

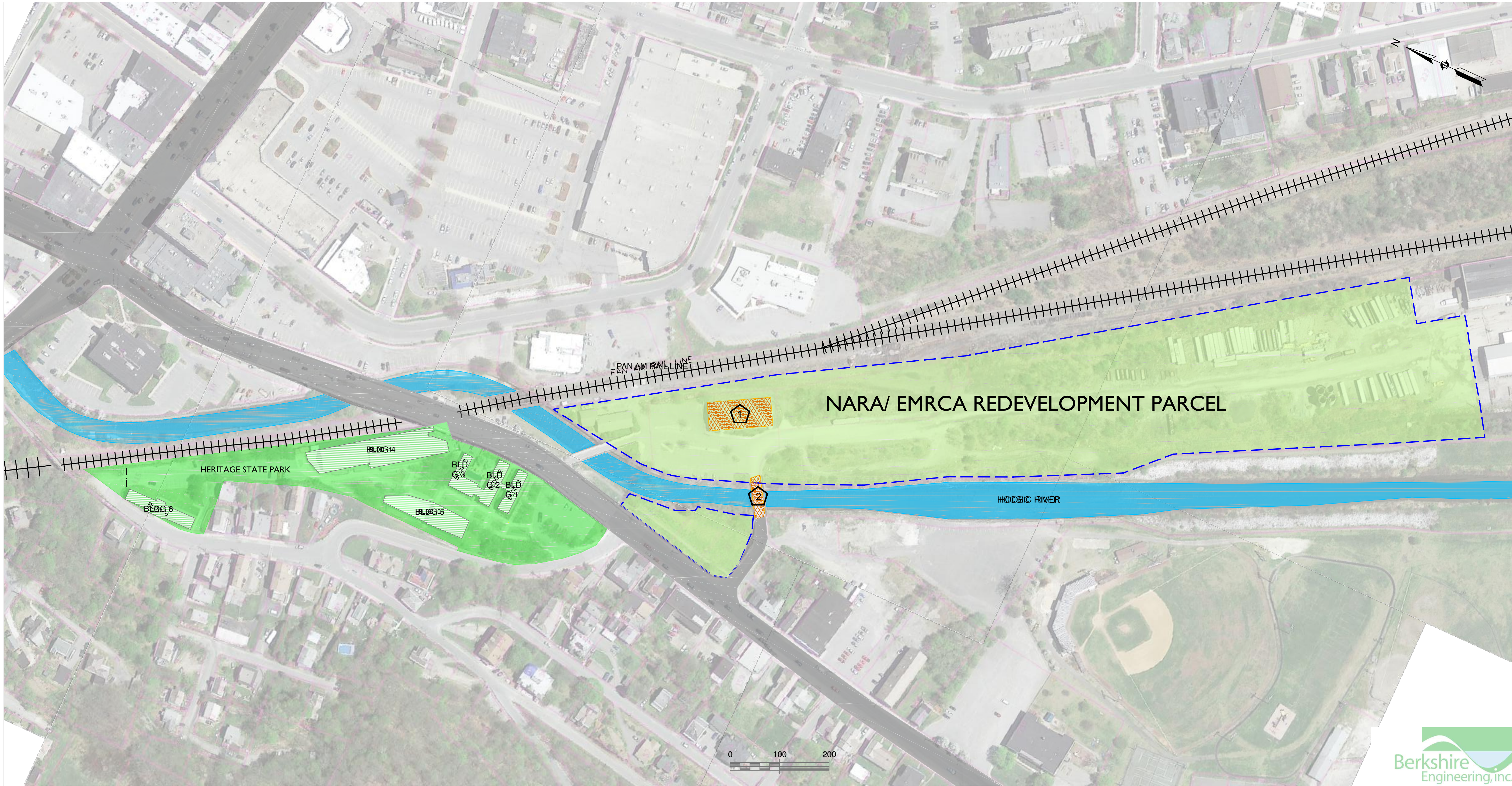
## 2017 MASSWORKS GRANT APPLICATION APPENDIX

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# CITY OF NORTH ADAMS | MASSWORKS INFRASTRUCTURE PROGRAM 2017



1. WORK AREA ONE - SONS OF ITALY ABATEMENT, DEMOLITION AND SITE RESTORATION. | 2. WORK AREA TWO - CHRISTOPHER COLUMBUS DRIVE BRIDGE RECONSTRUCTION AND ACCESSIBILITY UPGRADES





**Heritage State Park**

**Work Area One: Abatement and demolition of the “Sons of Italy” building and associated site restoration.**

**Work Area Two: Reconstruction of the Christopher Columbus Drive Bridge and associated accessibility upgrades.**



## **Work Area One:**

### **Sons of Italy Abatement, Demolition, and Site Restoration.**

#### ***Development Objective:***

Identify and prepare an architecturally unencumbered developable parcel, of suitable size and arrangement, to attract and support a very significant private investment in the form of a proposed world class museum development.

#### ***Existing Deficiency:***

The City owned Sons of Italy building is a hazardous structure in need of immediate removal. The building has been abandoned with rot, mold and hazardous materials throughout. It's abatement and demolition are necessary to rid the city of the liability associated with its ownership, as well as provide valuable development space. The Sons of Italy building physically encumbers a much larger development tract identified as vital to securing substantial private investment. The buildings abatement and removal is vital to securing private investment and development of the North Adams Redevelopment Authority's real property holdings.

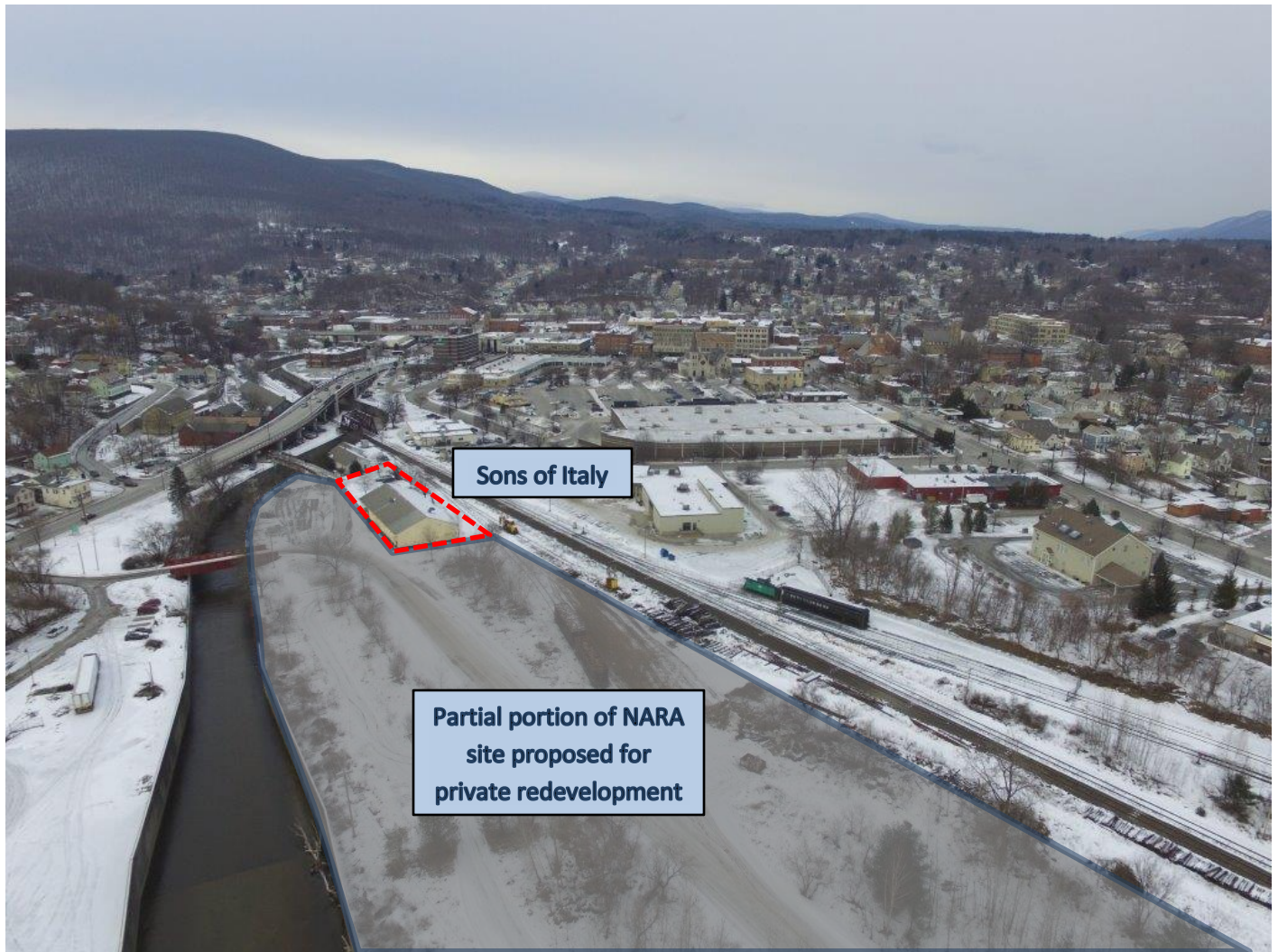
#### ***Infrastructure Need:***

An unencumbered and remediated parcel of suitable size and arrangement is needed to support EMRCA's identified programmatic and facility needs. EMRCA's proposed building footprint will include the entirety of the existing Sons of Italy building location as well as substantial areas beyond. In order for the EMRCA development team to conduct vital geotechnical, environmental, and hydrologic exploration of the proposed development footprint, the existing Sons of Italy building must be removed,. This immediate data collection need, coupled with the multitude of hazards posed by the derelict facility demand its immediate removal. At the completion of demolition an appropriately graded and vegetated site is necessary to ensure environmental and pedestrian safety is maintained or enhanced as a result of the project.

#### ***Proposed Remedy:***

Fully abate the existing Sons of Italy building of all identified hazardous materials in accordance with local, state, and federal regulations. Cap and stub existing utility services currently serving the site to ensure they can be suitably reused or further decommissioned as deemed necessary by the EMRCA development project needs. Demolish and dispose of the existing wood and framed structure and associated concrete and masonry foundation. Appropriately remediate any environmental contamination or concerns uncovered as a result of the buildings removal. Provide suitable fill material throughout the former building foundation to bring final grade level with that of the surrounding area and ensure stormwater ponding conditions are not introduced. Provide topsoil, seed, and mulch throughout the restored site to ensure stable soil conditions are maintained. Repair or reconstruct the existing security fence along the railroad right of way, as required to discourage unlawful pedestrian or vehicular access to the right of way, and as required by existing covenants running with the land.





**Work Area One- Picture 1:**

Aerial view looking north towards the Sons of Italy building, with Heritage State Park and downtown North Adams beyond. Note the Christopher Columbus Drive Bridge crossing the Hoosac River, west of the Sons of Italy building.





**Work Area One- Picture 2:**

Looking west towards the derelict Sons of Italy building.



**Work Area One- Picture 3:**

Looking south towards the derelict Sons of Italy building with the Christopher Columbus Drive Bridge to the right.



## **Work Area Two:**

### **Christopher Columbus Drive Bridge Reconstruction.**

#### ***Development Objective:***

Consistent, accessible, reliable, and safe ingress is necessary to support the significant number of visitors and staff who will be drawn to the North Adams Redevelopment Authority (NARA) parcel. Increased vehicular and pedestrian loading on Christopher Columbus Drive will require modern accessible bridge to ensure safe access to the site.

#### ***Existing Deficiency:***

Safe and efficient access to the NARA site is hampered by limited ingress and egress facilities crossing the Hoosic River. A single lane bridge leading from the Heritage State Park campus core is located to the north of Christopher Columbus Drive, but is not suitable for truck and bus traffic. Additionally it's single lane nature and location leading in to the heart of Heritage State Park limits its overall function. The redeveloped NARA parcel will rely on a primary entrance at the Christopher Columbus Drive crossing. Currently a private bridge spans approximately 45 feet across the Hoosic River. The existing bridge is privately maintained and not located within a public right of way. As such, it is not subject to MADOT bridge inspection, certification, or oversight. This lack of oversight has resulted in the bridge condition deteriorating to the point of being functionally obsolete. The Christopher Columbus Drive Bridge is a steel girder with timber stringer and deck structure. The uneven deck surface limits allowable snow removal efforts, negates any compliant accessible route across the span, and presents a significant maintenance challenge. The timber deck is splintered and failing in places, resulting in numerous holes through the deck exposing views to the Hoosic River below. Finally, the structure does not make any accommodations for pedestrian protections as it lacks a sidewalk or adequate lane demarcation. This bridge provides dedicated access to the NARA redevelopment site, a railroad services building, and a commercial scrap recycling business to the south.

#### ***Infrastructure Need:***

A viable two way crossing from Route Eight to the primary NARA redevelopment site is necessary for the proposed EMRCA project to move forward. Because the only other bridge serving the site is not suitable for truck access, the Christopher Columbus Bridge must be replaced while maintaining a single lane of traffic throughout the reconstruction project. The reconstructed crossing must be of sufficient design and construction to support the construction phase loading, as well as the existing scrap metal operation, and railway support operation that rely on the crossing for the sole access to their respective operations. Finally the bridge must provide efficient movement of people and vehicles in order to support the significant visitor counts anticipated as a result of the NARA parcel redevelopment.

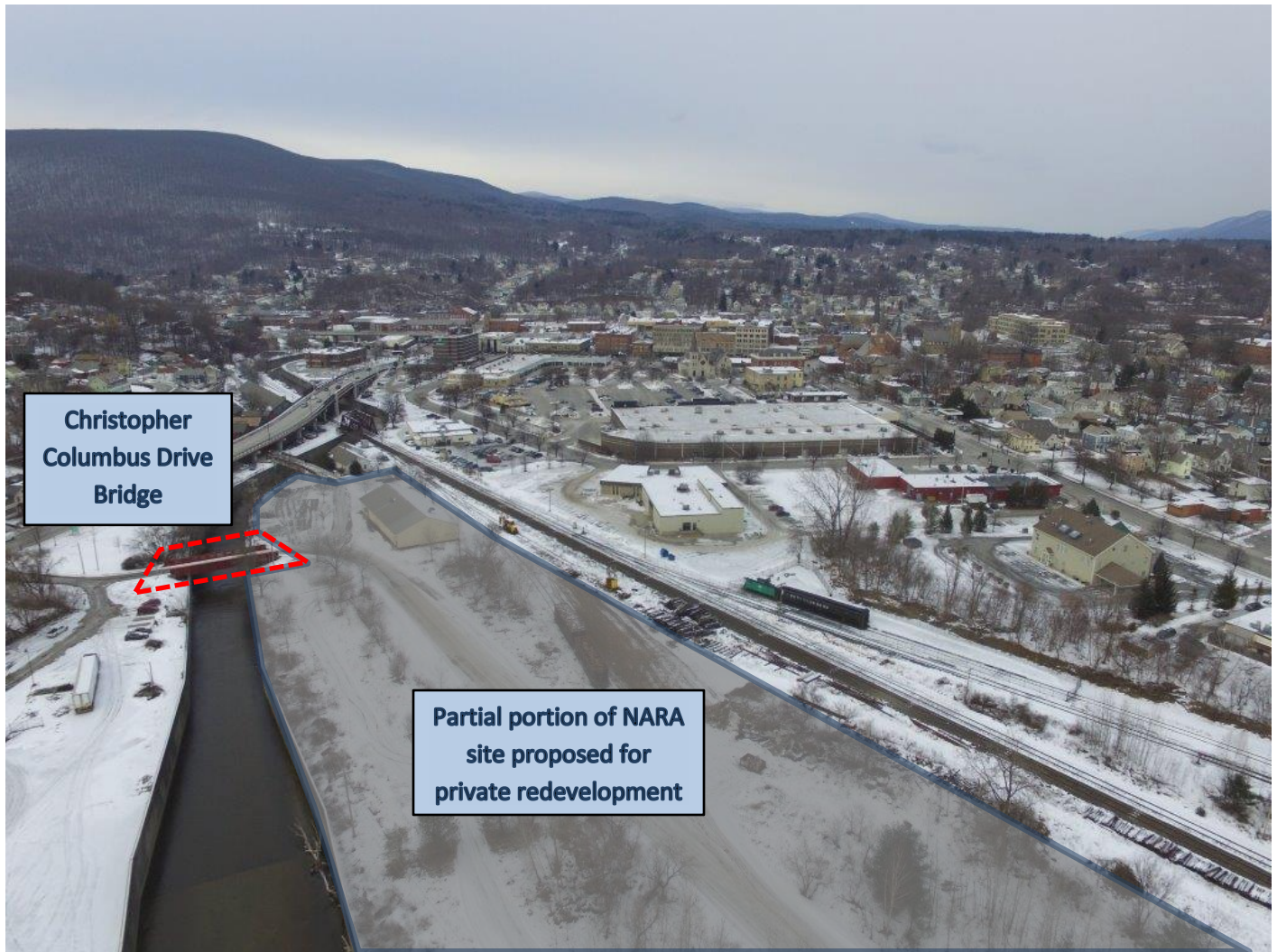
#### ***Proposed Remedy:***

Remove and reconstruct the existing Christopher Columbus Bridge, while maintaining a single lane of traffic throughout the course of construction. It is anticipated the existing bridge abutments will be incorporated in to the reconstructed bridge structure, as their construction and condition appear to



warrant continued use. Because the bridge is not located within a public way, it is exempt from the extensive MADOT Chapter 85 review process typically associated with a bridge replacement project. This exemption will allow the bridge reconstruction to take place on a relatively fast track schedule while still maintaining the utmost standards of public safety. It is anticipated that one lane of the existing bridge will remain in service at all times, or that a temporary crossing will be provided to maintain suitable access to the parcel. The existing bridge will be demolished and replaced with a modern precast concrete structure that utilizes the existing abutments. The new bridge is proposed to also include a fully accessible sidewalk as well as two lanes of vehicle traffic. Inherent space constraints associated with the bridge location will limit the ability to include a dedicated bike lane on the bridge; however the existing single lane bridge is proposed to be reconfigured to provide these facilities. In addition to reconstructing the bridge and providing an accessible sidewalk, the scope of work outlined calls for the installation of new lighting along the crossing, as well as reconstructed approach aprons and restore site vegetation to preconstruction conditions.





**Work Area Two- Picture 1:**

Aerial view looking north towards the Christopher Columbus Drive Bridge, with Heritage State Park and downtown North Adams beyond. Note the Sons of Italy building located to the east of the bridge crossing.





**Work Area Two- Picture 2:**

West of the Hoosic River looking east across the Christopher Columbus Drive Bridge toward the 7,280 square foot Sons of Italy Building. Note the granite bound in the foreground demarcating the terminus of the current formal public way.





**Work Area Two- Picture 3:**

West of the Hoosic River approaching the Christopher Columbus Drive Bridge. Note the lack of suitable accessibility accommodations, lighting, and pedestrian crosswalk.





**Work Area Two- Picture 4:**

West apron of the Christopher Columbus Drive Bridge. Note the unsafe footfall conditions presented to pedestrians and persons of disability.





**Work Area Two- Picture 4:**

Center Span of the Christopher Columbus Drive Bridge, looking east toward the Sons of Italy Building, noting several temporary steel plates covering existing failed timber deck members.



**City of North Adams – 2017 MassWorks Infrastructure Program Grant Application – Construction Cost Estimate**

Work Area One - Sons of Italy Building Abatement, Demolition, and Site Restoration				
Item	Units	Quantity	Unit Price	Extended Price
Abatement of Hazardous materials (assumes interior wall coverings, floor tiles, select ceiling tiles, possible roofing)	Lump Sum			\$250,000.00
Demolition of roof structure	c.y.	700	\$130.00	\$91,000.00
Demolition on interior and exterior walls along with floor system	c.y.	300	\$115.00	\$34,500.00
Demolition and removal of all concrete and masonry foundation elements	lump sum	1		\$135,000.00
Backfilling and compaction of foundation hole	c.y.	2600	\$42.00	\$109,200.00
Utility Termination, including stubbing and capping in place (water/sewer/electric/gas)	Lump Sum	1		\$45,000.00
Environmental controls and monitoring during abatement and demolition (air monitoring, vectors, etc.)	Lump Sum	1		\$30,000.00
Traffic Controls and site security	Lump Sum	1		\$12,000.00
SUBTOTAL				\$706,700.00
Work Area Two - Christopher Columbus Drive Bridge Reconstruction				
Item	Units	Quantity	Unit Price	Extended Price
Phased demolition of existing bridge deck and superstructure to allow continued use	Lump Sum	1		\$800,000.00
Phased structural repair and reinforcement of existing abutments to allow continued use	Lump Sum	1		\$495,000.00
Phased construction of new precast concrete bridge superstructure	Lump Sum	1		\$1,015,000.00
Phased construction of new cast in place concrete bridge deck	S.F.	2250	\$300.00	\$675,000.00
Construction of appropriate accessible sidewalk and appurtenances	S.F.	425	\$40.00	\$17,000.00
Supply and install lighting including power source, foundation, poles and lights.	Each	6	\$12,000.00	\$72,000.00
Demolition of approaches	S.F.	3500	\$17.50	\$61,250.00
Reconstruction of approaches	S.F.	3500	\$22.50	\$78,750.00
Adjacent sidewalk repair in integration	S.F.	250	\$40.00	\$10,000.00
Pavement markings	L.F.	1000	\$1.50	\$1,500.00
Signage	Lump Sum	1		\$5,000.00
Environmental controls	Lump Sum	1		\$22,000.00
Site restoration and plantings	S.Y.	1200	\$100.00	\$120,000.00
SUBTOTAL				\$3,372,500.00
Work Area One and Two - Total Project Expenditure Summary				
Item		Cost Type	Multiplier	Total
Construction Cost Subtotal				\$4,079,200.00
Work Area One and Two				
Total Project Mapping and Research Cost		Fixed		\$28,000.00
Total Property Survey / Easement Study Cost		Fixed		\$45,000.00
Total Bid Documents and Procurement Cost		Percent	5%	\$203,960.00
Total Construction Oversight Cost		Percent	10%	\$407,920.00
Total Design Cost		Percent	10%	\$407,920.00
Total Permitting Cost		Percent	5%	\$203,960.00
PROJECT GRAND TOTAL				\$5,375,960.00



# EMRCA

EXTREME MODEL RAILROAD  
&  
CONTEMPORARY ARCHITECTURE MUSEUM





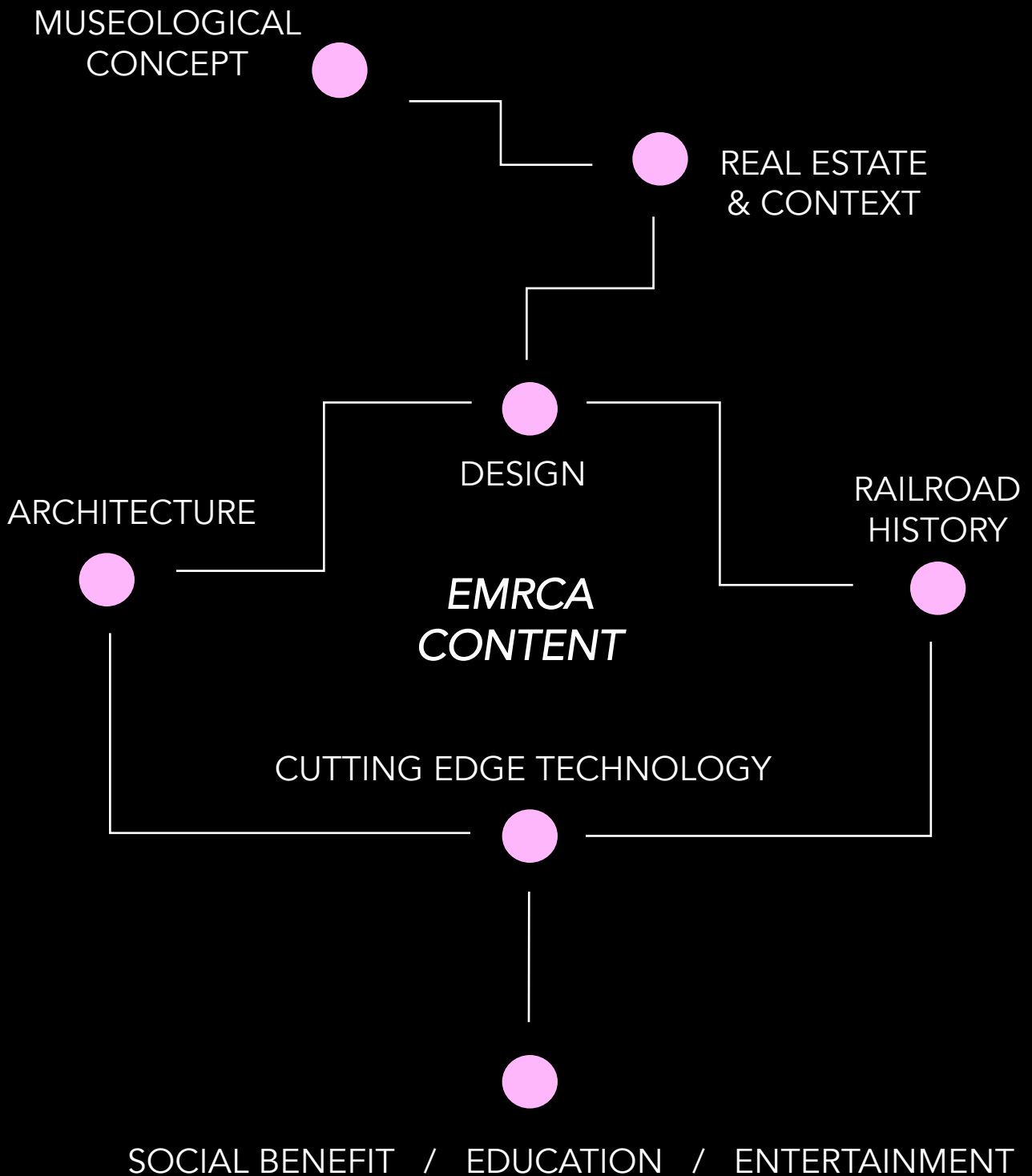




AN ALTERNATIVE MODEL FOR ART MUSEUMS

THE ART MUSEUM / THEME PARK EXPERIENCE





OUR GOAL IS TO IMPROVE  
THE ECONOMY, HEALTH AND WELL BEING  
OF NORTH ADAMS AND NORTHERN BERKSHIRE COUNTY

ECONOMIC  
IMPACT



HUMAN  
HEALTH &  
WELL-BEING



SOCIAL  
EQUALITY



RECREATION &  
ECOLOGICAL  
SERVICES



EDUCATION  
OPPORTUNITIES





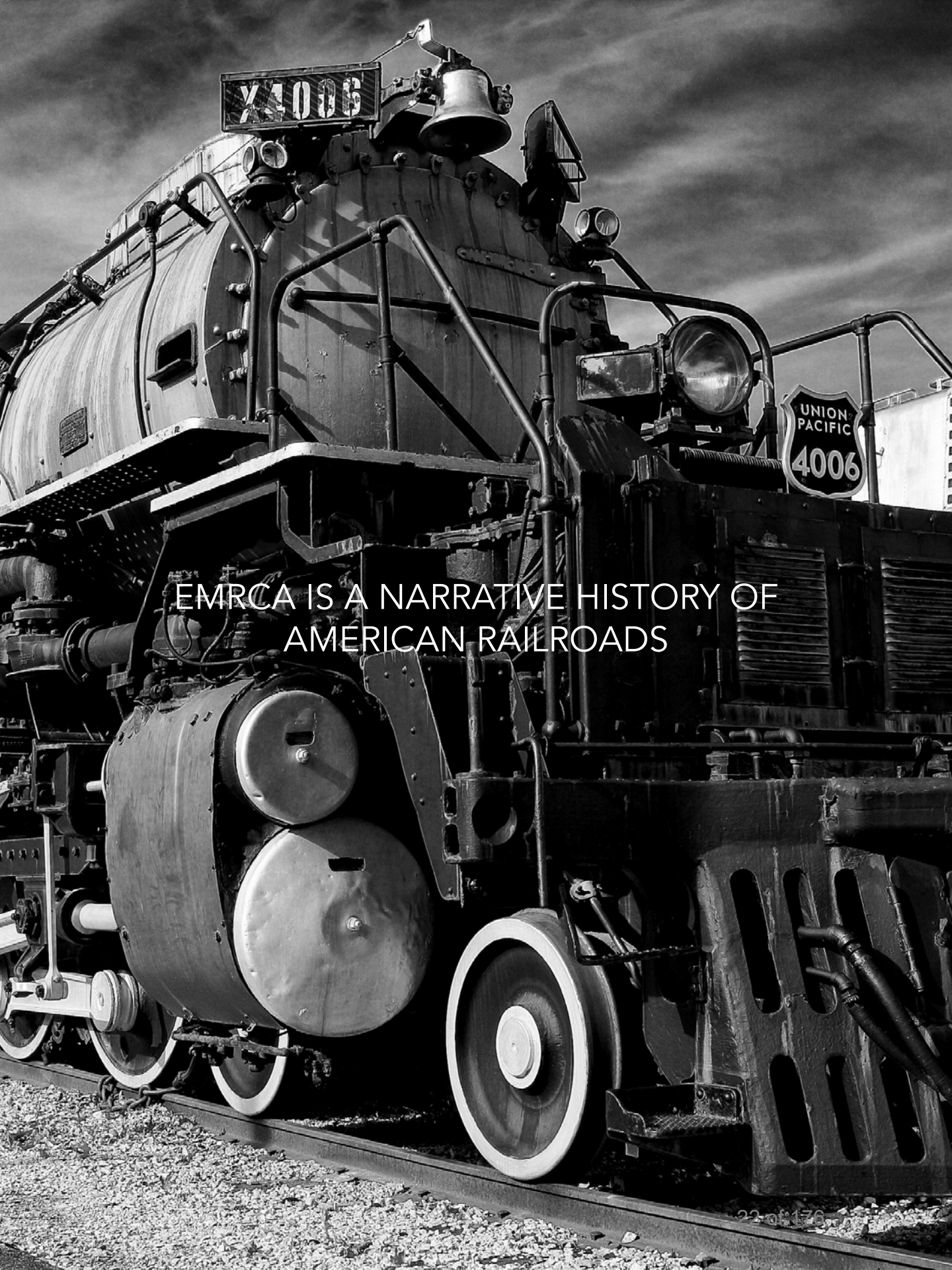


PRECEDENT: GUGGENHEIM BILBAO



ARCHITECT: FRANK GEHRY






EMRCA IS A NARRATIVE HISTORY OF  
AMERICAN RAILROADS







EMRCA IS A NARRATIVE HISTORY  
OF POST-INDUSTRIAL ARCHITECTURE



An aerial photograph of the Empire State Building in New York City, showing its iconic Art Deco architecture and the dense surrounding urban landscape. A digital model of the building's upper section, including the observation deck and the spire, is overlaid on the photograph. The model is rendered in a light gray, semi-transparent style, showing internal structural details and scaffolding. The text "IN PRECISION SCALE" is centered over the model.

IN PRECISION SCALE





WITH 164 MASTERPIECE BY  
71 RENOWNED INTERNATIONAL ARCHITECTS

26 of 176



A photograph of the Brooklyn Bridge and the Freedom Tower in New York City. The bridge's massive stone piers and suspension cables are prominent on the left, leading the eye across the East River towards the Freedom Tower, which stands tall in the background among other skyscrapers. The sky is overcast with grey clouds.

.....FROM THE BROOKLYN BRIDGE TO THE FREEDOM  
TOWER,





FROM FRANK LLOYD WRIGHT'S FALLING WATER



TO ZAHA HADID IN ABU DHABI





A low-angle, upward-looking photograph of a highly ornate, dark-colored architectural facade, likely the entrance to the Chicago Stock Exchange. The facade is covered in intricate carvings, including acanthus leaves, scrolls, and floral motifs. A large, dark archway is the central focus, through which a modern skyscraper with a grid-like facade and a blue sky are visible. The lighting is dramatic, with strong highlights and deep shadows.

