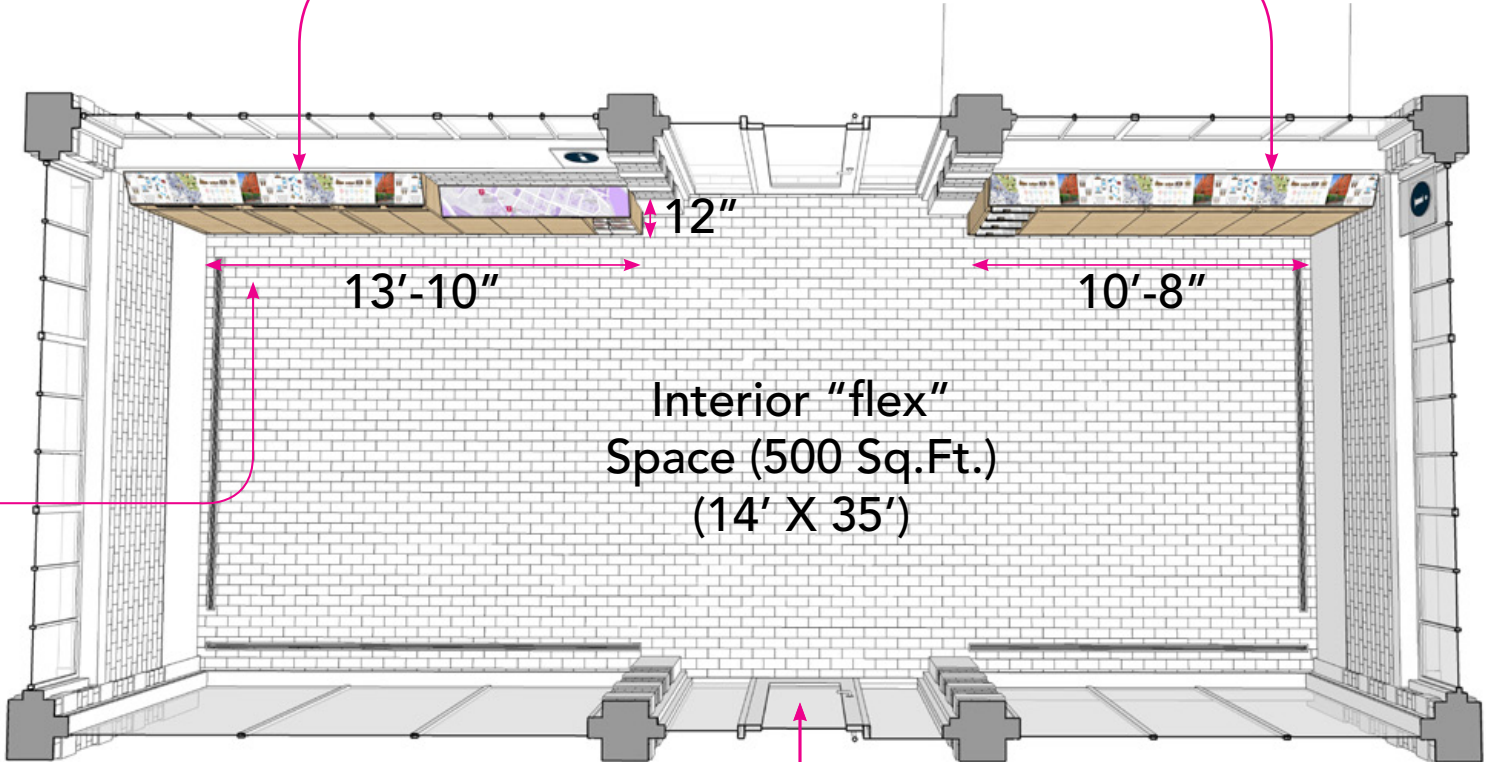
Tables (6)
*Foldable



Chairs (24)
*Stackable



Flexible Storage



Family Activities



Civic Functions



Social Seating



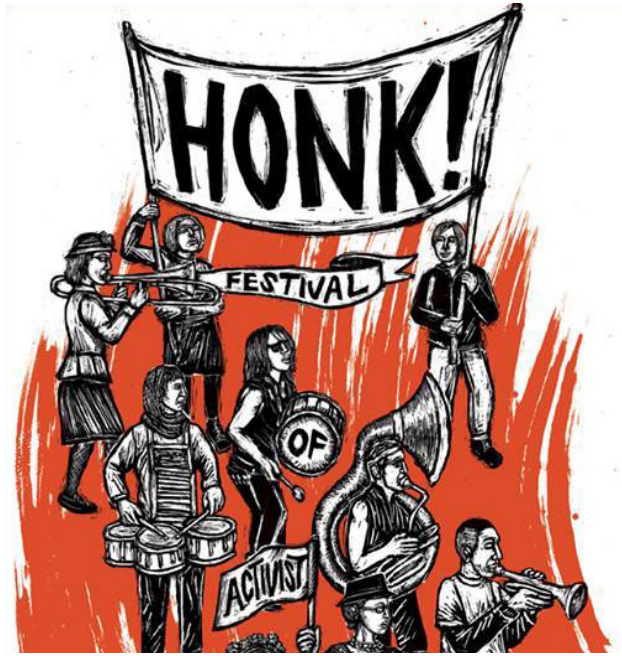
Board Games



Performance

Temporary Uses

Daily Use: Visitor Information + News



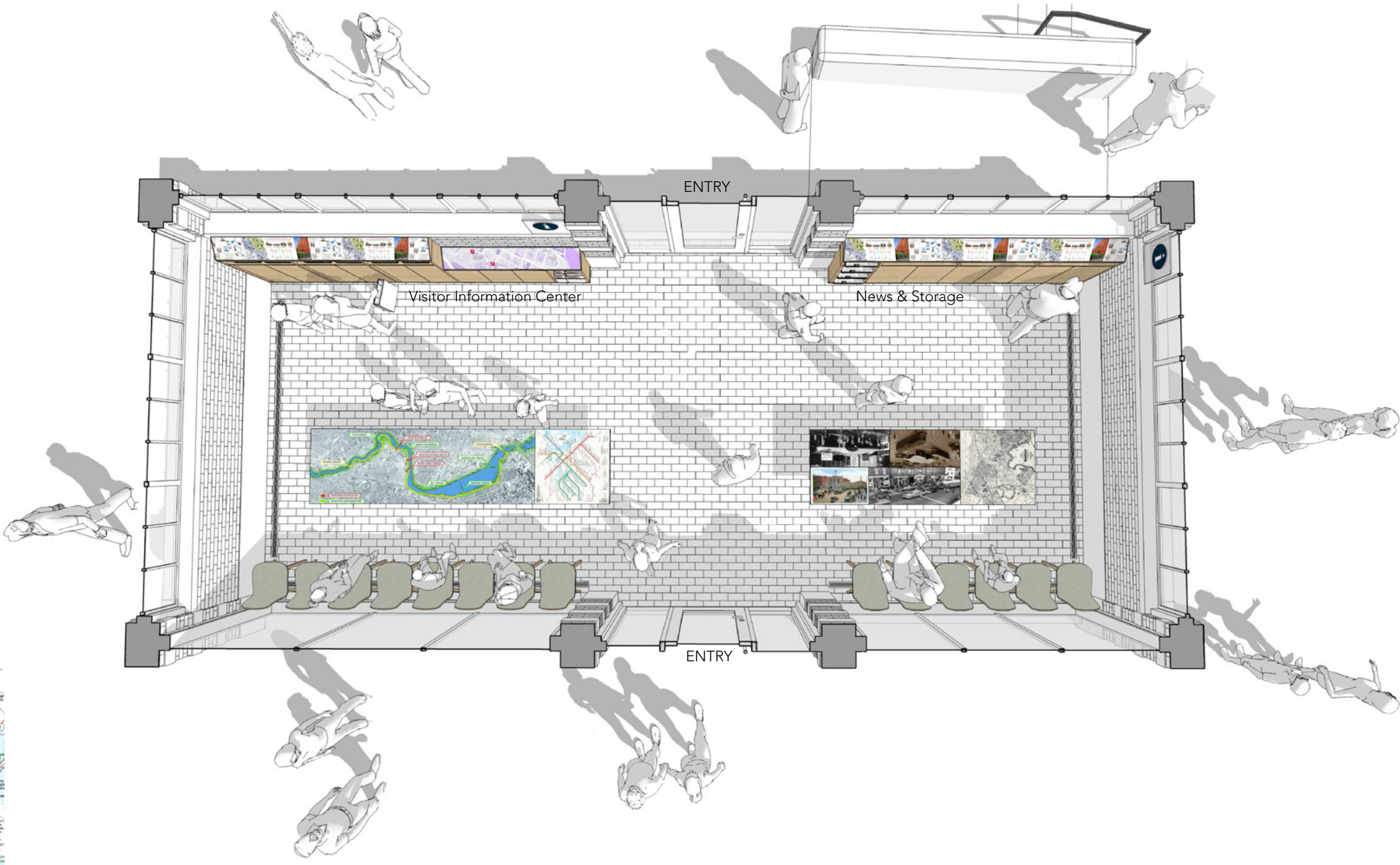
Local Events

<p>APR 4 Brain Rhythms in Health & Disease Symposium MIT Building 46, Room 3002, Singleton Auditorium... Free • on Eventbrite</p>	<p>APR 8 Israel Summit at Harvard 2018 The Charles Hotel, Cambridge, MA Free • on Eventbrite</p>
<p>APR 22 BAHFest MIT 2018 Kresge Auditorium, Cambridge, MA Starts at \$5.00 • on Eventbrite</p>	<p>APR 27 COLOMBIA 2040: V Colombian Conference at Harvard + MIT HARVARD + MIT, Massachusetts, USA Free • on Eventbrite</p>

Announcements & Area events

boston.about.com

Harvard Square - Walking Tour of Harvard Square-Harvard



Tour Information
HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
 JULY 12, 2018

