

A.5

THE NEW *Schoolfield* DISTRICT

FILTRATION PLANT *Potential Options*



Existing Structures + Adaptability





Executive Summary

The former Water Filtration Plant re-imagined as a destination and amenity to the Schoolfield Village along with the redeveloped Schoolfield Woods will serve as an essential hub for the community as well as visitors as the new northern gateway. This once utilitarian structure transformed into an active venue with a large community courtyard, will be an asset that can support public and private events:

- As a hospitality center, provide information to orient visitors to the Schoolfield Woods and provide food and beverage services along with restrooms;
- As a community center, provide spaces for public gathering, makerspace, co-working and learning spaces;
- As an entertainment venue, support both community and private events with indoor and outdoor venues;
- As a destination, utilize art, historic interpretation, and food to highlight the culture of the community;
- As an amenity, spur investment in the community and attract visitors

Its location complements and enhances the new nature trails at the Schoolfield Woods and provides a resource for the rest of the park for all users, providing value to the public by improving the park's usability for all ages. This new programming opportunities can create a node of activity along Memorial Drive that will extend connections back to the W Main Street corridor, connecting people to the River Trail and other trail systems through Ballou Park.

While the historical structure is robust and the existing spaces lend themselves to being re-purposed, challenges include access along the busy Memorial Drive, parking to support the proposed parking, and a full rehabilitation of the dormant 75 year old structure including all new infrastructure. The full rehabilitation requires a comprehensive approach including a full study of the structure, viability of the exterior, an environmental report and multi-modal planning at the site. Reuse of the existing fabric within Danville is key to adding an authentic, resilient, historic and thriving plan that can stitch together these communities.

By folding the redevelopment of the Filtration Plant into the development of the Schoolfield Woods, parking and access for pedestrians, bicyclists, vehicles could be resolved. The proposed key strategies for this site include access at Wood Avenue and parking at the north side of the Filtration Plant along with a pedestrian bridge across Memorial Drive to provide pedestrian and bicycle access from the River Trail.

A phased approach of redeveloping the 22,534 square foot former Filtration Plant outlined in the following Potential Program Options is recommended. Full build-out of the Filtration plant is estimated at \$7.5 million for under roof programming at \$332/SF and \$2.8 million to re-purpose the outdoor basins at \$76/SF for a total of \$10.3 million. By phasing the project, essential programming that will benefit the adjacent park can come on line first with additional programming being added as funding becomes available. Proposed programming includes an outdoor community courtyard, exterior roof deck space for temporary and permanent vendors, infrastructure for public restrooms, co-working space for park affiliated staff, community learning space and active outdoor programming. The redeveloped Filtration Plant provides an opportunity to include public art, murals, local food, interpretative signage, and places for events and regular gatherings that will help to strengthen and build neighborhood connections.

Adaptive reuse projects while challenging, can create authentic welcoming spaces that highlight the history of a community and aid to activate the public realm. Previous efforts in the city like the River District in downtown Danville, showcases the success of revitalizing key areas of the city. The re-imagined former Water Filtration Plant has the opportunity to be a gateway to the Schoolfield Village, provide programming that benefits the community, and add to the place-making efforts within Danville while highlighting the history of Dan River Textile Mill.

Historic Narrative

Little is known regarding the Water Filtration Plant on Memorial Drive. The local Danville City paper, The Bee, reported on October 19, 1946, an update to the Dan River Mill current projects including the new water filtration plant anticipated to be operational by turn of the year.

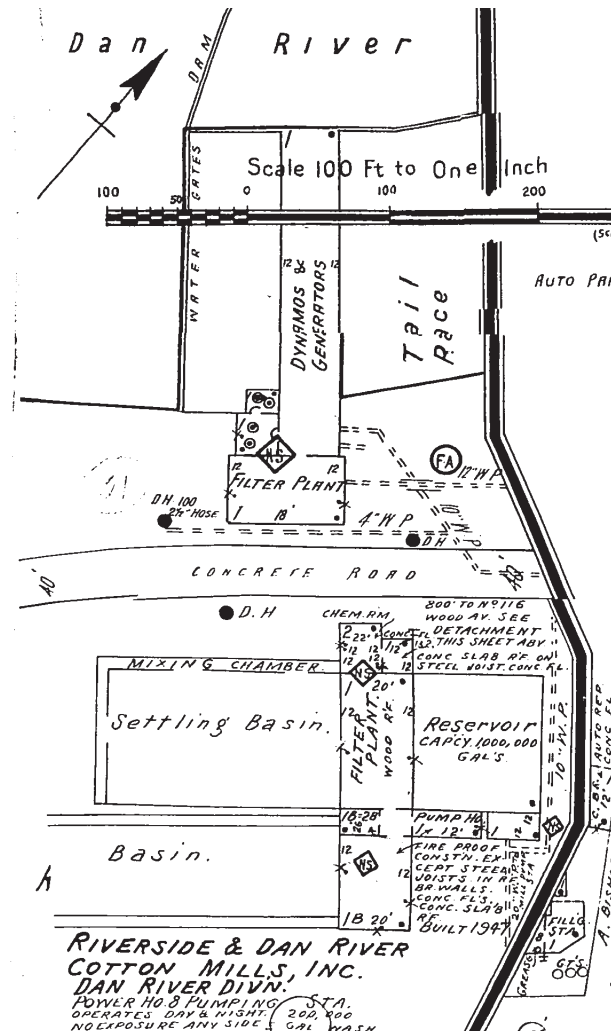
It appears from aerial photos that Section A and B, the Storage Warehouses and control offices, along with the exterior settling basins were built first. There were subsequently at least 2 additions that included Section C, D, & E as well as a canopy that fronts Memorial Drive. It is uncertain the dates and sequence but based on Sanborn Maps, Section C pump room occurred sometime between 1951 and 1969. Section D & E occurred sometime after 1994 with a new gantry in Section C most likely added in that last addition.

Around 2015-2016 the filtration plant was decommissioned. When operational it drew between 10-16 million gallons of water daily from the Dan River mainly for use in the bleachery. The water was pumped from the filtration plant up to holding tanks at the textile mill. The pipes that directly connected it to the plant and river now lie dormant.

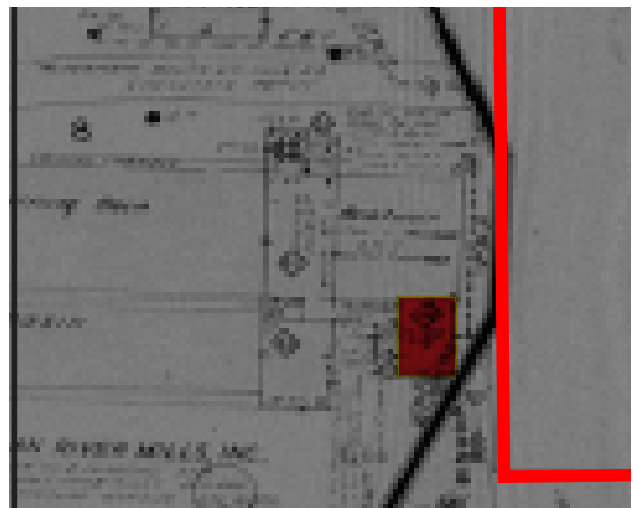
The original structures of the filtration plant (Section A & B) reflect the style and construction of the hydroplant across the street built in 1902 by Lockwood Greene, architect for many of the Dan River Mill structures. It is speculation that they were involved in the construction of the filtration plant, but the hydro plant definitely influenced the design of the filtration plant.

Per the EPA report dated 1992 regarding water use by Dan River Inc.:

Water Supply: All drinking water is supplied from the City of Danville public water supply system. This water is taken in from the Dan River approximately 2/10 of a mile upstream from the hydroelectric plant and the filtration plant operated by Dan River, Inc. Process water used by Dan River is taken in from the Dan River, treated at their filtration plant and pumped up to the site and stored in water towers and two reservoirs."