FROM LOUIS SULLIVAN IN CHICAGO



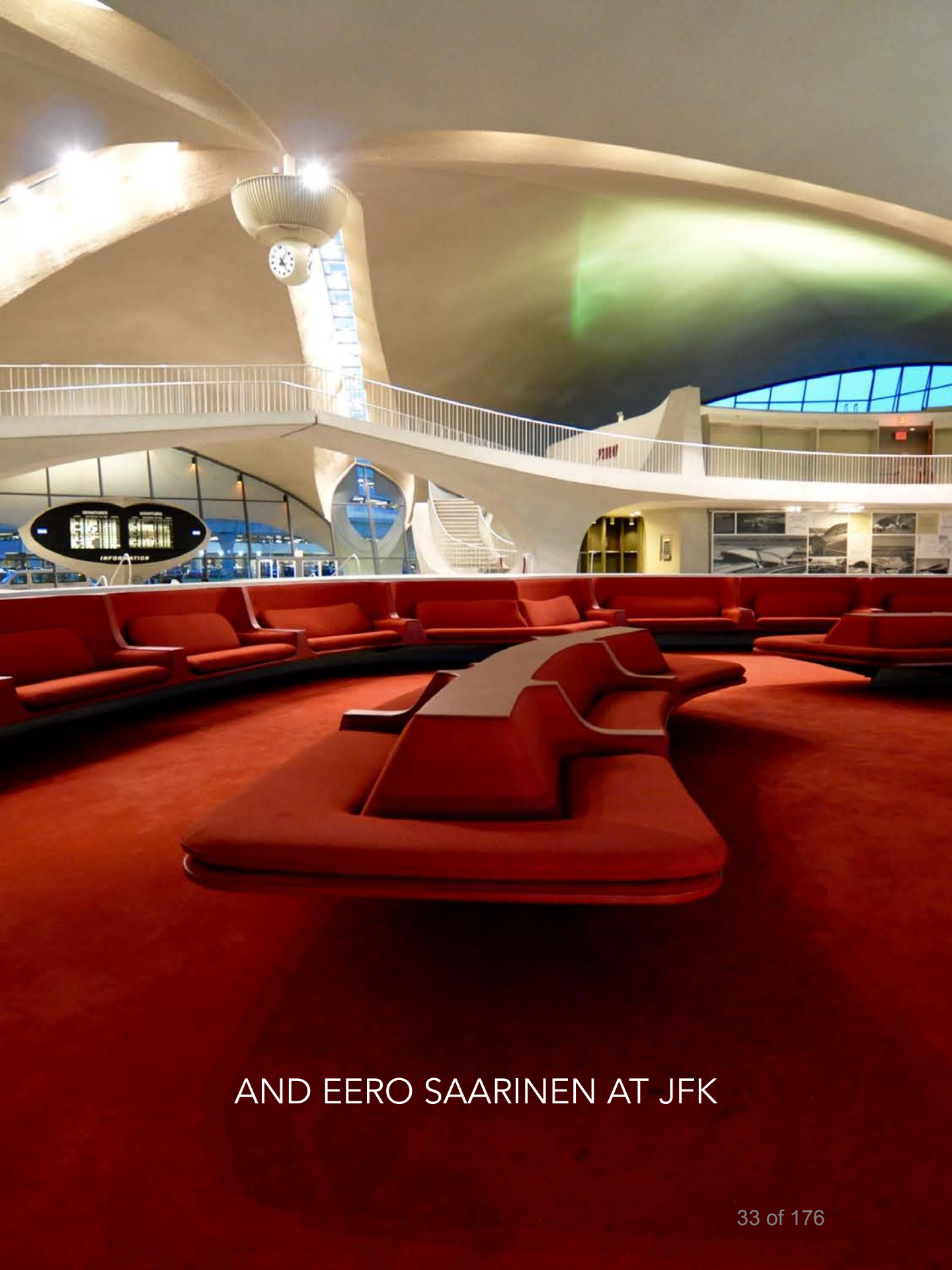
TO THE SEAGRAMS BUILDING ON PARK AVENUE







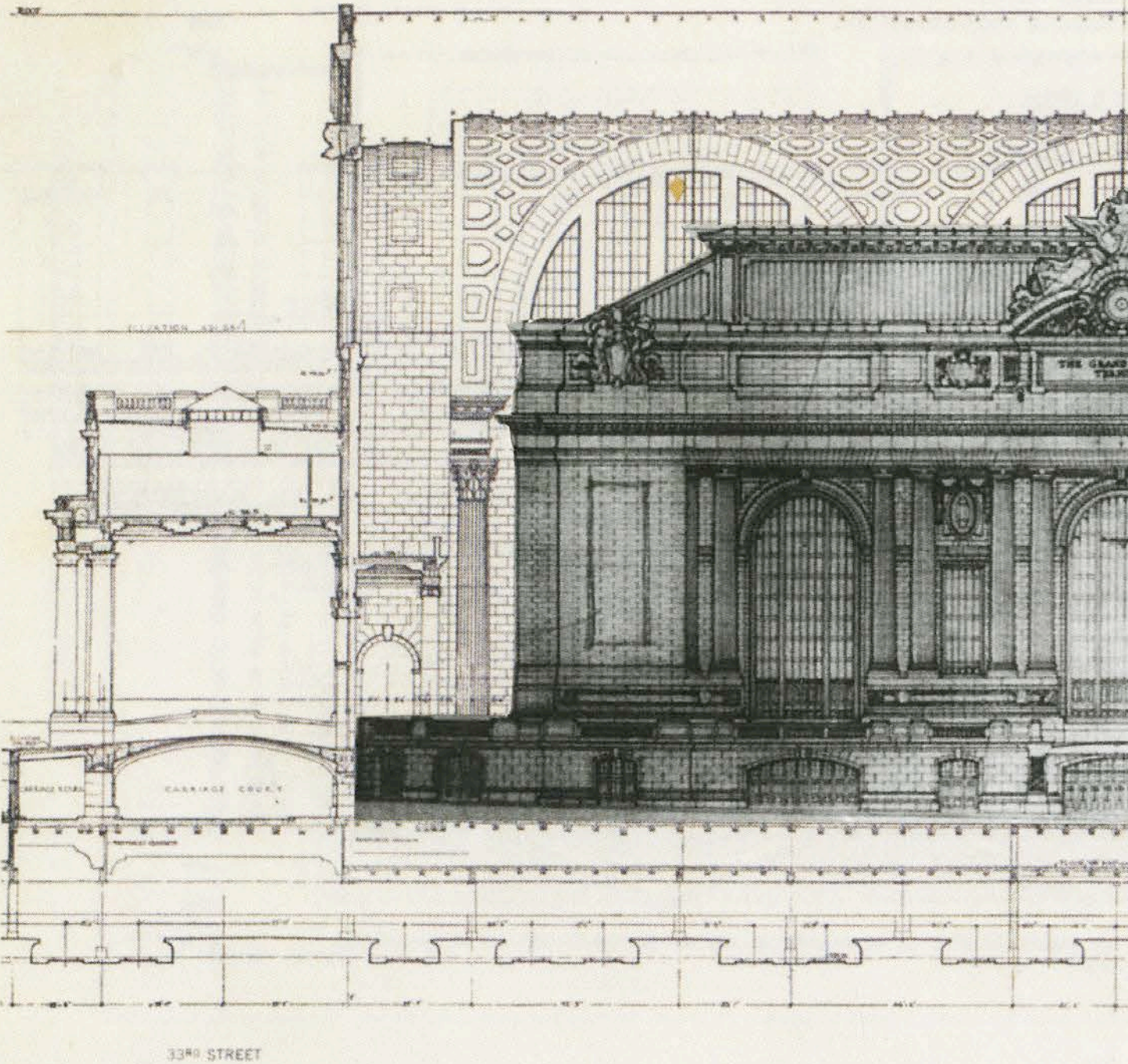




AND EERO SAARINEN AT JFK

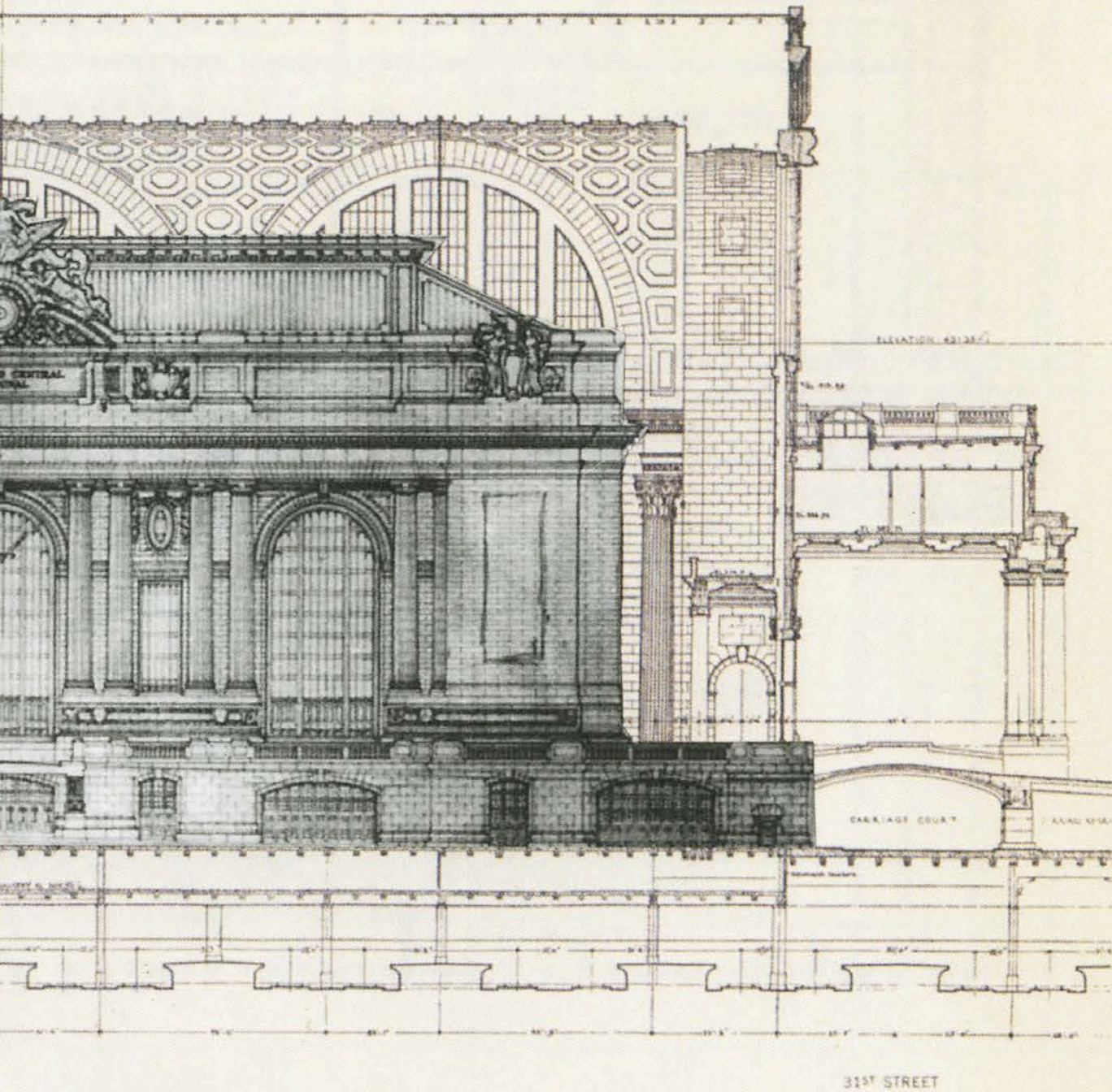


# AND NEW YORK CITY'S





GREATEST TRAIN STATIONS.





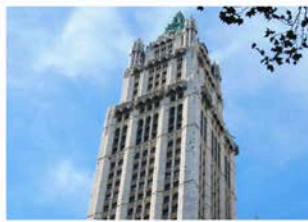
A nighttime photograph of the Lower Manhattan skyline. The One World Trade Center stands prominently on the right, its spire reaching into a clear blue twilight sky. To its left, the cylindrical 111 West 57th Street is brightly lit with warm yellow lights. Other skyscrapers of varying heights and architectural styles are visible, their windows glowing with interior lights. The foreground shows the dark, calm water of the harbor, reflecting the city lights.

164 ARCHITECTURAL MASTERPIECES  
1,092 "STANDARD" BUILDINGS

1256 PRECISION SCALE STRUCTURES  
IN TOTAL



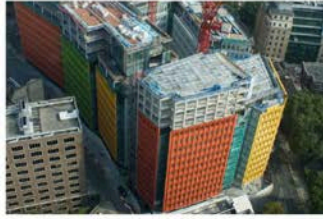




Gilbert Cass



Peter Zumthor



Renzo Piano



Louis Kahn



Rafael Moneo



Herzog & de Munro

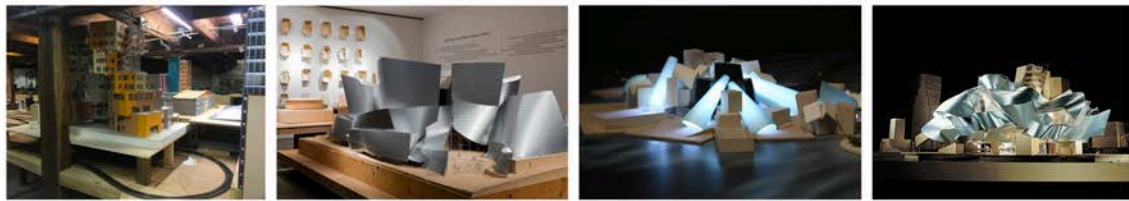


Mies van der Rohe



Aldo Rossi





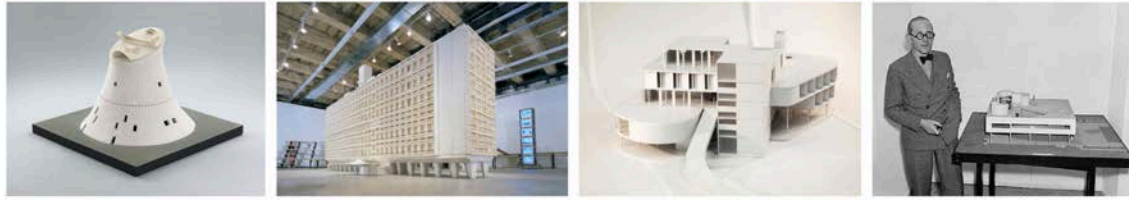
Frank O. Gehry



Frank Lloyd Wright



Zaha Hadid



Le Corbusier

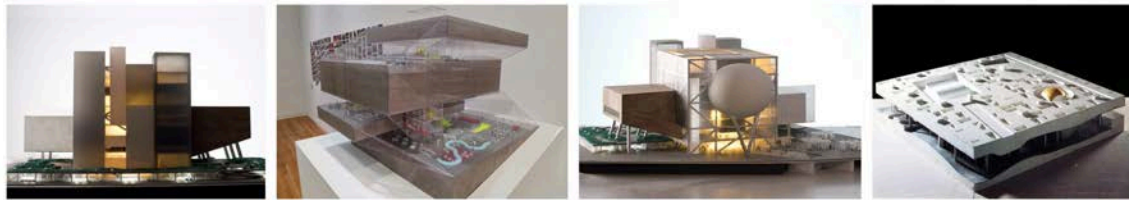
CONCEPT STUDY NOT FOR CONSTRUCTION



CONCEPT STUDY NOT FOR CONSTRUCTION

EXTREME MODEL RAILROAD AND CONTEMPORARY ARCHITECTURE MUSEUM

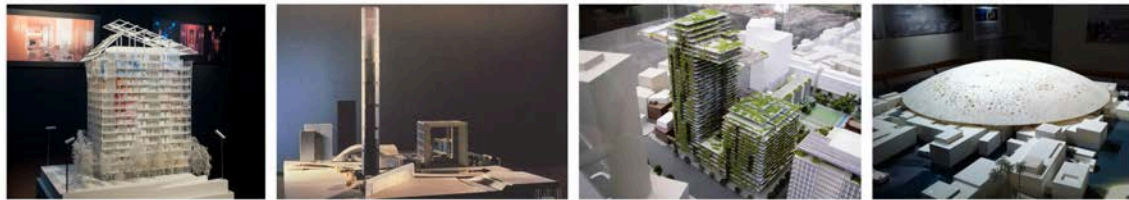
A-020b



OMA



Louis Sullivan



Jean Nouvel



SOM

CONCEPT STUDY NOT FOR CONSTRUCTION



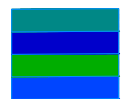
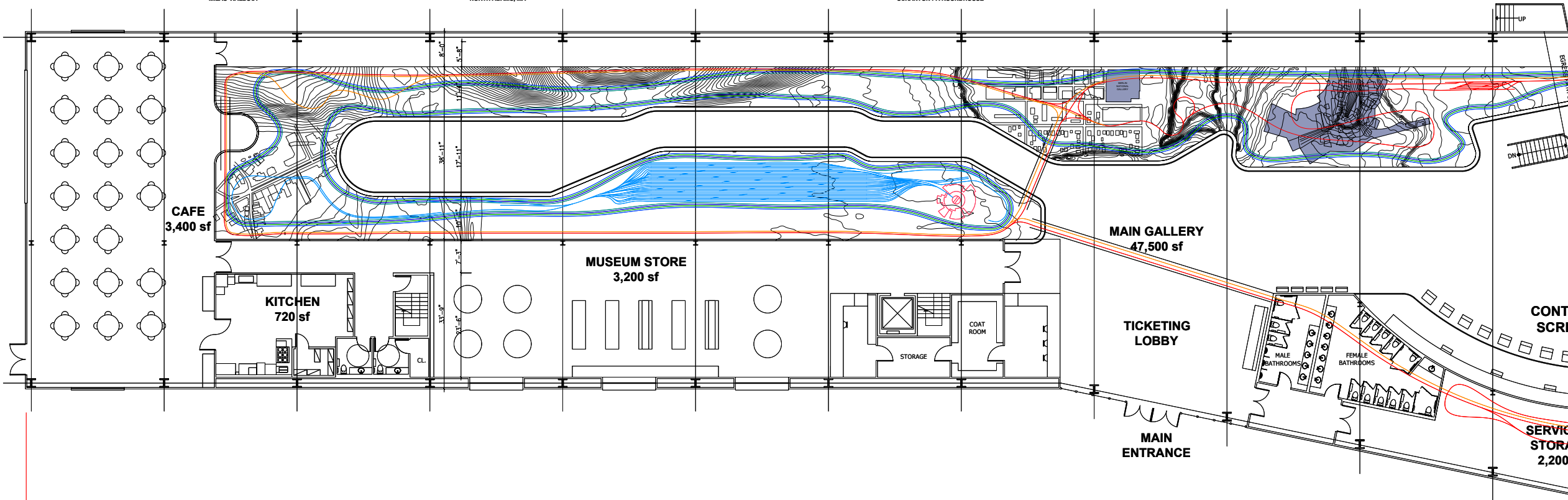
CONCEPT STUDY NOT FOR CONSTRUCTION

EXTREME MODEL RAILROAD AND CONTEMPORARY ARCHITECTURE MUSEUM

A-020c



# EMRCA LAYOUT & TRACK PLAN



LOW-LAND  
MAINLINE



MID-LAND  
MAINLINE



MOUNTAIN  
MAINLINE



ELEVATED  
CITY RAIL



SUBWAY



120" DIA.  
36" DIA.



ROUNDHOUSE



COAL YARD



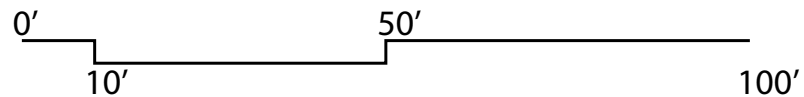
SWITCHING STATION



SMALL TEARDROP



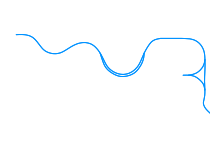
RAILYARD



LUMBER MILL



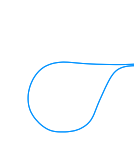
INDUSTRIAL YARD



"SCENIC" ROUTE



ROUNDHOUSE



LARGE TEARDROP



RAILYARD



"SCENIC"

700'



BROOKLYN BRIDGE



BATTERSEA POWER STATION



GUGGENHEIM BILBAO



FENWAY PARK



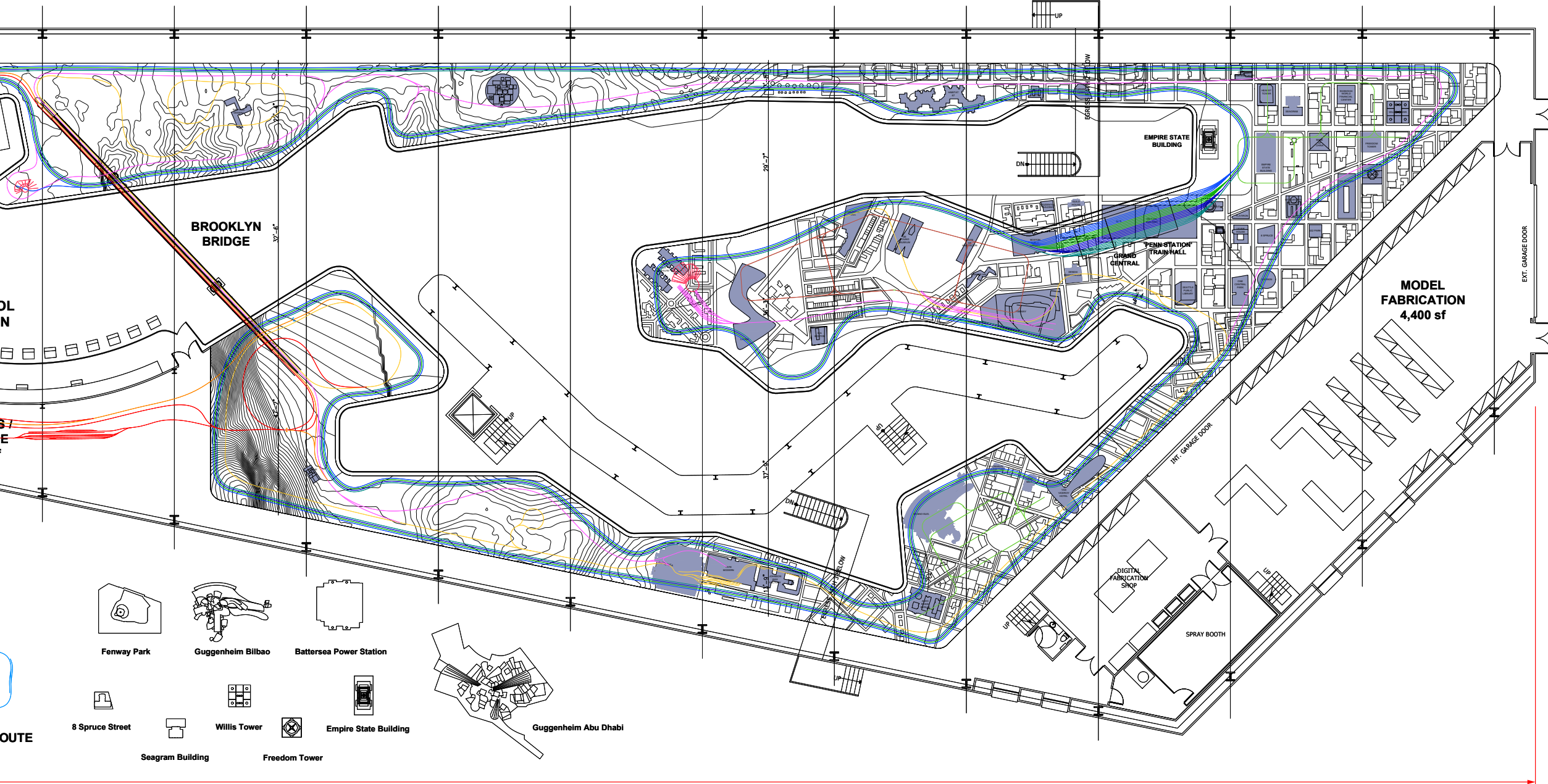
GRAND CENTRAL STATION



EMPIRE STATE BUILDING

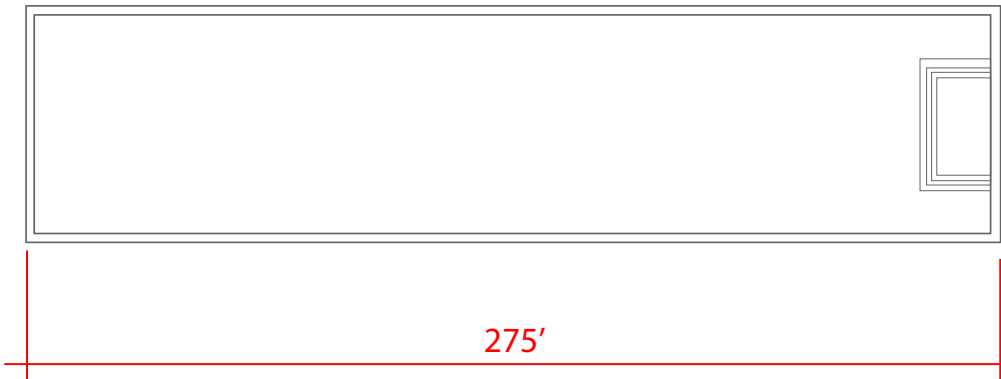


WORLD TRADE CENTER 1

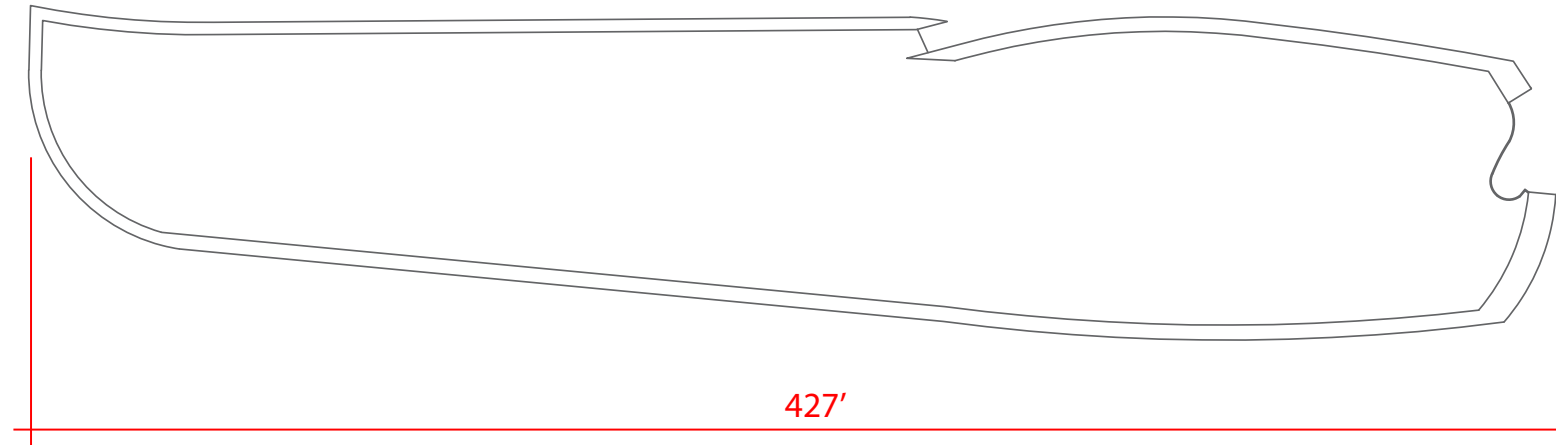




EMRCA Preliminary Geographic Zone Diagram



MASS MoCA  
Building 5  
275' x 55'  
15,950 sf

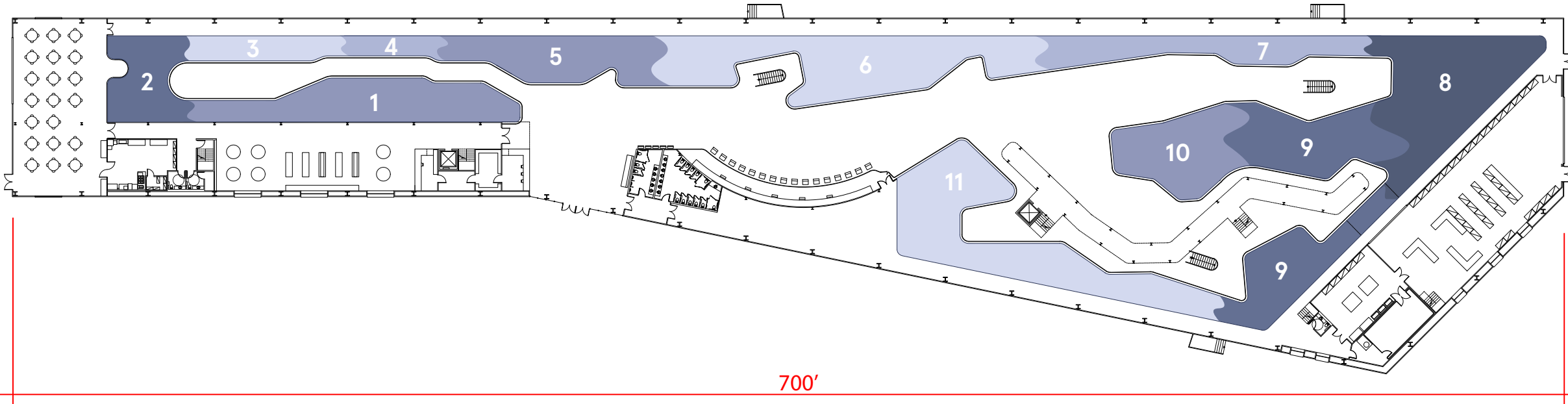


#	TYPE	SPECIFIC LOCATION	SQFT
1	INDUSTRIAL	MUSCLE SHOALS RAILYARD	2,175
2	RURAL CITY	NORTH ADAMS / BERKSHIRES	1,300
3	LANDSCAPE	APPALACIA	800
4	SUBURBAN	MIDWEST	420
5	URBAN	BUFFALO/ HONG KONG	1,800
6	LANDSCAPE	DESERT SOUTHWEST	2,500
7	SUBURBAN	NORTHEAST	2,000
8	HIGH URBAN	GOTHAM / NYC	2,600
9	URBAN	BOSTON / BILBAO	1,400
10	URBAN	LOS ANGELES	2,200
11	LANDSCAPE	THE ROCKIES	3,600
TOTAL			22,000

Bilbao  
Large Gallery  
427' x 98'  
32,165 sf



EMRCA  
700' x 80-160'  
83,210 sf





EMRCA WILL FEATURE...



107 SIMULTANEOUSLY OPERATING...







STEAM AND DIESEL LOCOMOTIVE MASTERPIECES...











# The New York Times

WITH MORE THAN 2,000 PASSENGER .....







AND FREIGHT CARS...



ON 12 SEPARATE MAIN LINES &  
5 MAJOR RAILYARDS.








EMRCA IS CONTINUOUS MOTION





WONDEROUS LANDSCAPES



# VERDANT VALLEYS



A photograph of a high plateau landscape. The scene features a massive, layered red rock formation with distinct horizontal strata. A train with yellow and black locomotives is crossing a bridge that spans a deep canyon. Below the bridge, a river flows. The sky is clear and blue. The text "HIGH PLATEAUS" is overlaid on the right side of the image.

## HIGH PLATEAUS



A high-angle photograph of a freight train traveling along a steep, rocky mountain slope. The train, consisting of a black locomotive and several red and black freight cars, is positioned in the lower half of the frame, moving towards the viewer. The surrounding terrain is rugged and barren, with steep, light-colored rock faces and deep shadows. The sky is a clear, bright blue. The text "VERTIGINOUS TERRAIN" is overlaid in white, sans-serif capital letters in the center of the image.

# VERTIGINOUS TERRAIN

55 of 176



AND BLISTERING TRUE-SCALE SPEED





ON TWO HIGH SPEED RAIL LINES





WITH THE HIGHEST BRIDGES







LONGEST TUNNELS





AUTHENTIC SCENOGRAPHY





EXTREME DETAILING



# DAZZLING ELECTRIFICATION





# IMMERSIVE PROJECTION





# SYMPHONIC SOUND



















THE EMRCA INSTALLATION IS...



# WHERE LASER SCANNING MEETS ...







CARBON 3D PRINTING...

**Carbon**





LASER CUTTING ...



AND DIGITAL CNC MODELING...





TO PRODUCE PRECISION  
ARCHITECTURAL MODELS...





WITH THE MOST EXQUISITE DETAIL...

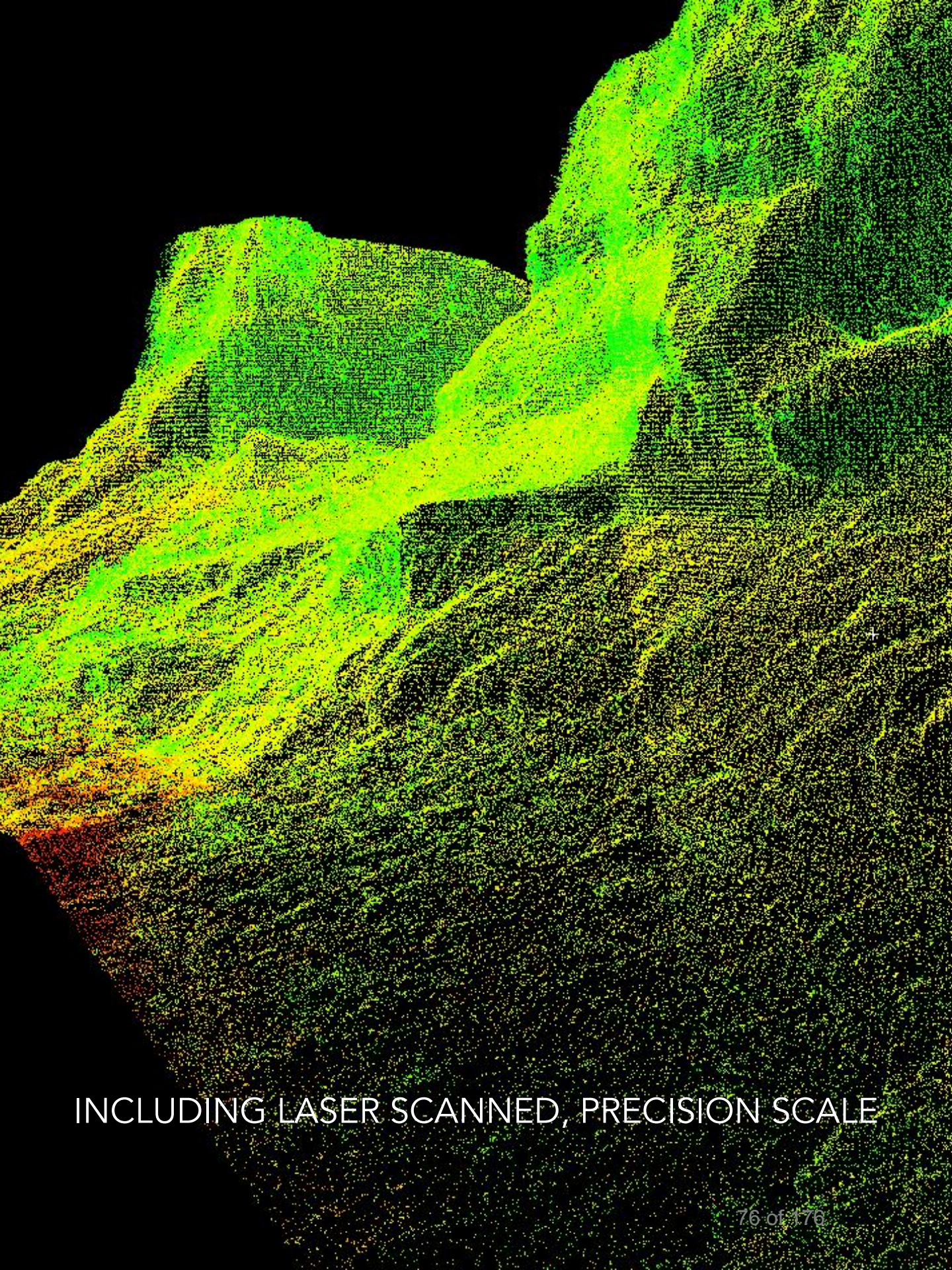






AT EXTRAORDINARY SCALE,  
IN THE SHORTEST TIME...