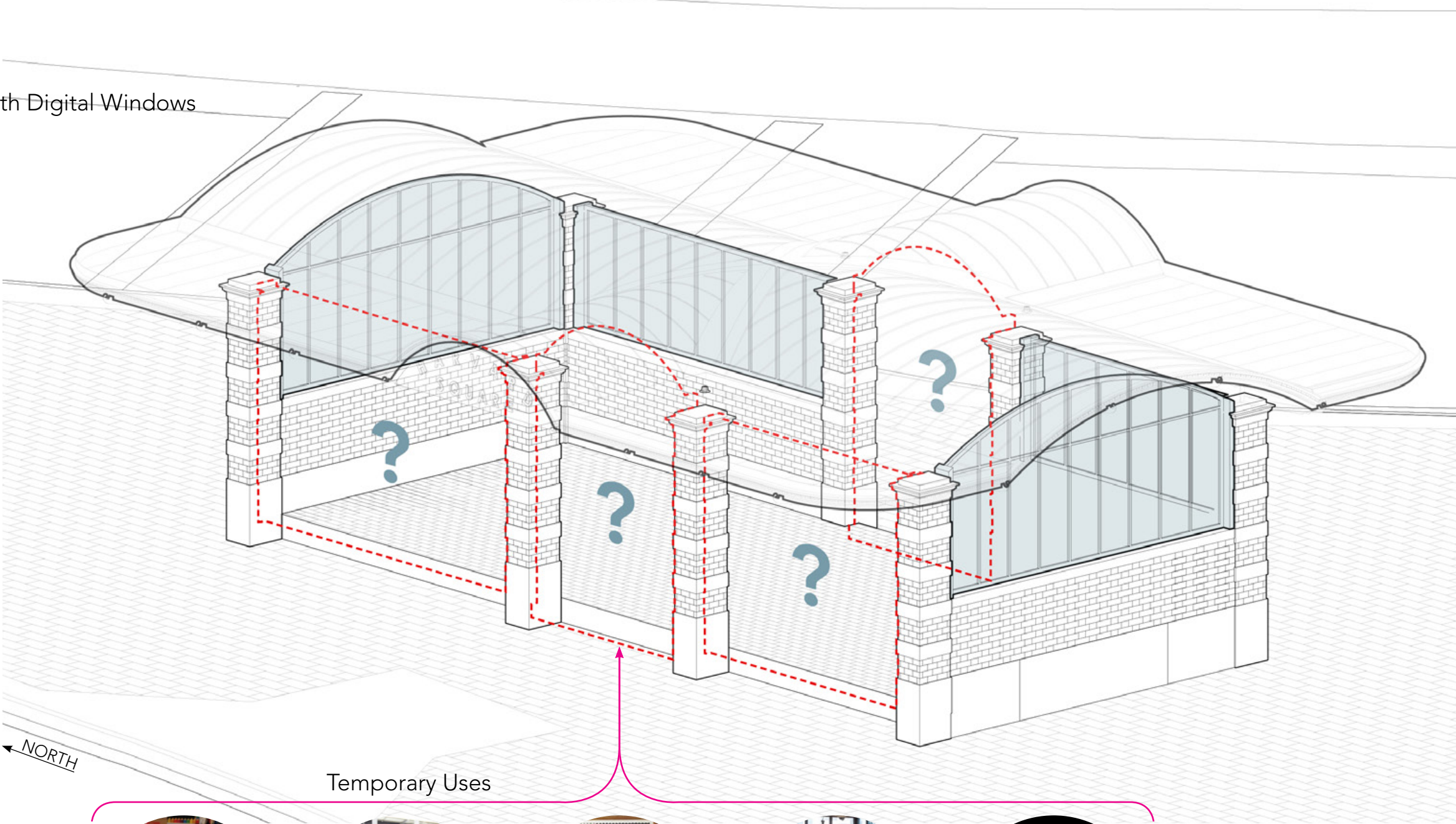
Tourist Maps



Exterior Facade and Interior Use Opportunities

Exterior Facade Options

- 1. Fixed Windows
- 2. Fixed Digital Windows
- 3. Sliding Windows
- 4. Folding Glass Doors
- 5. Folding Glass Doors with Digital Windows



Temporary Uses



Family Activities

Civic Functions

Social Seating

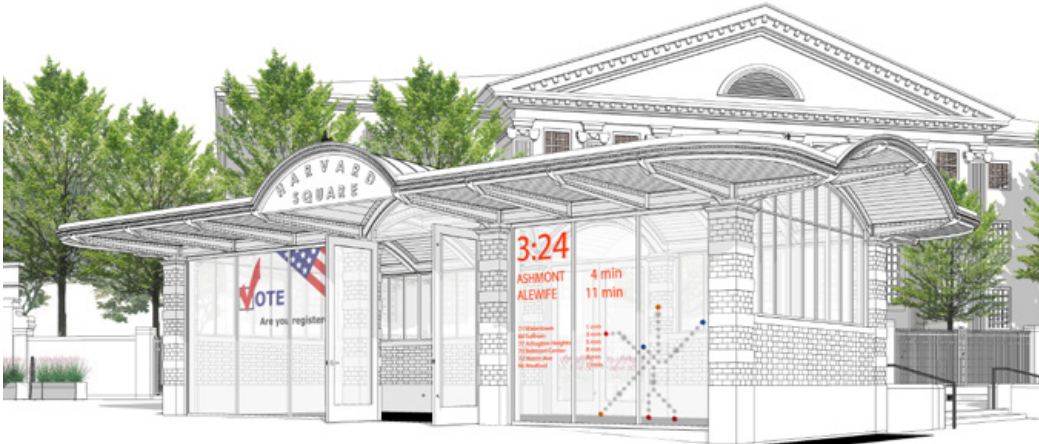
Board Games

Performance

Exterior Kiosk Opportunities



Fixed Windows



Fixed Digital Windows



Sliding Windows (Counter Height)



Family Activities



Civic Functions



Visitor Information



News



Social Seating



Board Games



Performance

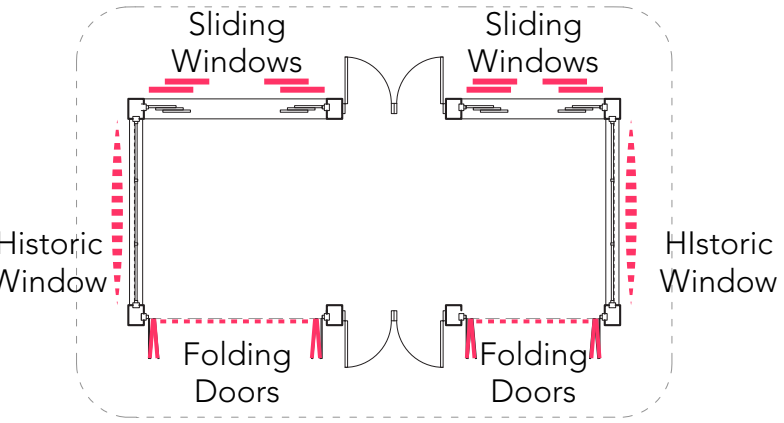


Folding Glass Doors



Folding Glass Doors with Digital Windows

Folding Glass Doors with Sliding & Historic Windows



Key Plan
 The folding doors are structurally feasible with additional stiffening of the existing structural header.



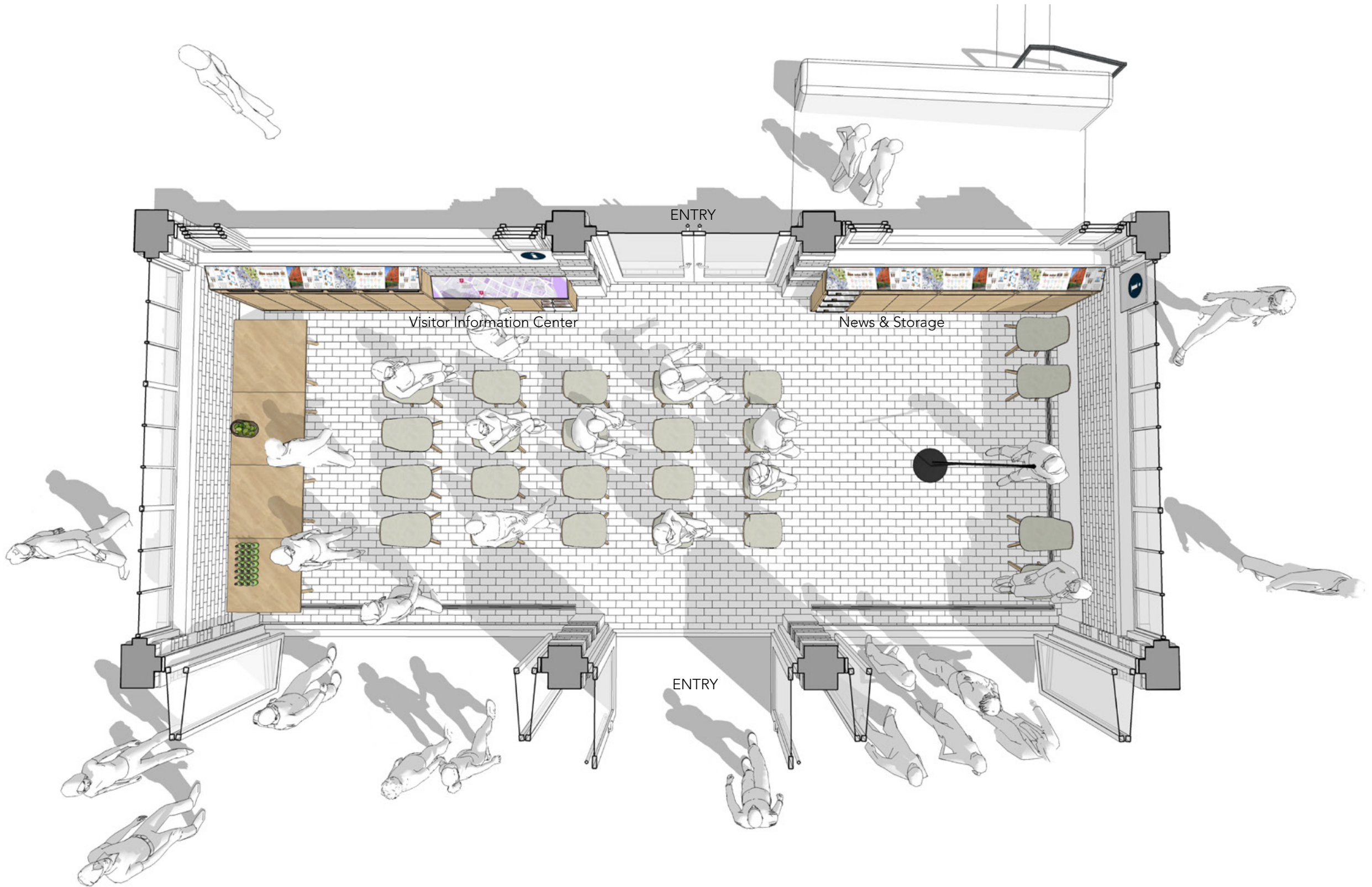
View - Southwest



View - Northeast
HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
 JULY 12, 2018

Folding Glass Doors with Sliding & Historic Windows

*We are waiting to hear back from the manufacturer in regards to the steel sliding glass window profiles.