Sanborn map dated 1951 noting date of construction as 1947



Sanborn map dated 1969 graphically showing Section C

Zoning

M-I INDUSTRIAL MANUFACTURING DISTRICT

PURPOSE & INTENT

The M-I, Industrial manufacturing District is established to provide locations within Danville for future medium intensity industry as well as existing and future heavy intensity industry.

The M-I District is primarily intended for use by medium to large manufacturing operations, heavy equipment facilities, construction and maintenance yards, fuel businesses and other basic intensive industrial activities normally found in an urban environment.

All industrial uses fronting on the Dan River shall be regulated by special permit.

Highly Recommended uses per Zoning

- Artisan/Craftsman Manufacturing
- Hotels and Motels, With or Without Eating Establishments
- Uses permitted by right in the HR-C District or LED-I District
 - ✗ Business Services
 - ✗ Artisan/Craftsman Manufacturing
 - ✗ Health Club, Spa or Fitness Center
 - ✗ Light Intensity Wholesale Trade Establishments
 - ✗ Movie Theaters
 - ✗ Offices (General and Professional)
 - ✗ Personal Service Establishments
 - ✗ Restaurants
 - ✗ Schools, Colleges and Universities (Public and Private)
 - ✗ Bicycle Shop

Other recommended uses per Zoning:

- Metal Fabrication
- Plant Nursery
- Private Training Facilities and Vocational Schools
- Establishments for Manufacturing, Production, Processing, Assembly, Compounding, Cleaning, Servicing, Storage, Testing, Repair and Distribution of Materials, Goods or Products, Which Conform to Federal, State and City Environmental Performance Standards
- Establishments for Scientific Research, Development and Training, or Corporate Offices
- Light Wholesale Trade Establishments, (With Outdoor Storage)

Recommended Uses requiring a Special Use Permit

- Drive-In Movie Theaters
- Metal Foundries, Smelting, Processing, Fabrication And Storage
- Regional Brewery
- Uses permitted by Special Permit in the HR-C District or LED-I District
 - ✗ Bed and Breakfast, Inn or Tourist Home
 - ✗ Commercial Recreation Facilities (Indoor and Outdoor)
 - ✗ Microbrewery or Micro-Winery
 - ✗ Distillery
 - ✗ Restaurant

Existing Conditions

The Water Filtration Plant is a part of a larger parcel owned by Caesar's Virginia LLC. The focus of this assessment is on the space noted as the Water Filtration Plant and adjacent acreage within that parcel.

The initial assessment regarding opportunities and limitations is based on WRT and JMA's site visit on 10/27/2021 and a review of public records. Findings were outlined in the Existing Conditions report. Limited existing drawings were provided at a later date and were used to supplement the Potential Options noted in the following pages. An all-inclusive survey is recommended for further documentation.

A Phase II ESA was performed at the site in 2017.

Testing wells and soil vapor samples indicated no VOC concentrations above regulatory standards. Soil borings for ground water, however, were inconclusive. Given the age of the structure, WRT recommends a comprehensive environmental report for the interior and exterior of the Filtration Plant for recommendations regarding probable abatement for lead, asbestos and possible underground storage tanks.

Information and observation provided in the Existing Conditions Report as well as potential program options will require further confirmation for code, systems, accessibility and life safety outside of this report.

Total Acreage:

Approximately 23.8 Acres (TBD) of 78.16
(Diagram to be developed)

Historic District:

Schoolfield Historic District

Property Class:

Commercial

Flood Insurance Rate Map (FIRM)

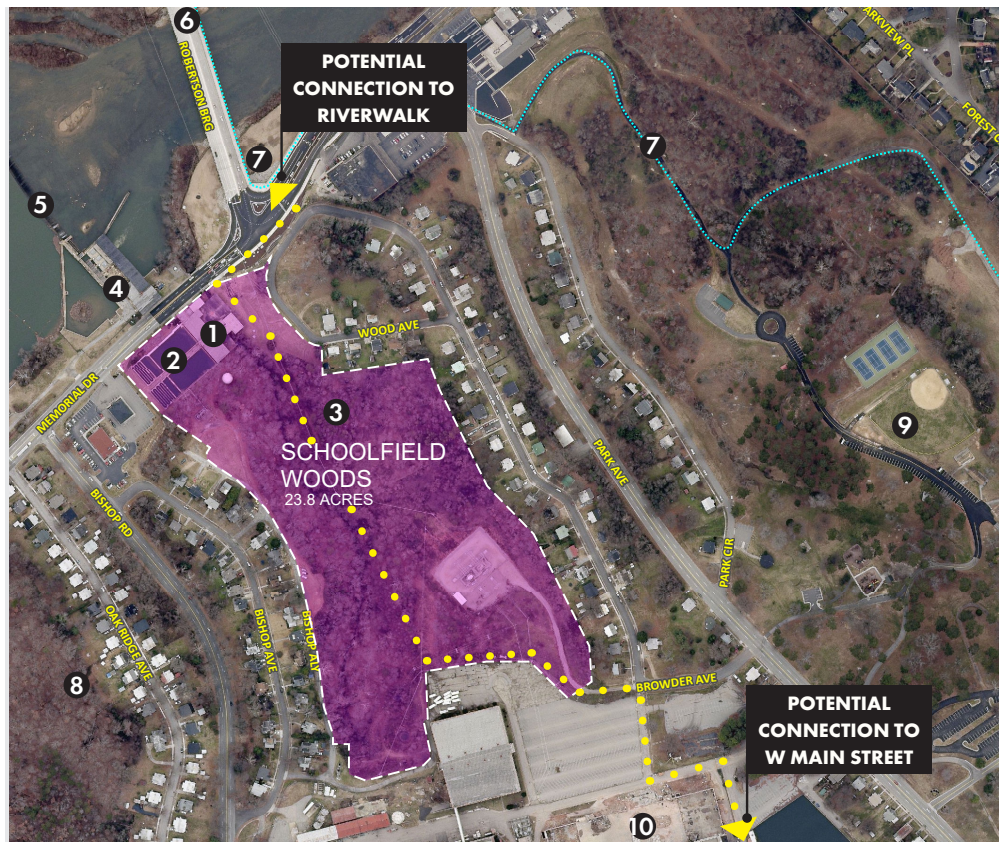
Flood Zone - X (outside the 500 year flood zone)

Property Information:

- Building 8 - 12 of 1100 W Main Street
- Finished Square feet: 22,534 sf
- Multi stories
- Built: 1947 with subsequent additions (dates to be confirmed)
- Masonry structure with reinforced concrete floors and stairs and a steel framed roof.

Construction:

- Masonry structure with reinforced concrete floors and stairs and a steel framed roof.



Site Map

- | | |
|-------------------------------|-------------------------------------|
| 1. Water Filtration Plant | 6. Robertson Bridge/ Piedmont Drive |
| 2. Filtration Settling Basins | 7. Riverwalk Trail |
| 3. Schoolfield Woods | 8. High Bay Building |
| 4. Hydro-electric Plant | 9. Ballou Park |
| 5. Dan River Dam | 10. Future Caesar's Virginia Resort |

Existing Conditions (cont)

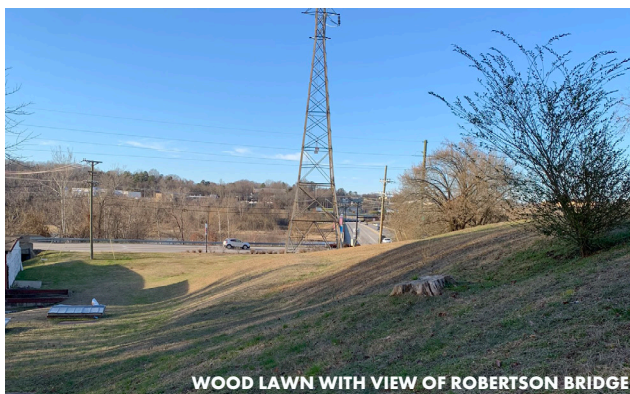


FIGURE 25 | Existing filtration plant view southwest





Office Wing and Receiving Addition at Loading Dock



Upper Filtration Gallery - West Wing



East side of filtration gallery (background). Pump Room Clerestory windows at Pump Room adjacent to covered Clear Well (foreground).