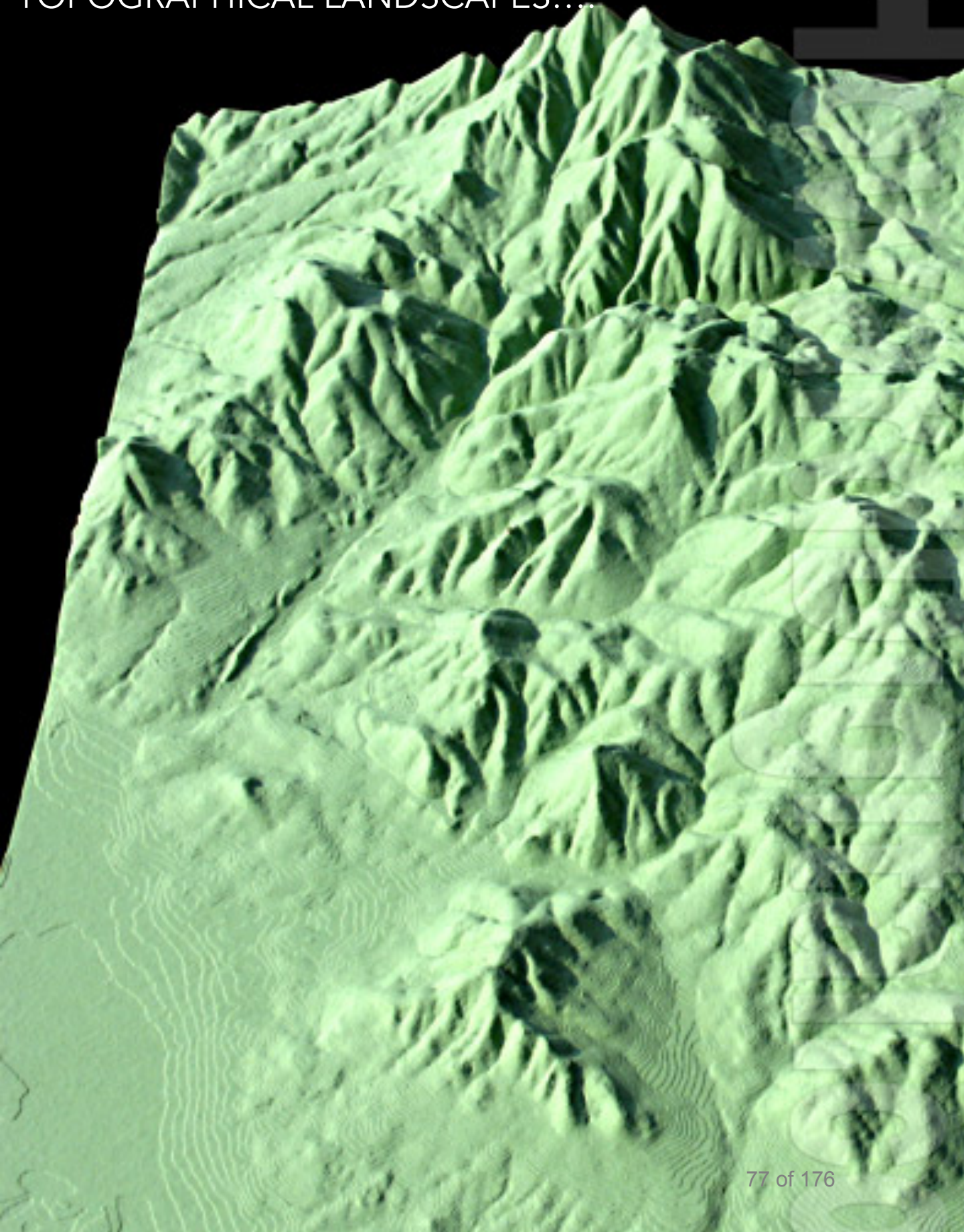




INCLUDING LASER SCANNED, PRECISION SCALE

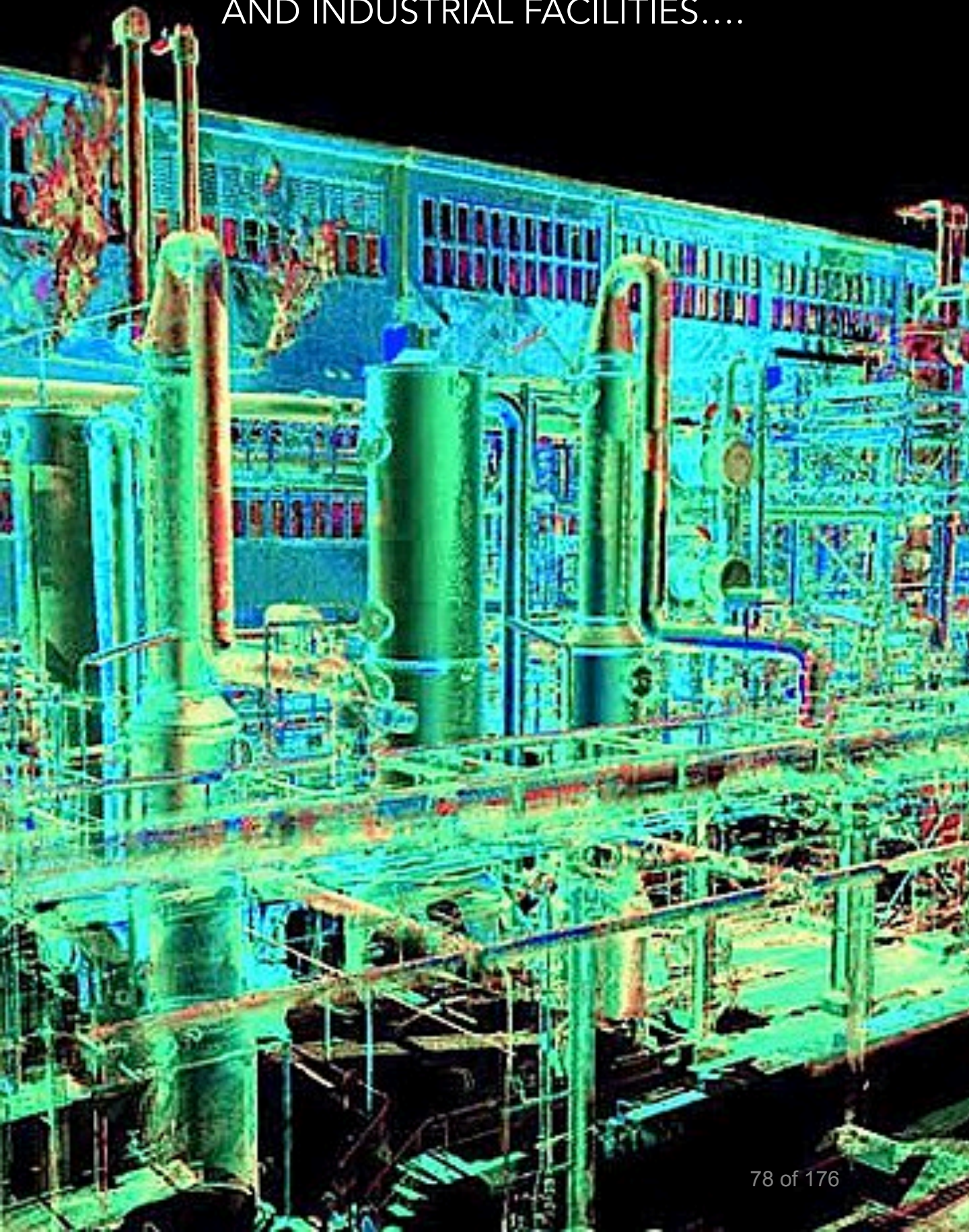


# TOPOGRAPHICAL LANDSCAPES...





AND INDUSTRIAL FACILITIES....





MODELED TO  
PERFECTION.





THE EMRCA PROGRAM EMPHASIZES  
INTERACTIVE EDUCATION...



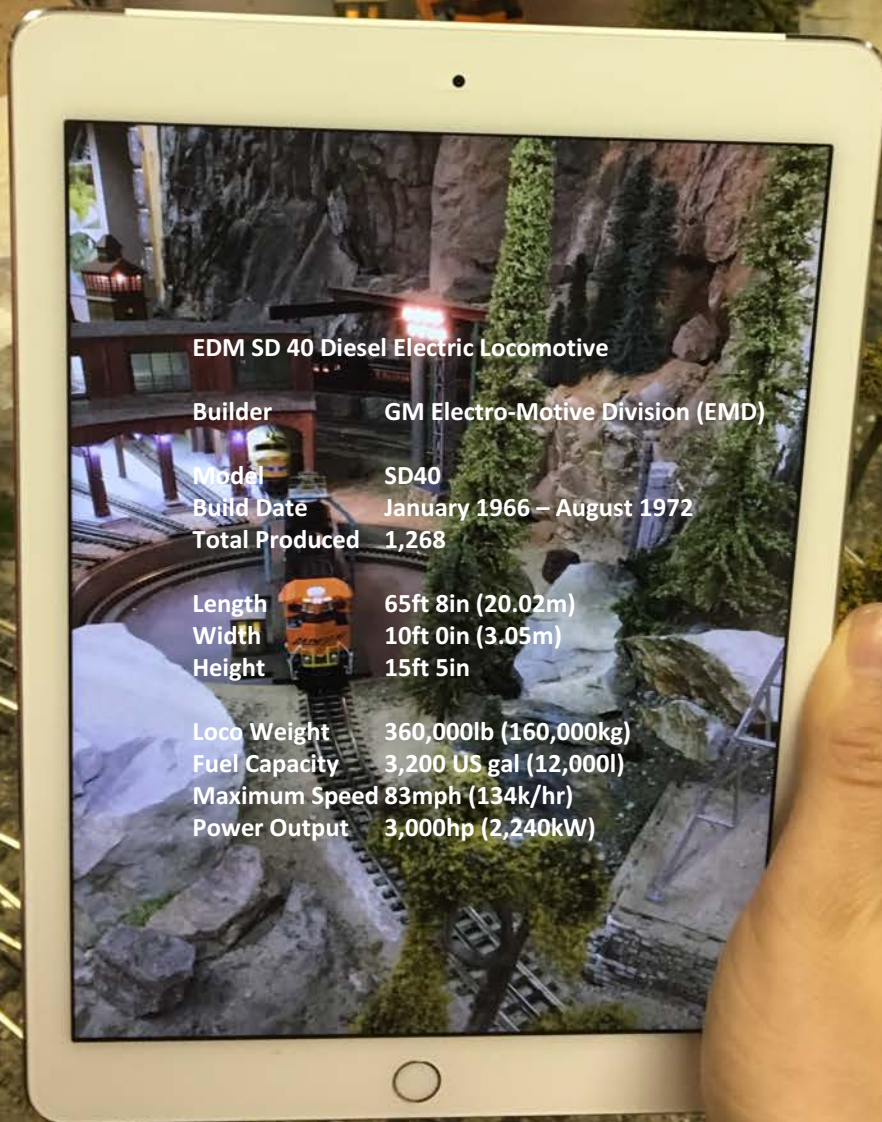


AND STUDENT LEARNING WORKSHOPS,





WITH FREE VISITOR TABLET INTERFACE...



**EDM SD 40 Diesel Electric Locomotive**

**Builder** GM Electro-Motive Division (EMD)

**Model** SD40

**Build Date** January 1966 – August 1972

**Total Produced** 1,268

**Length** 65ft 8in (20.02m)

**Width** 10ft 0in (3.05m)

**Height** 15ft 5in

**Loco Weight** 360,000lb (160,000kg)

**Fuel Capacity** 3,200 US gal (12,000l)

**Maximum Speed** 83mph (134k/hr)

**Power Output** 3,000hp (2,240kW)



A close-up, side-profile photograph of a person wearing a black Oculus Development Kit VR headset. The headset is positioned over the person's eyes, and the text "Oculus Development Kit" is visible on its front. The person's face is partially visible, showing their nose and mouth. The background is blurred, suggesting an indoor setting with other people and lights.

VIRTUAL REALITY,  
& HOLOGRAPHIC ENHANCEMENT.



# EMRCA OBJECTIVES:



TO CREATE A  
UNIQUE,  
WORLD CLASS,  
HISTORY-BASED  
MUSEUM-THEME  
PARK  
EXPERIENCE



BY LEVERAGING  
EXISTING  
REGIONAL  
CULTURAL ASSETS  
AND  
CUTTING EDGE  
TECHNOLOGIES



750,000  
VISITORS /  
YEAR



25%  
ANNUAL  
PROFIT  
TARGET FOR I  
NVESTORS



2,007  
PERMANENT  
JOBS



# 672 CONSTRUCTION JOBS



\$169 MILLION  
/ YEAR  
INCREASED  
REGIONAL  
ECONOMIC  
OUTPUT



OUR AIM IS TO  
REDUCE  
REGIONAL  
POVERTY



AND  
ALLEVIATE  
DISEASES  
OF DESPAIR

## BUILDING SPECIFICATIONS

Architecture	Frank O. Gehry
Main Gallery (length)	670 feet
Main Gallery (area)	49,000 sf
Interior Height of Main Gallery	43 ft
Building Area	83,656 sf
Education Department	5, 780sf

## INSTALLATION COMPONENTS

Renowned International Architects	71
Significant Masterpiece Buildings	164
General/standard buildings	1092
Bridges/Tunnels	89
Miles of O-scale 2-Rail track	7.1
Turnouts (switches)	502
Operating Steam & Diesel Locomotives	107
Rolling Stock and Passenger Cars	2026
O-scale figures/people	250,000





# EMRCA

ART FOR THE MASSES

## CONTEXT

### EXISTING INSTITUTIONS

- CLARK ART INSTITUTE
- WILLIAMS COLLEGE
- WILLIAMS COLLEGE MUSEUM OF ART
- WILLIAMSTOWN REGIONAL CONSERVATION LAB
- WILLIAMSTOWN SUMMER THEATER
- MASS MOCA
- MASSACHUSETTS COLLEGE FOR THE LIBERAL ARTS

### PLANNED, NEW INSTITUTIONS

- EMRCA (EXTREME MODEL RAILROAD AND CONTEMPORARY ARCHITECTURE MUSEUM)
- MASSACHUSETTS MUSEUM OF TIME
- MOUNT GREYLOCK CRAFT DISTILLERY
- GLOBAL CULTURE ART MUSEUM
- GCAM FINE ARTS, STORAGE, INC
- WILSONIAN LUXURY HOTEL, ARCHITECTURE EXHIBITION HALL & WELLNESS CENTER
- ART OF THE MOTORCYCLE MUSEUM
- AMERICAN ART MUSEUM
- MOHAWK THEATER AND PERFORMING ARTS CENTER
- COMMONS/CENTRAL PARK, NORTH ADAMS
- PEDESTRIAN BRIDGE
- HOOSIC RIVER REVIVAL (SOUTH BRANCH)



## EMRCA, INC PHASE 2.1 INVESTORS

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  - ROBERT AND ELISABETH WILMERS







# EMRCA

## EXTREME MODEL RAILROAD & CONTEMPORARY ARCHITECTURE MUSEUM

CENTERPIECE OF THE NORTH ADAMS CULTURAL DEVELOPMENT MASTER PLAN  
THE TOTAL THEME PARK EXPERIENCE  
DEVELOPED BY EMRCA, INC., AND GCAM1 LLC

OPENING MAY 2020





95% Architectural Design - 2 August 2017

# Western Gateway Heritage State Park Redevelopment and Masterplan

North Adams, Massachusetts

August 2017

Project No. 17001  
North Adams Contract # NA-2016-018

GLUCKMAN **TANG**





**South Plaza**  
View North from Furnace Street Entry



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# Executive Summary

The repurposing of the Western Gateway Heritage State Park will be one of the benchmark projects for the rejuvenation of North Adams. Northern Berkshire County will undergo a resurgence by capitalizing on the success of the existing institutions to propel the completion of new initiatives planned in the de facto Cultural Corridor extending from North Adams to Williamstown and south to Adams. The Western Gateway Heritage Park will strengthen its connection to the past while re-establishing itself as a crucial center of cultural, educational, hospitality and recreational offerings in the region. These activities are known drivers of economic stimulus and the context of the Park is a perfect infrastructure to support this growth.

The project is a continuation of previous initiatives started in the 1980s, cultivating commercial and institutional opportunities by designing specific architectural interventions that accommodate new uses. The project signifies a renewal of the Park by making sensitive 21<sup>st</sup> century interventions into the historic fabric of the former depot. While highlighting the history of the site, it defines its new identity.

- The purpose of this study is to:
- Identify the assets of Heritage Park, the City of North Adams and the surrounding vicinity
  - Enhance and add links to exploit these assets
  - Revitalize the infrastructure, architecture and landscape of Heritage Park
  - Improve visitor experience
  - Attract and sustain new, financially viable initiatives

The new uses include the Distillery, the Museum of Time, two dining establishments and an event space.

Improvements of the pedestrian links will include upgrades to the infrastructure; the bridges accessing the site are an important part of this initiative.

The Park will provide more outdoor amenities for visitors’ activities such as picnicking, walking, biking and gathering spaces for weekend fairs, musical performance and other outdoor activities.

# History

**The Region**  
The city of North Adams is located in Berkshire County, Massachusetts in the northwestern corner of the state. Nestled in the valley between the Hoosac Range of the Berkshire Mountains to the east; the Taconic Mountains, including the state’s highest peak Mount Greylock, to the west; and the Green Mountain range to the north, the area is known and relished for its natural beauty.

While a haven for outdoor enthusiasts, the region also boasts being the home of the Massachusetts Museum of Contemporary Art (MASS MoCA), the largest contemporary art museum in the country; the Sterling and Francine Clark Institute, renowned for its collection of American and European art; the Williamstown Theater Festival, which brings America’s finest actors, designers, and playwrights to town for the summer; Williams College, the #1 liberal arts college in the country; in addition to the Williams College Museum, Massachusetts College of Liberal Arts, Williamstown Art Conservation Center, and countless other cultural and educational offerings.

These attractions bring hundreds of thousands of visitors to the area, immersing them in arts and culture amidst the idyllic landscape. While convincing visitors to stay overnight remains a challenge, the existing institutions lay the groundwork of additional institutions.

**The City**  
While for much of its history North Adams was a prosperous railroad hub and mill town, de-industrialization dealt the city a devastating economic blow. The city now lags far behind the country and the state in numerous crucial economic areas including employment, education, and others. Industrial spaces have begun to be re-purposed in attempts to revitalize the city, with more needing to be done to enhance its attraction.



**The Tunnel**

The State officially opened the Hoosac Tunnel on July 1, 1876. It was 4.84 miles long, making it the longest tunnel in North America at the time. The Tunnel took over 21 years to complete, costing over \$21 million and an estimated 196 lives. It remains the longest tunnel east of the Rocky Mountains and is widely considered one of the greatest engineering feats of the 19<sup>th</sup> century.

The economic impact of the tunnel was transformative. The Hoosac Tunnel connected Berkshire County to Boston to the east and Albany to the west. In addition to the labor force and materials that the construction of the tunnel required, the railroad allowed local industries – brick-making, textiles, manufacturing – to expand and flourish. The completion of the tunnel catalyzed the development of North Adams, as it became a bustling city with shops, hotels, and cultural institutions. North Adams grew from a town with 1,100 inhabitants in 1830 to the largest city in the Berkshires in 1900 with a population of 24,200. It was the Hoosac Tunnel that precipitated the decision for North Village of Adams to separate and become North Adams in 1878.

**The Depot**

In the 1860s, the Troy and Greenfield depot built a massive railroad yard with two round houses and warehouse buildings to serve as a distribution center for the North Adams area and beyond. Throughout the 20<sup>th</sup> century, the freight yard area continued to function as a commercial storage and distribution center, though declining in condition and use. The two roundhouses were eventually demolished, followed by the destruction of most other rail buildings during the Urban Renewal of the 1970s.

**Heritage Parks**

The movement to create Heritage Parks in Massachusetts was in response to the declining economic conditions of the post-industrial state. Tourism and recreation emerged as possible sources of revenue, supported by increased interest in the redevelopment of historical sites. In 1976, Governor Michael Dukakis signed a bill that designated downtown Lowell as the State’s first ‘Heritage Park’. It received federal support when Congress passed a bill establishing the Lowell National Historical Park. In 1979, the state approved a \$35 million bond bill towards urban-focused industrial heritage parks in seven locations, including North Adams.

**Western Gateway Heritage State Park**

Western Gateway Heritage State Park in North Adams was created to celebrate the history of American trains and to pay tribute to one of the greatest engineering feats of the 19<sup>th</sup> century: The Hoosac Tunnel.

Opened in 1985, the park and its exhibits tell the story of the tunnel’s construction and its profound impact on the city. The Park includes six remaining structures from the depot that adjoin the main tracks upon which trains continue to run.

Like most heritage parks, however, Western Gateway Heritage State Park has been unable to match Lowell’s success. For the majority of its existence, the buildings have been underutilized with no successful attempts to rejuvenate the space.

**The Buildings**

**Building 1**, erected between 1876 and 1894, was the first freight yard building used for receiving and storing rail freight.

**Building 2**, built in the 1880s, became a storehouse and distribution center for food arriving in North Adams by rail. Delivery wagons and light trucks were garaged in a portion of the building.

**Building 3**, built around 1880, replaced a lumber shed on the site. In the late 1880s, a wing was added to expand its storage capacity and it became a distribution facility for local use. Additions and alterations to the building were made depending on the changing needs of the market center.

**Building 4**, built in 1894 by the Fitchburg Railroad, is the largest building in the freight yard: 41 feet wide by 269 feet long. Tracks ran the length of both sides of the building. Finished goods from nearby plants were weighed, waybilled, marked, and sorted for their destination, then loaded onto box cars for transport. Building 4 was also the location of the Shipper’s Office, the main center of operations.

**Building 5**, constructed in the 1880s as a “coal pocket” holding thousands of tons of coal. An ‘elevator’ from the coal cars lifted coal in to the storage ‘pockets’. Wagons backed into the lower bays of the building under the ‘pockets’, were filled by chutes and then distributed locally.

**Building 6**, built in the 1880s by Fitchburg Railroad for hay and grain distribution. Grain, arriving from the mid-west and Canada, was conveyed by belt to the upper part of the building, stored until milled, then bagged and sold as animal feed. This building also featured a double-track siding.

# Regional Development: The Cultural Corridor

The de facto ‘Massachusetts Cultural Corridor’ provides a template for future expansion and enrichment of Northern Berkshire County in general and the City of North Adams in particular. Existing and proposed cultural and hospitality facilities are indicated in the following regional map.

In addition to the cultural amenities of the region, there are other regional assets including the Hoosic River, the Appalachian Trail, the Mohawk Trail, Mt. Greylock, and the proposed Williamstown-North Adams Bike Path.

North Adams is in position to capitalize on the opportunities generated by the Cultural Corridor. Re-invigorating the Western Gateway Heritage Park will strengthen its connection to the past while redirecting its attention to develop cultural, educational, hospitality and recreational activities. These activities are known drivers of economic stimulus and the context of the Park is a perfect infrastructure to support this growth.







1 The Clark Art Institute



2 Regional Conservation Lab



3 Williamstown Theater Festival



4 Williams College Museum of Art



5 Global Contemporary Art Museum



6 Artists Studio



7 MASS MoCA



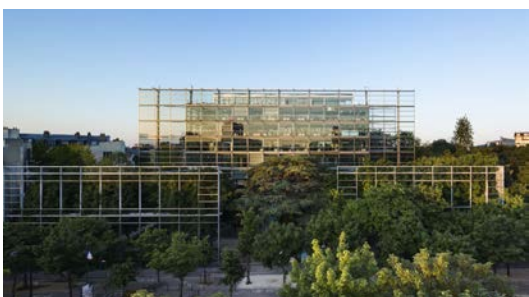
8 Mohawk Cinema and Performing Arts Center



9 Heritage State Park Museum of Time & Mount Greylock Distillery



10 Museum of American Art



11 Luxury Hotel



12 Summer Street Apartments



13 Pedestrian Bridge



14 Art of the Motorcycle Museum



15 Extreme Model Railroad & Contemporary Architecture Museum



# Context & Connections: Existing

## Challenges:

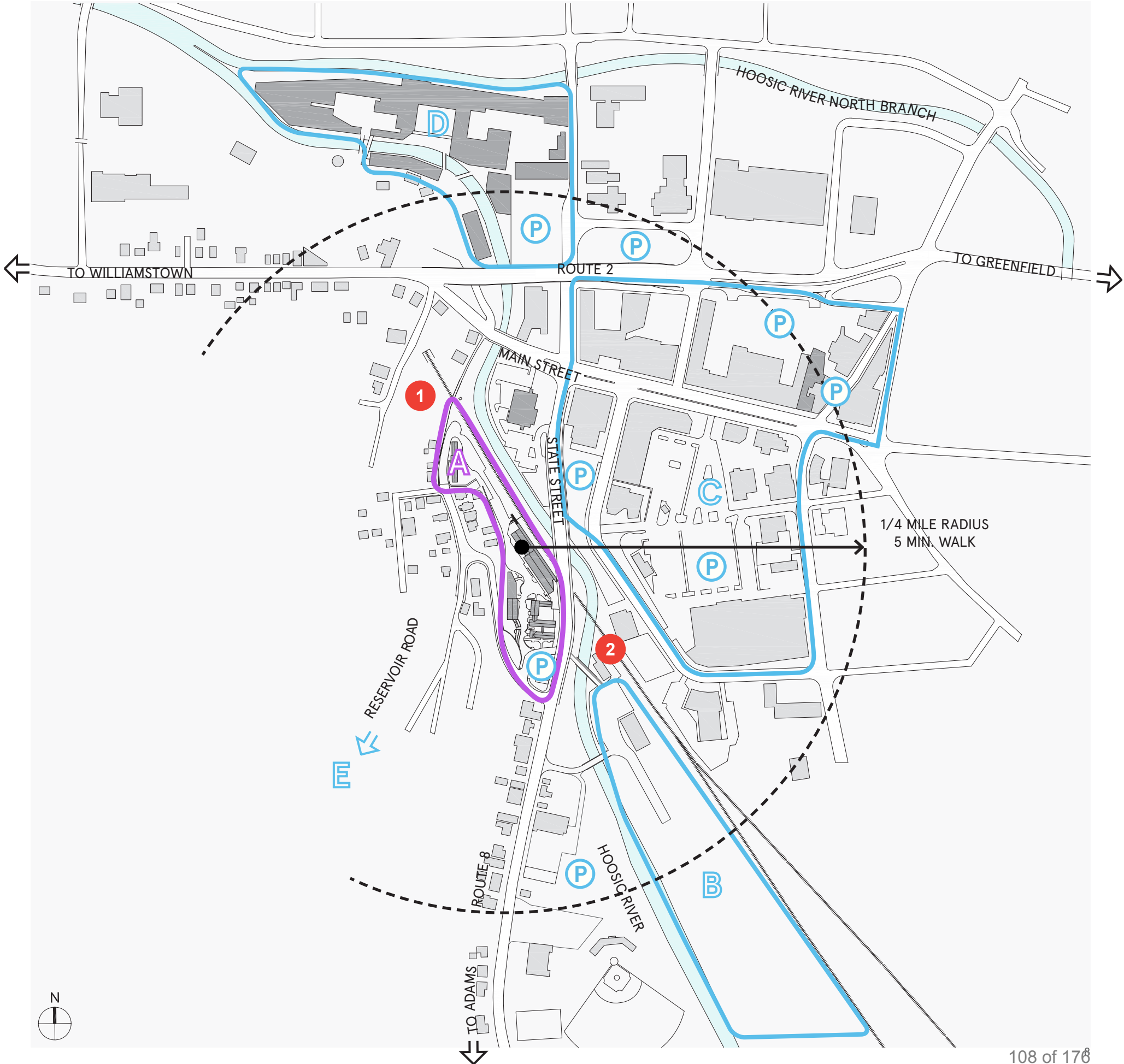
- Improve Pedestrian and Bike connections and Wayfinding to:

- A HERITAGE STATE PARK
- B EMRCAM, Extreme Model Railroad and Contemporary Architecture Museum
- C DOWNTOWN NORTH ADAMS
- D MASS MoCA
- E MT. GREYLOCK

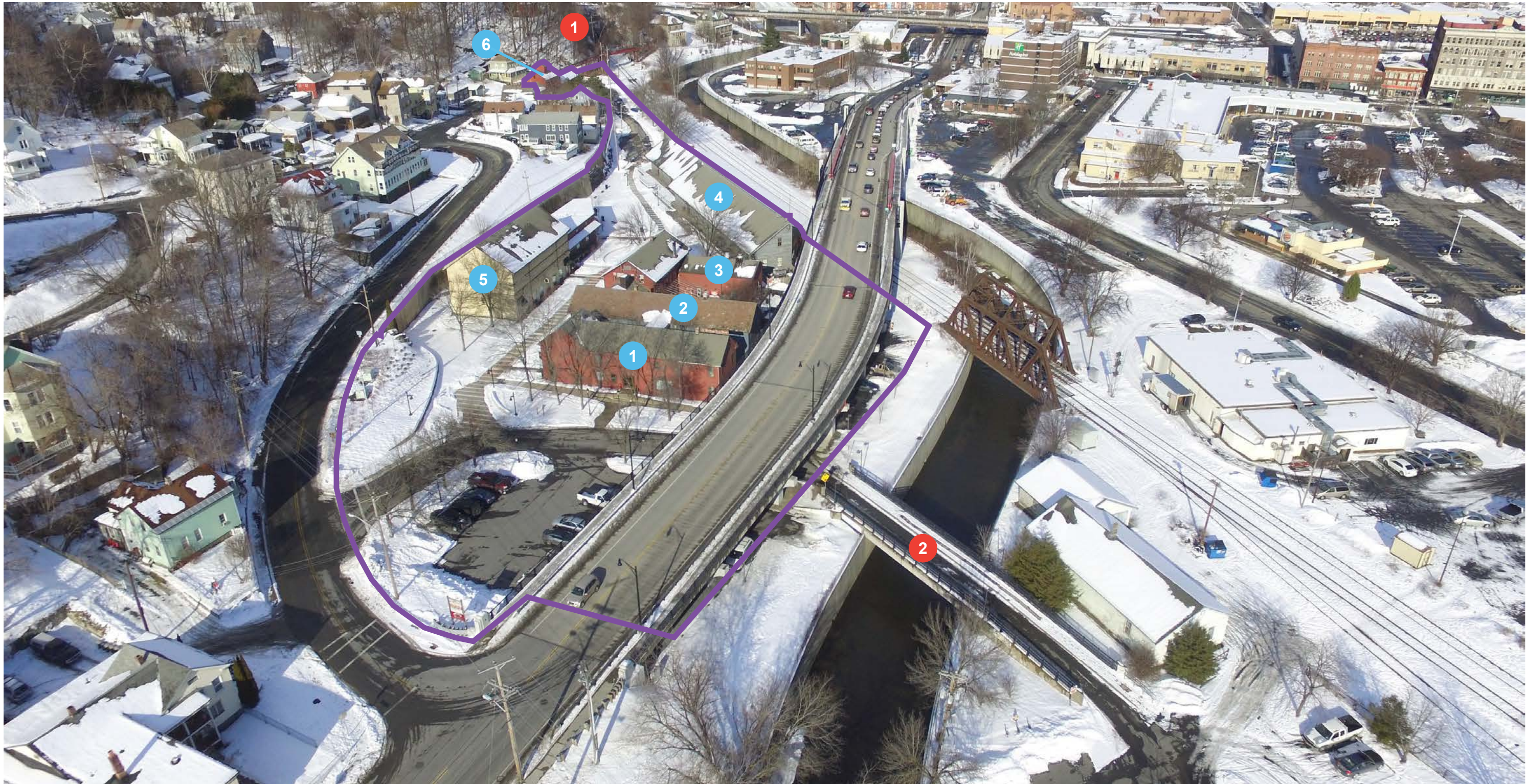
- Rejuvenate existing buildings to attract more visitors and exploit opportunities presented by the Cultural Corridor.