Plan (500 Sq.Ft.) - Diagram
HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018

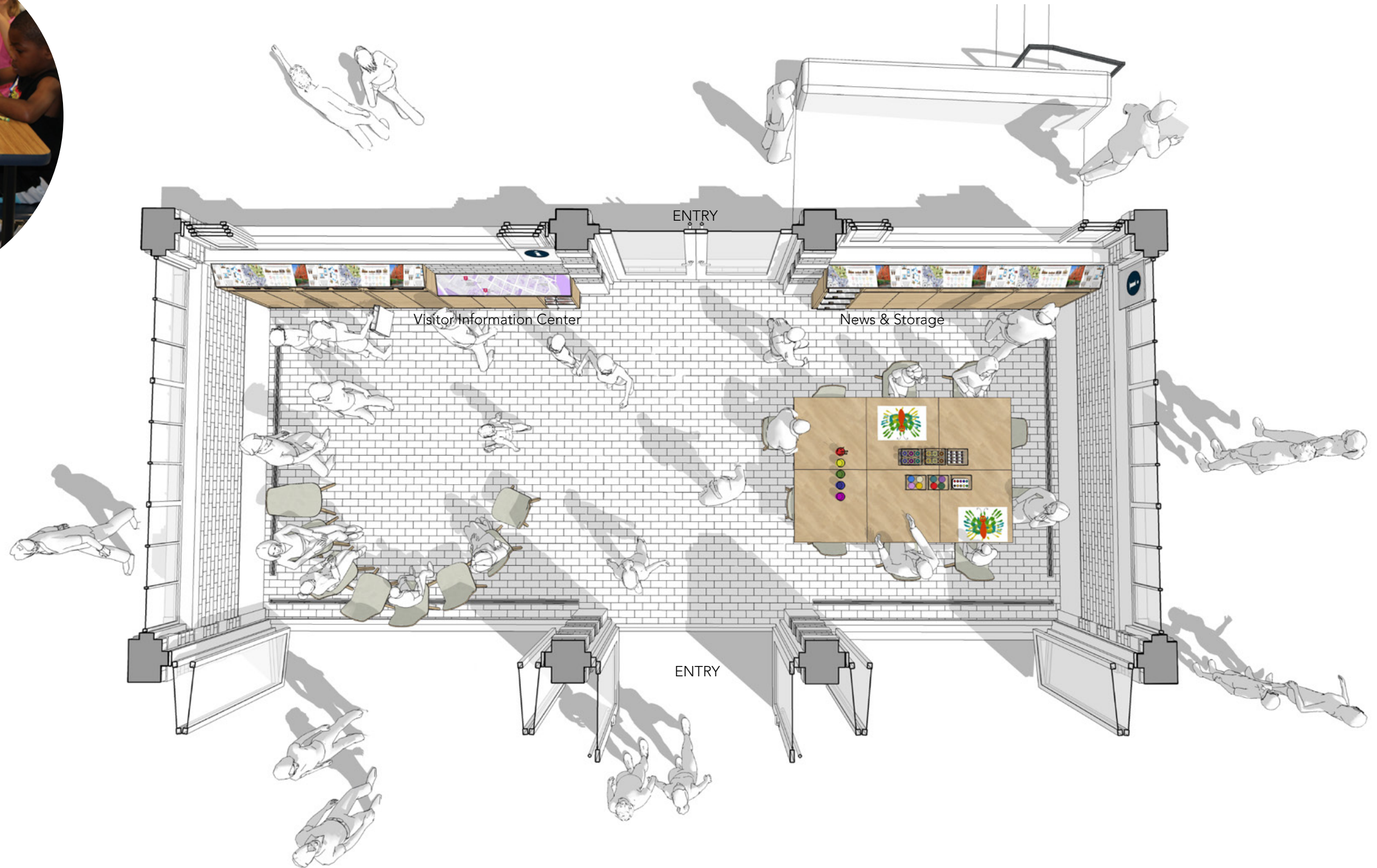
Folding Glass Doors with Sliding & Historic Windows