Top Floor - Central Section



Loading Dock - Lower Level



Office Wing - Top Floor



Pipe Room - East Wing



West Settling Basin looking northeast toward the Dan River



Pump Room - North View



Covered Clear Well and Pumping Room with access at grade.



Views to the Dan River from top floor office



Serpentine Mixing Basins

Existing Floor Plans

DOCUMENTATION

The initial assessment regarding opportunities and limitations is based on a visual review by WRT and JMA during our site visit on 10/27/2021. This was supplemented by a review of public records along with limited existing drawings. The plans and sections provided reflect this initial research. An all-inclusive survey is recommended for further documentation.

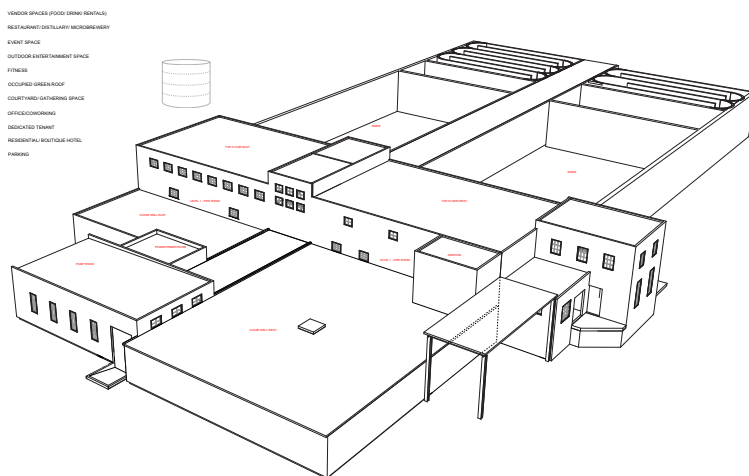


FIGURE 26 | PERSPECTIVE VIEW LOOKING SOUTHWEST

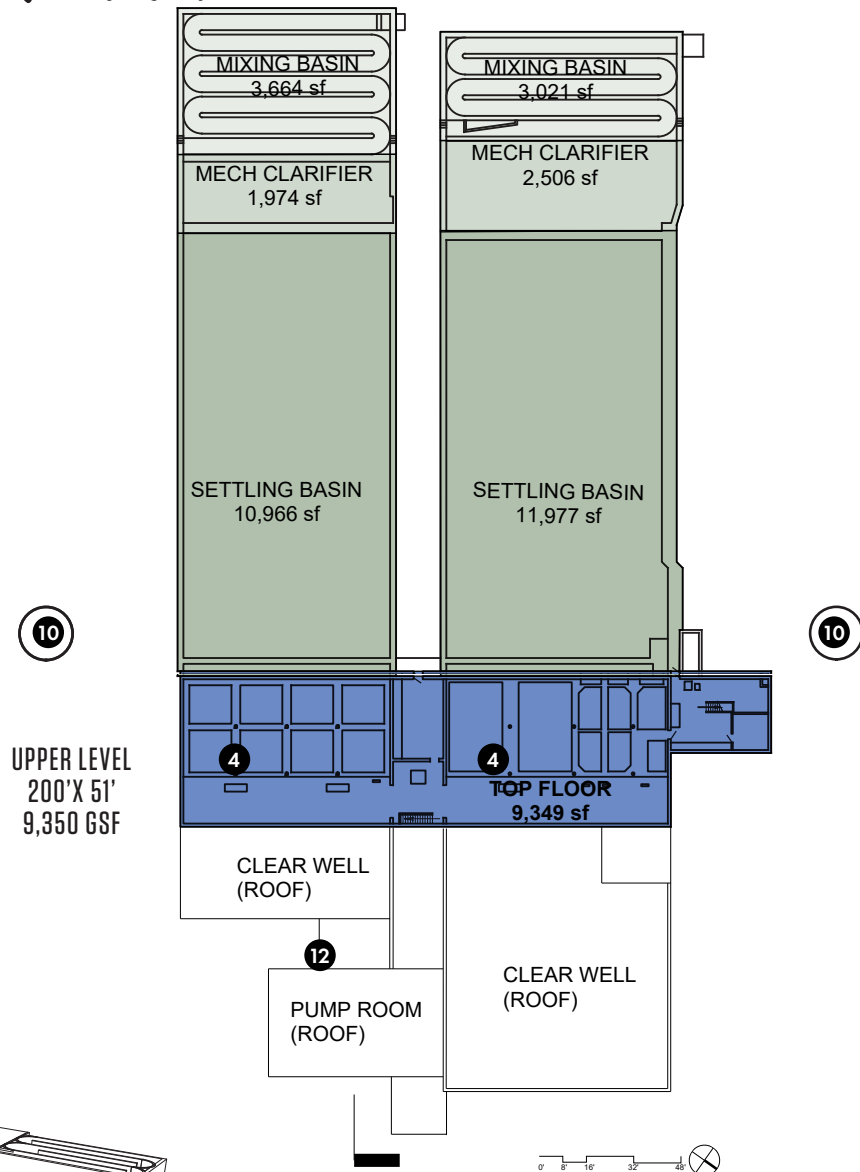


FIGURE 27 | Top Floor

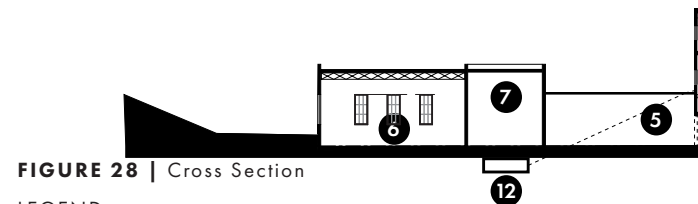


FIGURE 28 | Cross Section

LEGEND

- UPPER LEVEL OF BASIN
- LOWER LEVEL OF BASINS
- STORAGE/ FILTRATION BUILDING
- PUMP ROOM/ TRANSFORMER

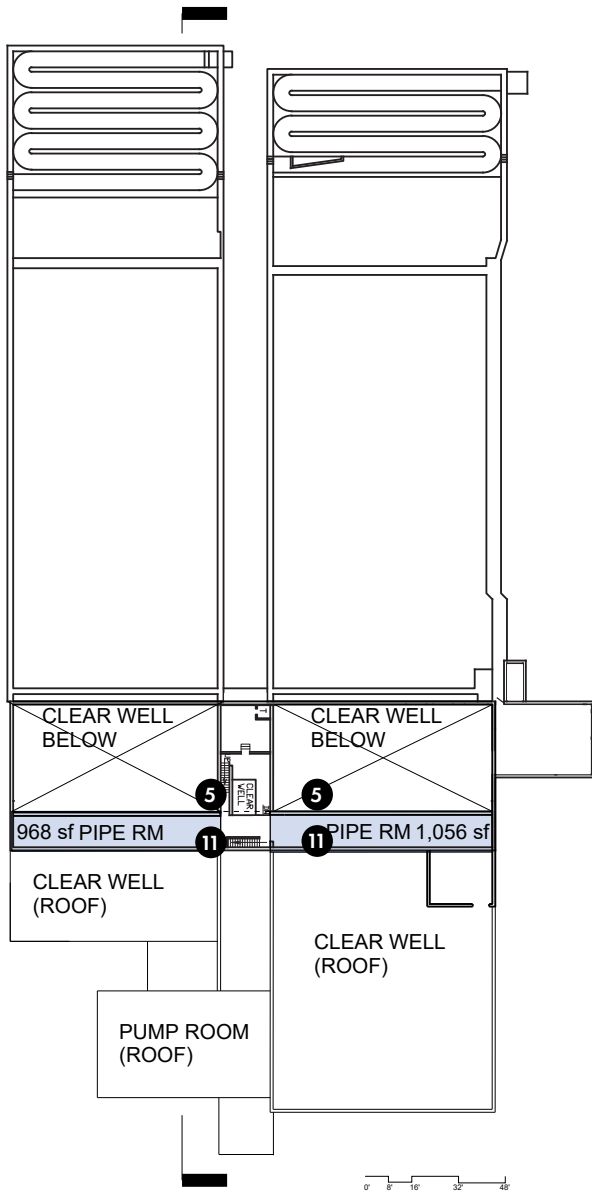


FIGURE 29 | MEZZANINE

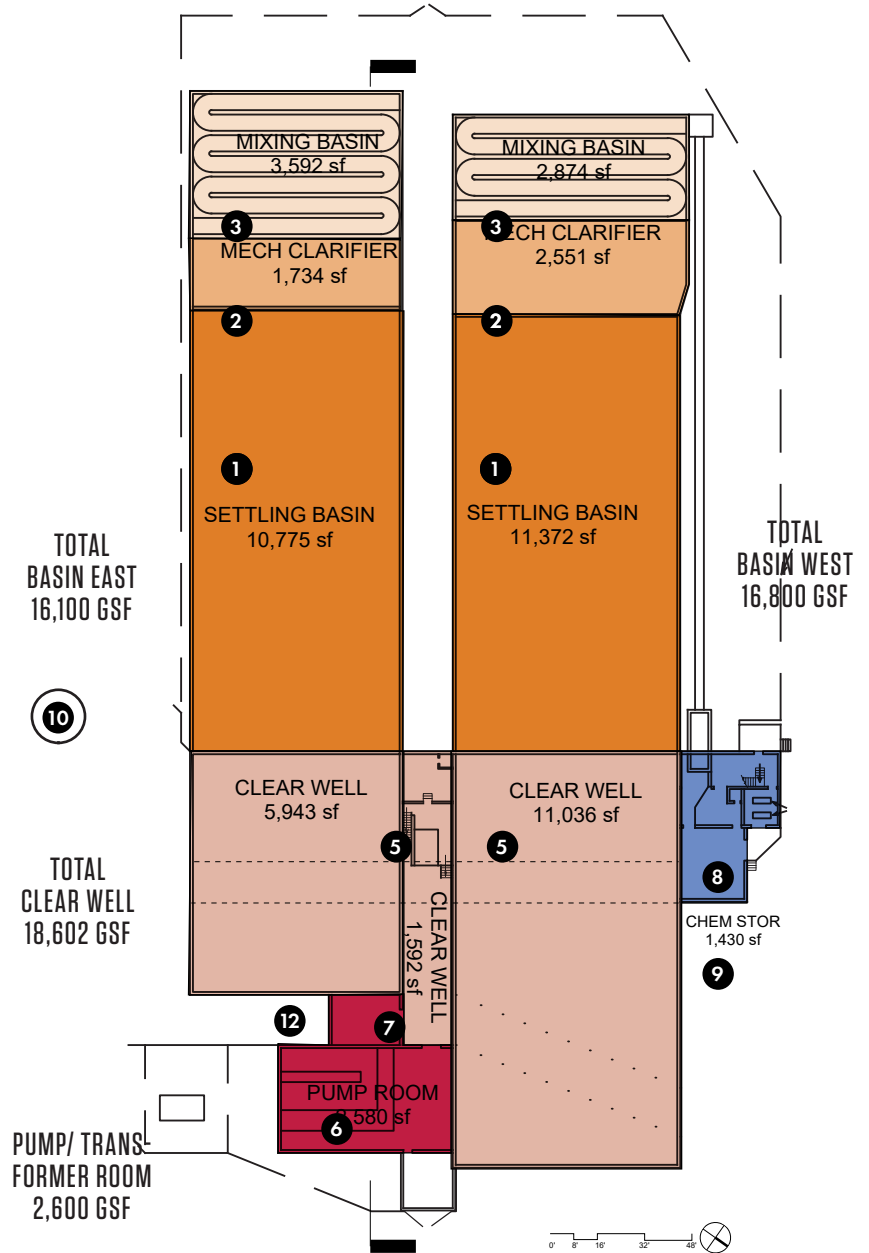
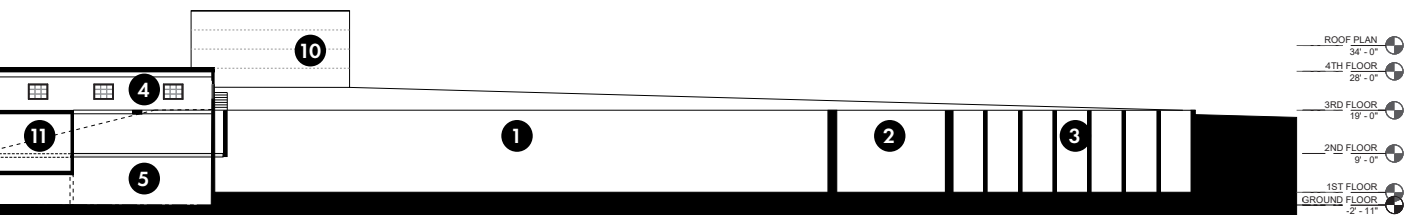


FIGURE 30 | LOWER LEVEL



- | | | |
|------------------------|--------------------|----------------------------|
| ① SETTLING BASIN | ⑤ CLEAR WELL | ⑨ LOADING DOCK |
| ② MECHANICAL CLARIFIER | ⑥ PUMP ROOM | ⑩ WASH WATER TANK |
| ③ MIXING BASIN | ⑦ TRANSFORMER ROOM | ⑪ PIPE ROOM |
| ④ FILTER ROOM | ⑧ CHEMICAL STORAGE | ⑫ SCHOOLFIELD BRANCH CREEK |

Schoolfield Woods

The conceptual design for Schoolfield Woods & former Water Filtration Plant creates a new immersive natural experience that is framed by adaptive reuse of the historical brick and concrete structure in conjunction with recreational amenities trails to experience nature and connect the Dan River to Ballou Park, Baltimore Avenue Cluster, W Main Street, and Caesars Virginia.