### Key:

- 1 North Entry Pedestrian Bridge in Disrepair
- 2 South Entry Bridge in Disrepair
- P Parking
- # Building #







Existing Site from South



# Context & Connections: Proposed

Western Gateway Heritage State Park sits in close proximity (within a 5-minute walk) to primary assets of the City of North Adams:

- A HERITAGE STATE PARK** The existing park buildings will be renovated and expanded to accommodate new uses. Landscape, hardscape and wayfinding to be upgraded.
- B EMRCAM** Extreme Model Railroad and Contemporary Architecture Museum to the southeast. The main point of access from **HERITAGE STATE PARK** will be across the Christopher Columbus bridge, which needs to be widened to accommodate additional traffic and the bike path.
- C DOWNTOWN NORTH ADAMS** to the northeast: the center city is poised for development of the Mohawk Theater, hospitality venues, and the new 'Central Park'.
- D MASS MoCA** to the north, recently expanded to fill its 700,000 SF of exhibition space on 13 acres of land.
- E MT. GREYLOCK** to the southwest. Improve wayfinding and Furnace Street as access road.

Key:

1

2

3

4

5

6

7

North Entry Bridge Improvement

South Entry Bridge Improvement

Future Bike Path - Ashuwillticook Trail Extension

Existing Bike Path

Future Bike Path - Williamstown-North Adams

Mohawk Trail

Scenic Railroad

P

SR Platform

Parking





Proposed:

**Pedestrian paths** and bridges to Heritage Park (A) will be enhanced by upgrading the links to the cultural assets and off-site vehicular parking. This requires bike-friendly (and ADA) paths leading up to a new bridge crossing over the railroad at the North Entry and a reinforced and widened Christopher Columbus Bridge crossing the Hoosic River towards the **EMRCAM** at the South Entry.

**Bicycle links** to and through the Park will connect to the proposed bike path from the North and will link to the **Williamstown – North Adams Bike Path**. This Bike Path will cut through Building 6 of MASS MoCA, over the pedestrian pathway and enter Heritage Park north of Building 6, pass through Park east of Building 4, and connect directly across the river to **EMRCAM** and continue on the **Ashuwillticook Bike Trail** to Adams, 18 miles to the south.

Connections to the nearby **Appalachian Trail** and the **Mohawk Trail** are planned. Access to the **Hoosic River Restoration Project** is planned.

**Parking** for the new facilities will be accommodated in two large lots to the south of **Heritage State Park**, adjacent to the planned **EMRCAM**.

Key:

ooo

ooo

ooo

#

●

Visitor Drop-Off

Emergency Vehicle Access

Service Vehicle Access

Building Number

Wayfinding

▶

▶

■

■

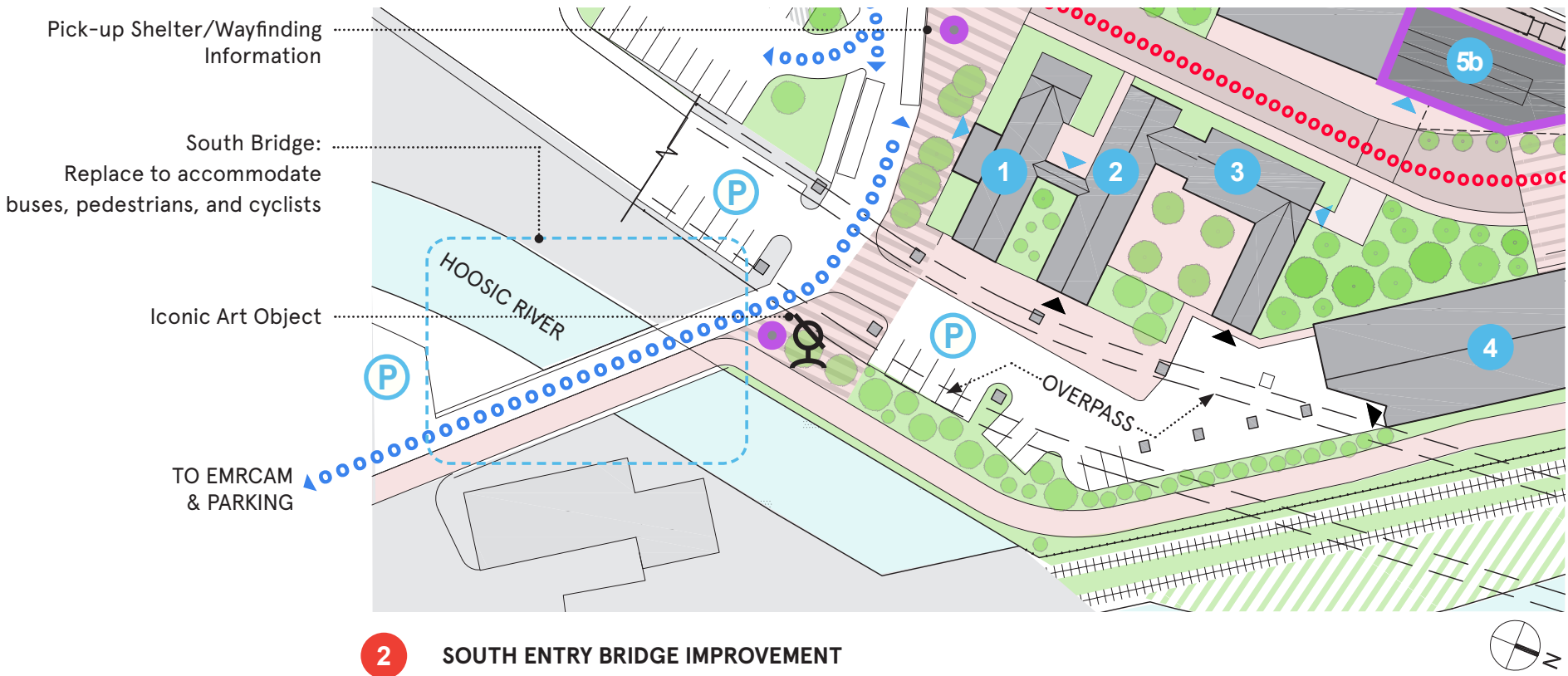
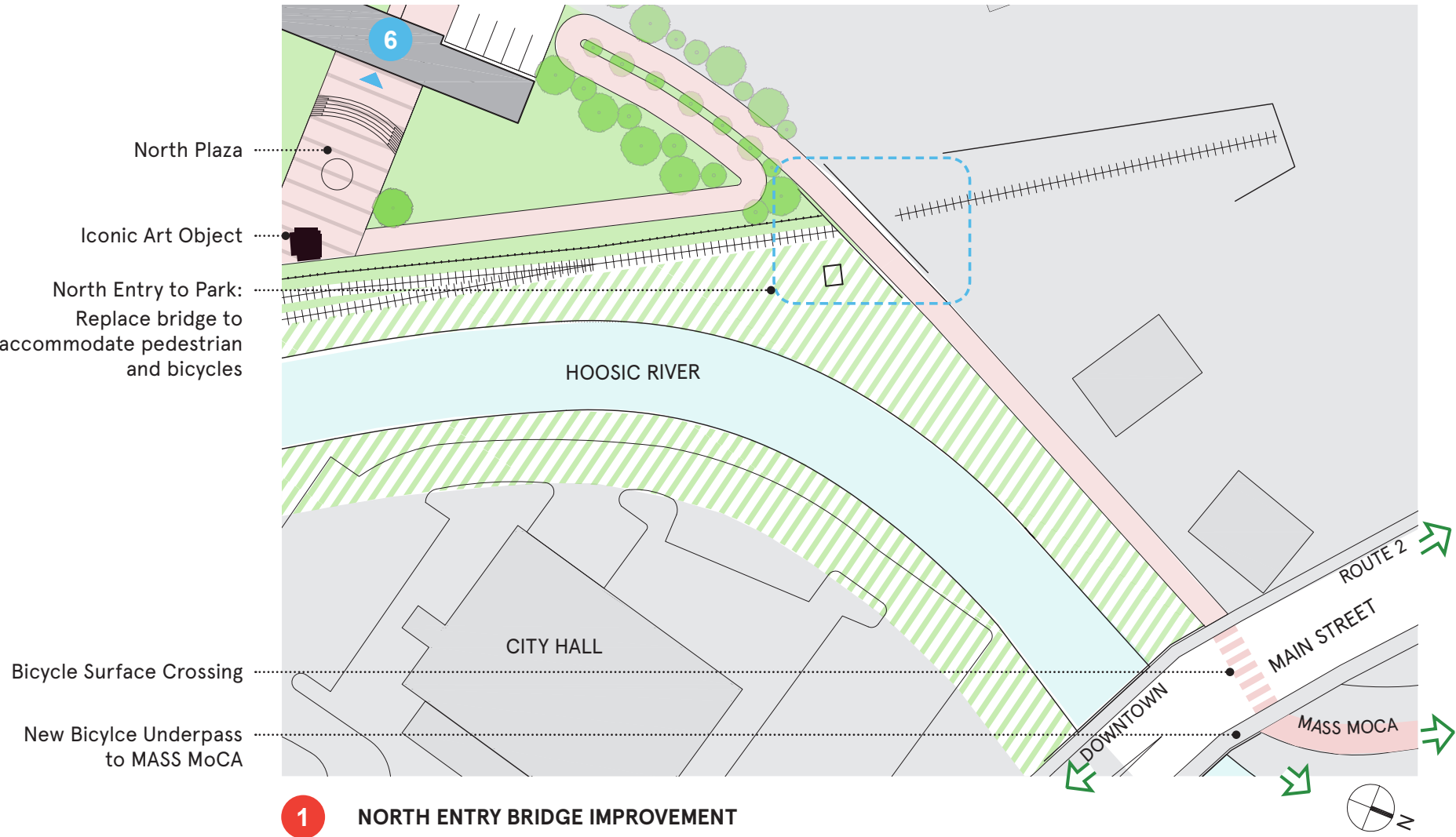
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Visitor Entrance

Service Entrance

Scenic Railroad

Hoosic River Revival





# Site: Existing

**Site identity:** Heritage Park will need a signifier to attract and direct visitors to the park, in particular from Route 2. Signage, using the model of MASS MoCA, will provide the long distance orientation and local wayfinding signage will direct the visitor within the city.

**Site access: Pedestrian** access is difficult from the north (MASS MoCA) and difficult from the south (future home of EMRCAM) and from Downtown North Adams.

**Site access: Vehicular.** New proposed uses will require new strategies for wayfinding and service vehicles.

**Infrastructure:** Bridges at the north and south are inadequate by today’s standards. Utility upgrades may be necessary for new uses.

**Amenities:** the park today is undeveloped and underutilized, especially to the north. Wayfinding, historic markers, and travel information and amenities are necessary.

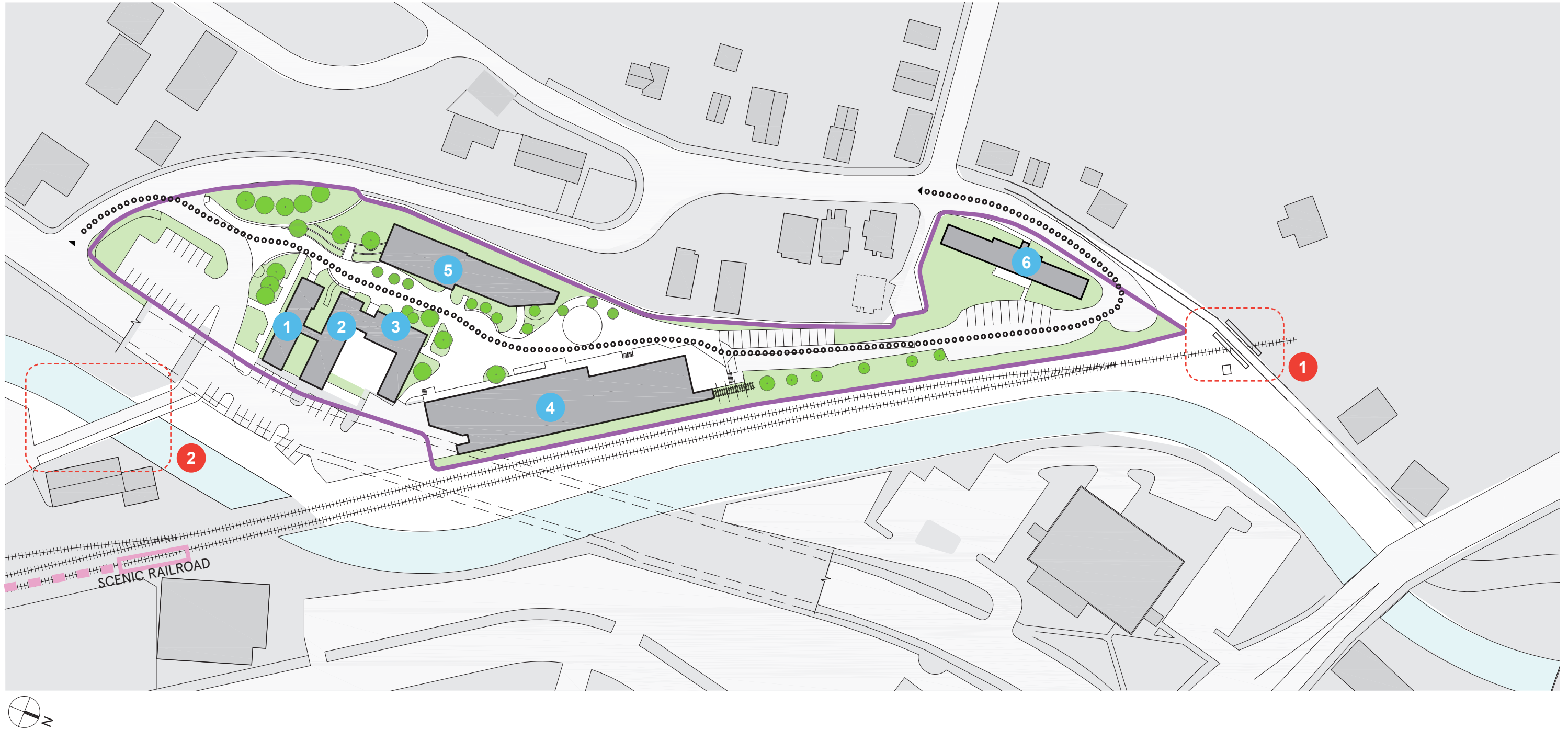
**Key:**

- 1 EMRCAM Offices
- 2 EMRCAM Offices, Unoccupied Level 2
- 3 Freight Yard Pub
- 4 DCR, History Museum
- 5 History Museum, Coffee Roaster, Mt. Greylock Visitor Center
- 6 Unoccupied
- 1 North Entry Bridge
- 2 South Entry Bridge
- ooo Vehicle Path



Existing Conditions  
Buildings 1-5







# Site: Proposed

## Strategies

- Improve orientation to Park
- Improve wayfinding and circulation to and within Park
- Design outdoor spaces for dynamic and static activities: performance, fairs, picnicking, repose
- Add green space
- Upgrade infrastructure to and within Park

### The Courtyard

The Courtyard will connect the Park South Entry to the Park North Entry. Orientation and circulation through the site will be enhanced by introducing three ‘Public Plazas’ as focal points and gathering spaces to visually and physically connect the length of the park.

### Landscape

New landscaping will provide opportunities for an improved visitor experience that will accommodate walking, biking, picnicking and cultural activities including art installations and gathering spaces for small performances. Sound and view mitigation as well as appropriate sustainability strategies for storm water mitigation, irrigation and restoration plantings will be included.

### Hardscape

The Park will provide access for service and emergency vehicles. Buses and cars will load and unload on-site and park elsewhere. The existing parking lot at the south end of the site will be maintained for ADA parking and limited staff parking under the overpass. The balance of the parking will be accommodated off-site. Three pedestrian plazas connected by streets and walkways will provide focal points for orientation and activities. The first marks the South Entry and provides wayfinding and identifies the drop-off point for cars. The second, the Central Plaza provides access to the Distillery Entry and the Museum of Time Entry and is the core public gathering place. The third, the North Plaza at Building 6, will provide space for more informal public activities.

### Features:

The new **Courtyard** will extend from the **South Entry** to the **North Entry**, acting like the path in an Italian hill town, linking the three main gathering spaces of the Park. They will be unified with consistent hardscape and softscape elements as well as architectural ‘events’ that will help orient the visitor. These may be object installations, such as sculptures, a clock tower, industrial artifacts or bandshells. Amphitheater, performance type spaces and furniture for picnic areas, rest areas and historic signage locations will be included.

**North Entry Plaza:** A large **sculpture** will provide an **orientation** device at the **North Entry**, the ‘landing point’ for the new pedestrian and bike path to and from **MASS MoCA**. New hardscaping and softscaping will provide an expanded green area and gathering place.

**Central Plaza:** The main exterior gathering place that links entries to Buildings 4 and 5, will include paving, landscaping, seating, and lighting.

### Features (cont’d):

**South Entry Plaza:** An **Iconic** artifact will serve as an orientation device and ‘sign’ for Main Entrance to Heritage State Park. An **Entry Shelter** for pick-up, drop-off and orientation will greet the visitor on a new plaza spanning from the west to the east, connecting vehicular arrival and pedestrian access to downtown North Adams and EMRCAM.

Key:

1

Distillery Retail, EMRCAM Offices

2

Fine Dining, Bar, Kitchen

3

Casual Dining, Distillery Offices

4

Museum of Time

5

Distillery, Bottling, Tasting

6

Events, Barrel storage

7

Entry Kiosk

8

DCR Visitor Center

1

North Entry Bridge Improvement

2

South Entry Bridge Improvement

Addition/New Construction

Pedestrian, Biking Path

Vehicular Service Path

\*

South Entry Plaza

\*

Central Plaza

\*

North Entry Plaza

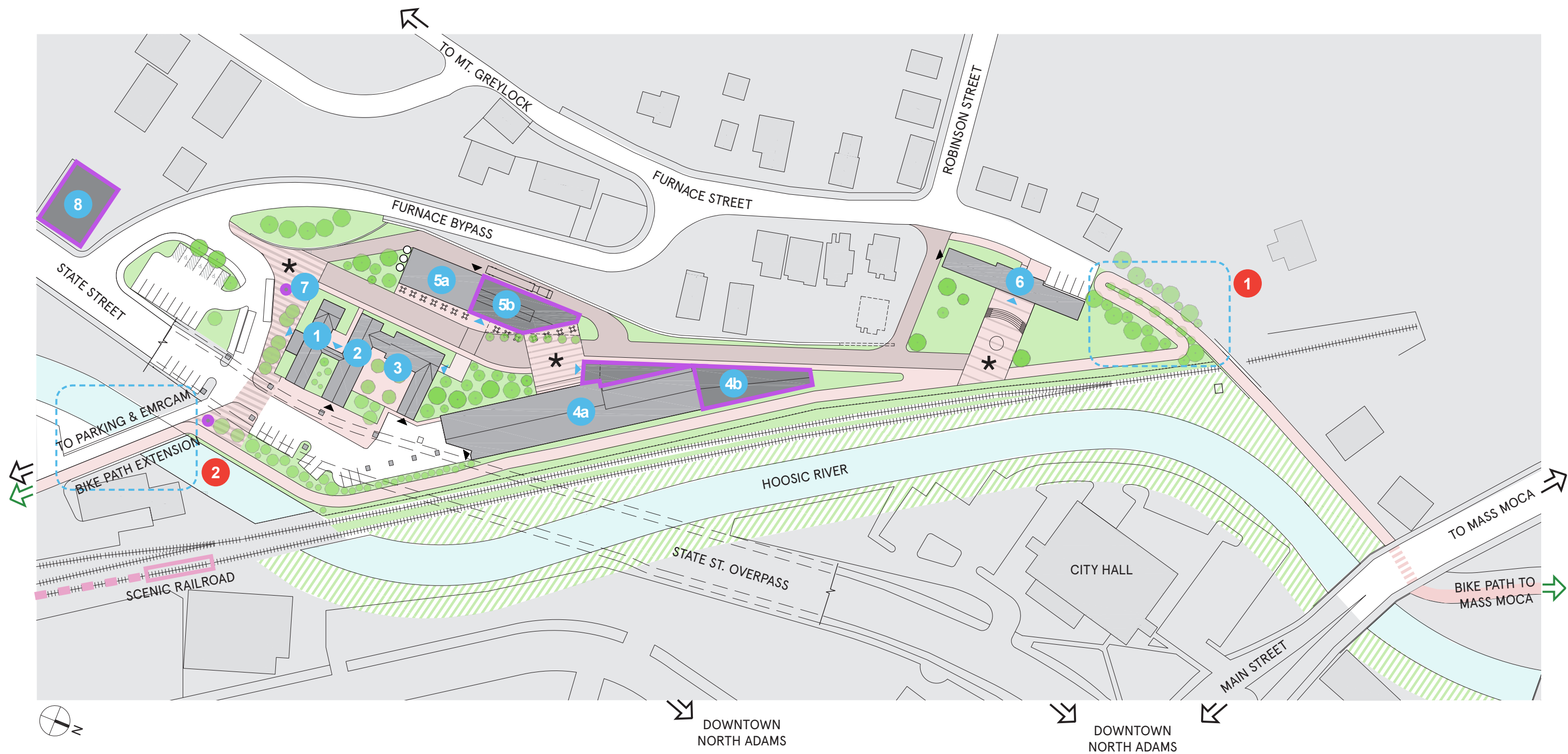
Hoosic River Revival

Public Entrance

Service Entrance

Scenic Railroad









**South Plaza**  
View North from Furnace Street Entry





**Building 5**  
View North



# Site: Flows and Logistics

Key:

1

Distillery Retail, EMRCAM Offices

2

Fine Dining, Bar, Kitchen

3

Casual Dining, Distillery Offices

4

Museum of Time

5

Distillery, Bottling, Tasting

6

Events, Barrel storage

7

Entry Kiosk

8

DCR Visitor Center

1

North Entry Bridge Improvement

2

South Entry Bridge Improvement

•••

Visitor Drop-Off

•••

Emergency Vehicle Access

•••

Service Vehicle Access

Addition/New Construction

Pedestrian, Biking Path

Vehicular Service Path

★

South Entry Plaza

★

Central Plaza

★

North Entry Plaza

Hoosic River Revival

Public Entrance

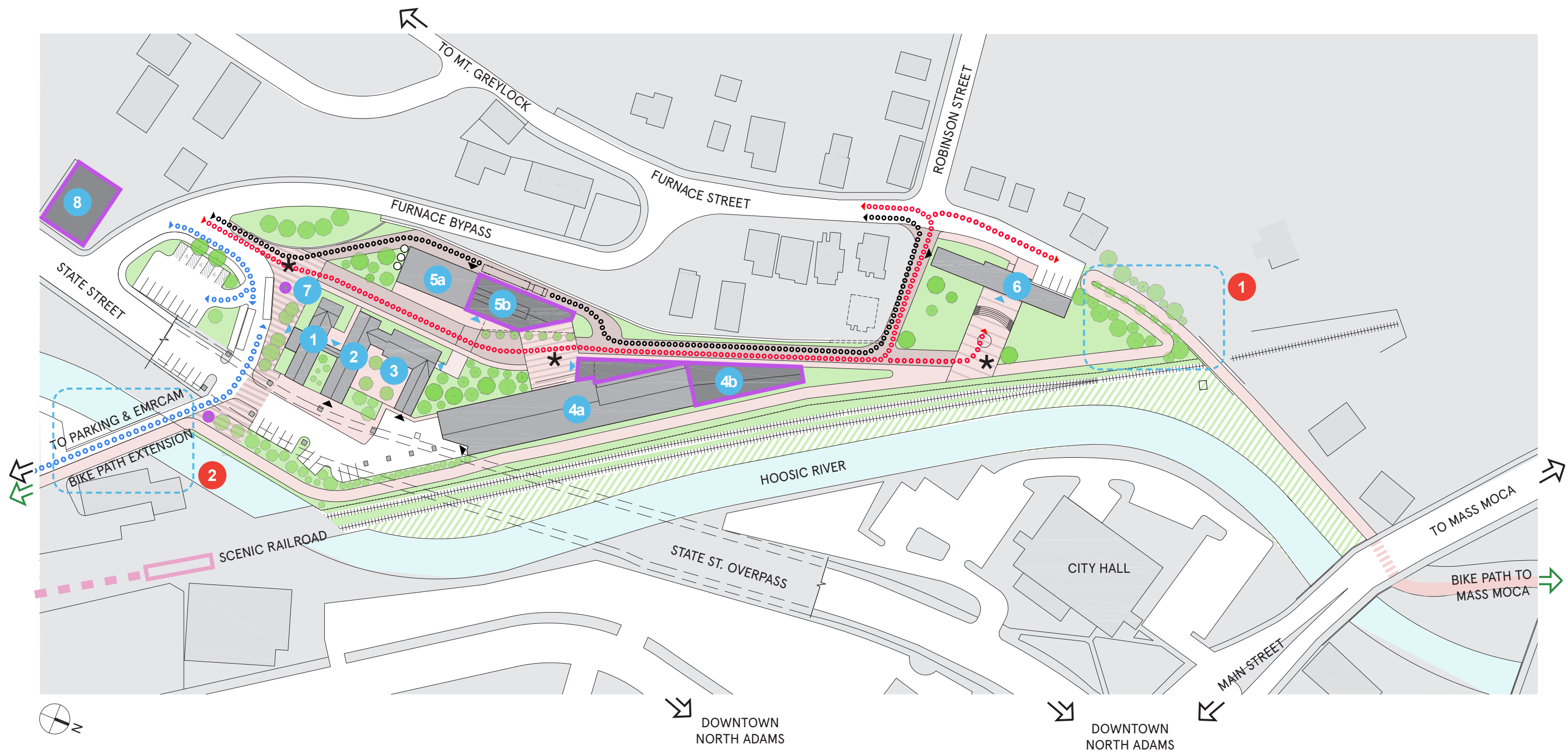
Service Entrance

Scenic Railroad



**Bike Path**  
View South from Reconfigured Pedestrian Bridge







# Site: Details

Key:

1

Distillery Retail, EMRCAM Offices

2

Fine Dining, Bar, Kitchen

3

Casual Dining, Distillery Offices

4

Museum of Time

5

Distillery, Bottling, Tasting

6

Events, Barrel storage

7

Entry Kiosk

8

DCR Visitor Center

1

North Entry Bridge Improvement

2

South Entry Bridge Improvement

Addition/New Construction

Pedestrian, Biking Path

Vehicular Service Path

★

South Entry Plaza

★

Central Plaza

★

North Entry Plaza

Hoosic River Revival

Public Entrance

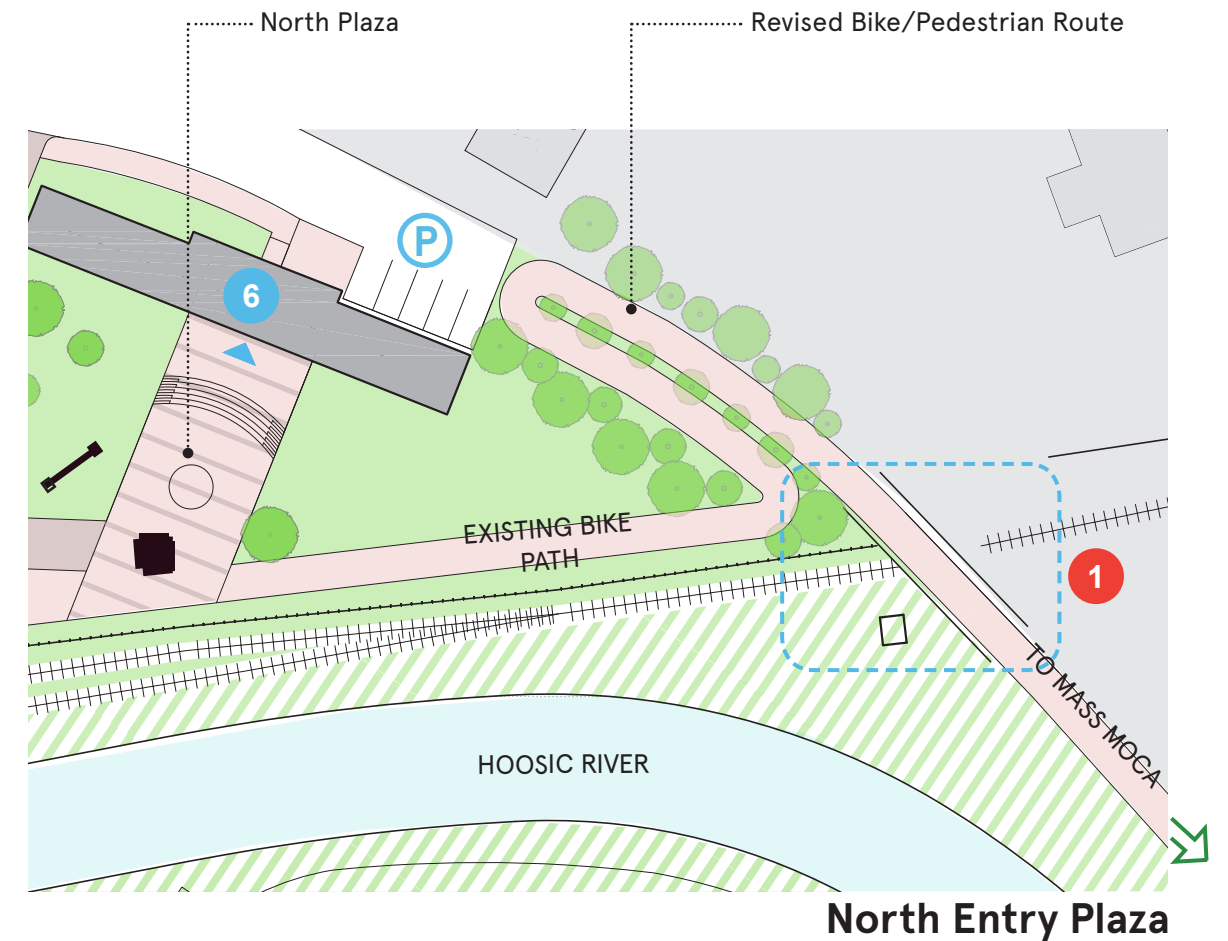
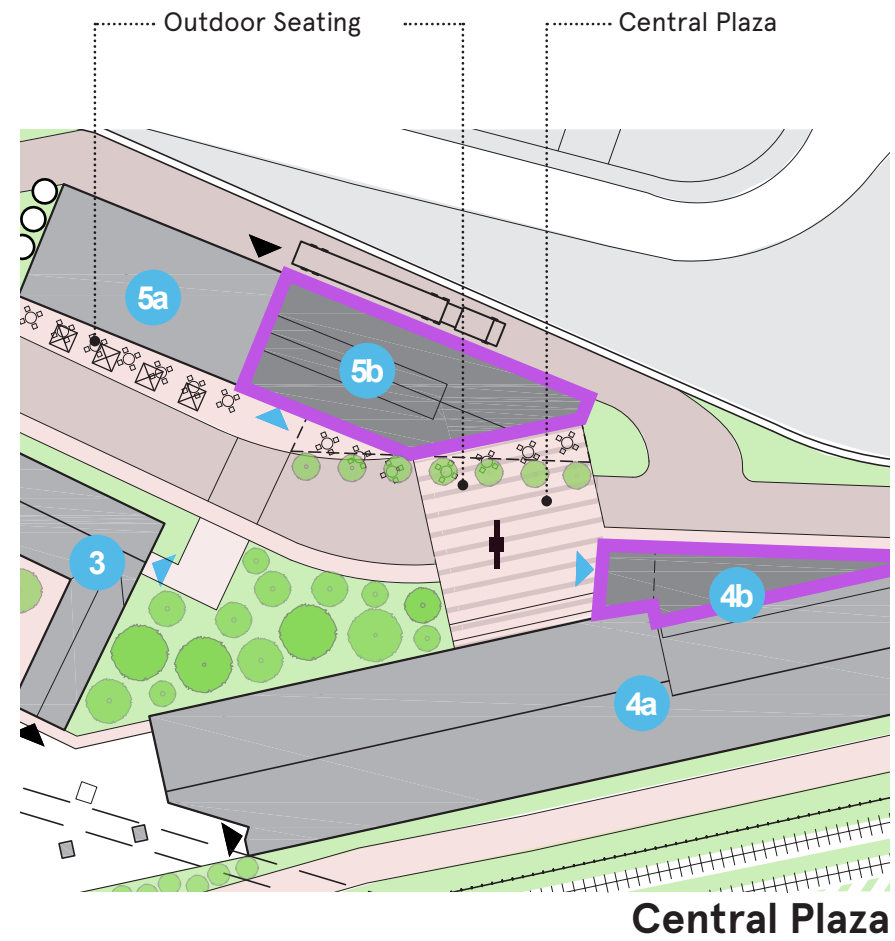
Service Entrance

Scenic Railroad



Central Plaza  
View from Building 4 Terrace

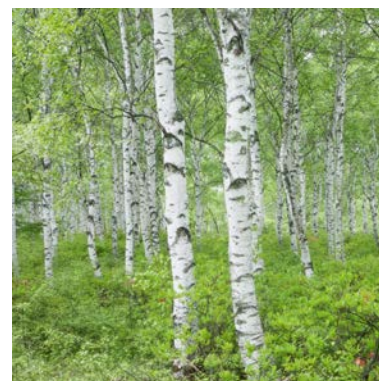




Resin Bonded Gravel  
(permeable)



Granite Pavers



Birch Trees &  
Ground Cover  
Planting



Native Meadow  
Grasses & Wildflowers

# Programming & Design

The character of the restoration, renovation and additions is to be a dramatic yet cohesive mix of old and new. Aesthetic strategies will completely refresh the image of the Heritage Park complex. Contemporary architectural elements will play a major role in the experience of the park and will fit cohesively within the its historic context. The architectural design of 21<sup>st</sup> century additions will identify the new uses programmed for the Park and signify to the visitor that contemporary, new uses are being introduced to reinvigorate the park. The contemporary elements will relate in size, scale, and palette to the historic buildings, but will be distinctive of their time, thereby respecting the integrity of the historic framework. The historic buildings will be sensitively glazed to make them more transparent, bringing natural light into, and providing important views from, the new social functions of the interiors.