Section - East/West

HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018

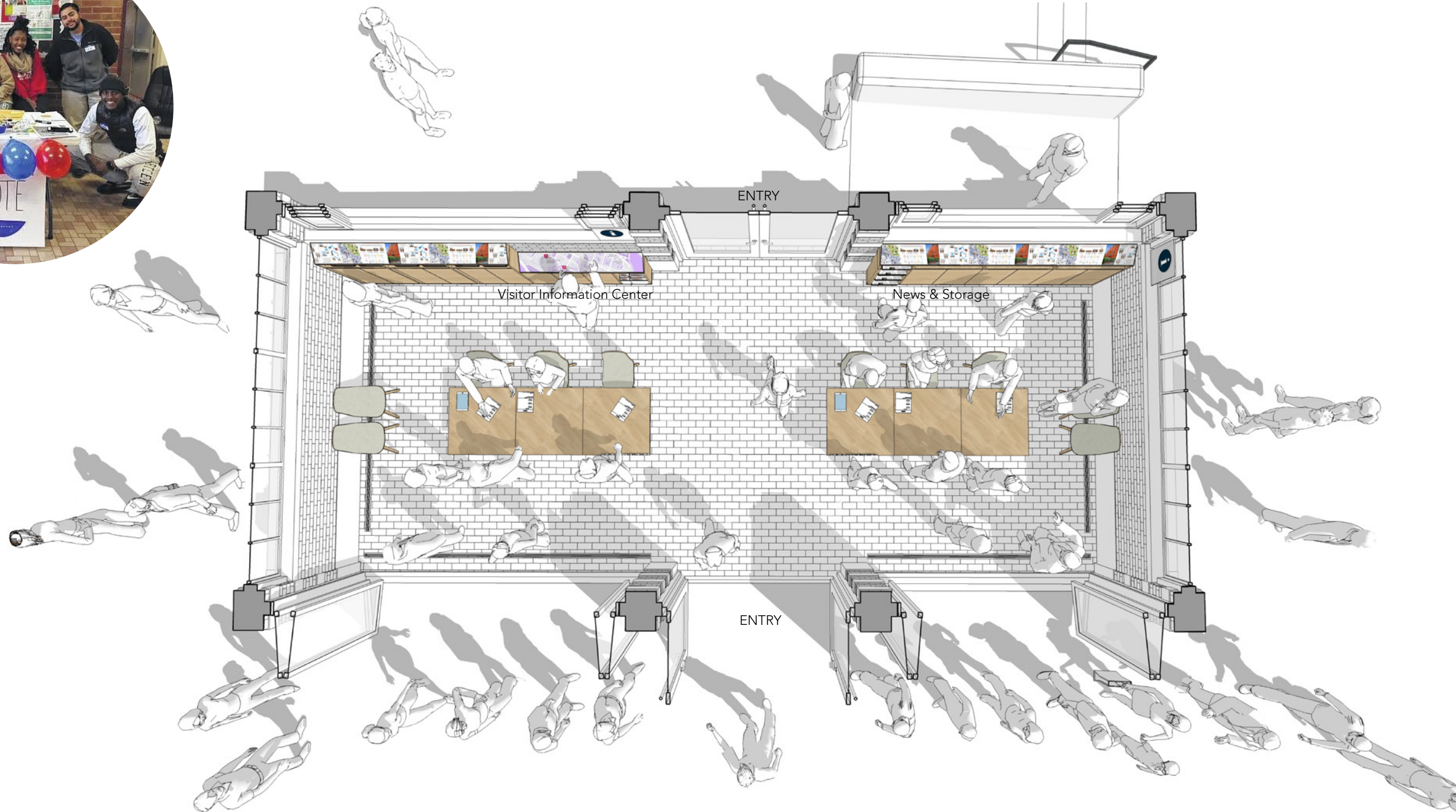
Family Activities



Plan (500 Sq.Ft.) - Diagram

← NORTH

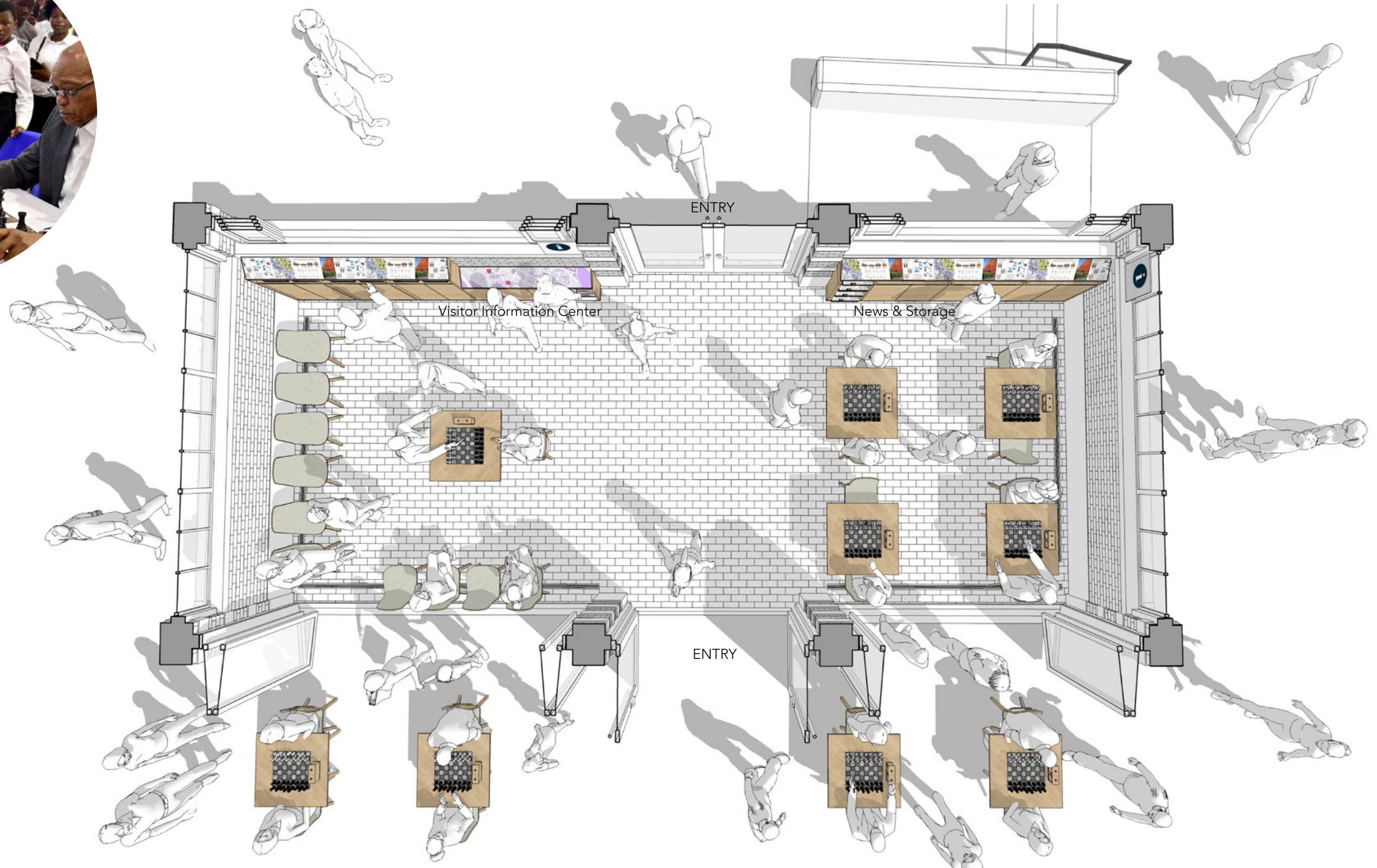
Civic Functions



Plan (500 Sq.Ft.) - Diagram

← NORTH

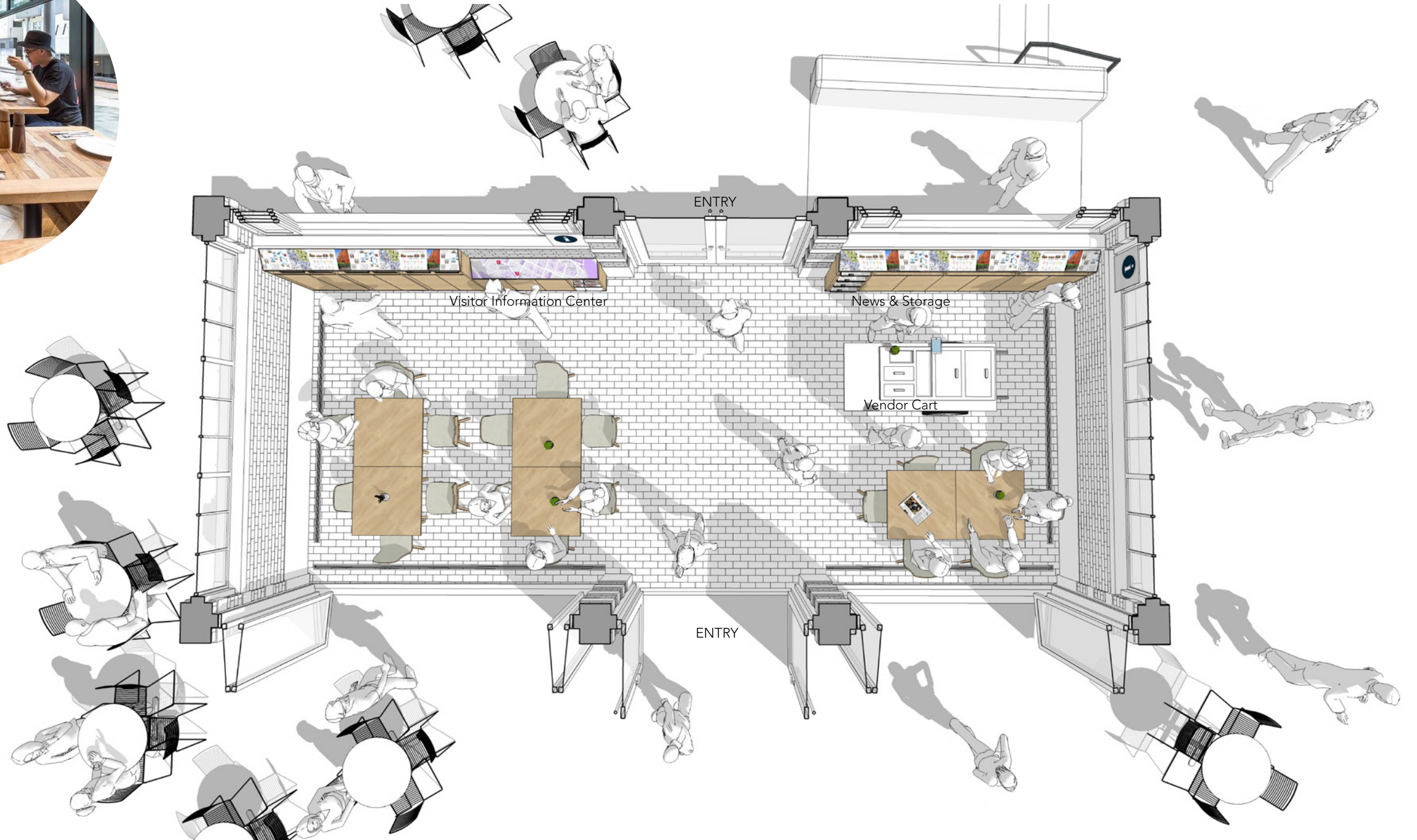
Board Games



Plan (500 Sq.Ft.) - Diagram

← NORTH

Social Seating



Plan (500 Sq.Ft.) - Diagram

← NORTH

Historic Signage Photo - circa 1961



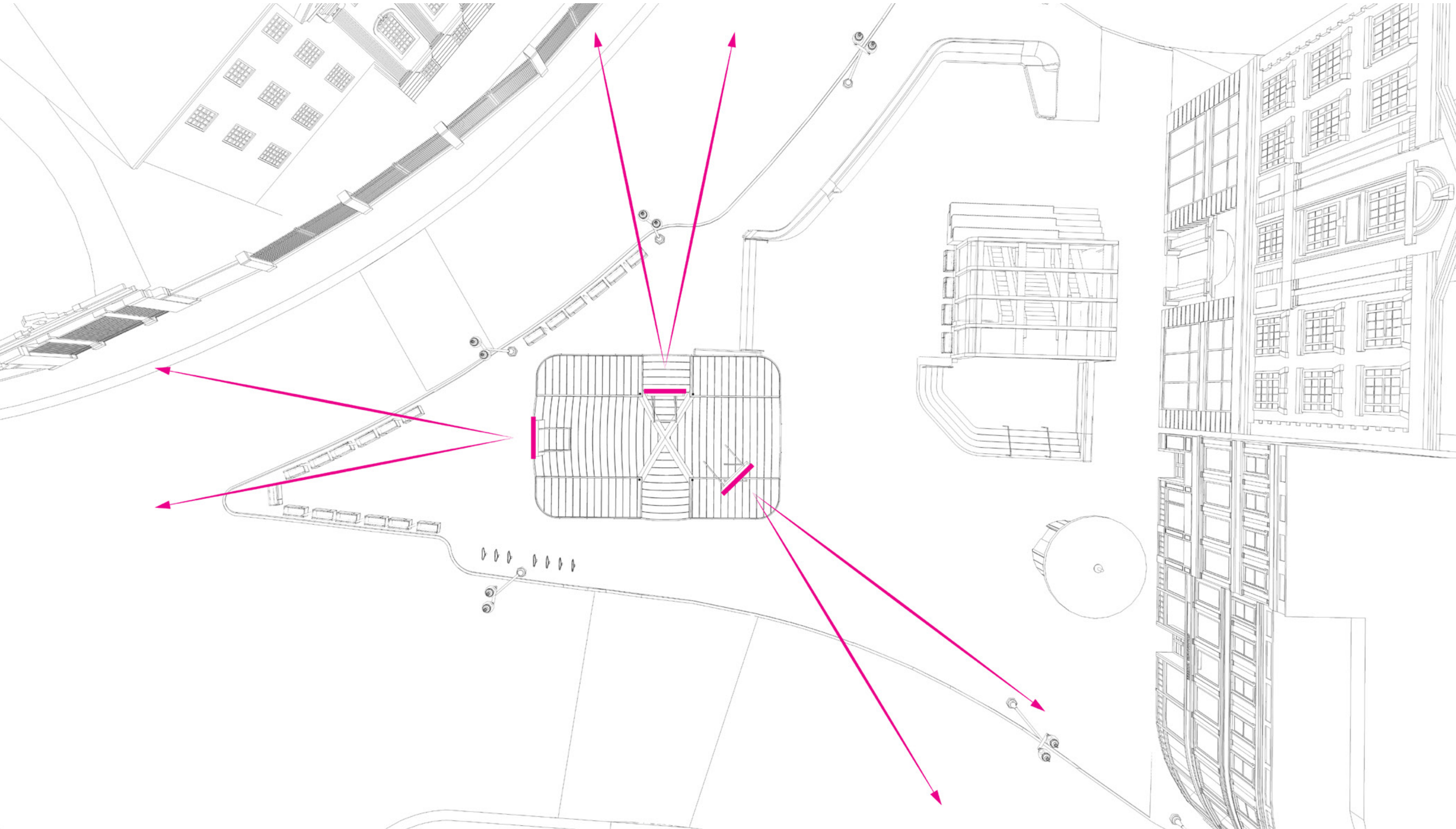
Historic Signage Photo - circa 1954-58



Historic Signage Photo - circa 1966

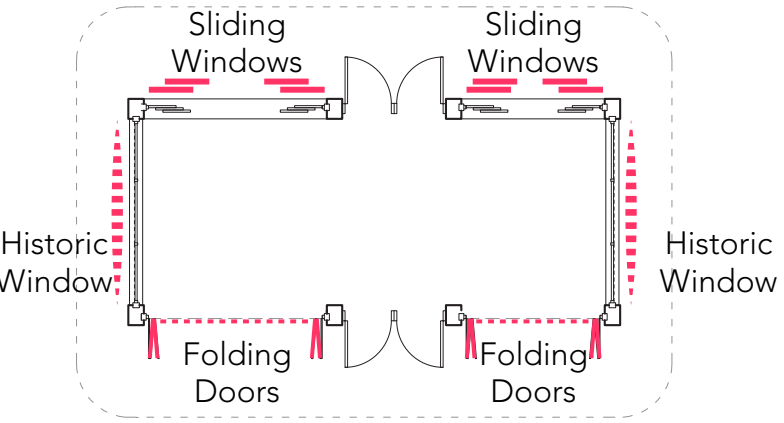


Historic Rooftop Signage Orientation



Plan - (3) Historic Sign Orientations
HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018

Historic Rooftop Signage



Key Plan

Signage Panels: 4'-0" tall x 6'-0" wide (approx.)