+ Adaptive reuse of the Filtration Plant for a mixed-use community oriented development

The former Filtration Plant re-imagined as a destination and amenity will serve as an essential hub for the community as well as visitors to the new northern gateway for the Schoolfield Village. The once utilitarian structure can be transformed to include an active venue with a community courtyard to support public and private events; hospitality center orienting users to surrounding amenities, restrooms, and concessions; community center for public gathering; maker-spaces for co-working and learning. As an entertainment venue, it can support community and private events with indoor and outdoor spaces. This new programming opportunities can create a node of activity along Memorial Drive that will extend connections back to the W Main street corridor, connecting people to the Rivertrail and other trail systems through Ballou Park.

+ Create a trail system through Schoolfield Woods

A series of new, elevated and at-grade nature trails are proposed to meander through the serene woods with views of a restored stream corridor, connecting visitors between the Riverwalk and the Schoolfield Village. This system would connect north through the Filtration Plant adaptive reuse center over to the Riverwalk trail, Abreu Grogan and connect south to Ballou Park's existing trail system, and further down to the W Main Street corridor and the future opportunity at the Reservoir.

+ Provide a nature education center

A nature education center or kiosk could be located adjacent to the woods to provide additional support to the nature preserve and be gateway to the trail system for the neighborhood. Envisioned as a launching point for expansion of existing and future programs offered for families with children, and adults of ages to have enhanced access to nature and its restorative effects.