## The Distillery

**Buildings 1,2,3,5,6**

The craft distilling movement has grown exponentially in the past decade, benefiting from a confluence of factors including the liberalization of alcohol production laws, the proliferating interest in agri-tourism, and outpouring of support for local producers. By year-end in 2011, there were 234 in-production craft distilleries – there are now over 1,300. While demand for craft spirits surges, it also becomes increasingly important to carve out a market niche in the current landscape of growing supply.

A distillery in Heritage State Park would capitalize on converging favorable market conditions, significant private development in the area, existing regional tourism, and a booming interest in local alcohol and food production. Further, with the distillery bringing production of a tangible goods back to the city, it offers a notable opportunity to give form to a new sense of place and a re-defined municipal identity.

## Distillery

Building 1	Level 1	Distillery Retail	700 SF
Building 2	Level 1	Fine Dining, Bar, Kitchen, Services	2,200 SF
	Level 2	Barrel Aging and Special Events	820 SF
Building 3	Level 1	Mid-range Dining	2,000 SF
	Level 2	Distillery Offices	600 SF
Building 5a&b	Entire	Distillery, Bottling, Tasting, Services	11,800 SF
Building 6	Entire	Event Space, Barrel Aging, Storage	3,300 SF

## Amenities

Building 1	Level 1	Visitor Amenities, Wayfinding, Lavs, Pedagogic Displays, Retail	1,700 SF
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## EMRCAM

Building 1	Level 2	EMRCAM Offices	1,600 SF
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## The Massachusetts Museum of Time

**Building 4, expanded 4a**

The Massachusetts Museum of Time will be home to a unique collection of 18<sup>th</sup> and 19<sup>th</sup> century antique clocks, many of which were manufactured originally in Massachusetts and Connecticut. The approximately 90 clocks in the collection were selected by their owner / collector for the complexity of their mechanisms and the aesthetic appeal of their elegant and seductive design. Some of the clocks in the collection were critical to standardizing time for the railroads in the northeast and were associated with the Harvard College Observatory. This is one of the finest private collections of its type in the world, and the collector has expressed interest in establishing a permanent home for the collection in North Adams because of his interest in MASS MoCA and the unfolding cultural context of northwestern Massachusetts.

In addition to the vast clock collection, a new black box space will be added to serve as a multipurpose room and theater. The black box will screen installations such as Christian Marclay’s “The Clock” and Maarten Baas’s “Sweeper’s Clock.”

## Hoosic River Restoration

To the extent possible, the Hoosic River Flood Chute Naturalization Plan (see 30% Concept Design May 2015) will be coordinated with the Masterplan.





**Central Plaza**  
View North





**Central Plaza**  
 View South from Museum of Time (Building 4) Lobby





**North Plaza**  
View North from Museum of Time (Building 4)



# Mt. Greylock Distillery

## Building 1-3: F&B, Retail, Offices

Scope of work **Buildings 1,2,3**  
Demolition as required, new double glazed windows and doors to match existing, additional windows as required, upgraded mechanical systems, upgraded plumbing and electrical fixtures (LEDs), refinish wood floors, interior walls and ceilings, and repaint exterior.

**Building 2**, in addition to above, remove portion of Level 2 to make double-height space. New doors at entry. Add new infrastructure for restaurant and bar, new lavatories as required. Add gable skylight.



**Building 2**  
Event Space



**Building 2**  
Fine Dining



**Building 3:**

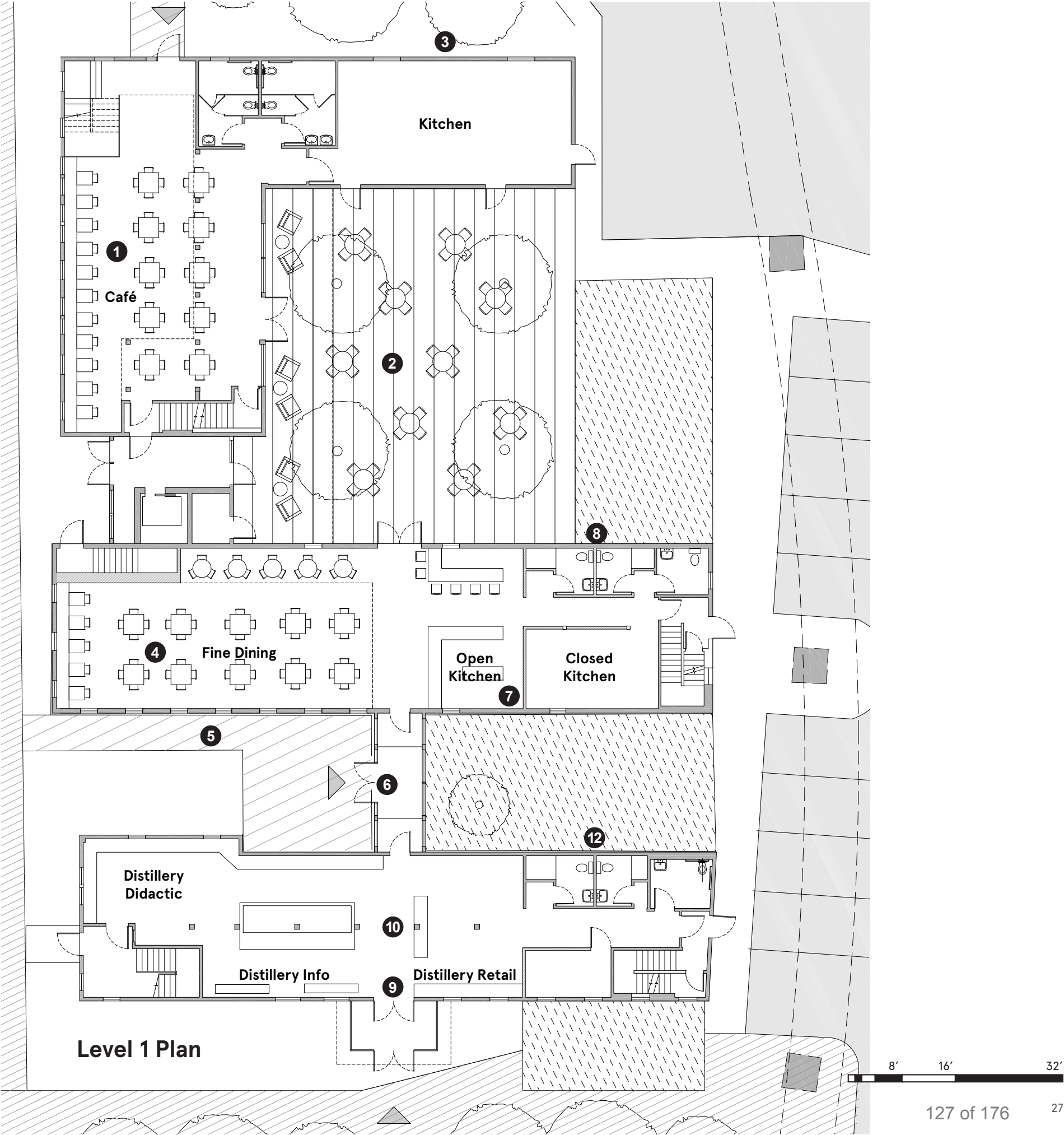
- 1 New double-height space for café
- 2 Renovated terrace to the east
- 3 New windows at kitchen

**Building 2:**

- 4 New double-height space for dining room
- 5 New openings to south courtyard
- 6 New doors at entry
- 7 New open and closed kitchens
- 8 Additional WCs for patrons

**Building 1:**

- 9 New vestibule and south-facing windows
- 10 New info desk
- 11 Removal of existing kitchen & storage rooms
- 12 Additional WCs for patrons





# Mt. Greylock Distillery

## Building 1-3: F&B, Retail, Offices

Scope of work **Buildings 1,2,3**

Demolition as required, new double glazed windows and doors to match existing, additional windows as required, upgraded mechanical systems, replace plumbing and electrical fixtures (LEDs), refinish wood floors, repair exterior siding as required and repaint.

**Building 3**, in addition to above, remove portion of Level 2 to make double-height space. Add gable skylight.

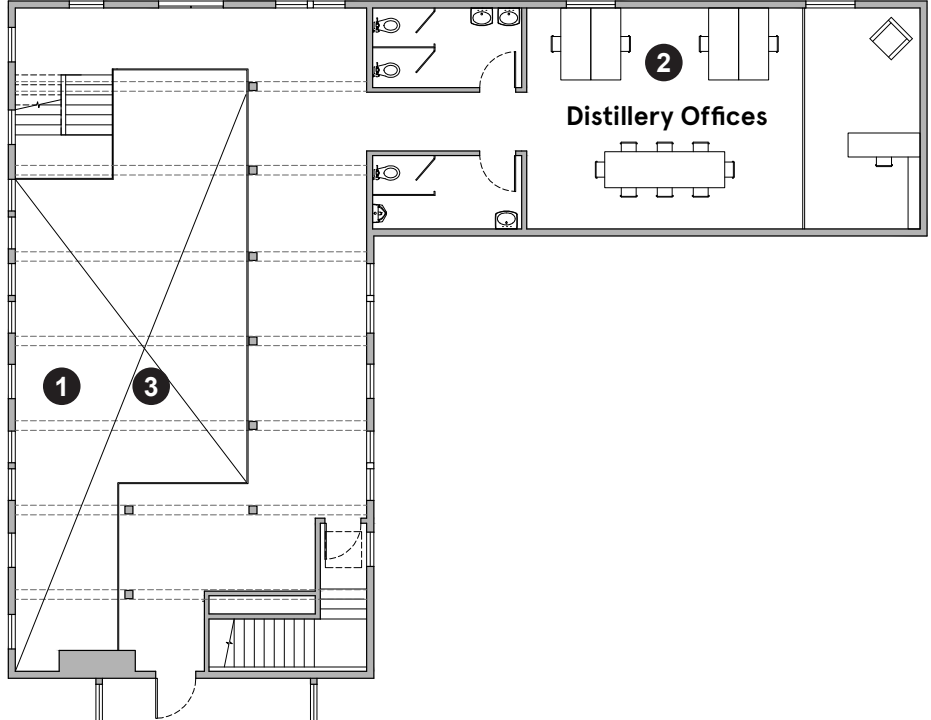


**Building 3**  
Café



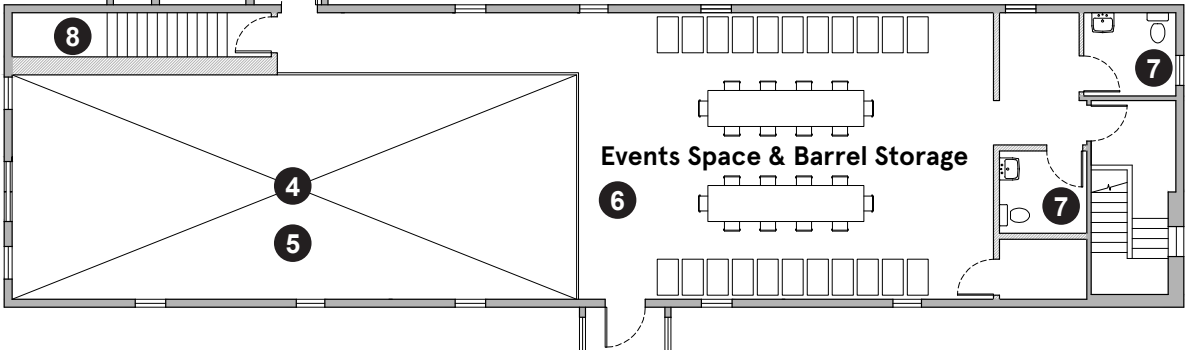
**Building 3:**

- 1 New double-height space for café
- 2 Renovated distillery office
- 3 New gable skylight above



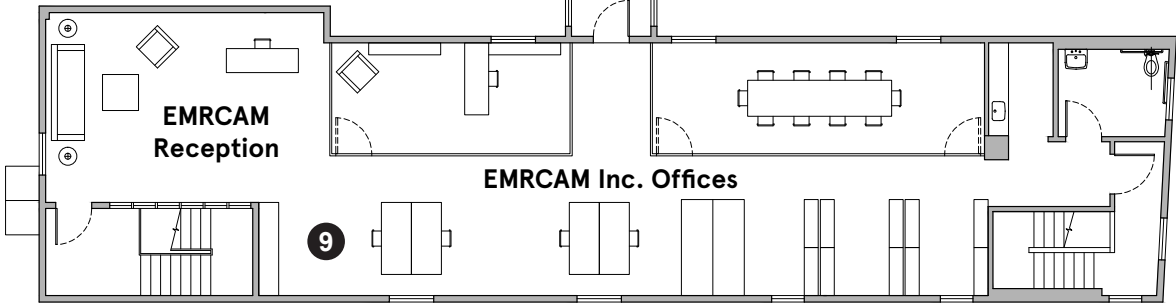
**Building 2:**

- 4 New double-height space for dining room
- 5 New gable skylight above
- 6 New event space and barrel storage
- 7 New WCs for event space
- 8 Re-configured egress stair

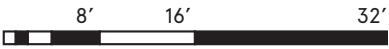


**Building 1:**

- 9 Renovated office space for EMRCAM Inc. Offices



**Level 2 Plan**



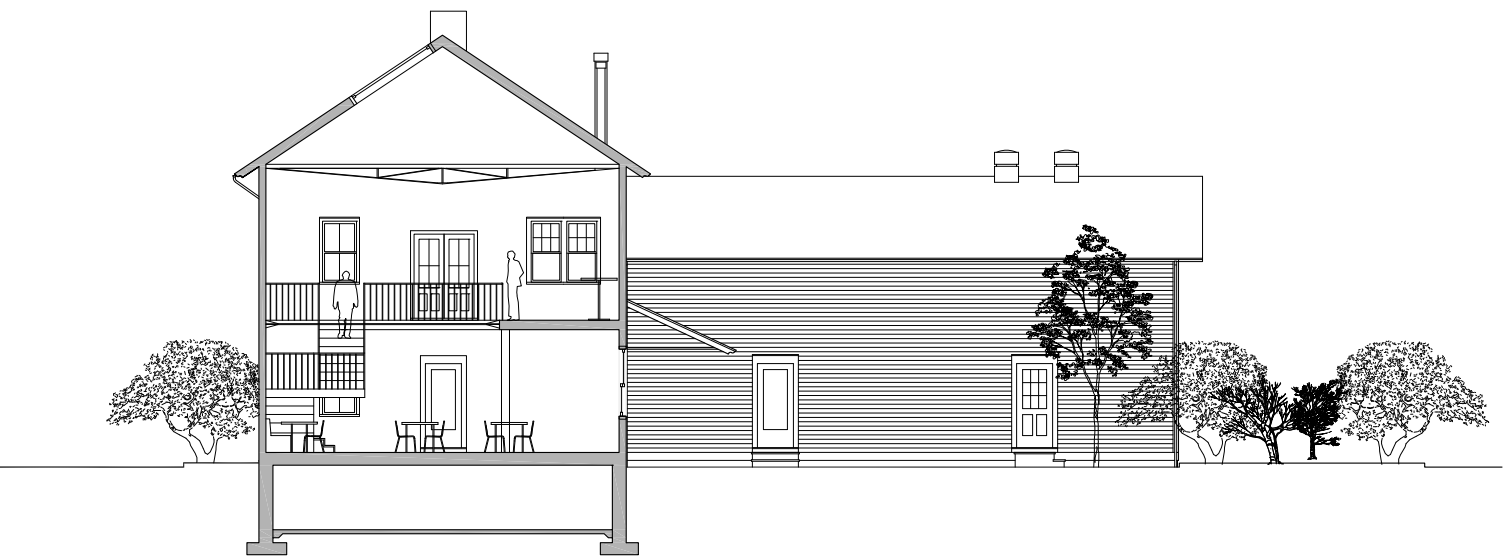




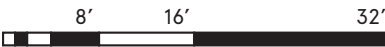
West Elevation



South Elevation



Section View North







**East Elevation**



**North Elevation**



**Section View West**



# Mt. Greylock Distillery

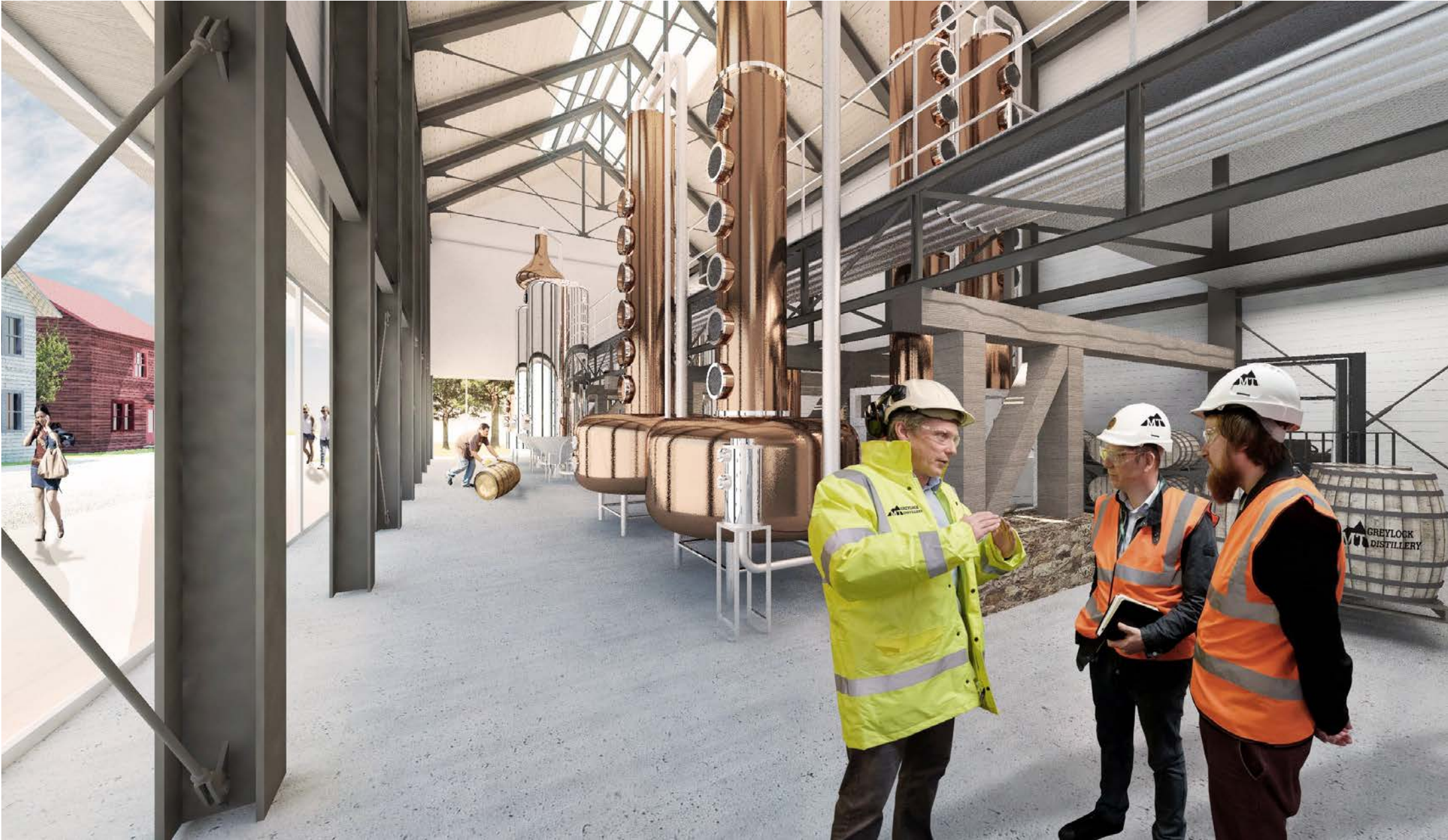
## Building 5: Distillery & Tasting Room

**Building 5a:** demolish buildings 5b and 5c. Add new insulated glazing to the east and south facades of Building 5. Remove existing floors, introduce steel reinforcing structure and locate new mechanical systems in basement of new 5b.

**Building 5b:** New steel frame building with full basement to replace existing buildings 5b and 5c. Clear span gabled steel structure with mezzanine, accessed via stairs and freight elevator. Main level and mezzanine to serve as a bar and tasting room. Full basement to contain restrooms, equipment rooms, and grain storage for the distillery.



**Building 5**  
Distillery Hall, Mezzanine View South

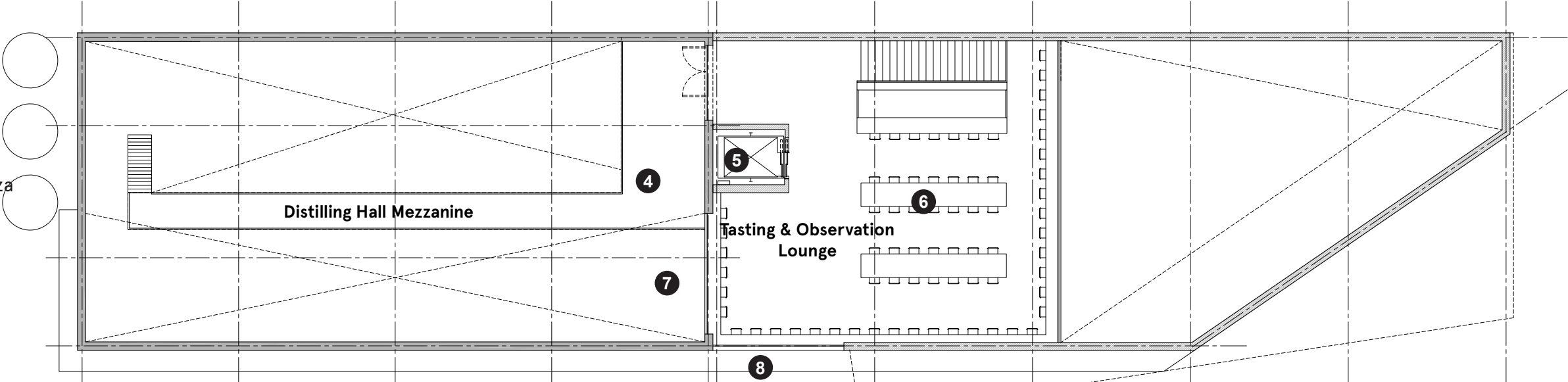


**Building 5**  
Distillery Hall, View South

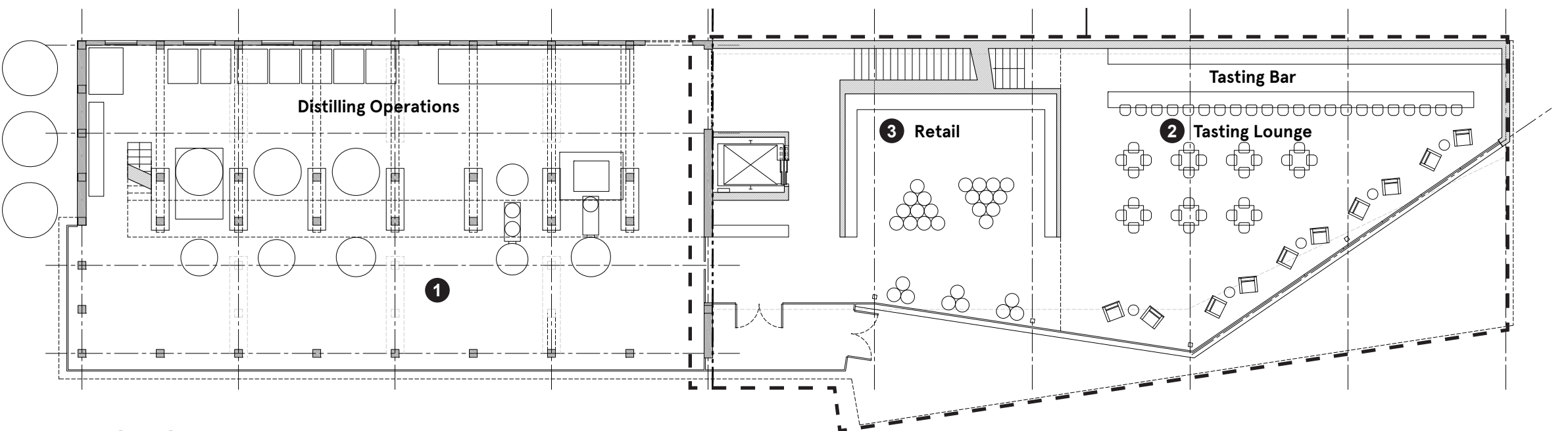


**Building 5:**

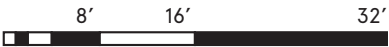
- 1 New triple-height distilling hall
- 2 New addition for tasting lounge
- 3 New retail space
- 4 New mezzanine in distilling hall
- 5 New elevator
- 6 New tasting & observation lounge
- 7 New window overlooking distilling hall
- 8 New windows overlooking central plaza



**Level 2 Plan**



**Level 1 Plan**





**Mt. Greylock Distillery**  
**Building 5: Distillery & Tasting Room**

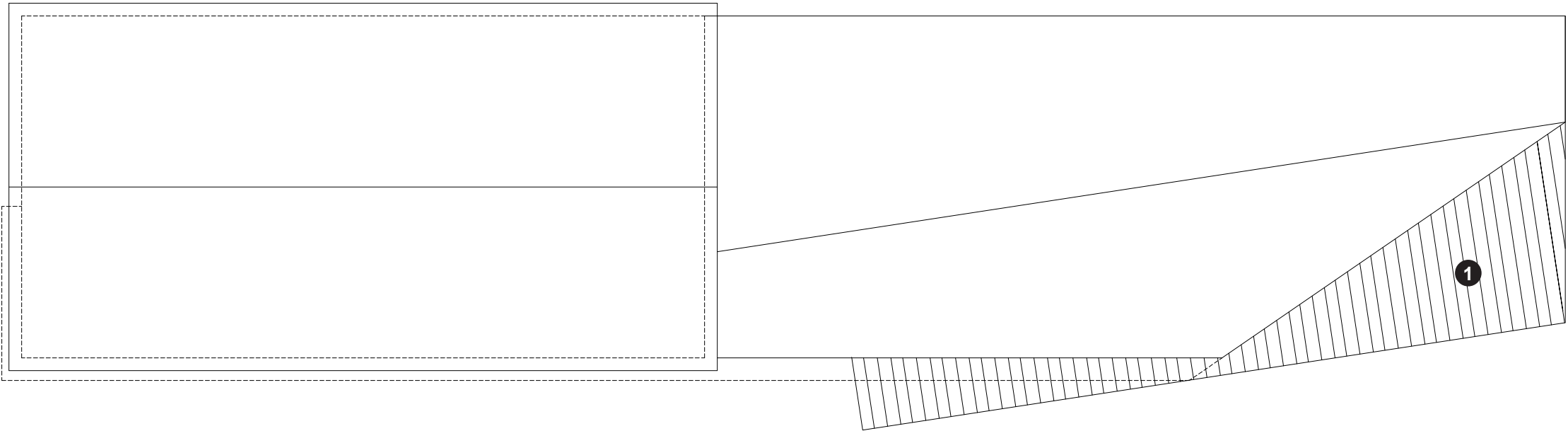


**Building 5**  
Tasting Lounge & Retail, View North



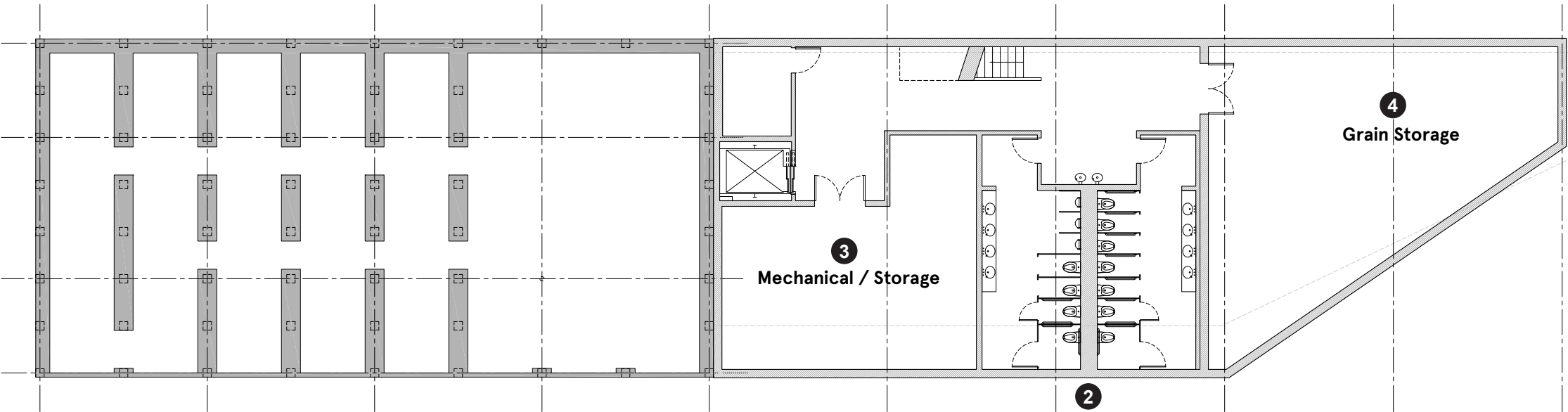
**Building 5:**

- 1 New wooden trellis roof



**Roof Plan**

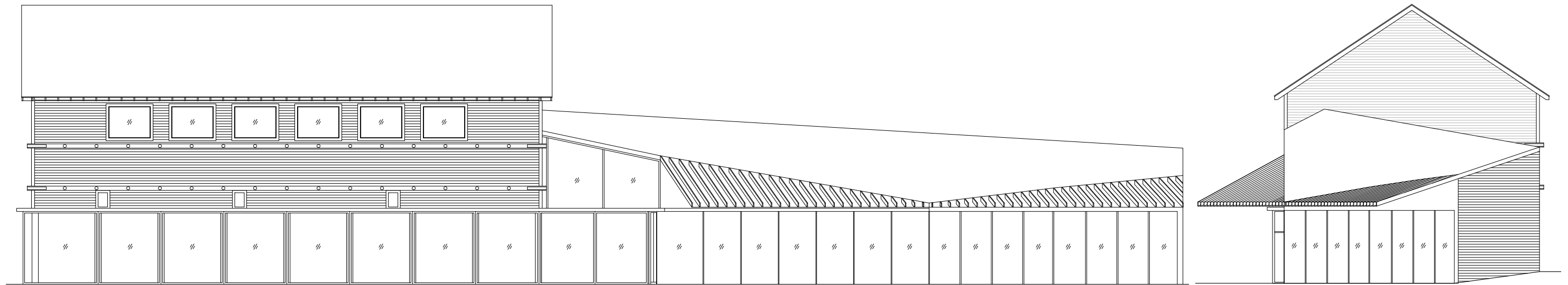
- 2 Relocated WCs
- 3 New mechanical / storage
- 4 New grain storage