Structurally feasible with existing structure



View - Southwest

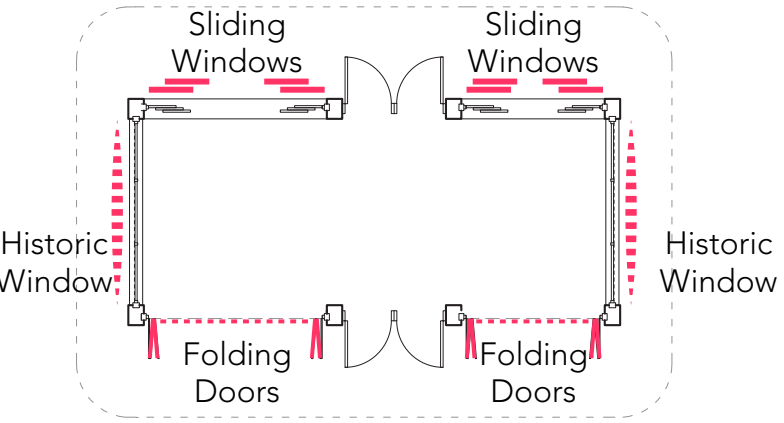


View - Northeast

HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS

JULY 12, 2018

Rooftop Signage



Key Plan
 Signage Panels: 4'-0" tall x 6'-0" wide (approx.)
 Structurally feasible with existing structure



View - Southwest



View - Northeast
 HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
 JULY 12, 2018

Rooftop Signage Precedents

LED Billboards



4mm



6mm



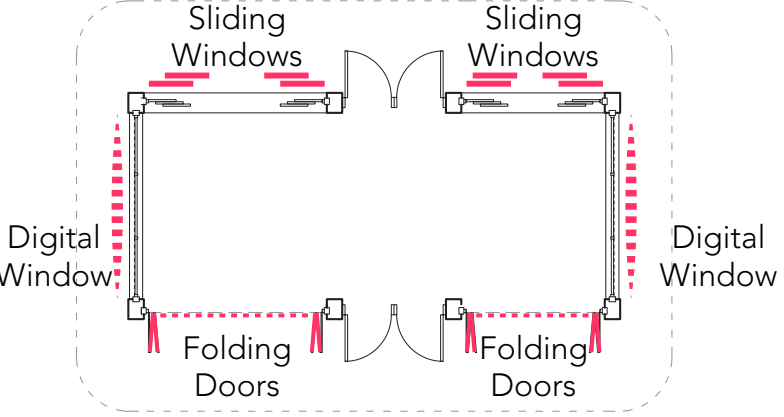
8mm



8mm

- 4mm (optimal viewing greater than 16') (Approximate cost: \$250-300k)
- 6mm (optimal viewing greater than 18') (Approximate cost: \$175-225k) (recommended)
- 8mm (optimal viewing greater than 24') (Approximate cost: \$135-185k)

Digital Windows (north and south elevation)



Key Plan



View - Southwest



View - Northeast

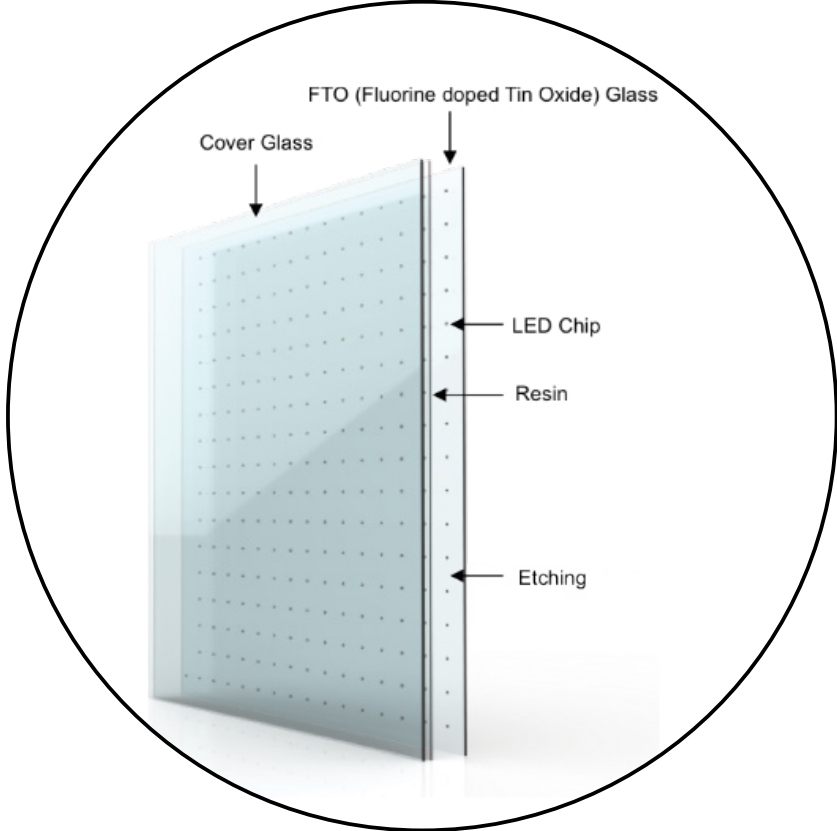
Digital Windows



Section - East/West

HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018

Glass Options



LED's in Insulated Glazing Unit

99.7% Transparent

LED Technology is embedded into the building envelope

Visible after Dusk



Digital Window Precedents



Interior Projection Mapped Window

8-14K Laser Projector

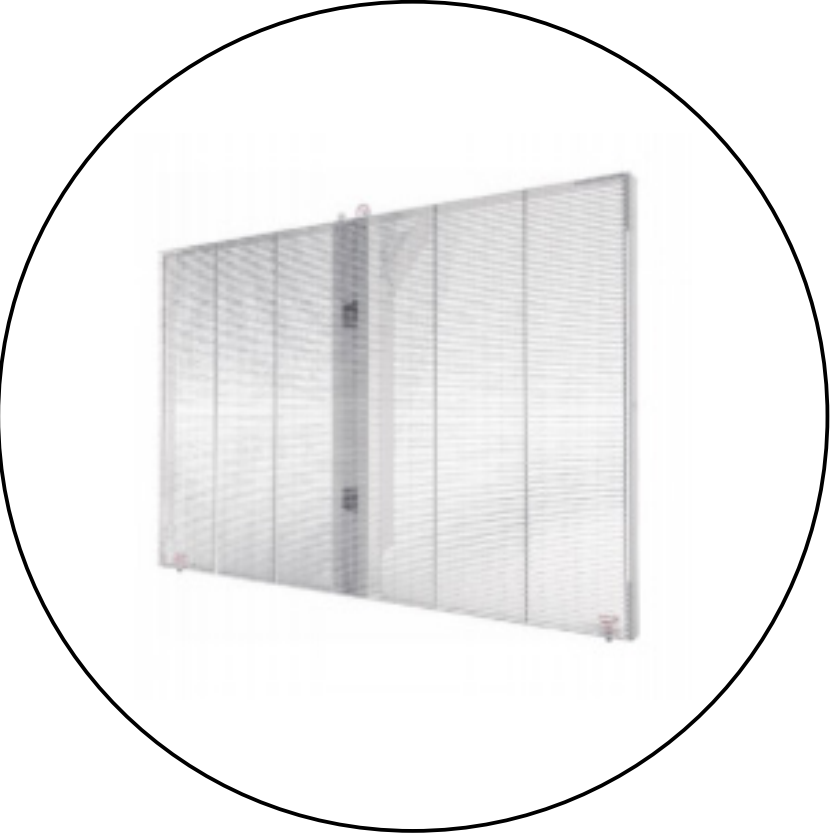
Projection Vinyl is applied on Second Surface of Window