+ Build community spaces

While the goal of this site is to preserve the area as a natural area, community parks spaces and gardens are also strategically located throughout the site to activate areas for residents to enjoy a variety of different activities in nature.

+ Restore the stream corridors for natural and recreational purposes



FIGURE 31 | Schoolfield Woods + Filtration Plant Conceptual Site Plan

NOTE: The proposed catalyst sites are conceptual plans and illustrate only some of the many ideas heard during the planning process. The conceptual plans are intended to offer suggestions for future development at these parcels. Additional coordination will be required between parcel owners, the city, and/or private developers to further advance the design and test the economic feasibility. Additional engineering, traffic, and design studies will also be required to advance the concepts prior to implementation.



WHAT IT COULD LOOK LIKE

KEY STRATEGIES:



- 1 Create public spaces with public art opportunities
- 2 Create community courtyard in Filtration Plant
- 3 Incorporate community gathering spaces



- 4 Adaptive reuse of former Filtration Plant as a mixed use development with amenity spaces



- 5 Create a Nature Education Center
- 6 Restore and enhance stream
- 7 Provide elevated trails over stream
- 8 Create nature trail connecting down to W Main Street
- 9 Provide nature overlooks along the nature trail
- 10 Create passive open space
- 11 Preserve Schoolfield Woods Natural Area
- Native Plants and Water Retention
- - - Bioretention and Reduced Impervious Surface



- 12 Build 2-way bike lane connecting W Main Street and the Riverwalk Trail along Memorial Drive
- 13 Build pedestrian bridge across Memorial Drive to connect to Riverwalk Trail
- 14 Improve pedestrian connection to neighborhood / Neighborhood Greenway Connections and connections to Ballou Park



FIGURE 32 | Schoolfield Woods + Filtration Plan
Axonometric View

NOTE: The proposed catalyst sites are conceptual plans and illustrate only some of the many ideas heard during the planning process. The conceptual plans are intended to offer suggestions for future development at these parcels. Additional coordination will be required between parcel owners, the city, and/or private developers to further advance the design and test the economic feasibility. Additional engineering, traffic, and design studies will also be required to advance the concepts prior to implementation.



Community Experience

The reimagined Filtration Plant works hand in hand with the development of Schoolfield Woods to create a revitalized community space that celebrates the history of Schoolfield and amplifies its historical and natural resources.

Community design and neighborhood planning directly impacts community health – from how

we design our indoor and outdoor environments to access to services and amenities. The plan's approach to Restitch the Village by improving active connections, creating new trails and opportunities for recreation, and expanding vegetation and green infrastructure directly align with the revitalized Filtration Plant and Schoolfield Woods.

Potential Site Assets

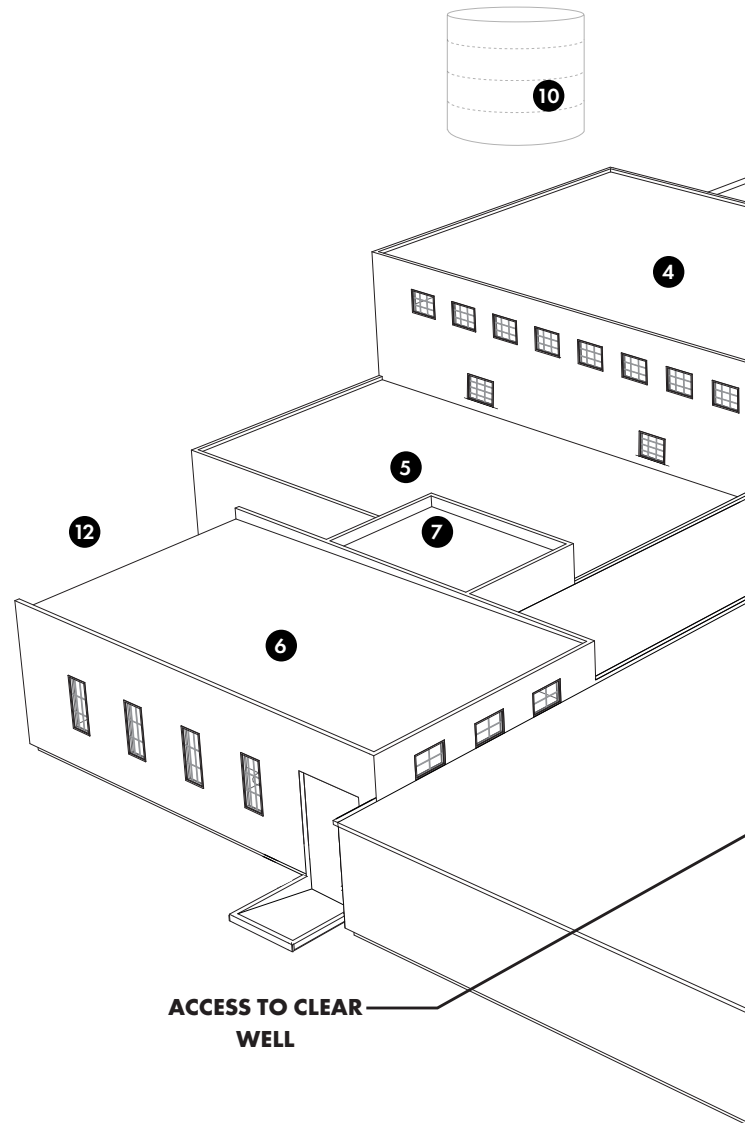
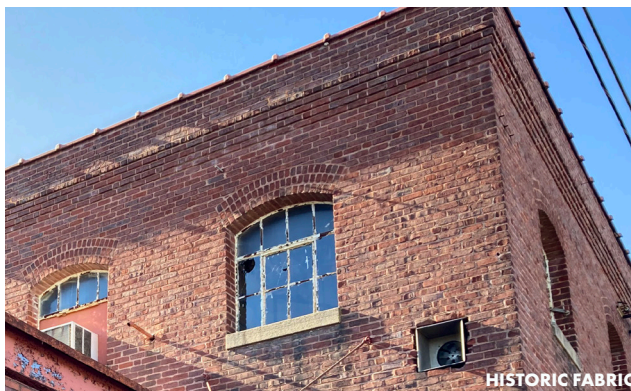
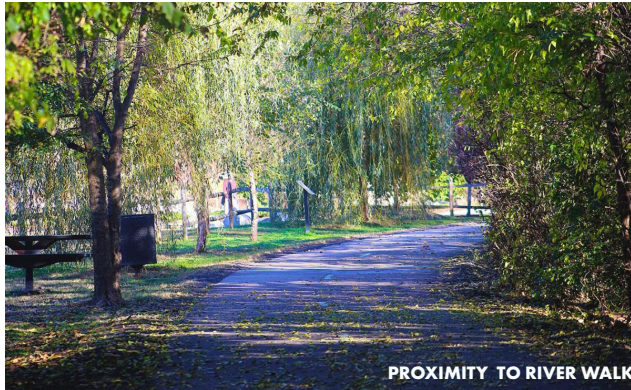