**Basement Plan**

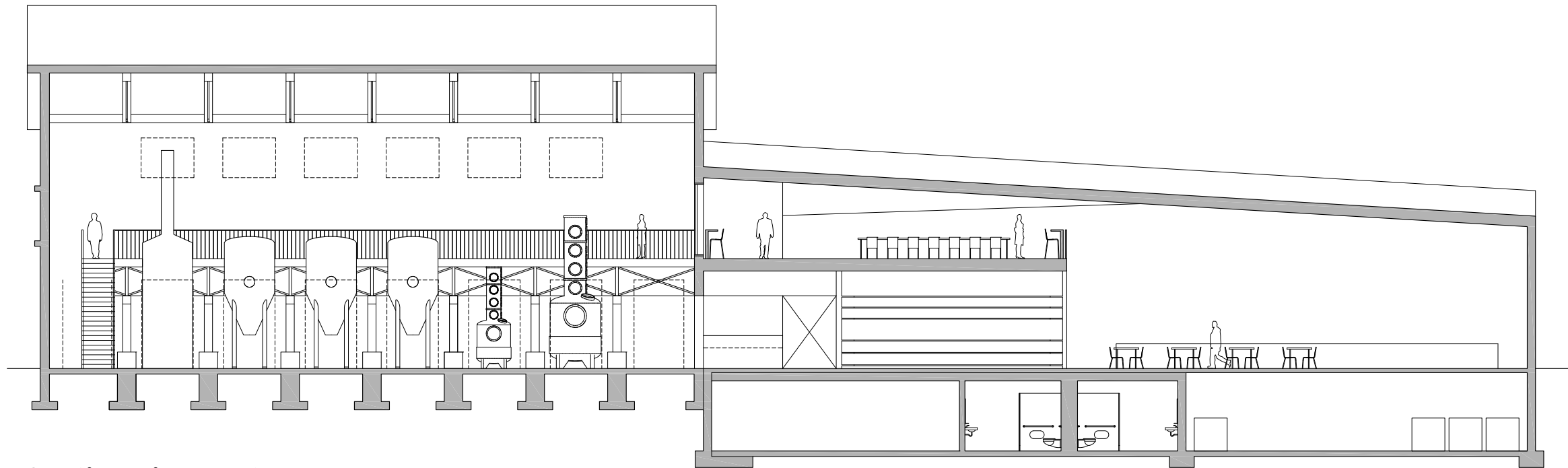




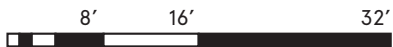


East Elevation

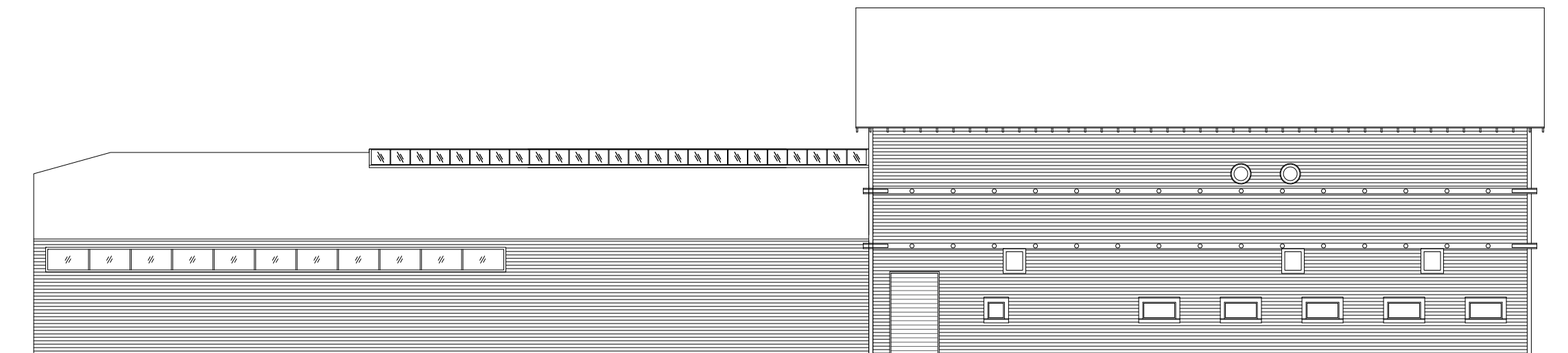
North Elevation



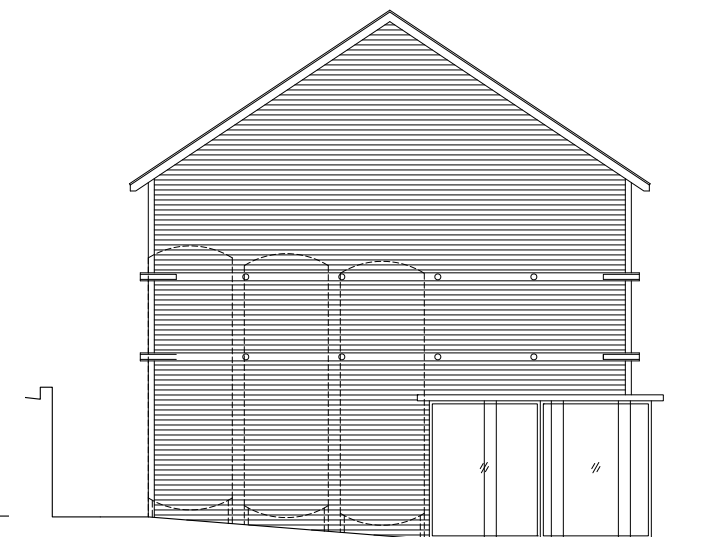
Section View East



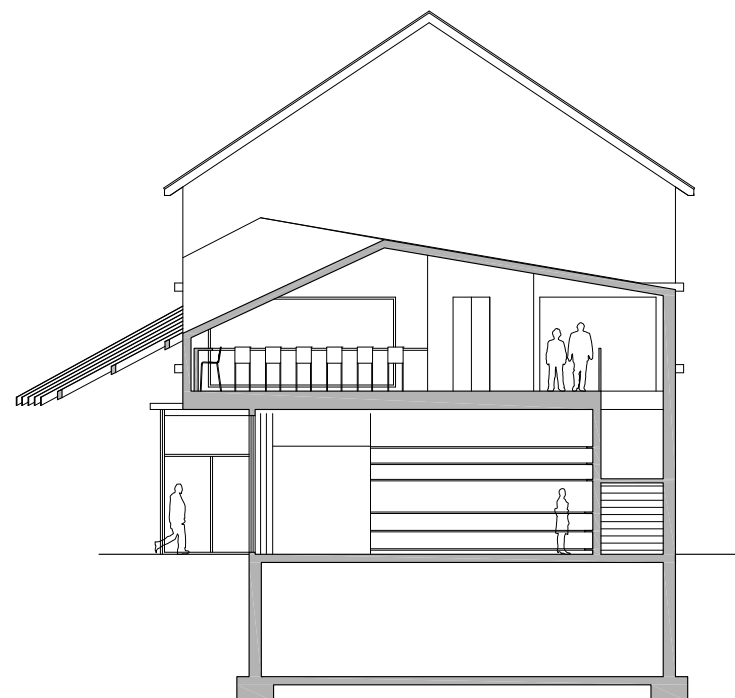




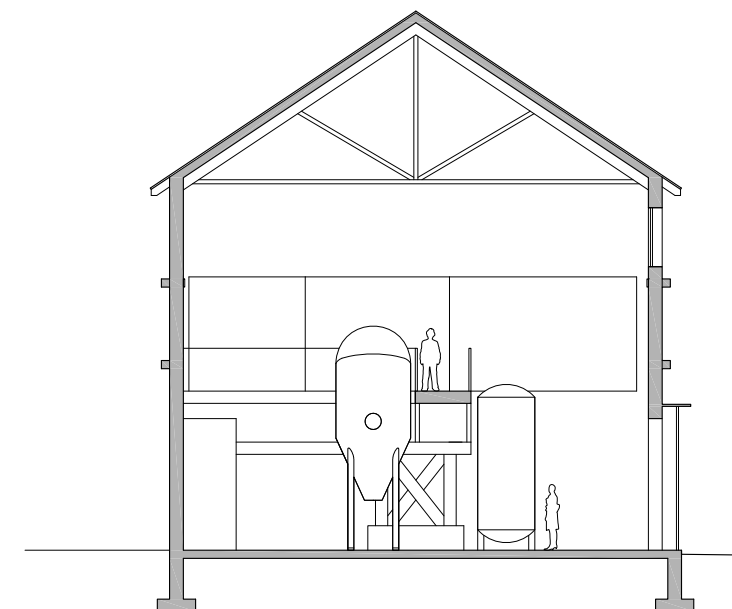
**West Elevation**



**South Elevation**



**Section View South**



**Section View South**



# Mt. Greylock Distillery

## Building 6: Events & Barrel Aging

### Scope of Work Building 6:

The existing interior partitions will be removed to create a large storage space that will double as a space for large events such as weddings or dinners.

To accomplish this goal, the following work is recommended: Demolish non-load-bearing partitions, ceilings and finishes. Remove Level 2. Raise north wing +/- 18" to match floor level at south wing. Replace existing window with insulated windows to match. Add windows to match. Replace entry doors. Add loading dock at south façade. New mechanical systems in new enclosed basement. New entry sequence to include terraced steps and ramp, new terrace, and doors.

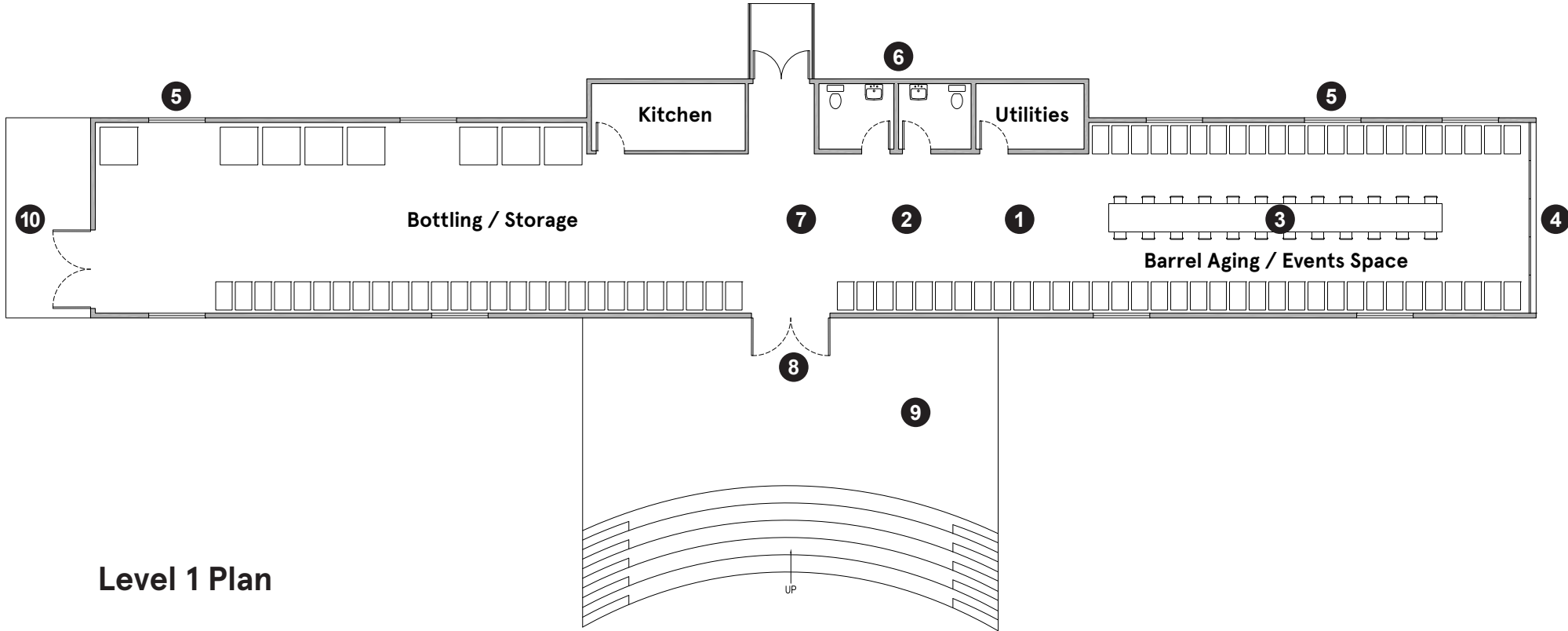


**Building 6**  
Events Space



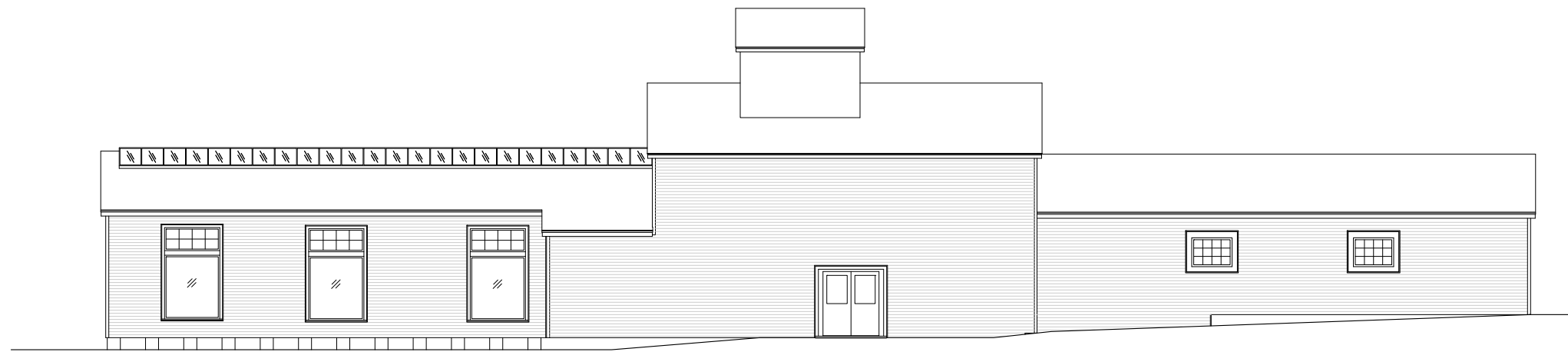
**Building 6:**

- 1 Barrel storage and event hall
- 2 Open to roof
- 3 New gable skylight above
- 4 New floor-to-ceiling glass façade
- 5 New windows to match existing
- 6 Relocated WCs
- 7 Cupola and existing historic equipment exposed above
- 8 Replace entry doors with new
- 9 New terrace
- 10 New loading dock

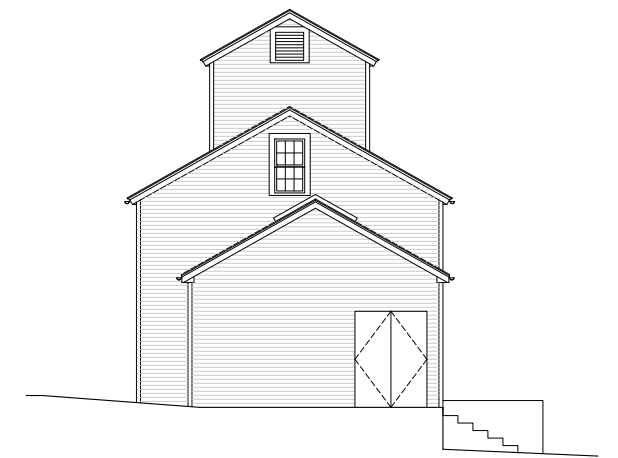


**Level 1 Plan**

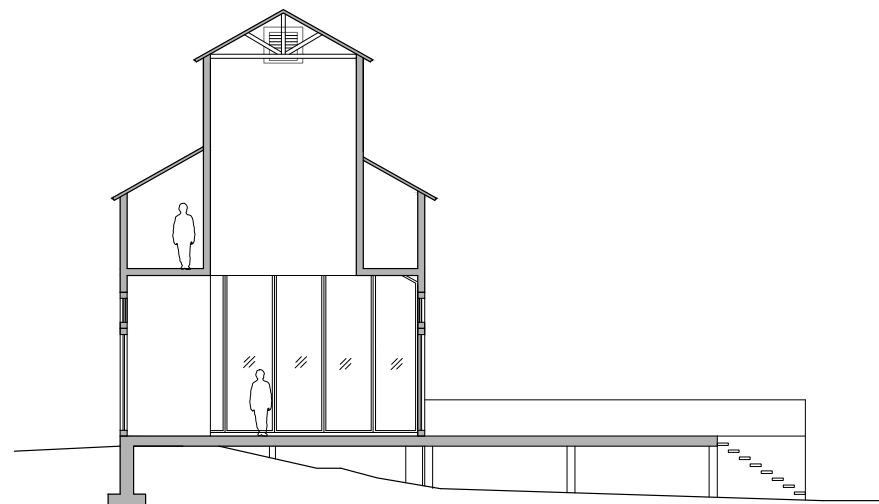




**West Elevation**



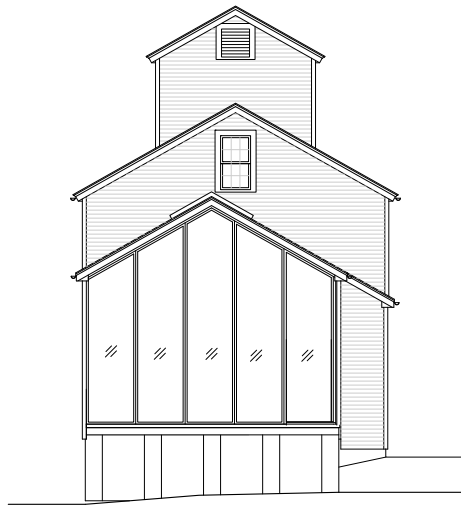
**South Elevation**



**Section View North**



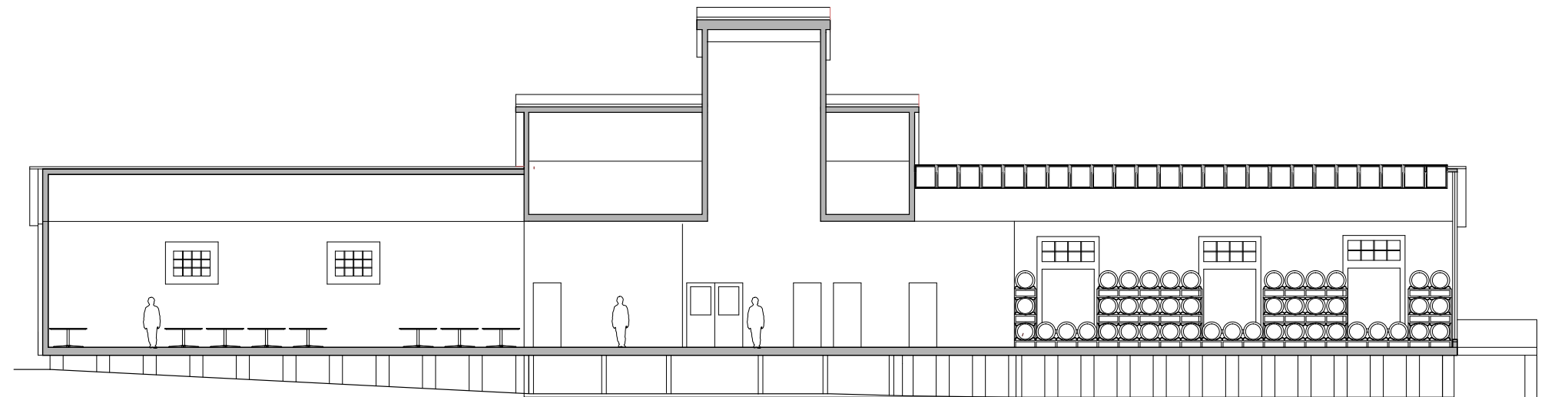




**North Elevation**



**East Elevation**



**Section View West**



# Museum of Time

## Building 4: Museum of Time

Scope of work, **Building 4 and 4a**  
The Museum of Time would include 4,000 SF of new exhibition space, 2,300 SF of new atrium space added to the renovated existing building of 12,000 SF for a total of 15,800 SF. The new atrium will be a welcoming threshold to the Museum of Time with full-height glazing and a generous lobby that will be a celebratory space for the Museum and the Park.

The new black box space will serve as a multipurpose room and theater which will screen installations such as Christian Marclay’s “The Clock” and Maarten Baas’s “Sweeper’s Clock.” New mechanical systems (Mechanical, Electrical, and Plumbing (MEP)), lavatories, and insulated exterior glazing to match existing.

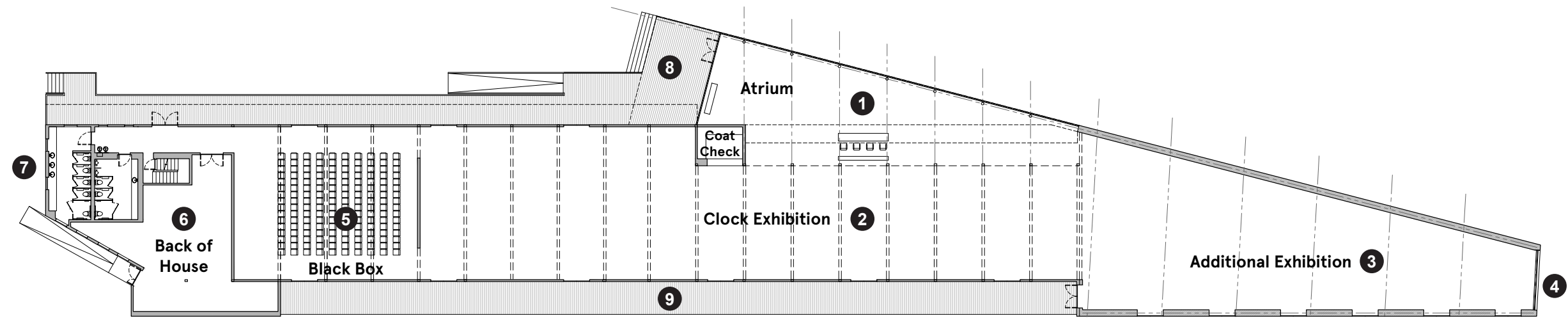


**Building 4**  
Atrium



**Building 4:**

- 1 New entry atrium
- 2 New exhibition space
- 3 Additional exhibition space
- 4 New picture window
- 5 New black box theater
- 6 New back of house / loading area / clock maintenance
- 7 Relocated WCs
- 8 Extended deck at entry
- 9 Renovated porch



**Level 1 Plan**







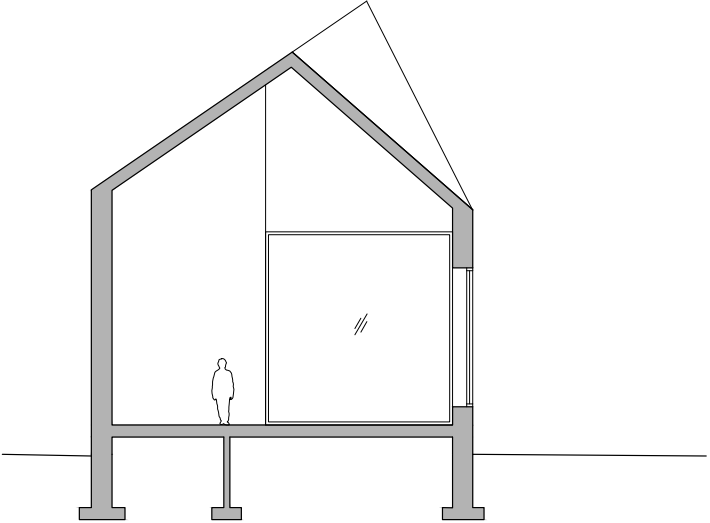
**Building 4b**  
 View North in Proposed Addition



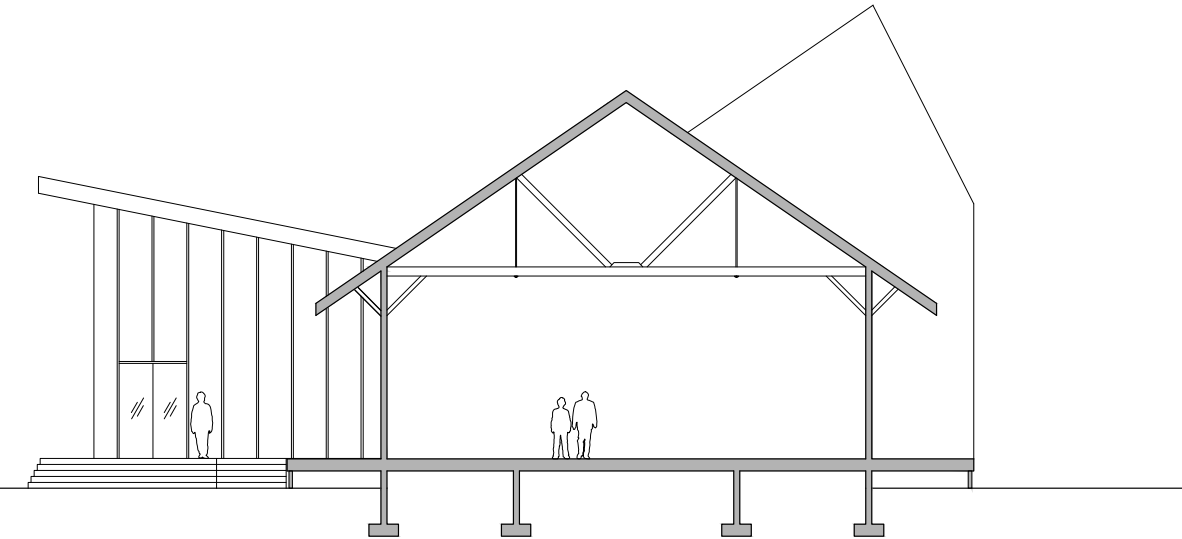


**Building 4**  
View South, to Atrium and Existing Building





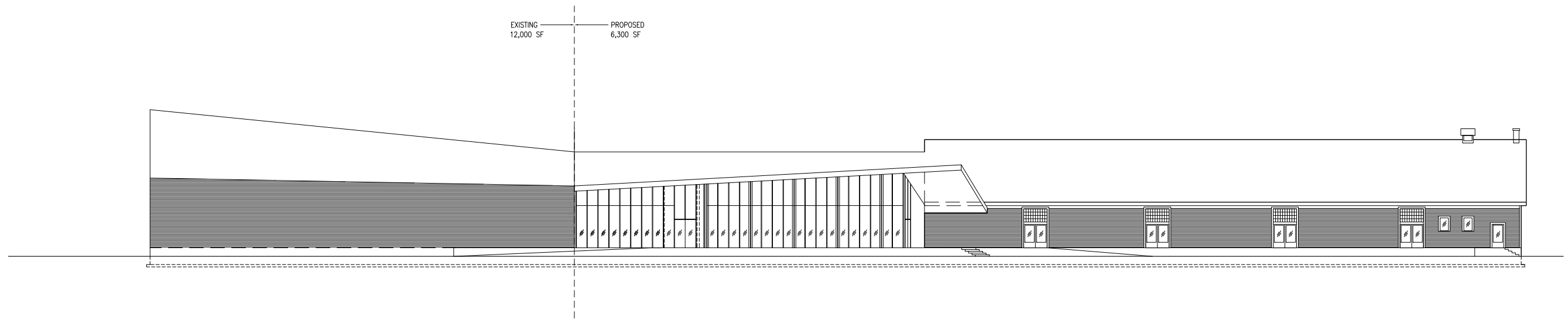
Section View North



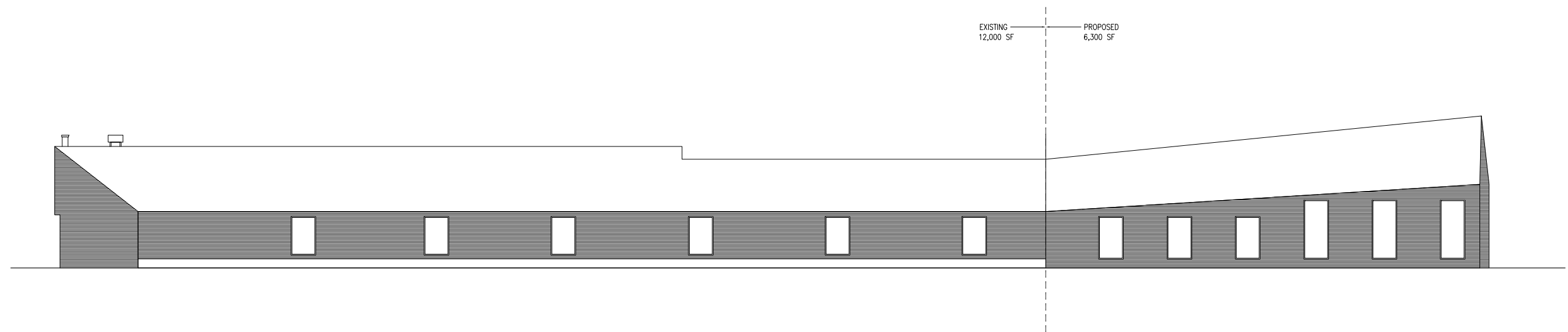
Section View North



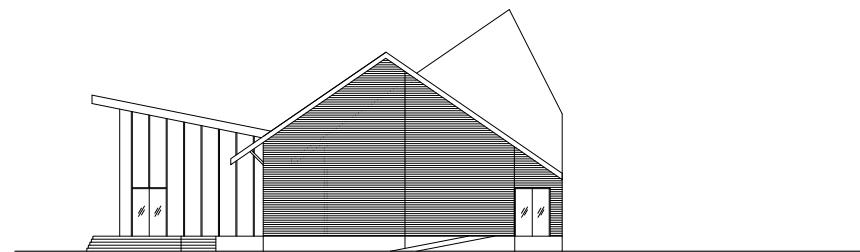




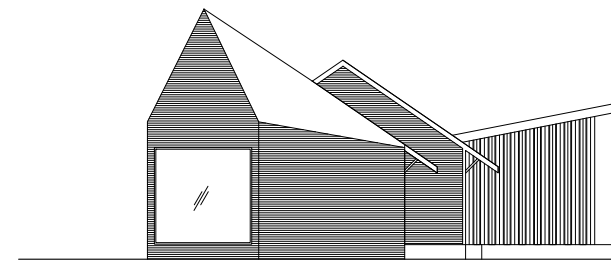
**West Elevation**



**East Elevation**



**South Elevation**



**North Elevation**





# References

EMRCAM, The Extreme Model Railroad and Contemporary Architecture Museum, Concept Development Study Phase 1, February 1916, GCAM/ Global Cultural Asset Management, Gluckman Tang Architects

The Massachusetts ‘Cultural Corridor’ in Northern Berkshire County, North Adams, MA – Williamstown, MA, 2015.

The North Adams Strategic Plan prepared by HR&A Advisors, Inc. & SHoP Architects, 2013.

North Adams/Masterplan Vision, SHoP Architects, 2014.

Hoosic River Flood Chute Naturalization, 30% Concept Design, May 2015







## The Economic Impacts of EMRCA

*The Extreme Model Railroad and Contemporary Architecture Museum*

Stephen Sheppard  
Center for Creative Community Development

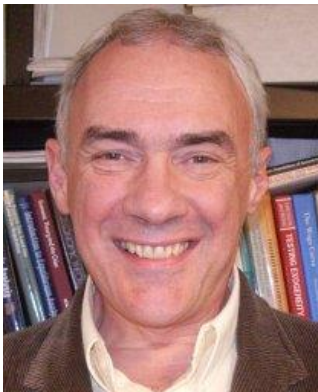


## Center for Creative Community Development

The Center for Creative Community Development (C3D) is a Williams College research center. The mission of the Center is to serve as a national focal point for research, education and training on the role of the arts in community development.

C3D undertakes research on the economic and social impacts of arts and cultural organizations in communities around the United States, and has developed a variety of tools and techniques for measuring and articulating these impacts in a diverse range of communities. The research focuses attention on the localized, neighborhood effects of the arts with a particular focus on communities in the midst of change. The Center, located on the Williams College campus, also works to make practical training in the application of these techniques and casemaking methods more widely available to policy makers, funders, arts administrators, and community development practitioners.

C3D's creation was made possible through the generous support of the Ford Foundation. Sustaining support has been made available from many sources, including the Institute of Museum and Library Services (IMLS), Leveraging Investments in Creativity (LINC), the National Endowment for the Arts (NEA), and the Massachusetts Cultural Council (MCC).



### Dr. Stephen Sheppard

Dr. Stephen Sheppard is the Class of 2012 Professor of Economics at Williams College and founding Director of the Williams College Center for Creative Community Development (C3D). Before coming to Williams, he had been at Oberlin College, the London School of Economics, Washington University in St. Louis and Virginia Tech.

Professor Sheppard's research focuses on the economics of housing markets and urban areas, particularly the impacts of environmental and cultural amenities on property values, land use regulation, the causes and consequences of urban expansion in cities around the world, and the impact of cultural organizations on urban and community development.

He has published more than 43 research papers and reports that have been cited in over 3,800 other research papers and books. His research has been supported by the Ford Foundation, the World Bank, the National Science Foundation, the National Endowment for the Arts, the Massachusetts Cultural Council, the Institute of Museum and Library Services, the National Center for Real Estate Research, the UK Department of Environment, Transport and the Regions and the UK Department for International Development.



## I. Introduction

In 1986, the Western Gateway Heritage State Park opened in North Adams. One of five “urban heritage” state parks opened around the Commonwealth that mostly celebrated a post-industrial heritage in cities or settings that had seen better days but had an interesting history to celebrate and story to tell. The North Adams Heritage State Park (HSP) provided interpretive museums to tell the story of the Hoosac Tunnel and the coming of the railroad to western Massachusetts, as well as the stories of Mount Greylock and the original settlements and settlers who came to the area. Beyond these attractions the Park offered spaces for local retailers and restaurants, a small but pleasant plaza but few other amenities.

Whatever its contributions to local education and local identity, with poor access, limited parking and small museums, the park could not be said to have been a significant driver of the local economy nor an important destination for visitors to the area. Such a destination would only come 13 years later with the opening and critical acclaim afforded to MASS MoCA. Meanwhile, the Heritage State Park spent four decades getting older and losing most of its commercial tenants.

In late 2015, a proposal was put forward by the EMRCA Group for establishing an Extreme Model Railroad and Contemporary Architecture Museum, a commercial boutique distillery designated as the Mount Greylock Distillery, and a small museum to house an impressive collection of clocks and time pieces designated as the Museum of Time.

During the first half of 2016, the project proposal moved through what was designated as Phase 1 during which a Concept Development Plan was put together and served as the basis for further design work and negotiations for access to and acquisition of the Heritage State Park site by the EMRCA Group. In late 2016 and the first half of 2017, Phase 2.1 was undertaken to produce cost estimates and more detailed operating plans for the proposal, working towards completion of a Comprehensive Development Master Plan for the site. This Master Plan is then to be used in Phase 2.2 of the process as the basis for attracting investment and elaboration of concrete steps required for the project.

Part of the Comprehensive Development Master Plan is an evaluation of potential audience and likely economic impacts of the proposal. This report presents such an evaluation and a description of the analysis undertaken to obtain the evaluation.

The evaluation suggests that the proposal has very considerable promise for attracting a large audience and generating a very significant impact on the local economy. Indeed, the project now envisioned would present what is predicted to be the most important cultural destination in Berkshire County, further strengthening the reputation of western Massachusetts and helping to support the transformation of the local economy.