Visible after Dusk

Holographic Effect Optional with Custom Content



Digital Window Precedents



Interior Custom Sized Transparent LED Window

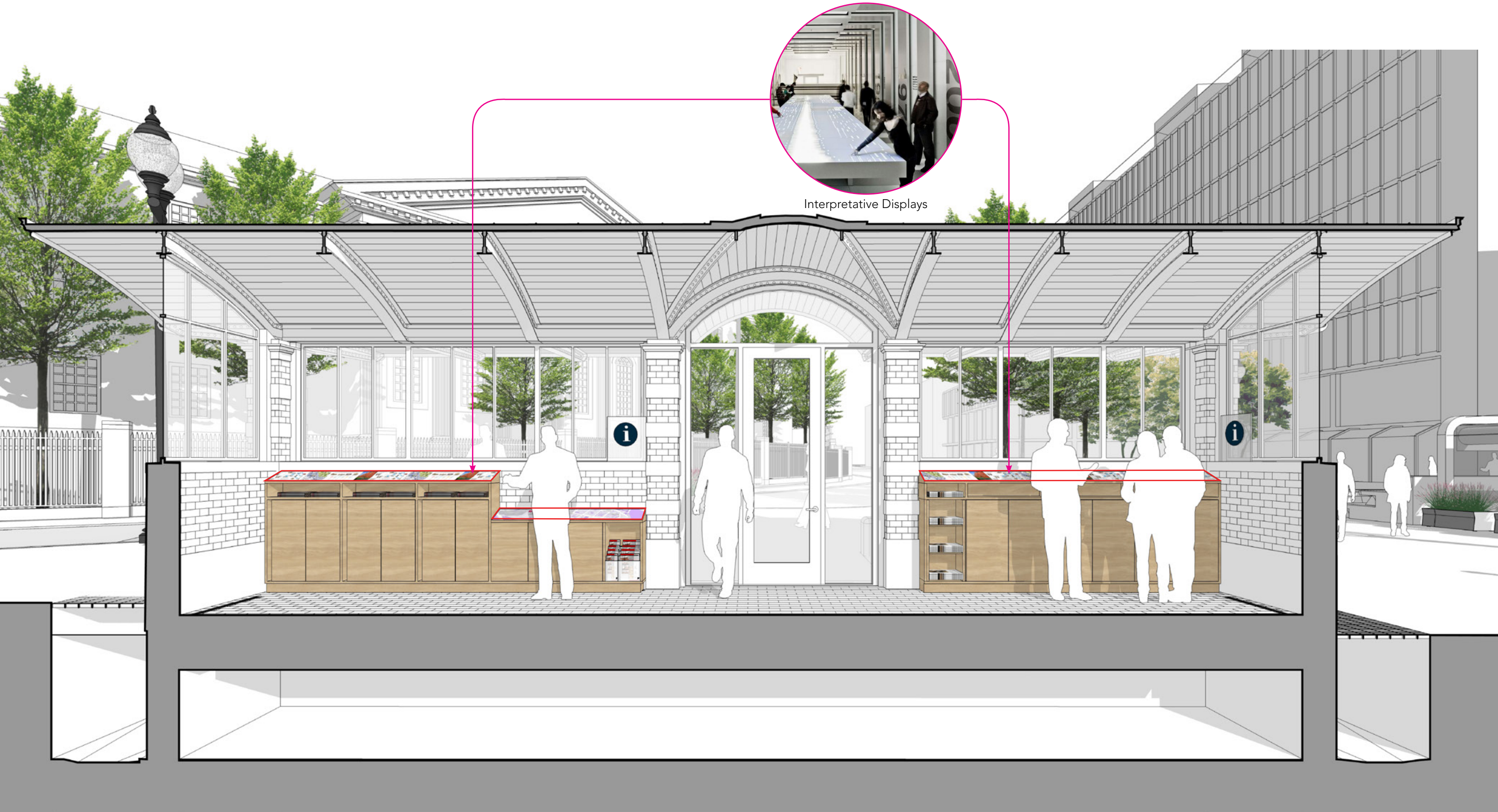
Highly transparent

Interior Brightness within the Space Impacts Contrast

Visible after Dusk



Daily Uses: Visitor Information & News Content



Section - North/South

HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018

Interior Touchscreens Precedents



Group of 16:9 standard aspect ratio Small Screens

- Individual Use
- Less Dynamic and Versatile
- Integrated into Custom Casework



16" x 87" Single Screen (approx.size)

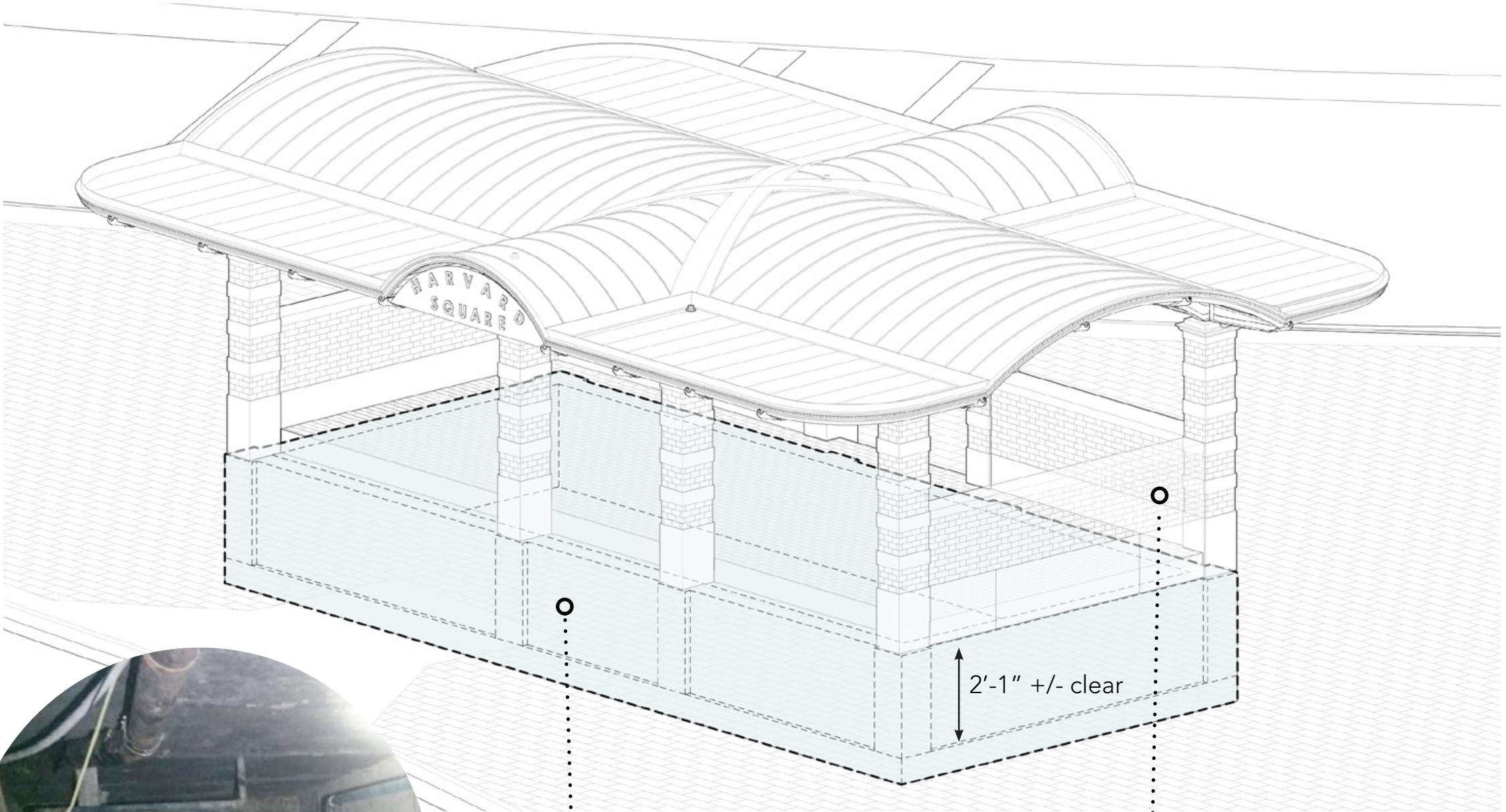
3 -6 Simultaneous Users

Ultra Wide Display with Custom Touch Bezels

Integrated into Custom Casework

Guidelines for Treatment of the Landmark

Utilities - Electrical & HVAC



vents along south elevation



existing crawlspace

potential HVAC system location in existing crawlspace

potential electrical panel location (interior, below window)



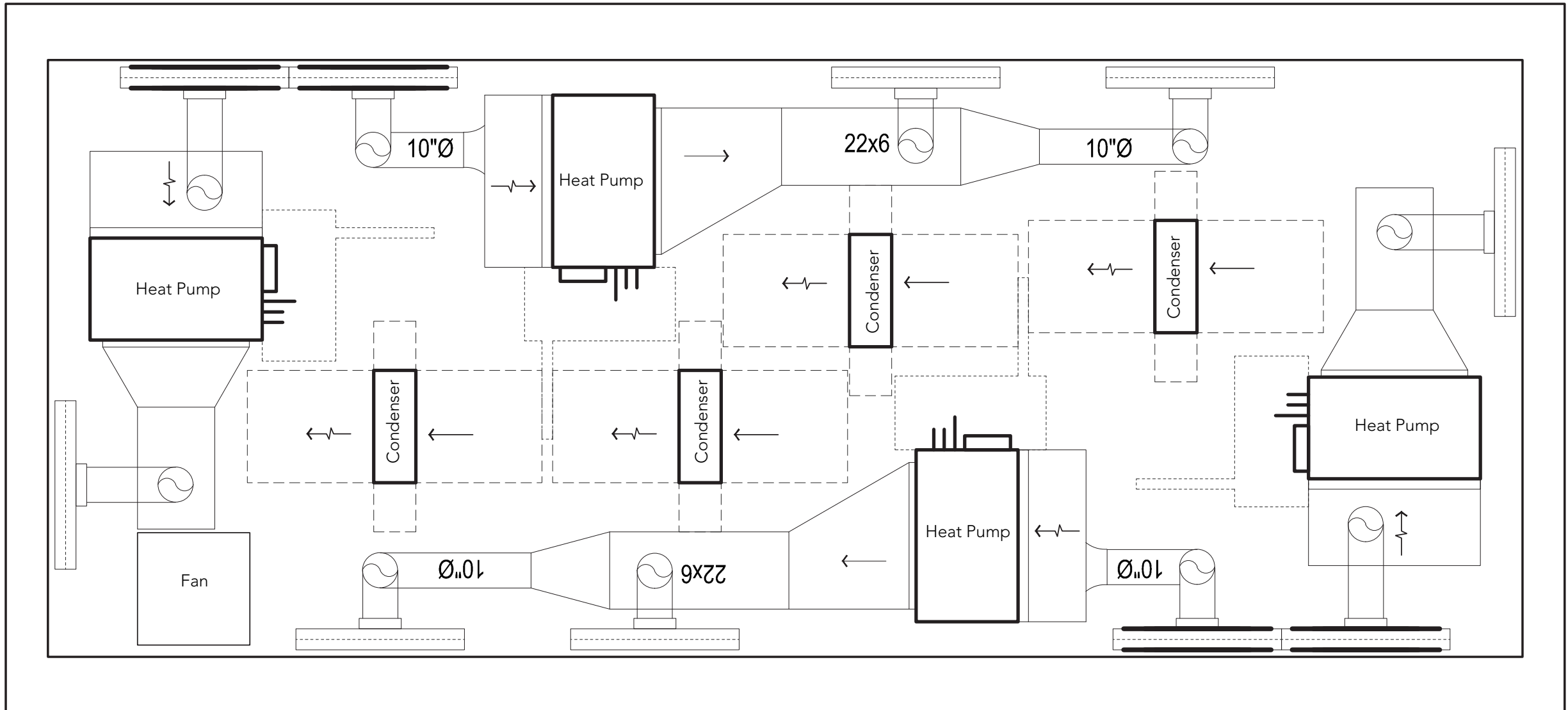
removal of all interior & exterior heating and cooling units for redesign of systems for greater efficiency