FIGURE 33 | 3D view south - Phase 0: preliminary work

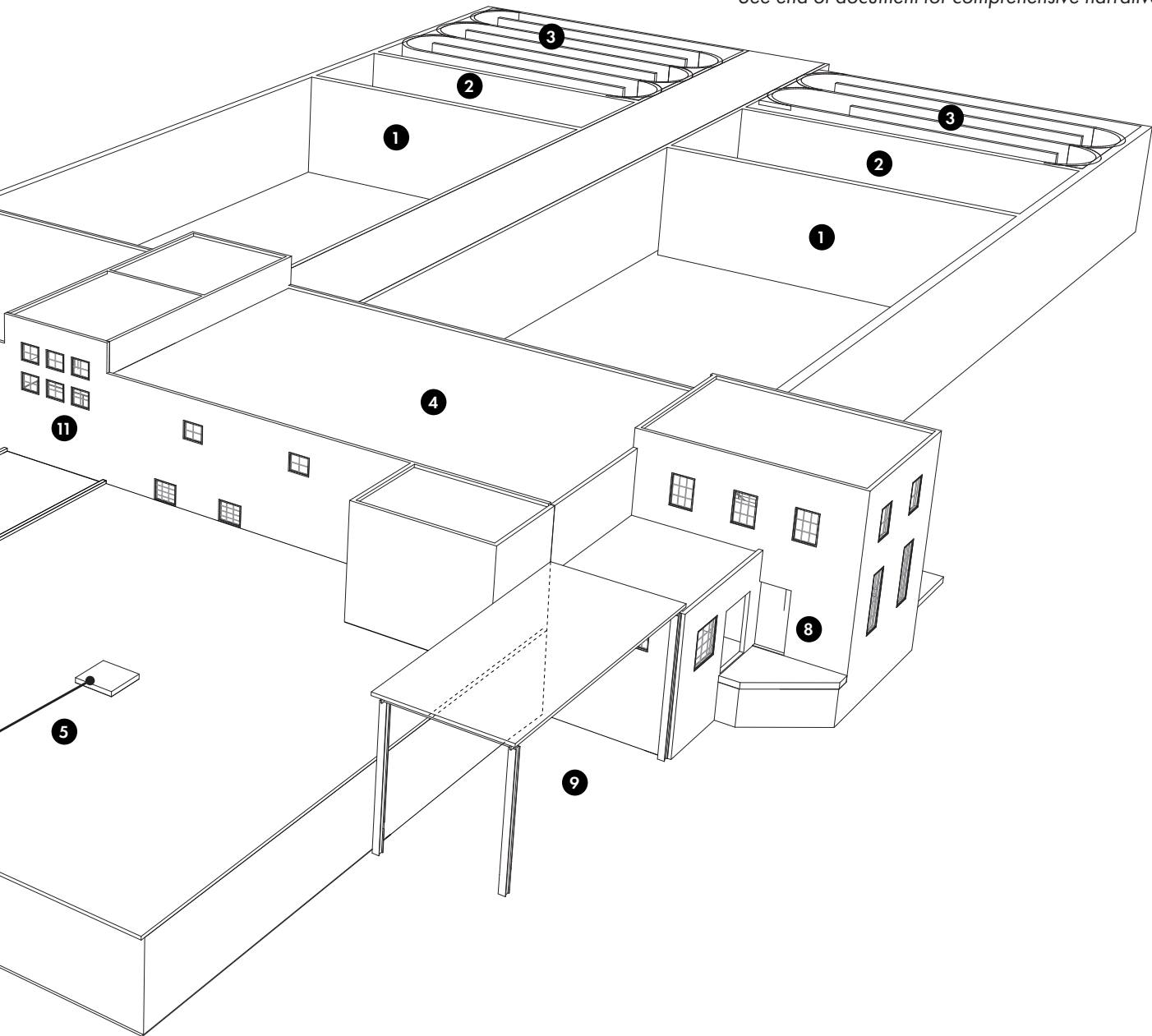
LEGEND

	VENDOR SPACES (FOOD/ DRINK/ RENTALS)		OCCUPIED GREEN ROOF
	RESTAURANT/ DISTILLARY/ MICROBREWERY		COURTYARD/ GATHERING SPACE
	EVENT SPACE		OFFICE/COWORKING
	OUTDOOR ENTERTAINMENT SPACE		

Pre-Design Recommendations*:

- + Confirm disconnections to existing external infrastructure (e.g. hydroelectric power plant and former Dan River Textile Mill)
- + Perform a comprehensive structural analysis. Stabilize existing structures as required.
- + Undergo a Phase 1 Environmental Site Assessment (ESA) for environmental recommendations.
- + Provide temporary infill at all openings to create a secure site

*See end of document for comprehensive narrative

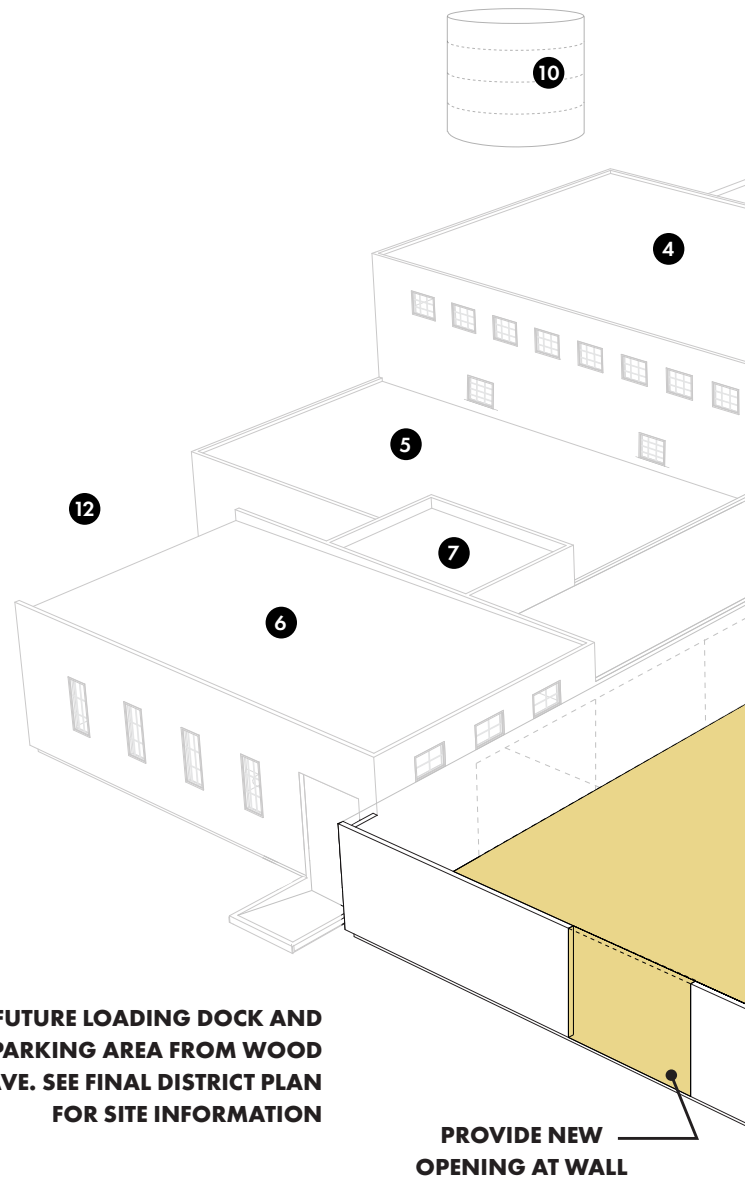
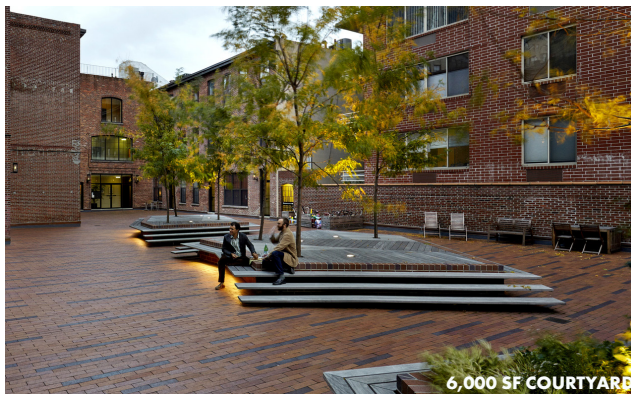