**The analysis predicts that the project could generate over 2170 jobs for the local economy, adding as much as \$191 million per year to total output of goods and services in Berkshire County. After completion of construction, we predict a long-term addition of between 1400 and 2000 jobs, with the local economy producing between \$125 million and \$181 million more economic output. This would have a transformative impact on the region.**



## II. Expected Audience

In order to determine the economic impact of EMRCA and other components of the proposed redevelopment of the Heritage State Park (HSP), we need an estimate of the number of annual visitors who can be expected to visit EMRCA and other attractions. Making such estimates will always involve a certain amount of guesswork. For this study we seek guidance from several different sources:

- The experience of other cultural attractions locally, around the US and the world;
- Comparison with the number of visitors attracted to similar attractions;
- The relative attraction of history-themed attractions compared to other cultural attractions;
- Statistical analysis of survey data collected from a sample of individuals who have previously visited or inquired about visiting Berkshire County.

### *Experience of other cultural attractions*

The Guggenheim Museum Bilbao is a contemporary and modern art museum that opened in 1997 in the declining industrial city of Bilbao, Spain. Conceived as both an important cultural institution and a spur for local economic development, it was hoped that the museum would serve to reverse the economic fortune of the city. While Bilbao had enjoyed growth for the first 30 years following World War II, its population stagnated around 1980. From 1980 to 1990, population dropped a staggering 14.1% (Berkshire County's population during the same period declined by 3.9%). From 1990 through 2000 Bilbao's population declined a further 4.8% but has almost stabilized in the period since (following the opening of the museum).

While Bilbao is itself larger than Berkshire County, it is not within a densely populated urban area. This can be easily seen in the maps in Figure 1, which compare the location of North Adams and Bilbao, with circles that indicate the area within 175 miles (which might be taken as representing a half-day travel by car or train).

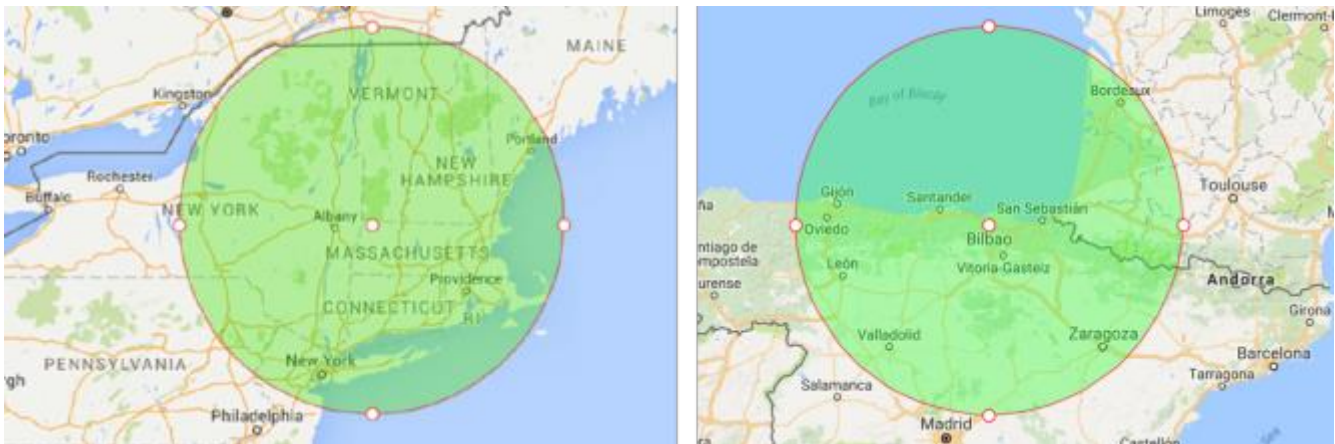


Figure 1: North Adams, Massachusetts and Bilbao, Spain

Within this distance from North Adams is a combined population of nearly 36 million. Within the same distance of Bilbao is a total population of about 9.1 million. Despite having a relatively modest population accessible to the city as a “day trip” the Guggenheim Museum Bilbao has been spectacularly successful, arresting the population decline and encouraging



more economic development to a degree now routinely referred to as the “Bilbao effect”. In 2016, the 20<sup>th</sup> year since it opened, travelers continued to come to Bilbao and the museum recorded more than **1 million visitors**. This at least suggests that the EMRCA and other attractions being developed in or near HSP might approach this level of visitors.

### *Experience of similar attractions*

A further indication of the level of potential audience might be obtained by considering the model railroad and model transportation museum in Hamburg, Germany called Miniatur Wunderland. Open at the very end of 2000, with initial installation completed in August of 2001, the attraction is extremely popular despite being located in relatively cramped quarters in the upper floors of a refurbished industrial building in the Speicherstadt district of Hamburg.



*Figure 1 - Miniatur Wunderland in Hamburg*

Miniatur Wunderland, shown in Figure 1<sup>1</sup>, has attracted large numbers of visitors since completing installation of the exhibits. As of July of 2016, the exhibition had attracted 14,385,217 visitors from over 190 countries since opening. Marking from the completion of the installation, this amounts to about **959,000 visitors per year**.

While Hamburg itself is a large urban area with about 4.9 million residents in the metropolitan area, the location of Miniatur Wunderland itself is not particularly well served by roads or public transit, and the building where the models

are located is somewhat dark and constrained in accessibility (a single elevator or walk up several flights of stairs). In such conditions to attract nearly a million visitors per year on average is suggestive of the potential of a more attractively situated and diverse display such as envisioned for EMRCA and other HSP attractions.

### *Experience of local cultural attractions*

The Advocacy Report that can be obtained from the web site of DataArts<sup>2</sup> (formerly the Cultural Data Project) permits us to obtain total numbers of visitors for all cultural attractions in any zip code area, county or state. Focusing on the North Adams and Williamstown zip codes, we discover that in fiscal year 2010 (the most recent data available for these areas)

<sup>1</sup> By Gulp - Von Gulp in die deutschsprachige Wikipedia geladen., CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=1452362>

<sup>2</sup> <http://www.culturaldata.org/advocacy>

the total number of **visitors was 518,455**. Almost all of these would have come to MASS MoCA (in North Adams) or the Clark Art Institute or Williamstown Theatre Festival (in Williamstown). One intuitively plausible argument is that EMRCA and other HSP attractions should face little difficulty persuading a similar number of persons to visit the attractions (or persuading the visitors already coming to these two adjacent communities to extend their visit by a day) and so this might be taken as a lower bound on the number of likely visitors.

The largest audiences attracted to any existing Berkshire County cultural attraction are those who come to visit the Boston Symphony Orchestra's Tanglewood performing arts center. In 2016, Tanglewood attracted 356,000 visitors to performances that took place over a three month season. About 84% of these visitors were from outside of Berkshire County and so can be taken as bringing new economic activity to the region that would not otherwise take place.

These numbers are impressive, particularly when we consider that classical music (which constitutes the majority of Tanglewood programming) is a relatively niche audience. According the most recent Survey of Public Participation in the Arts<sup>3</sup>, the proportion of Americans who attend a classical music concert each year is about 8.8%. By contrast, 23.9% of Americans visit a historical site or historical-themed museum each year, suggesting that the audience for an EMRCA like experience is about 2.71 times the audience for Tanglewood. Setting aside the difference between the length of season (it is expected that EMRCA will be open year round) this would suggest a **potential audience for EMRCA of 966,864**. If 84% of these visitors came from outside of Berkshire County this would bring **812,165 non-local visitors per year**.

#### *Analysis of survey data*

All of these observations seem reasonable enough, but it would be comforting to have some analysis based on data from US audiences who have visited or contemplate visiting the Berkshire County region, and who are responding specifically to the concept of EMRCA and associated attractions.

To provide such analysis we organized and conducted a survey based on a mailing to the 1Berkshire (Berkshire Visitor's Bureau) mailing list. The e-mail went out in mid-November of 2016. The mailing included a description of the ideas that motivate EMRCA, although developments in the planning and design of the facility have progressed since that time so that it is now expected to be larger and housed in a more architecturally unique and attractive structure.

The survey produced 524 complete responses (some partial responses had to be discarded) from 292 zip code areas in the US and several countries outside of the US. Though somewhat modest in size, the spatial distribution of responses is broadly similar to both the distribution of visitors to MASS MoCA and to Tanglewood, which we take as indicative that the survey provides good representation of the group of individuals likely to travel to the region. The distribution of visitors is indicated in Figure 2 below.

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<sup>3</sup> *A decade of arts engagement: findings from the survey of public participation in the arts, 2002–2012*, National Endowment for the Arts Office of Research and Analysis, NEA Research Report #58, January 2015.



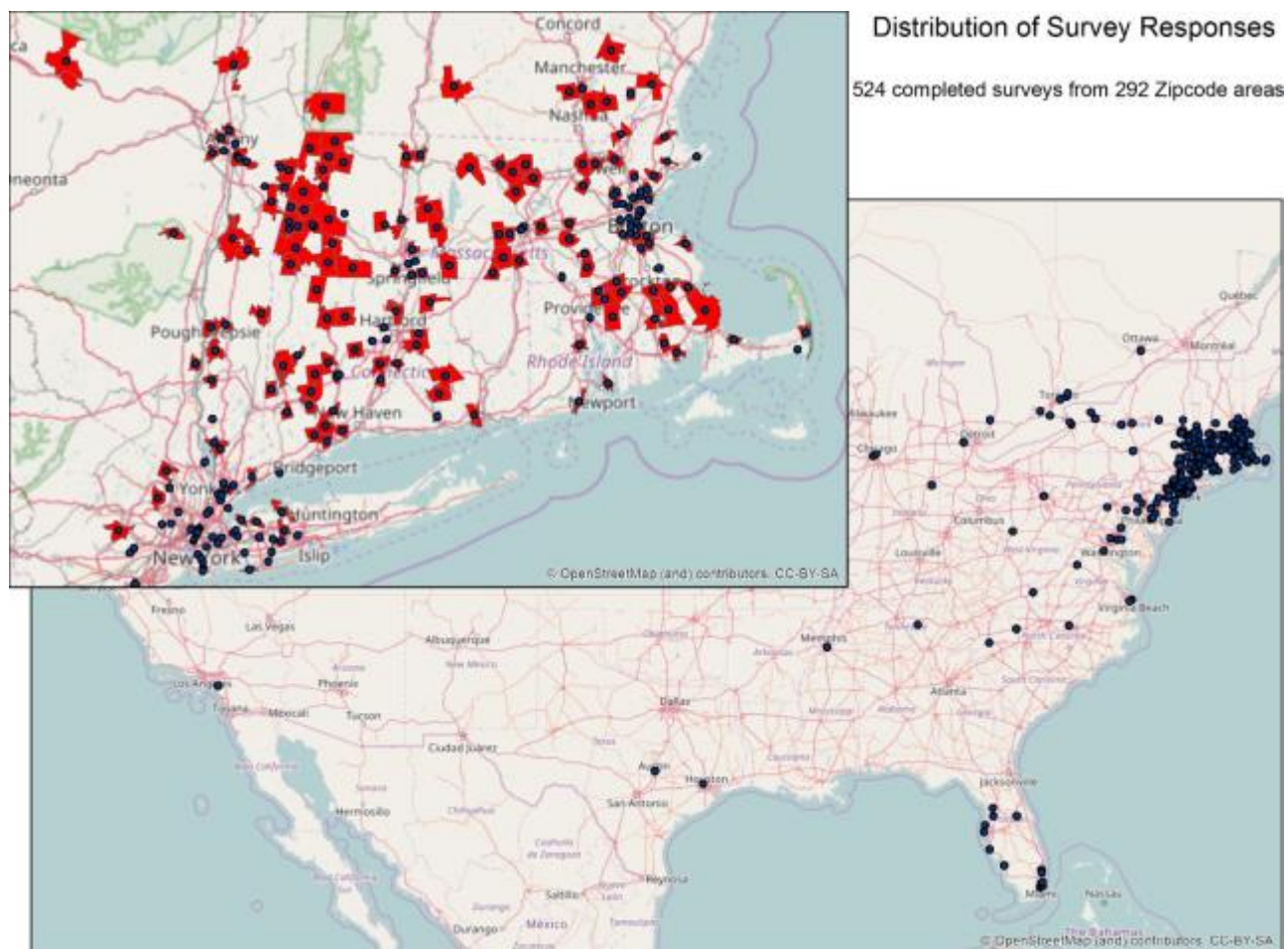


Figure 2 - Respondents to EMRCA Survey

Respondents were asked a variety of questions, including not only their level of interest in coming to visit EMRCA and the frequency of those visits, but also the timing of recent visits to the region and their expenditures on lodging, food, retail and other expenditures during those visits. These data were summarized and used to compute both the size of expected audience and the likely economic impact of those visitors when they do come to the area.

Of course, not all of the respondents could be expected to come every year. The year of most recent visit for respondents ranged from 2000 to 2016, with about 95% of respondents having come within the past 10 years. Not all respondents indicated firm interest in the planned content of the EMRCA. Approximately 67% of respondents indicated that they definitely would be interested in visiting and 84% indicated that they were definitely or possibly interested in visiting.

To estimate the size of the possible market, we considered the respondents from each zip code area as a representative sample of that area. We multiplied the share of respondents who said “Yes, definitely” or “Yes, possibly” times the 2010 population of each zip code area, and summed the result. We take this as an estimate of the potential number of visitors over a ten year interval, resulting in an estimate of **650,492 visitors per year**. If we focus only on those responses from outside of Berkshire County, this would provide a smaller number of **521,955 non-local visitors per year**.

We regard this survey approach as relatively cautious. There are many zip code areas containing substantial population from which we received no responses (either because the Berkshire mailing list contained no persons from those areas or the ones that are there did not respond to the survey). From these we have estimated zero visitors. Given the unique nature of the EMRCA design and other related attractions in the area, and the general similarity between estimates obtained through several lines of argument and analysis, we consider this a very achievable and sensible minimal estimate.

Combining these observations and analyses together, we have a range of estimates, summarized in Table 1. These range from 518 thousand to one million per year. As noted at the beginning of this section, estimating future audience levels will always involve a good amount of guesswork, but if we average these different observations we obtain what might be called a reasonable expected level of annual attendance of nearly 819 thousand per year. If, as is the case with MASS MoCA and Tanglewood, about 84% of these come from outside of Berkshire County, we would expect nearly 688 thousand non-local visitors each year.

*Table 1 - Potential EMRCA Audience*

<b>Source of information</b>	<b>Estimate</b>
Bilbao	1,000,000
Miniatur Wunderland	959,000
North Adams and Williamstown	518,455
Tanglewood	966,864
Survey	650,492
Average	818,962
Non-Local	687,928

In summary, there are reasonable arguments for expecting the annual number of non-local visitors to EMRCA to be somewhere between a minimum of about 500,000 and perhaps as high as 900,000 (if total numbers of visitors were to be approximately 1 million). For our analysis of economic impact, we therefore consider two scenarios. A “cautious” scenario of 500,000 non-local visitors, and an “optimistic” scenario of 750,000 non-local visitors. We now turn to a presentation of these estimated impacts.



### III. Local Economic Impacts of EMRCA

In this and the following sections we present estimates of the economic impact of the EMRCA and related HSP project proposals. In order to produce these estimates and to understand their interpretation, it is necessary to begin with an explanation of several key points.

- What sort of economic model is used to obtain the estimated impacts?
- What data are used to adapt that model to the context of EMRCA and the HSP proposals?
- Over what geographic area do the estimated impacts apply?
- For what time periods are the estimated impacts provided?

We address each of these questions before presenting the estimates themselves.

The economic model used for analysis of the local economy in Berkshire County and North Adams is called an “input-output” or inter-industry model. This approach is widely used for analysis of local and national economies. This approach divides the economy up into multiple sectors for groups of firms producing similar goods and services (ranging from “oil seed farming” to “museums” to “automotive repair and maintenance”). There are also sectors for households in various income groups, and for firms and households located outside the geographic region of interest. For our economic model of Berkshire County, there are over 500 different potential economic sectors, although not all of them have any employment or activity in the county at present.

For each of these sectors, the model tracks the patterns of sales and purchases between them. Purchases by food retailers from local bakers or local vegetable farmers. Sales by these retailers to local households, etc. These patterns of sales and purchases are tracked through surveys of business and consumer expenditures that are conducted regularly by the Bureau of Economic Analysis<sup>4</sup> within the US Department of Commerce. The data are collected as part of information required for the US Income and Product Accounts that are used to calculate US national GDP and other important economic data required for government and policy makers to do their work.

The data are disaggregated to the state, county and local zip code level using a combination of actual measurements and approximations, and are made available by commercial firms or organize the data in consistent ways for use in local economic modeling. We obtain the data for the Berkshire County model from Implan<sup>5</sup> (formerly known as the Minnesota Implan Group) who have data for the entire US and several foreign countries and whose data are widely used for economic analysis by state and local governments, local chambers of commerce, and researchers interested in understanding local economies.

The data are always available with a delay due to the time required to conduct the data surveys and process the information. The data we use for this analysis are the latest available and reflect the patterns of trade observed in the US economy during 2015. The estimates we present are always adjusted to the time period when the expenditures are expected to occur, and the value of the associated impacts reported for those same time periods adjusted for

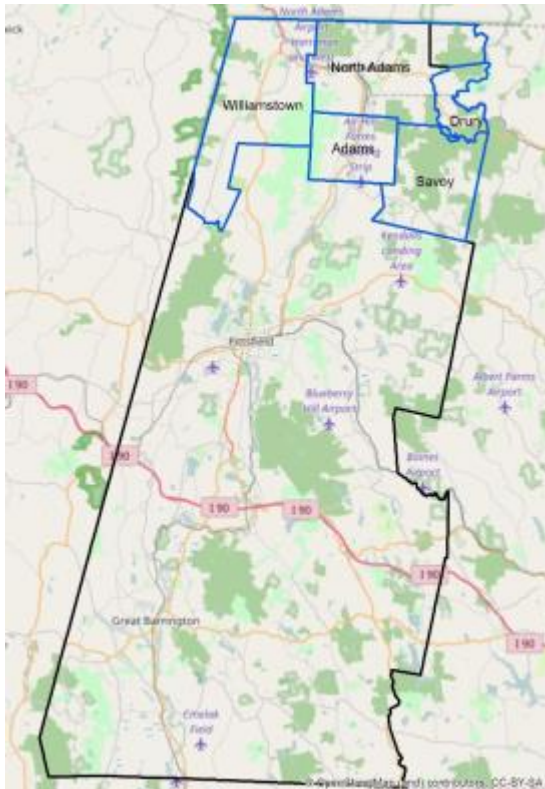
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<sup>4</sup> [https://www.bea.gov/industry/io\\_annual.htm](https://www.bea.gov/industry/io_annual.htm)

<sup>5</sup> <http://www.implan.com/company/>

expected changes in the price level due to inflation. Patterns of trade can be disrupted by significant changes in technology and other severe economic dislocations, but these input-output models have generally been found to be reasonably accurate over periods of 10-20 years.

To analyze the impact of EMRCA and associated projects, we identify the economic sectors which are expected to experience changes in “final demand” as a result of the project. This means we identify expected expenditures to construct the buildings and assemble the exhibits, then expected expenditures to staff and operate each project, and finally the expected expenditures by visitors who come from outside of the “local area” because of the project.



*Figure 3 - Berkshire County and Northern Berkshire*

We focus on these “non-local” visitors out of caution to avoid overstating the economic impact of the project. A family who comes from, say Stockbridge to spend the day in North Adams visiting EMRCA will surely generate some net addition to the North Adams economy so why not count it? The answer is that such a family might otherwise have spent the day visiting the Norman Rockwell Museum in Stockbridge, but now will not do so. As a result the “boost” to North Adams is offset by the “loss” to Stockbridge so there is no net gain to Berkshire County.

The distinction between local and non-local is important for another reason related to analysis of the model. When a project takes place, it purchases some of its inputs (whether for construction or for operations) from local businesses. These local businesses then in turn expand, purchasing some inputs locally hiring workers who spend some of their labor income locally. This “recycling” of local expenditures in the local economy is the source of what is called the “indirect and induced impacts” or

the “multiplier effect” that enhances the impact of a project. When the businesses purchase their inputs from outside the local area (reducing the indirect impacts) or the employees spend their incomes outside of the area (reducing the induced impacts), the multiplier effect is diminished.

There may be circumstances when we do want to count gains to the North Adams area as real gains even if they come at the expense of some other area within Berkshire County. We may similarly want to regard North Adams businesses who purchase inputs from firms in Pittsfield or elsewhere in the county as a “loss” to the indirect impacts because of spending outside the local area. For this reason we define and undertake analysis for a North Adams region consisting of the North Adams zip code and all zip code areas in Berkshire County that are adjacent to it. Both of the regions we analyze are shown in Figure 3. Berkshire County is outlined in black, and the cluster of blue zip codes near the top comprise the North Adams region that we consider. In the final analysis the impacts estimated for the two regions is



similar, reflecting the fact that most of the economic impacts are felt locally, and most of the visitors are expected to come from outside of Berkshire County.

In order to estimate impacts, we have to assign expenditures as changes to final demand in particular economic sectors and assign these changes in final demand to particular time periods. We obtained estimates of total construction costs, costs of assembling the installation, and operating cost for staff and other requirements once EMRCA is open. From the current EMRCA plans we obtained total construction costs which we divide equally over two years from mid-2018 through early 2020. Installation costs we assume will all take place in the last year of the construction and are evaluated as of 2020.

For projects such as EMRCA and associated HSP projects that have yet to break ground, the timing of the construction and opening, along with the final costs of construction and operation, should most properly be understood as estimates. Current EMRCA plans call for construction of the Mt. Greylock Distillery and the Museum of Time within the existing footprint of HSP to take place simultaneously with the construction of EMRCA itself. In this and the following section we consider a less aggressive schedule that anticipates construction of HSP beginning in 2021 and opening the following year, in 2022. Table 2 identifies the costs expected for different components of the project and the times when I have evaluated them. The impacts are separately evaluated below, so if a more compressed time schedule is anticipated the amounts can be added together.

*Table 2 - Costs and Timing for Project Events*

Event	2018	2019	2020	2021	2022	2023
EMRCA Construction	\$14,230,471	\$14,230,471				
EMRCA Streets, Access and Parking	\$4,343,443					
EMRCA Installation		\$12,646,642				
EMRCA Operation <sup>6</sup>			\$5,384,241	→		
Visitors <sup>7</sup>			\$86,490,000	→		
Museum of Time Construction				\$7,500,000		
Distillery Construction				\$7,378,027		
Museum of Time Operation					\$2,275,000	→
Distillery Operation					\$6,675,407	→

The estimated expenditures for visitors are based on two sources. The basic expenditures per person on lodging, food, and other expenses are obtained from the survey discussed in the previous section for those cases where the respondent provided a date of most recent visit, the size of the group and the amounts spent per day during that visit. The reported expenditures were adjusted using the CPI (consumer price index) to account for changes in the prices from when the visit took place until 2020. This information was augmented using data from surveys of Tanglewood audiences conducted in March and April of 2017 concerning the division of “other expenditures” between travel costs, local retail, and other services. Finally, the Tanglewood data were used to estimate an average length of stay for visitors.

The resulting expenditures per non-local visitor are presented in Table 3 below. These figures

<sup>6</sup> Operation expenditures and Visitor expenditures are multiplied by 1.5 to evaluate the 750,000 visitor scenario

<sup>7</sup> The symbol → indicates that the expenditure given to the left is expected to be repeated each year

are then multiplied by 500,000 (for the “cautious” scenario) or 750,000 (for the “optimistic” scenario) to obtain visitor expenditures used in obtaining the estimated economic impacts.

*Table 3 - Expenditures per Visitor from Survey*

<b>Item</b>	<b>Amount</b>
Hotels and motels	\$68.57
Full-service restaurants	\$52.89
Child care and other services	\$3.88
Retail - Gasoline stores	\$14.12
Retail – Food, beverage and other stores	\$33.52
<b>Total</b>	<b>\$172.98</b>

Analysis of economic impacts of EMRCA on Berkshire County indicates that EMRCA alone is likely to be very significant for the region’s economy. Table 4 below presents an evaluation. In the second column, headed 2018-19, the estimated impacts of the first year of construction (EMRCA building and construction of new street access and parking) are presented. The third column presents the impacts of completion of construction and installation of the EMRCA exhibition. The fourth and fifth columns present, respectively, the estimated impacts of combined expenditures from non-local visitors and from EMRCA operations at the cautious and optimistic scenarios.

*Table 4 - EMRCA Impacts on Berkshire County*

	<b>2018-19</b>	<b>2019-20</b>	<b>Total 2020 forward</b>	<b>Total 2020 forward</b>
<b>Employment</b>			<i>500k visitors</i>	<i>750k visitors</i>
<i>Direct</i>	129	254	1,024	1,535
<i>Indirect+Induced</i>	73	138	315	472
<i>Total</i>	202	391	1,339	2,007
<b>Labor Income</b>				
<i>Direct</i>	\$6,764,434	\$12,647,907	\$29,565,787	\$44,256,101
<i>Indirect+Induced</i>	\$3,336,185	\$6,100,167	\$13,711,608	\$20,522,499
<i>Total</i>	\$10,100,620	\$18,748,074	\$43,277,394	\$64,778,600
<b>Average Worker Earnings</b>	\$49,923	\$47,915	\$32,324	\$32,273
<b>Total Economic Output</b>				
<i>Direct</i>	\$18,573,914	\$26,877,112	\$73,240,611	\$109,699,421
<i>Indirect+Induced</i>	\$9,299,683	\$17,609,674	\$39,728,078	\$59,458,562
<i>Total</i>	\$27,873,597	\$44,486,786	\$112,968,689	\$169,157,983

There are several important points to note from the analysis summarized in Table 4. The impact of EMRCA alone on local employment is significant. The table presents three broad metrics of economic impact: total employment, total labor income (with associated average earnings for the jobs created), and total economic output for the region. Within each metric group, a figure is presented for the “direct” impacts, which represents the impact generated by expenditure or investment in the relevant sector itself. Then the “indirect+induced” impacts are presented, which capture the multiplier effects that occur as businesses purchase inputs from local suppliers and workers spend their incomes at local businesses. Finally, the “total”



impacts are presented, which sum these two measures of economic impact together.

Even in the first year of construction, the project would add over 200 jobs to the local economy. The average labor income provided by these jobs would be just under \$50 thousand, about \$1000 per year above the average for all occupations in the county. In the second year, with continued construction of the museum and installation of the exhibits, employment impact rises to 391, exceeding the estimated impact of MASS MoCA, the other significant cultural destination in North Adams and one of the major destinations in the region.

It is with the opening and expected flow of visitors to the area that the most significant impacts would be observed. Even with 500,000 visitors per year, the combined impact of EMRCA operations and the visitors would create 1,339 jobs in the region. While a higher proportion of these jobs would be in the services required for visitors so that the labor income per worker is reduced, the average wage would still be above \$32 thousand per year (\$16 per hour) and would be expected to provide welcome (and important) employment opportunities to local residents.

Turning attention to a higher level of visitors, when EMRCA attracts 750,000 per year then the increased scale of operations plus the increased services provided to the visitors themselves would generate over 2000 jobs and add more than \$169 million to the total economic output of Berkshire County. This would make EMRCA, by a considerable margin, one of the most important economic forces in the region and **the** most important cultural destination.

Taking the North Adams region discussed above as the “local area” Table 5 presents the estimated impacts restricting attention to these five zip code areas.

*Table 5 - Impacts of EMRCA on North Adams Region*

	2018-19	2019-20	Total 2020 forward	Total 2020 forward
<b>Employment</b>			<i>500k visitors</i>	<i>750k visitors</i>
<i>Direct</i>	129	254	1,022	1,532
<i>Indirect+Induced</i>	48	94	226	340
<i>Total</i>	178	348	1,248	1,872
<b>Labor Income</b>				
<i>Direct</i>	\$6,764,435	\$12,647,908	\$29,464,569	\$44,196,854
<i>Indirect+Induced</i>	\$2,179,641	\$4,191,830	\$9,904,772	\$14,857,158
<i>Total</i>	\$8,944,076	\$16,839,738	\$39,369,341	\$59,054,012
<b>Average Worker Earnings</b>	\$50,325	\$48,410	\$31,548	\$31,548
<b>Total Economic Output</b>				
<i>Direct</i>	\$18,573,914	\$26,877,113	\$73,036,503	\$109,554,755
<i>Indirect+Induced</i>	\$6,035,613	\$12,072,472	\$29,425,530	\$44,138,295
<i>Total</i>	\$24,609,527	\$38,949,585	\$102,462,033	\$153,693,050

As expected, the amounts provided in Table 5 are similar to, but generally slightly less than, the comparable figures provided in Table 4. This reflects the fact that the North Adams region would be expected to capture most of the impacts of the EMRCA project, but that being a smaller region the multiplier effects (indirect+induced) in particular are smaller because some

of the local purchases are made in other parts of the county. Nevertheless it must be observed that 93% of the increased jobs and 91% of the increase in total output from the project would be realized in the North Adams region, providing an important boost for its local economy.

Again, we note that the jobs created during the construction phase of the project tend to be more highly compensated, generating labor income of just over or nearly \$50 thousand per year on average. The explosion of jobs that comes with the commencement of operations and the visitors flowing into the community, while welcome are not as highly compensated. These jobs, however, compare favorably to many of those currently available in the region.

It is worth noting that this analysis is based on EMRCA alone, and does not include the two other main components of the proposed purchase and reuse of the Heritage State Park site (The Massachusetts Museum of Time and the Mt. Greylock Distillery). Evaluation of those additional projects is discussed in the next section.



#### IV. Local Economic Impacts of the Mt. Greylock Distillery and Museum of Time

Using the increased expenditures for construction costs and operating costs identified and presented in the final four rows of Table 2 above, we can estimate the impacts on employment, labor income, and total economic output that could be expected to result from completing the remaining HSP projects: the Mt. Greylock Distillery and the Museum of Time.

The visitor survey suggested that for many respondents the distillery and some other museums would be an important factor in making a visit to EMRCA (6.07 score for the distillery, 5.84 for the other museum, with 10="Yes, certain to go to the attraction"). Despite this, we have not attempted to forecast a separate increment of visitors to be added along with the distillery and museum. Instead, it seems best to regard the presence of these two attractions as increasing the probability of achieving 750,000 visitors per year, and we let the two visitor scenarios evaluated encompass the likely range of audience for the combined attractions proposed for the HSP site.

Table 6 below presents the economic impacts on the wider Berkshire County economy of these additional HSP projects. There is a considerable incremental addition of jobs, labor income and total economic output during the construction period. Even after construction is complete, the distillery and Museum of Time are expected to provide an ongoing 56 jobs generating annual labor income of more than \$48 thousand per year, adding \$12 million to local economic output.

*Table 6 - Impacts of Distillery and Museum of Time on Berkshire County*

	Construction 2020-21	Operations 2022 forward
<b>Employment</b>		
<i>Direct</i>	111	33
<i>Indirect+Induced</i>	55	22
<i>Total</i>	165	56
<b>Labor Income</b>		
<i>Direct</i>	\$5,934,956	\$1,657,682
<i>Indirect+Induced</i>	\$2,549,926	\$1,033,367
<i>Total</i>	\$8,484,882	\$2,691,050
<b>Average Worker Earnings</b>	\$51,278	\$48,359
<b>Total Economic Output</b>		
<i>Direct</i>	\$14,878,026	\$8,950,407
<i>Indirect+Induced</i>	\$7,131,283	\$3,083,567
<i>Total</i>	\$22,009,310	\$12,033,974

Table 7 presents the impacts for the North Adams region that are expected as a result of the construction and operation of the Mt. Greylock Distillery and the Museum of Time on the grounds of the former Heritage State Park.

After the 149 jobs created during the construction phase are completed, the additional HSP projects would still generate 55 ongoing jobs with labor income exceeding \$48 thousand per job on average. For these HSP projects, an even larger share of the impact is naturally

realized within the local North Adams region, with the smaller region's job totals being 98% of those expected for the county as a whole, and the increment to total economic output being 96% of what we would expect when considering all of Berkshire County.