Guidelines for Treatment of the Landmark



Mechanical Option: 1

(4) Heat Pumps with (4) Condensers and a Fan



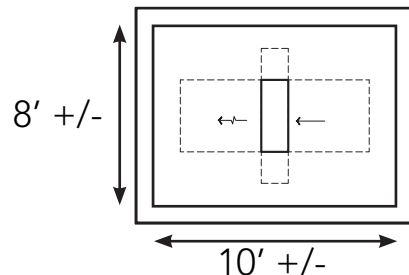
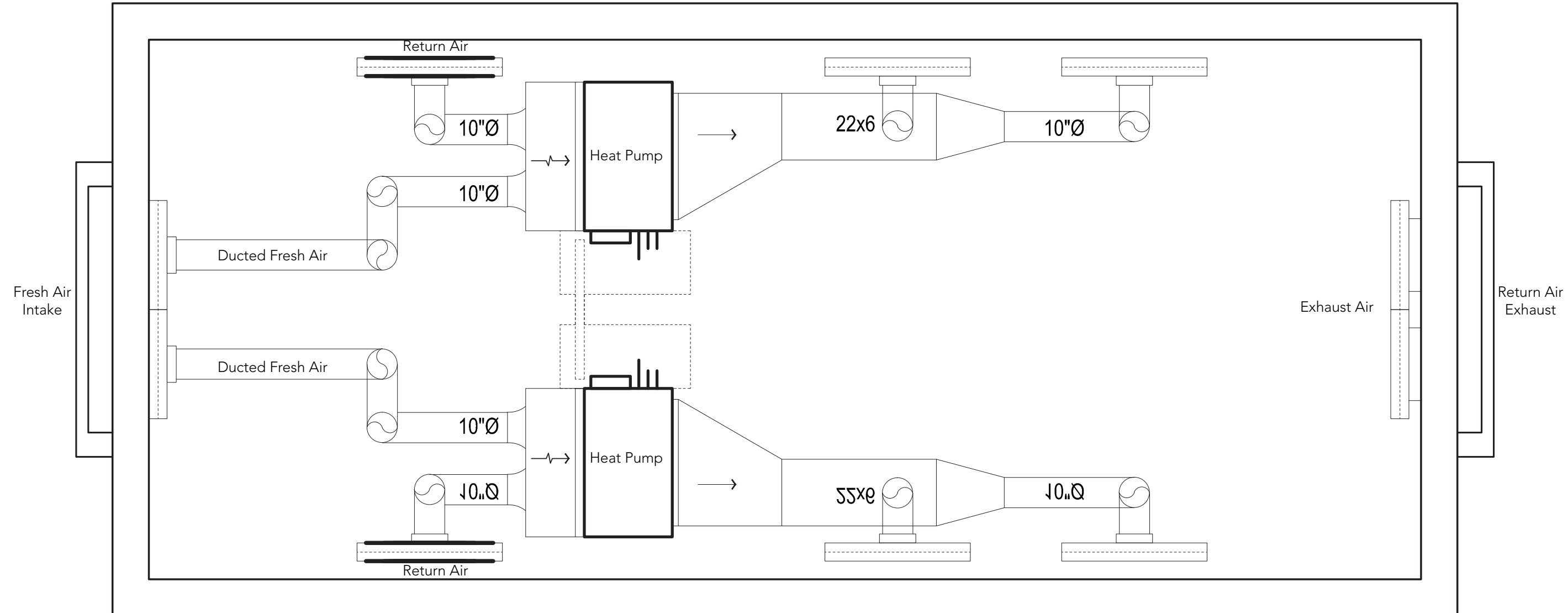
Heat	Air Conditioning	First Floor Ducted Fresh Air	Basement Ducted Ventilation Air (to cool the condensers only)	Remote Condenser	Fan in Basement
------	------------------	------------------------------	---	------------------	-----------------

Option 1: (Does not fit in the crawlspace)
 (4) heat pumps and (4) condensers with a fan in the crawl space.
 (Existing Plumbing/Sewer pipe sizes/locations need to be verified)

Yes	Yes	No	Yes, free area requires = 12.5 sq ft per side	Condensers in Crawl Space	Yes
-----	-----	----	---	---------------------------	-----

Mechanical Option: 2

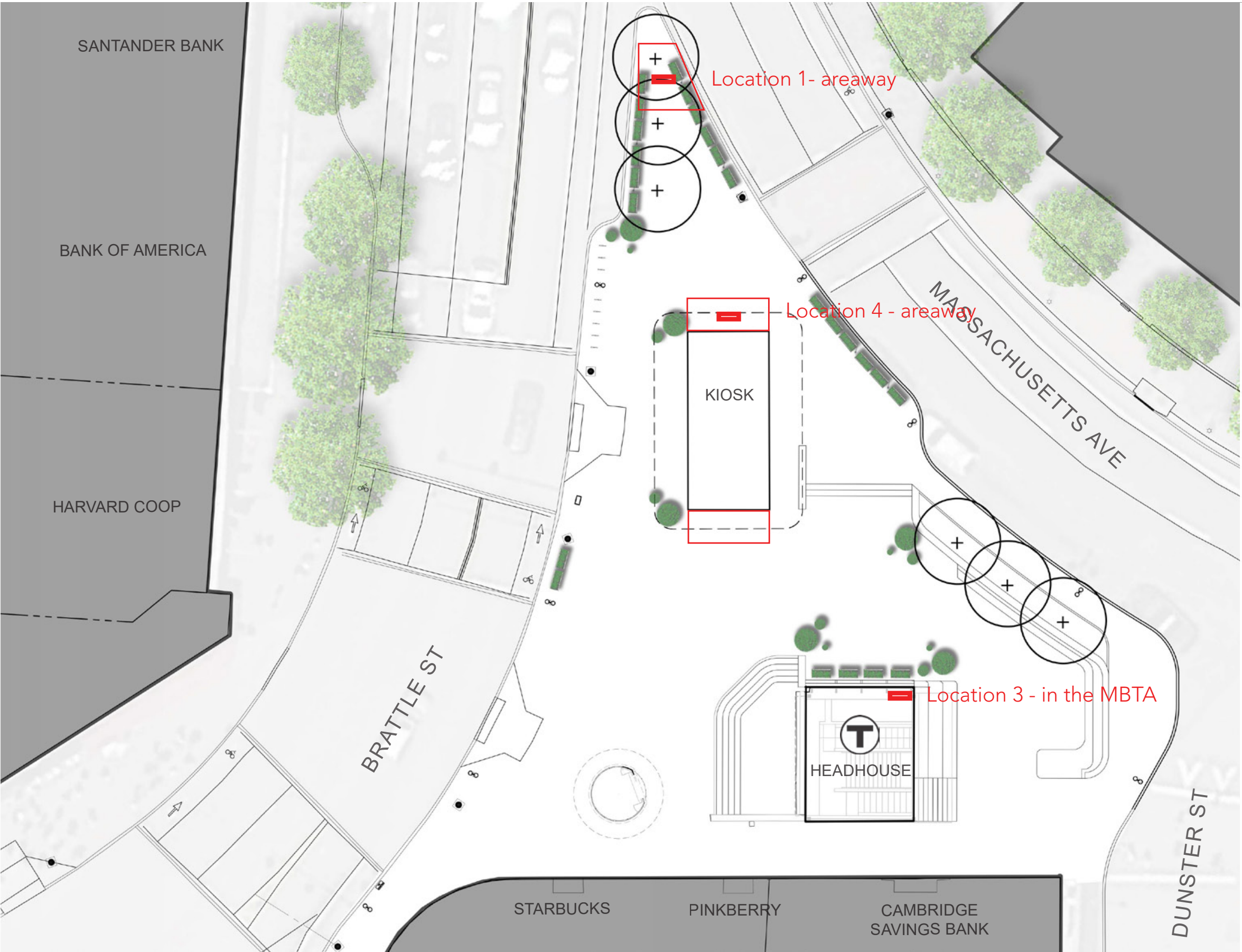
(2) Heat Pumps with a remote Condenser and ducted fresh air



Remote Condenser - Up to 250'-0" away from the Kiosk

	Heat	Air Conditioning	First Floor Ducted Fresh Air	Basement Ducted Ventilation Air	Remote Condenser (to cool the condensers only)	Fan in Basement
(2) heat pumps in the crawl space, with (1) large remote condenser in a area-way with grating above.	Yes	Yes	Yes, Vertical Wall Grilles supply fresh air	Yes, and area-way requires = 25 sq ft	Planter, MBTA, Roof of Adjacent Building	No

Possible Condenser Locations



ADDITIONAL "GREENING"

 MOVEABLE PLANTERS

PLANTERS ALONG THE PERIMETER SERVE TO BUFFER THE ROADWAY AND DIRECT PEDESTRIAN CIRCULATION

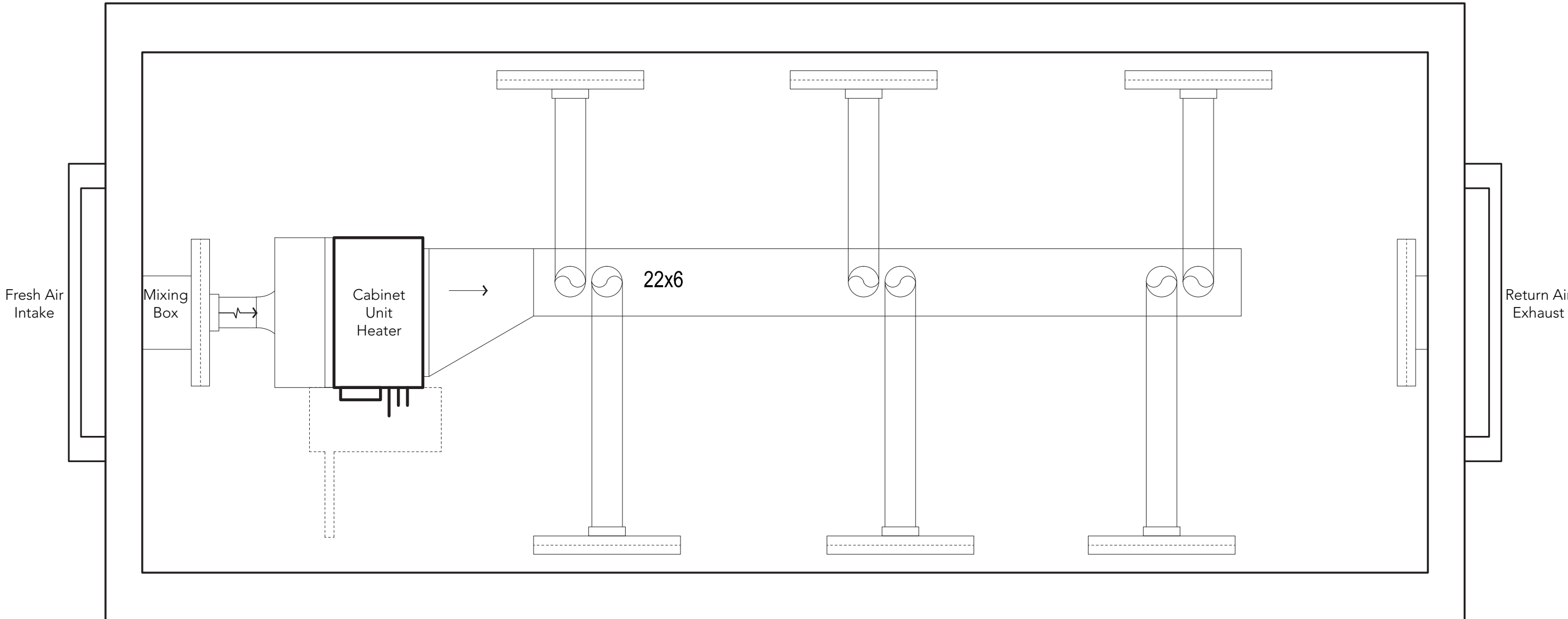
ADDITIONAL PLANTERS CAN BE DEPLOYED THROUGHOUT THE PLAZA ADDING SEASONAL INTEREST



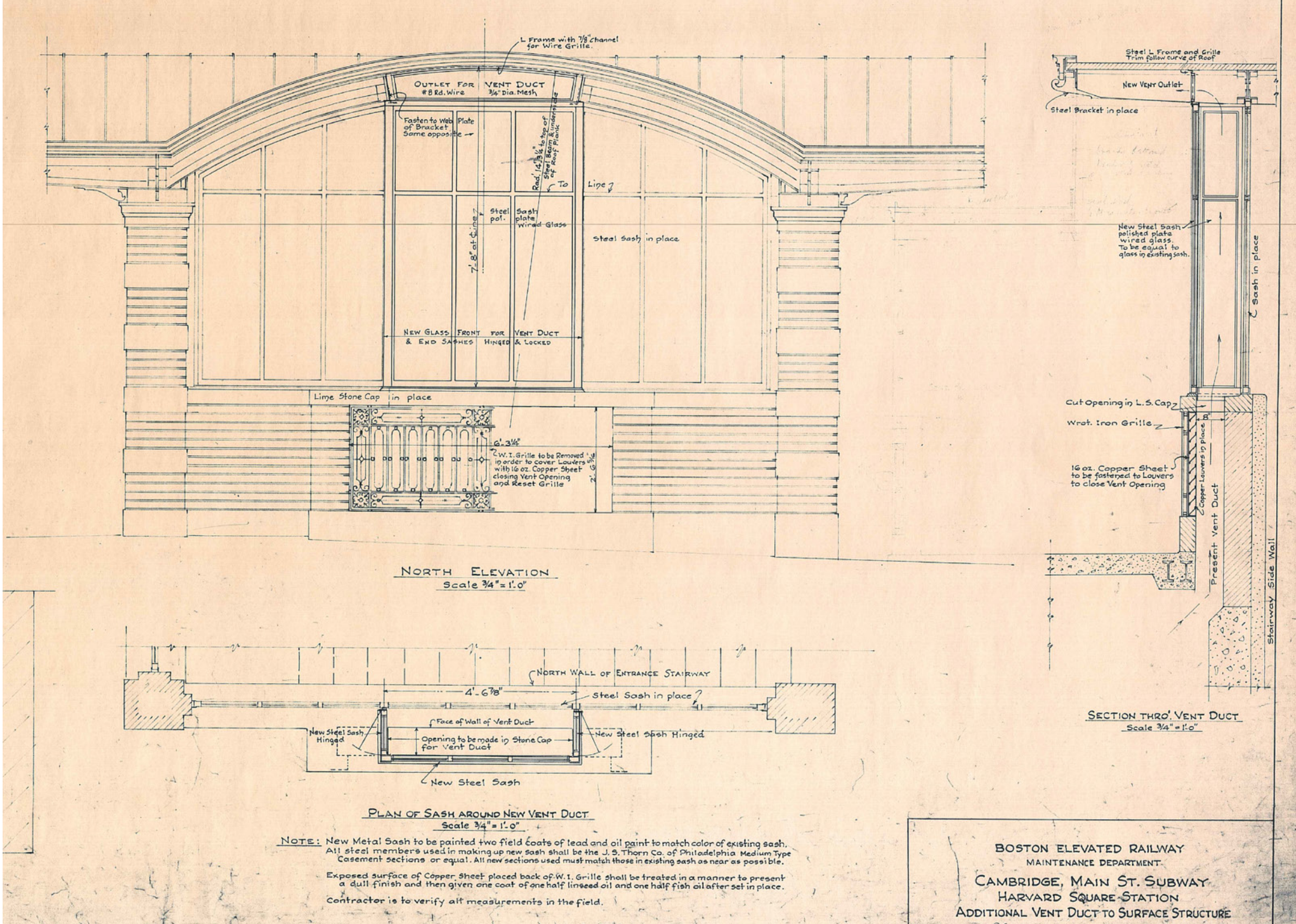
 Location 2 - on an adjacent rooftop (location tbd)

Mechanical Option: 3

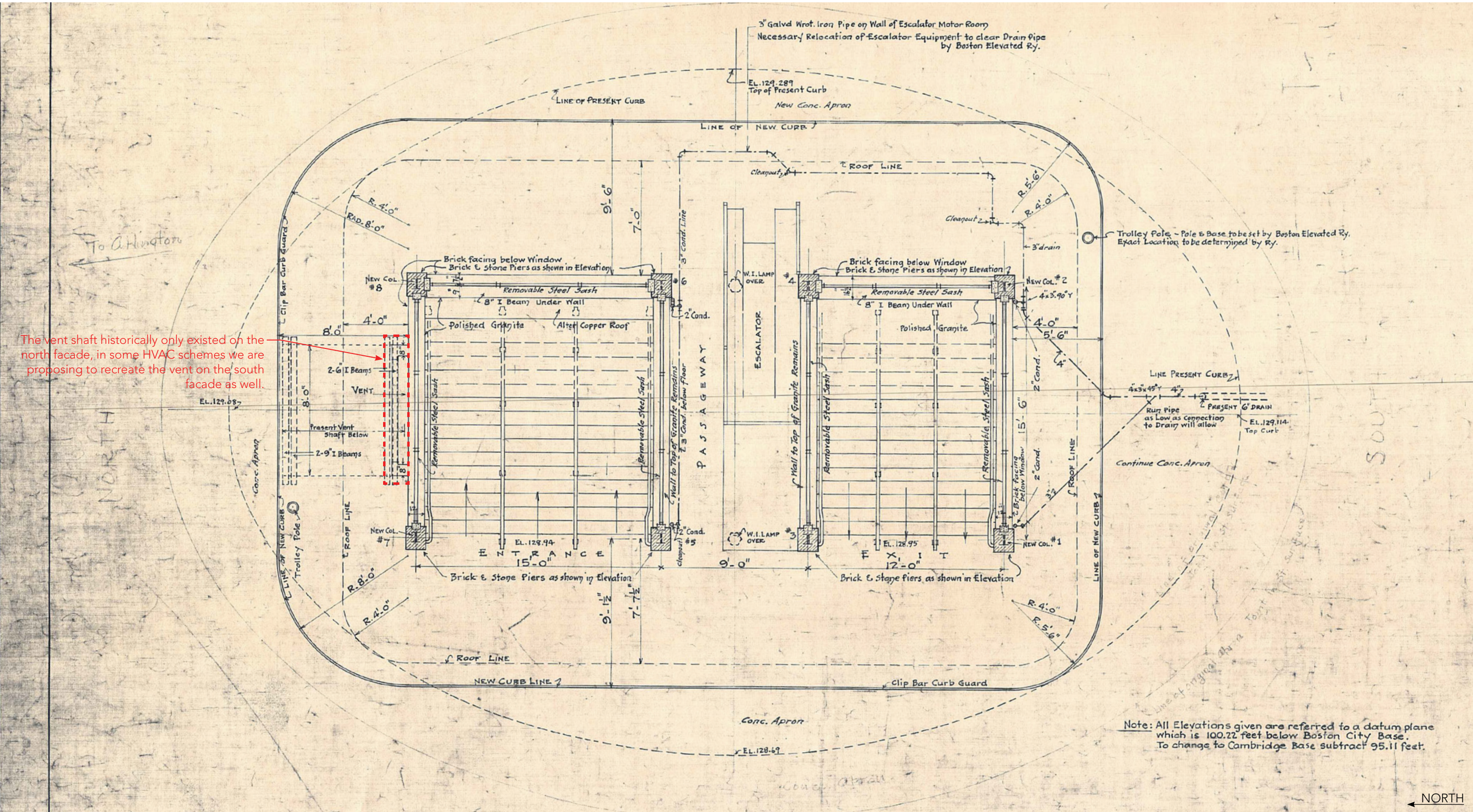
Cabinet Unit Heater, with ducted fresh air



	Heat	Air Conditioning	First Floor Ducted Fresh Air	Basement Ducted Ventilation Air <small>(to cool the condensers only)</small>	Remote Condenser	Fan in Basement
(1) cabinet unit heater in the crawl space, with passive fresh air for cooling, Grilles on the North and South wall for Supply and return	Yes	No	Yes, Vertical Wall Grilles supply fresh air	No	N/A	No



Preservation Research



The vent shaft historically only existed on the north facade, in some HVAC schemes we are proposing to recreate the vent on the south facade as well.

Note: All Elevations given are referred to a datum plane which is 100.22 feet below Boston City Base. To change to Cambridge Base subtract 95.11 feet.

Historical Ventilation Opening



View - Northeast



View - MBTA
HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018

Proposed Ventilation Opening with Signage



Signage Detail



View - Northeast



View - MBTA
HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018

Composite Drawing



View - Northeast
HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018

Character of the Place



HARVARD SQUARE KIOSK - CAMBRIDGE, MASSACHUSETTS
JULY 12, 2018