*Table 7 - Impact of Distillery and Museum of Time on North Adams Region*

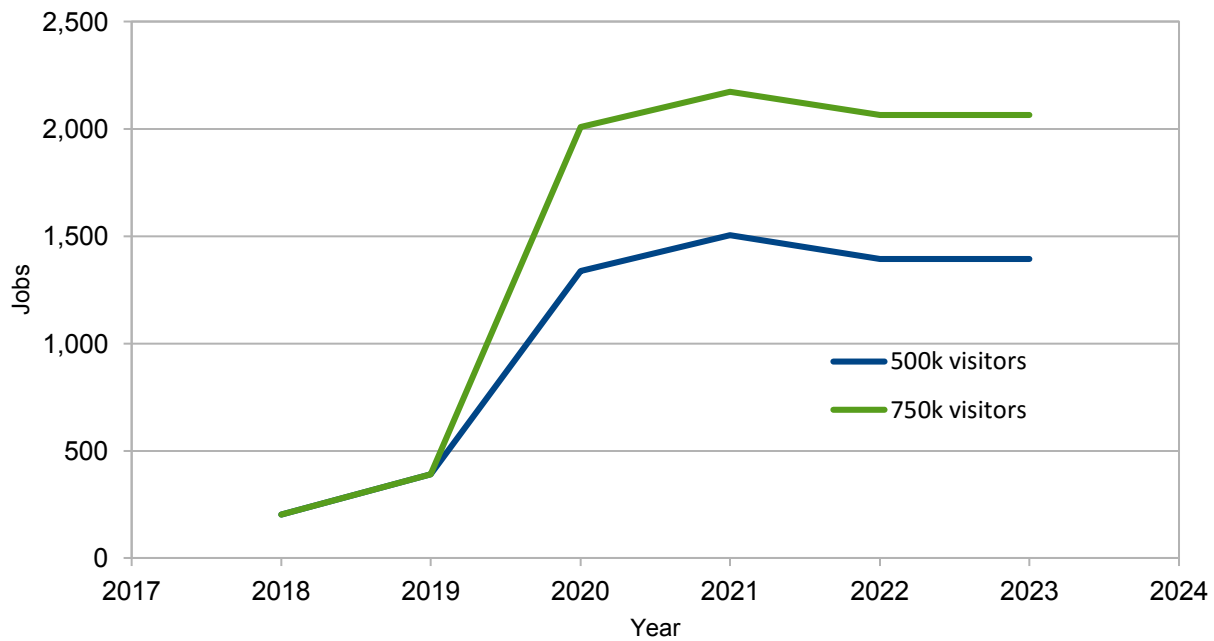
	<b>Construction 2020-21</b>	<b>Operations 2022 forward</b>
<b>Employment</b>		
<i>Direct</i>	111	35
<i>Indirect+Induced</i>	37	19
<i>Total</i>	149	55
<b>Labor Income</b>		
<i>Direct</i>	\$5,934,957	\$1,813,210
<i>Indirect+Induced</i>	\$1,716,863	\$822,880
<i>Total</i>	\$7,651,820	\$2,636,090
<b>Average Worker Earnings</b>	\$51,502	\$48,237
<b>Total Economic Output</b>		
<i>Direct</i>	\$14,878,027	\$8,950,407
<i>Indirect+Induced</i>	\$4,827,661	\$2,594,725
<i>Total</i>	\$19,705,688	\$11,545,132

For comparison, it is worth noting that while the steady-state impacts of these two HSP projects seems modest (particularly in comparison with the larger impacts expected from EMRCA) the impacts for these projects is of the similar magnitude to the impact estimated for MASS MoCA before its expanded performing arts and festival events of the Wilco Solid Sound and Freshgrass festivals, and its expanded exhibition space opened in 2017. These projects contribute in an important way to the overall redevelopment plan proposed by the EMRCA group for Heritage State Park.

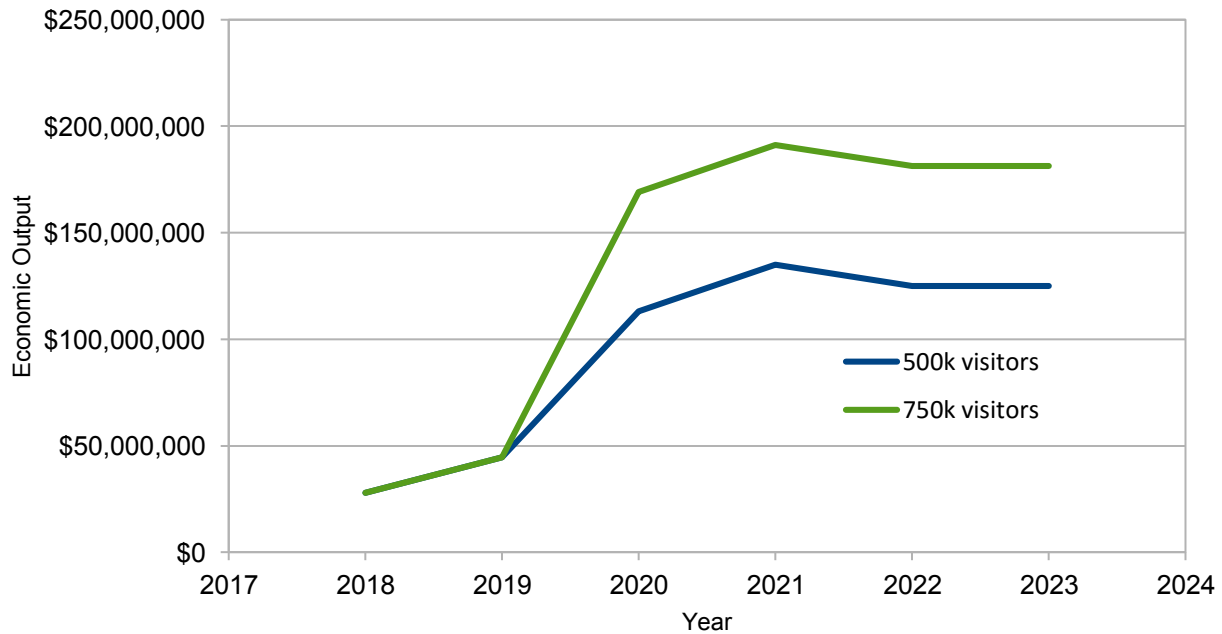
In order to develop an appreciation of the overall impact of the three components of the project: EMRCA, the Mt. Greylock Distillery, and the Museum of Time, it is helpful to combine these impacts and graph them over time. Using the dynamic structure presented in Table 2 above, Figures 4 and 5 below present this information for total employment impacts and changes in total economic output.

These two figures show clearly how transformative the EMRCA project for redevelopment of Heritage State Park can be. Starting small, the employment impact rises to a level between 1500 and 2200 jobs in 2021. Following completion of all construction, the employment impacts are expected to remain important, stabilizing at between nearly 1400 to more than 2060 jobs for the region. For a small region such as Berkshire County such an impact would be clearly felt, and the increase in total economic output of between \$125 and \$181 million could be expected to bring a noticeable "Bilbao effect" to western Massachusetts.





*Figure 4 - Combined impact on Berkshire County Employment*



*Figure 5 - Combined Impact on Total Output in Berkshire County*

In addition to the impacts on employment, labor income, and total economic output the EMRCA and additional HSP projects will have impacts on total revenues collected by local, state and federal governments. These range from income taxes on individuals and firms to

excise taxes on distilled spirits produced at the planned Mt. Greylock distillery, and many other sources of revenues.

As with the other economic impacts, the revenues accrue at different times and in different amounts from various components of the projects. Table 8 below provides estimated impacts on tax revenues in the scenario with 500,000 visitors. Table 9 provides the same calculations with the higher number of 750,000 visitors.

*Table 8 - Tax Revenue Impacts with 500,000 Visitors*

	EMRCA Const 2018	EMRCA Const 2019	500K Visitors 2020	EMRCA Operation 2020	Dist/MoT Const 2021	Dist/MoT Operation 2022
<i>State and Local</i>						
On business	\$538,509	\$989,839	\$9,215,898	\$239,999	\$433,238	\$2,169,800
On households	\$325,382	\$598,446	\$1,227,344	\$145,300	\$272,064	\$85,596
State/Local Total	\$863,891	\$1,588,285	\$10,443,242	\$385,299	\$705,302	\$2,255,396
<i>Federal</i>						
On business	\$1,208,314	\$2,278,576	\$5,911,139	\$564,962	\$1,039,954	\$550,228
On households	\$1,056,875	\$1,943,815	\$3,986,543	\$471,949	\$883,691	\$278,026
Federal Total	\$2,265,189	\$4,222,391	\$9,897,682	\$1,036,911	\$1,923,645	\$828,254
<b>Total Tax</b>	<b>\$3,129,080</b>	<b>\$5,810,676</b>	<b>\$20,340,924</b>	<b>\$1,422,210</b>	<b>\$2,628,947</b>	<b>\$3,083,650</b>

*Table 9 - Tax Revenue Impacts with 750,000 Visitors*

	EMRCA Const 2018	EMRCA Const 2019	750K Visitors 2020	EMRCA Operation 2020	Dist/MoT Const 2021	Dist/MoT Operation 2022
<i>State and Local</i>						
On business	\$538,509	\$989,839	\$13,823,846	\$352,800	\$433,238	\$2,169,800
On households	\$325,382	\$598,446	\$1,841,016	\$213,592	\$272,064	\$85,596
State/Local Total	\$863,891	\$1,588,285	\$15,664,862	\$566,392	\$705,302	\$2,255,396
<i>Federal</i>						
On business	\$1,208,314	\$2,278,576	\$8,866,709	\$830,499	\$1,039,954	\$550,228
On households	\$1,056,875	\$1,943,815	\$5,979,814	\$693,768	\$883,691	\$278,026
Federal Total	\$2,265,189	\$4,222,391	\$14,846,523	\$1,524,267	\$1,923,645	\$828,254
<b>Total Tax</b>	<b>\$3,129,080</b>	<b>\$5,810,676</b>	<b>\$30,511,385</b>	<b>\$2,090,659</b>	<b>\$2,628,947</b>	<b>\$3,083,650</b>

Because the different components of the project overlap, it can be difficult to visualize the flow of tax revenues over time. Figures 6 and 7 below take the data from Tables 8 and 9, respectively, and plot the revenue flows over time. Even with the cautious projection of 500,000 visitors per year, government revenues would be expected to increase by about \$25 million per annum, with the collections approximately divided equally between the federal government and state and local governments. With the increased level of economic impact that comes with 750,000 visitors, total additional tax collections would rise to about \$35 million per year attributable to EMRCA and the other HSP projects.



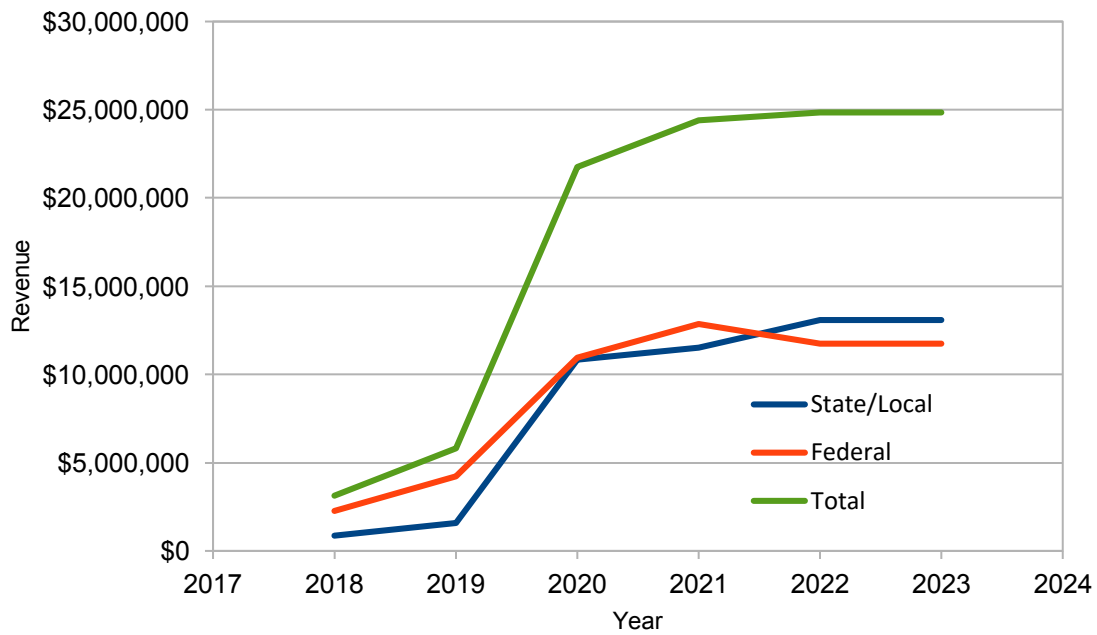


Figure 6 - Tax Revenue Flows with 500,000 Visitors

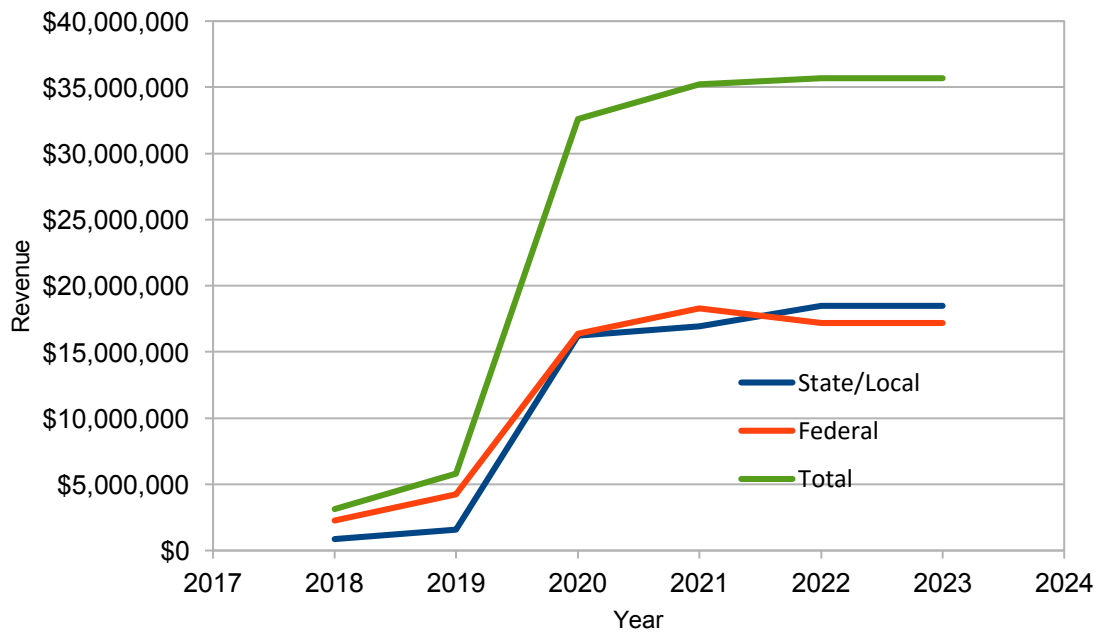


Figure 7 - Tax Revenue Flows with 750,000 Visitors

## V. Conclusion

The analysis presented above indicates that the economic impacts of the EMRCA museum, the Mt. Greylock Distillery, and the Museum of Time proposed by the EMRCA Group as the basis for redevelopment of the Heritage State Park site are very significant.

Analysis of potential visitors to the site after development suggests an expected number of non-local visitors of approximately 688 thousand per year after the project is completed, with scenarios of 500,000 and 750,000 visitors being evaluated to completely capture the range of possible impacts.

Evaluating a somewhat longer development schedule than currently proposed by the EMRCA Group, we find that under the cautious scenario of 500 thousand visitors, total employment impacts for Berkshire County will rise from a few hundred in the first year of construction to more than 1500 jobs, then after completion of construction will stabilize at just under 1400 jobs, with an addition of \$125 million per year to the local economy. Under a more optimistic but not unlikely scenario of 750 thousand visitors per year, the impact at maximum would add 2,173 jobs to the Berkshire economy before stabilizing at 2,063 jobs, adding over \$181 million to local production of goods and services and making the site one of the most significant drivers of the local economy.

If a more aggressive schedule is followed, the final stable impact would be the same, although the peak employment would be greater and of shorter duration.

The estimated impacts would be expected in a variety of distinct sectors of the economy, and the impacts for the industrial sectors that are expected to experience the largest impacts are detailed in Appendix section VI below. These tables show impacts for the entire Berkshire County economy, but the impacts for the North Adams region are very similar and average around 90 to 95 percent of the impacts estimated for the entire county.

The sectors that will experience an increase of more than \$5 million in total output are full service restaurants, hotels and motels, museums and historical sites, distilleries, retail including food and beverage stores, and real estate. These sectors also experience an increase of at least 35 full time jobs except for distilleries. In addition the provision of child day care and other services experiences a significant increase in employment.

In summary, the EMRCA Group proposal is expected to have a significant, even transformative impact on the economy of western Massachusetts.



## VI. Appendix – Economic Impacts by Sector

This Appendix presents a breakdown of the post-construction impacts of the proposed EMRCA projects by sector. Table 10 presents the impacts on total employment and Table 11 presents the impacts on total economic output. Both tables are sorted in order of decreasing total employment impact to facilitate comparison.

The first column of each table provides a brief description of the economic sector. The second column provides the impact of the EMRCA museum operations alone. The third column presents the impacts of the distillery and the Museum of Time operations combined together. The fourth column presents the impacts of visitors based on 750,000 visitors per year. The fifth column presents the sum of all impacts combined.

Those interested in the sectors of the economy likely to experience the greatest impact from the proposed project can identify those sectors by scanning down through these tables. All sectors with a total impact of at least one half of a full time job are included.

*Table 10 - Impacts on Employment by Sector in Berkshire County*

<b>Sector</b>	<b>EMRCA</b>	<b>Distillery/Museum</b>	<b>Visitors</b>	<b>Total</b>
Total	145.0	55.6	1,862.2	2,062.9
Full-service restaurants	2.4	0.9	840.4	843.7
Hotels and motels, including casino hotels	0.3	0.1	432.5	432.8
Retail - Food and beverage stores	1.2	0.5	124.9	126.6
Museums, historical sites, zoos, and parks	94.3	27.5	0.5	122.3
Child day care services	0.3	0.1	64.3	64.8
Real estate	6.9	2.3	28.0	37.2
All other food and drinking places	0.8	0.3	19.0	20.2
Hospitals	1.8	0.7	15.6	18.1
Retail - Gasoline stores	0.2	0.1	16.0	16.3
Limited-service restaurants	1.4	0.6	13.7	15.7
Services to buildings	1.4	0.6	13.3	15.3
Retail - General merchandise stores	1.0	0.4	9.6	10.9
Maintenance and repair const of nonresidential	0.9	0.5	8.8	10.2
Individual and family services	1.0	0.4	8.2	9.6
Accounting, tax preparation, bookkeeping, and payroll	0.9	0.5	8.2	9.5
Wholesale trade	0.6	1.1	7.2	8.9
Offices of physicians	0.9	0.3	7.6	8.9
Monetary authorities and depository credit intermediation	0.8	0.5	7.3	8.6
Landscape and horticultural services	0.8	0.4	7.4	8.5
Automotive repair and maintenance, except car washes	0.7	0.3	6.8	7.9
Retail - Clothing and clothing accessories stores	0.6	0.3	6.7	7.6
Home health care services	0.7	0.3	6.3	7.3
Other educational services	1.9	0.6	4.8	7.3
Postal service	0.6	0.2	6.4	7.3
Personal care services	0.7	0.3	6.2	7.2
Retail - Nonstore retailers	0.6	0.2	5.9	6.8
Retail - Miscellaneous store retailers	0.5	0.2	5.9	6.6
Junior colleges, colleges, universities, and professional schools	0.6	0.3	5.6	6.5
Insurance carriers	1.1	0.4	5.0	6.5
Nursing and community care facilities	0.6	0.3	5.5	6.4
Other financial investment activities	0.7	0.3	5.5	6.4
Independent artists, writers, and performers	0.5	0.2	5.3	6.0
Distilleries	0.0	5.9	0.0	5.9



Sector	EMRCA	Distillery/Museum	Visitors	Total
Employment services	0.7	0.3	4.6	5.6
Management of companies and enterprises	0.1	0.4	5.1	5.6
Retail - Building material and garden equipment and supplies	0.4	0.2	4.8	5.4
Private households	0.5	0.2	4.6	5.3
Other personal services	0.5	0.2	4.6	5.3
Legal services	0.5	0.2	4.3	5.0
Insurance agencies, brokerages, and related activities	0.8	0.4	3.4	4.6
Offices of other health practitioners	0.4	0.2	3.8	4.4
Transit and ground passenger transportation	0.4	0.1	3.8	4.3
Newspaper publishers	0.4	0.2	3.7	4.3
Retail - Health and personal care stores	0.3	0.1	3.7	4.2
Retail - Motor vehicle and parts dealers	0.4	0.2	3.5	4.1
Printing	0.4	0.2	3.2	3.7
Offices of dentists	0.4	0.1	3.2	3.7
Outpatient care centers	0.4	0.1	3.1	3.6
Office administrative services	0.5	0.2	2.9	3.6
Retail - Sporting goods, hobby, musical instrument and books	0.3	0.1	3.2	3.6
Advertising, public relations, and related services	0.3	0.2	3.1	3.6
Elementary and secondary schools	0.4	0.1	3.1	3.6
Labor and civic organizations	0.4	0.1	3.0	3.5
Religious organizations	0.3	0.1	3.0	3.5
Other amusement and recreation industries	0.2	0.1	3.0	3.4
Waste management and remediation services	0.2	0.1	3.0	3.3
Management consulting services	0.5	0.2	2.5	3.2
Personal and household goods repair and maintenance	0.2	0.1	2.6	3.0
Residential mental retardation, mental health, substance abuse facilities	0.3	0.1	2.4	2.8
Marketing research and all other professional, scientific, and tech services	0.2	0.1	2.4	2.8
Gambling industries (except casino hotels)	0.3	0.1	2.3	2.7
Dry-cleaning and laundry services	0.1	0.0	2.5	2.7
Architectural, engineering, and related services	0.2	0.1	2.3	2.6
Retail - Furniture and home furnishings stores	0.2	0.1	2.1	2.4
Couriers and messengers	0.8	0.3	1.3	2.3
Maintenance and repair construction of residential structures	0.3	0.1	1.9	2.2
Wired telecommunications carriers	0.2	0.1	1.9	2.1
Fitness and recreational sports centers	0.2	0.1	1.9	2.1
Business support services	0.2	0.1	1.8	2.0
Grantmaking, giving, and social advocacy organizations	0.2	0.1	1.6	1.9

Sector	EMRCA	Distillery/Museum	Visitors	Total
Truck transportation	0.1	0.2	1.5	1.9
Environmental and other technical consulting services	0.3	0.1	1.5	1.8
Community food, housing, and other relief services, including rehab	0.2	0.1	1.6	1.8
Performing arts companies	0.1	0.0	1.7	1.8
Periodical publishers	0.2	0.1	1.6	1.8
Retail - Electronics and appliance stores	0.1	0.1	1.6	1.7
Specialized design services	0.1	0.1	1.6	1.7
Funds, trusts, and other financial vehicles	0.2	0.1	1.5	1.7
Travel arrangement and reservation services	0.1	0.0	1.4	1.6
Promoters of performing arts and sports and agents for public figures	0.1	0.1	1.4	1.5
Other ambulatory health care services	0.1	0.1	1.3	1.5
Internet publishing and broadcasting and web search portals	0.1	0.1	1.3	1.5
Radio and television broadcasting	0.1	0.1	1.2	1.4
Commercial Sports Except Racing	0.1	0.1	1.2	1.3
Securities and commodity contracts intermediation and brokerage	0.1	0.1	1.1	1.3
Veterinary services	0.1	0.0	1.0	1.2
Other local government enterprises	0.1	0.1	0.9	1.1
Commercial and industrial machinery and equipment repair and maintenance	0.1	0.0	0.9	1.0
Investigation and security services	0.1	0.0	0.8	1.0
Scenic and sightseeing transportation and support activities for transportation	0.4	0.1	0.4	0.9
Electric power transmission and distribution	0.1	0.0	0.8	0.9
General and consumer goods rental except video tapes and discs	0.1	0.0	0.7	0.8
Amusement parks and arcades	0.0	0.0	0.7	0.8
Lessors of nonfinancial intangible assets	0.0	0.0	0.7	0.7
Photographic services	0.1	0.0	0.6	0.7
Motion picture and video industries	0.1	0.0	0.6	0.7
Nondepository credit intermediation and related activities	0.0	0.0	0.6	0.7
Warehousing and storage	0.1	0.0	0.6	0.7
Air transportation	0.1	0.0	0.6	0.7
Natural gas distribution	0.0	0.1	0.6	0.7
Bowling centers	0.1	0.0	0.5	0.6
Other computer related services, including facilities management	0.1	0.0	0.5	0.6
Computer systems design services	0.0	0.0	0.5	0.6
Electric power generation - Fossil fuel	0.0	0.0	0.5	0.5
Data processing, hosting, and related services	0.0	0.0	0.5	0.5
Death care services	0.0	0.0	0.4	0.5



*Table 11 - Impacts on Economic Output by Sector in Berkshire County*

<b>Sector</b>	<b>EMRCA</b>	<b>Distillery/Museum</b>	<b>Visitors</b>	<b>Total</b>
Total	\$14,460,401	\$12,033,974	\$154,697,583	\$181,191,957
Full-service restaurants	\$115,792	\$45,396	\$40,648,052	\$40,809,241
Hotels and motels, including casino hotels	\$31,005	\$10,426	\$51,554,058	\$51,595,489
Retail - Food and beverage stores	\$70,274	\$27,816	\$7,551,300	\$7,649,390
Museums, historical sites, zoos, and parks	\$7,919,875	\$2,276,946	\$43,128	\$10,239,949
Child day care services	\$15,784	\$6,353	\$3,046,101	\$3,068,238
Real estate	\$1,098,669	\$369,904	\$4,459,313	\$5,927,886
All other food and drinking places	\$36,503	\$14,949	\$825,825	\$877,277
Hospitals	\$295,832	\$116,647	\$2,545,884	\$2,958,363
Retail - Gasoline stores	\$13,272	\$5,382	\$1,006,906	\$1,025,560
Limited-service restaurants	\$128,720	\$52,314	\$1,241,873	\$1,422,907
Services to buildings	\$42,563	\$19,904	\$409,650	\$472,117
Retail - General merchandise stores	\$59,555	\$23,381	\$582,754	\$665,690
Maintenance and repair const of nonresidential	\$141,751	\$74,870	\$1,362,753	\$1,579,375
Individual and family services	\$30,916	\$12,098	\$266,346	\$309,359
Accounting, tax preparation, bookkeeping, and payroll	\$64,184	\$35,658	\$613,086	\$712,928
Wholesale trade	\$130,518	\$238,815	\$1,485,862	\$1,855,194
Offices of physicians	\$138,358	\$54,454	\$1,191,241	\$1,384,053
Monetary authorities and depository credit intermediation	\$192,062	\$114,032	\$1,734,058	\$2,040,151
Landscape and horticultural services	\$40,836	\$18,911	\$387,233	\$446,980
Automotive repair and maintenance, except car washes	\$60,391	\$28,746	\$593,652	\$682,789
Retail - Clothing and clothing accessories stores	\$43,619	\$17,615	\$470,485	\$531,719
Home health care services	\$30,032	\$11,993	\$258,912	\$300,937
Other educational services	\$81,410	\$26,810	\$206,439	\$314,660
Postal service	\$68,265	\$24,664	\$698,778	\$791,708
Personal care services	\$24,291	\$9,614	\$209,162	\$243,067
Retail - Nonstore retailers	\$78,449	\$31,383	\$753,228	\$863,060
Retail - Miscellaneous store retailers	\$17,683	\$7,181	\$203,984	\$228,848
Junior colleges, colleges, universities, and professional schools	\$80,727	\$32,865	\$710,028	\$823,620
Insurance carriers	\$466,828	\$187,028	\$2,111,715	\$2,765,570
Nursing and community care facilities	\$47,286	\$18,659	\$406,872	\$472,817
Other financial investment activities	\$86,369	\$37,287	\$723,109	\$846,765
Independent artists, writers, and performers	\$15,879	\$7,079	\$179,745	\$202,702
Distilleries	\$2	\$6,675,624	\$77	\$6,675,703
Employment services	\$43,453	\$19,983	\$277,769	\$341,205
Management of companies and enterprises	\$17,819	\$76,619	\$940,487	\$1,034,925

Sector	EMRCA	Distillery/Museum	Visitors	Total
Retail - Building material and garden equipment and supplies	\$41,593	\$16,875	\$469,445	\$527,913
Private households	\$7,622	\$3,051	\$65,676	\$76,349
Other personal services	\$16,469	\$6,919	\$162,058	\$185,446
Legal services	\$61,530	\$26,555	\$540,495	\$628,580
Insurance agencies, brokerages, and related activities	\$135,802	\$78,814	\$608,441	\$823,057
Offices of other health practitioners	\$39,351	\$15,758	\$338,956	\$394,064
Transit and ground passenger transportation	\$21,274	\$8,918	\$229,586	\$259,778
Newspaper publishers	\$40,495	\$23,940	\$402,194	\$466,629
Retail - Health and personal care stores	\$27,173	\$11,067	\$299,699	\$337,939
Retail - Motor vehicle and parts dealers	\$38,125	\$18,671	\$336,385	\$393,181
Printing	\$63,250	\$36,183	\$572,031	\$671,464
Offices of dentists	\$48,558	\$19,640	\$417,985	\$486,183
Outpatient care centers	\$52,241	\$20,816	\$449,832	\$522,889
Office administrative services	\$47,300	\$17,094	\$277,883	\$342,277
Retail - Sporting goods, hobby, musical instrument and books	\$14,292	\$5,792	\$154,222	\$174,306
Advertising, public relations, and related services	\$46,305	\$28,000	\$460,613	\$534,918
Elementary and secondary schools	\$22,534	\$9,088	\$194,445	\$226,067
Labor and civic organizations	\$22,406	\$9,090	\$193,862	\$225,358
Religious organizations	\$54,554	\$21,800	\$469,617	\$545,970
Other amusement and recreation industries	\$15,579	\$6,550	\$190,443	\$212,572
Waste management and remediation services	\$42,359	\$25,048	\$706,983	\$774,390
Management consulting services	\$43,840	\$16,186	\$219,777	\$279,803
Personal and household goods repair and maintenance	\$19,852	\$10,196	\$217,062	\$247,110
Residential mental retardation, mental health, substance abuse facilities	\$11,892	\$4,709	\$102,399	\$119,001
Marketing research and all other professional, scientific, and tech services	\$12,434	\$6,256	\$133,411	\$152,100
Gambling industries (except casino hotels)	\$38,226	\$15,202	\$328,880	\$382,308
Dry-cleaning and laundry services	\$7,581	\$3,045	\$173,875	\$184,500
Architectural, engineering, and related services	\$36,472	\$16,242	\$404,580	\$457,294
Retail - Furniture and home furnishings stores	\$16,126	\$6,530	\$181,922	\$204,578
Couriers and messengers	\$51,364	\$18,179	\$82,549	\$152,091
Maintenance and repair construction of residential structures	\$41,930	\$16,251	\$312,340	\$370,521
Wired telecommunications carriers	\$79,987	\$33,267	\$717,593	\$830,848
Fitness and recreational sports centers	\$6,182	\$2,569	\$74,777	\$83,528
Business support services	\$5,853	\$2,827	\$65,721	\$74,401
Grantmaking, giving, and social advocacy organizations	\$24,178	\$9,460	\$208,282	\$241,921
Truck transportation	\$24,451	\$38,205	\$255,336	\$317,992
Environmental and other technical consulting services	\$17,792	\$6,875	\$96,027	\$120,694



Sector	EMRCA	Distillery/Museum	Visitors	Total
Community food, housing, and other relief services, including rehab	\$15,601	\$6,101	\$134,375	\$156,076
Performing arts companies	\$13,318	\$5,729	\$209,014	\$228,062
Periodical publishers	\$40,140	\$22,641	\$411,259	\$474,040
Retail - Electronics and appliance stores	\$5,841	\$2,415	\$72,511	\$80,767
Specialized design services	\$7,543	\$3,871	\$100,255	\$111,668
Funds, trusts, and other financial vehicles	\$50,216	\$20,292	\$418,012	\$488,520
Travel arrangement and reservation services	\$18,003	\$7,602	\$234,556	\$260,160
Promoters of performing arts and sports and agents for public figures	\$13,085	\$5,752	\$151,344	\$170,180
Other ambulatory health care services	\$13,975	\$5,572	\$120,378	\$139,925
Internet publishing and broadcasting and web search portals	\$59,265	\$33,134	\$590,931	\$683,330
Radio and television broadcasting	\$21,145	\$12,583	\$209,582	\$243,309
Commercial Sports Except Racing	\$6,438	\$3,137	\$63,191	\$72,767
Securities and commodity contracts intermediation and brokerage	\$10,346	\$5,087	\$104,478	\$119,910
Veterinary services	\$13,019	\$5,217	\$112,113	\$130,349
Other local government enterprises	\$18,669	\$8,128	\$134,435	\$161,231
Commercial and industrial machinery and equipment repair and maintenance	\$8,911	\$6,022	\$119,511	\$134,443
Investigation and security services	\$3,991	\$1,523	\$28,010	\$33,524
Scenic and sightseeing transportation and support activities for transportation	\$60,194	\$19,837	\$63,512	\$143,544
Electric power transmission and distribution	\$100,426	\$46,084	\$1,176,548	\$1,323,058
General and consumer goods rental except video tapes and discs	\$9,433	\$4,734	\$81,109	\$95,276
Amusement parks and arcades	\$2,691	\$1,091	\$45,959	\$49,741
Lessors of nonfinancial intangible assets	\$17,497	\$10,797	\$603,261	\$631,556
Photographic services	\$3,919	\$1,718	\$35,695	\$41,332
Motion picture and video industries	\$9,413	\$4,383	\$93,436	\$107,232
Nondepository credit intermediation and related activities	\$12,268	\$10,152	\$154,982	\$177,402
Warehousing and storage	\$5,308	\$2,687	\$48,523	\$56,518
Air transportation	\$25,727	\$13,318	\$235,148	\$274,194
Natural gas distribution	\$36,583	\$50,846	\$432,085	\$519,513
Bowling centers	\$2,623	\$1,056	\$22,601	\$26,280
Other computer related services, including facilities management	\$6,878	\$3,109	\$53,562	\$63,549
Computer systems design services	\$4,618	\$2,287	\$51,098	\$58,002
Electric power generation - Fossil fuel	\$61,561	\$28,250	\$721,221	\$811,032
Data processing, hosting, and related services	\$8,853	\$5,217	\$104,281	\$118,351
Death care services	\$4,842	\$1,919	\$41,657	\$48,419