- 1 SETTLING BASIN
- 2 MECHANICAL CLARIFIER
- 3 MIXING BASIN
- 4 FILTER ROOM

- 5 CLEAR WELL
- 6 PUMP ROOM
- 7 TRANSFORMER ROOM
- 8 CHEMICAL STORAGE

- 9 LOADING DOCK
- 10 WASH WATER TANK
- 11 PIPE ROOM
- 12 SCHOOLFIELD BRANCH CREEK

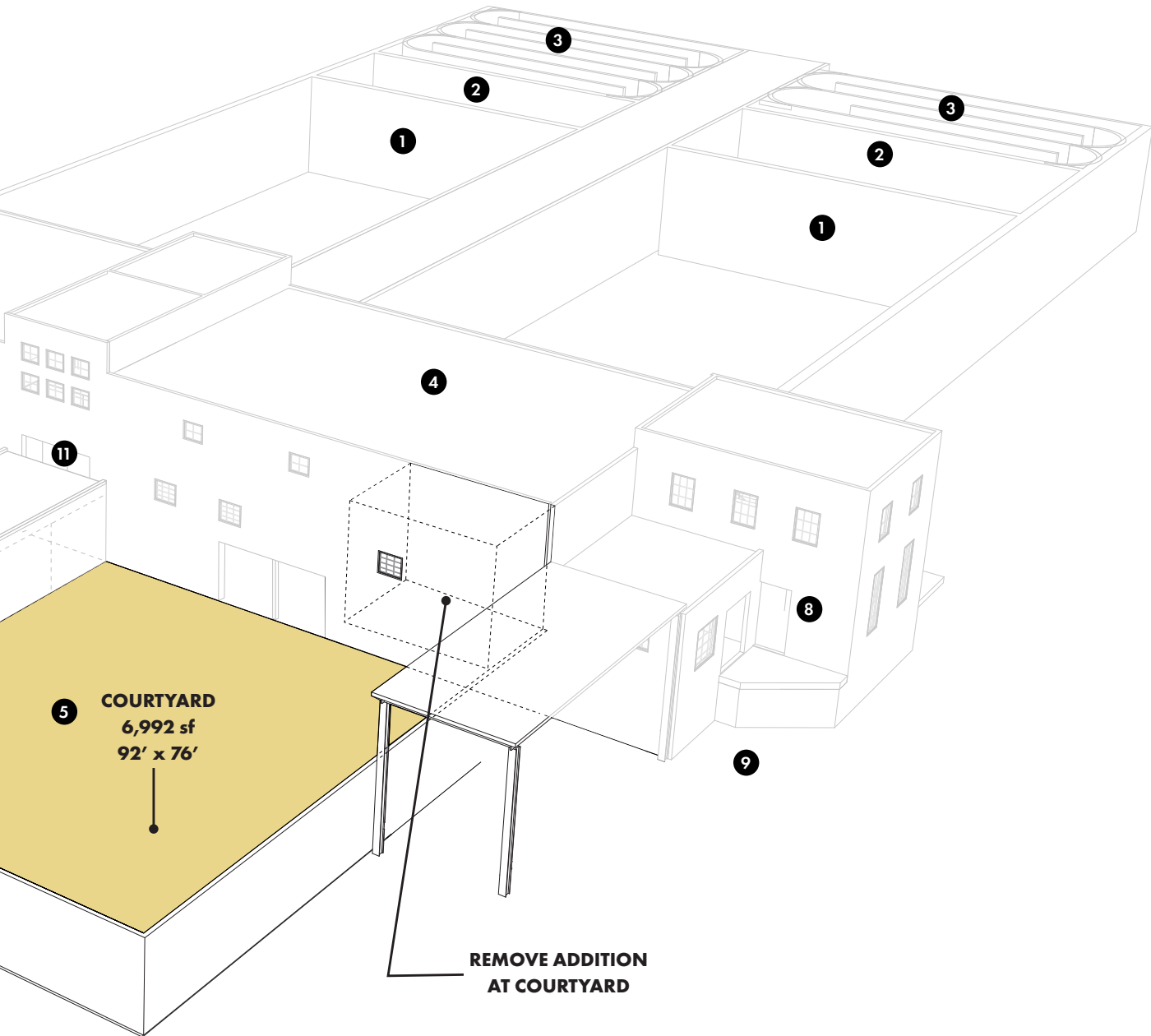
Potential Program - Option One:



Phase 1 Program*:

+ Outdoor Events And Mobile Vendors At Courtyard With Temporary Facilities

*See end of document for comprehensive narrative



- 1** SETTLING BASIN
- 2** MECHANICAL CLARIFIER
- 3** MIXING BASIN
- 4** FILTER ROOM

- 5** CLEAR WELL
- 6** PUMP ROOM
- 7** TRANSFORMER ROOM
- 8** CHEMICAL STORAGE

- 9** LOADING DOCK
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- 11** PIPE ROOM
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Potential Program - Option One:

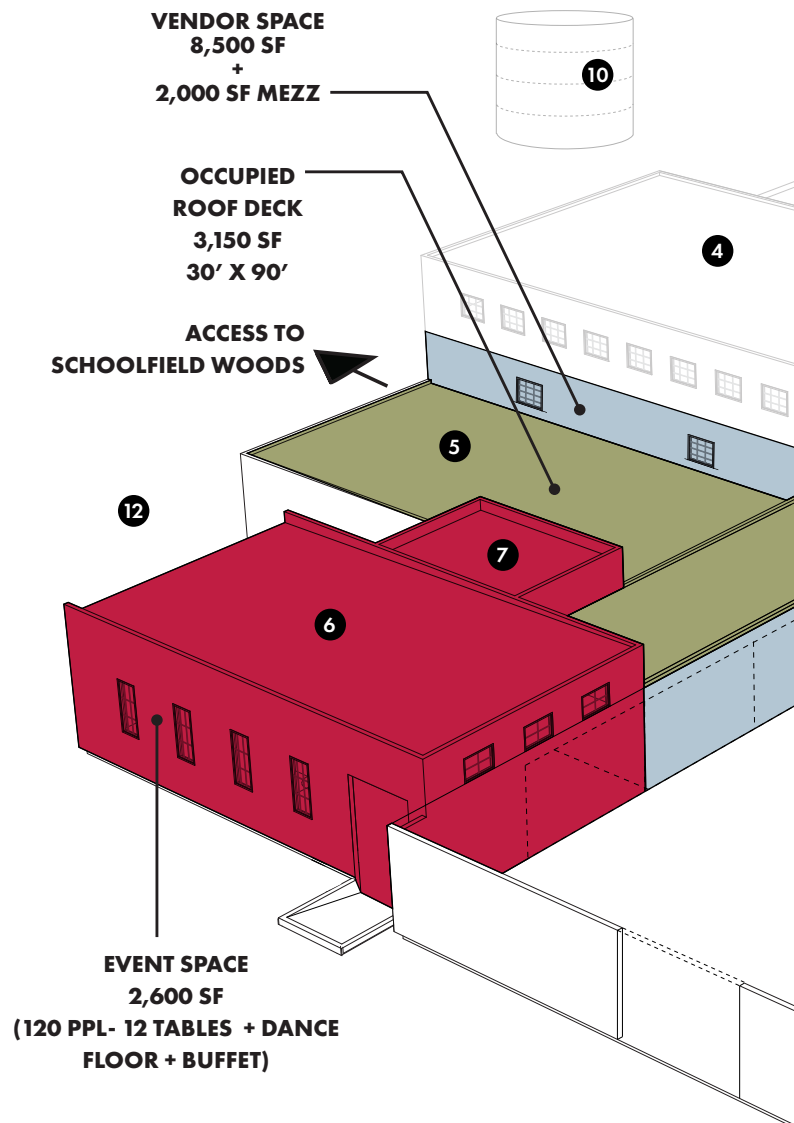


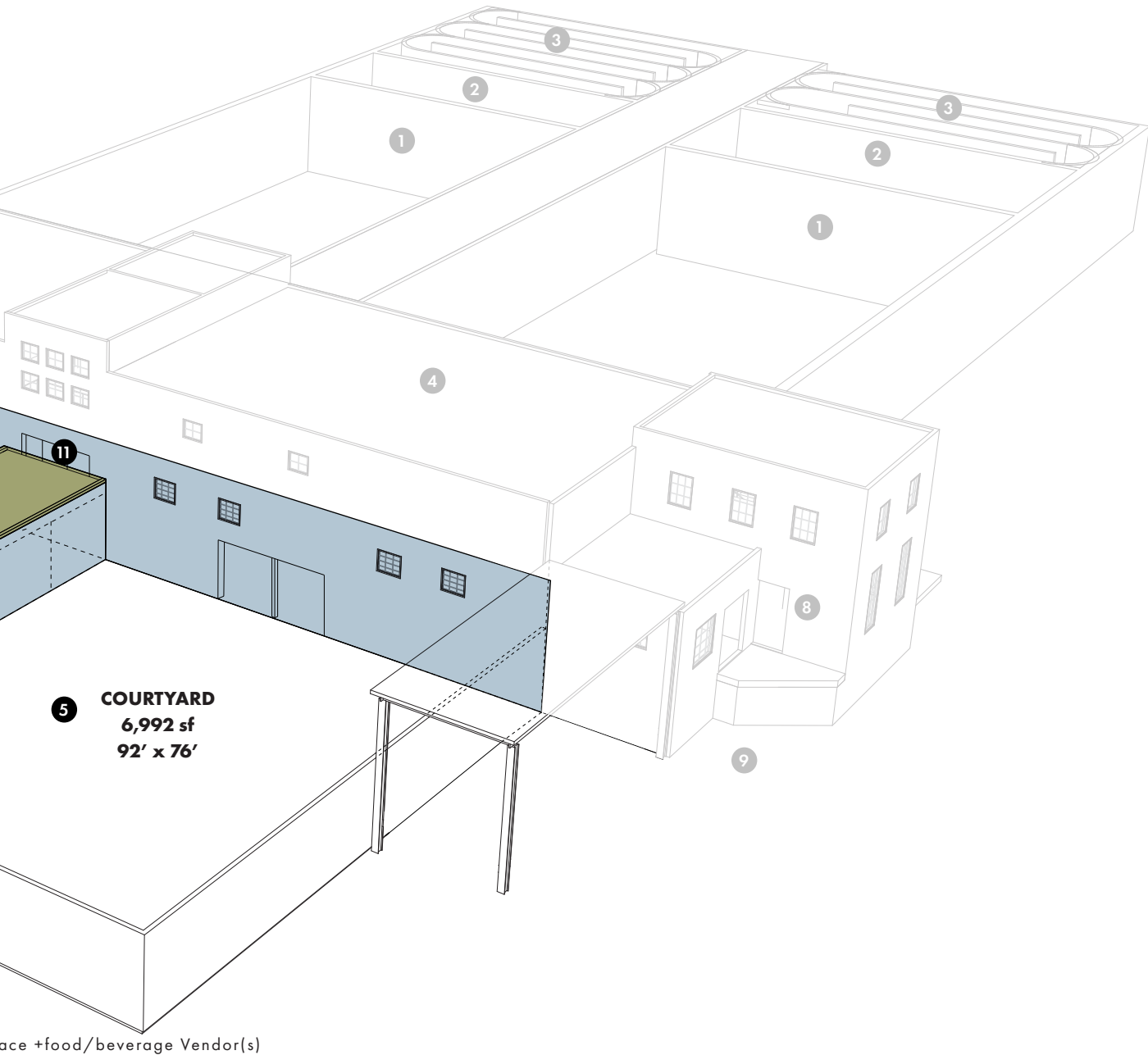
FIGURE 35 | 3D view south - Phase 2: Event Venue + Roof Deck + maker space

- | | |
|--------------------------------------|----------------------------|
| VENDOR SPACES (FOOD/ DRINK/ RENTALS) | OCCUPIED GREEN ROOF |
| RESTAURANT/ DISTILLARY/ MICROBREWERY | COURTYARD/ GATHERING SPACE |
| EVENT SPACE | OFFICE/COWORKING |
| OUTDOOR ENTERTAINMENT SPACE | |

Phase 2 Program*:

- + Outdoor Venues at Courtyard and Occupied Roof Deck, Event Space at Pump Room (6) (e.g., Catered Weddings, Music Performance, etc). Maker-Space at east Clear Well (5) and Vendor Spaces at Pipe Room (11)

*See end of document for comprehensive narrative



- 1 SETTling BASIN
- 2 MECHANICAL CLARIFIER
- 3 MIXING BASIN
- 4 FILTER ROOM

- 5 CLEAR WELL
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- 7 TRANSFORMER ROOM
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- 9 LOADING DOCK
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- 11 PIPE ROOM
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Potential Program - Option One (All)

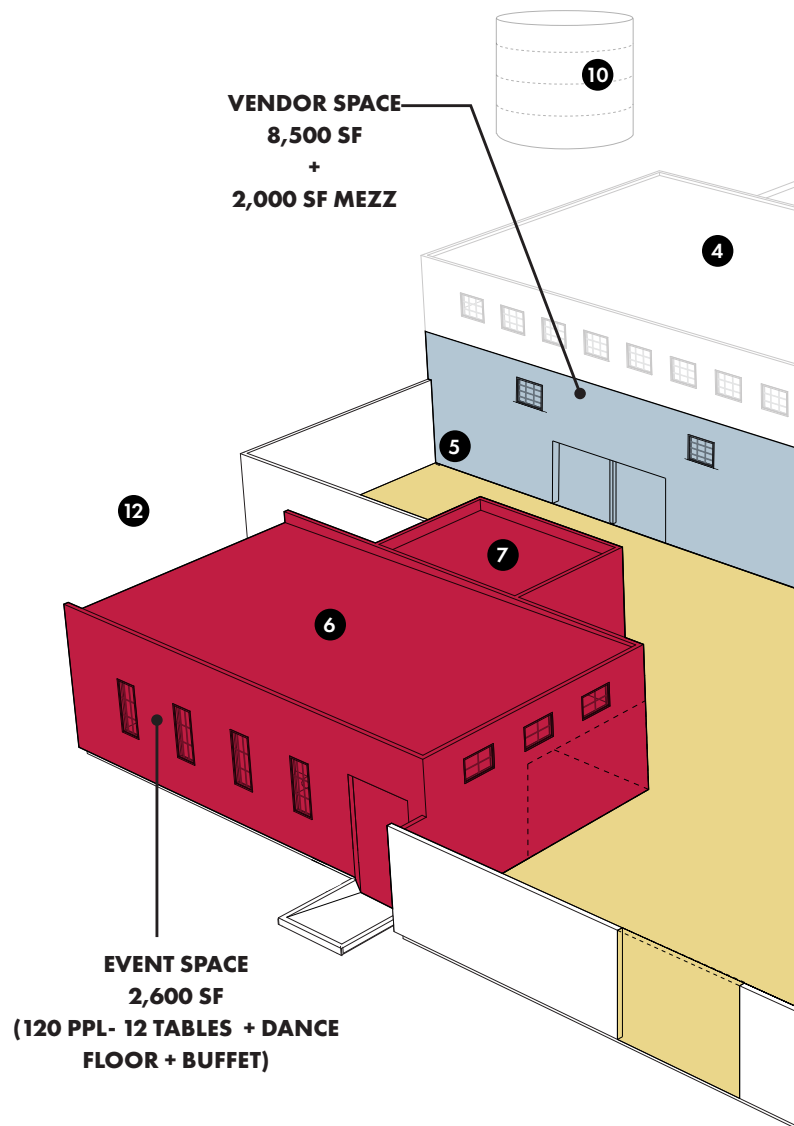









FIGURE 36 | 3D view south Phase 2 alternate:- enlarged Courtyard + vendor

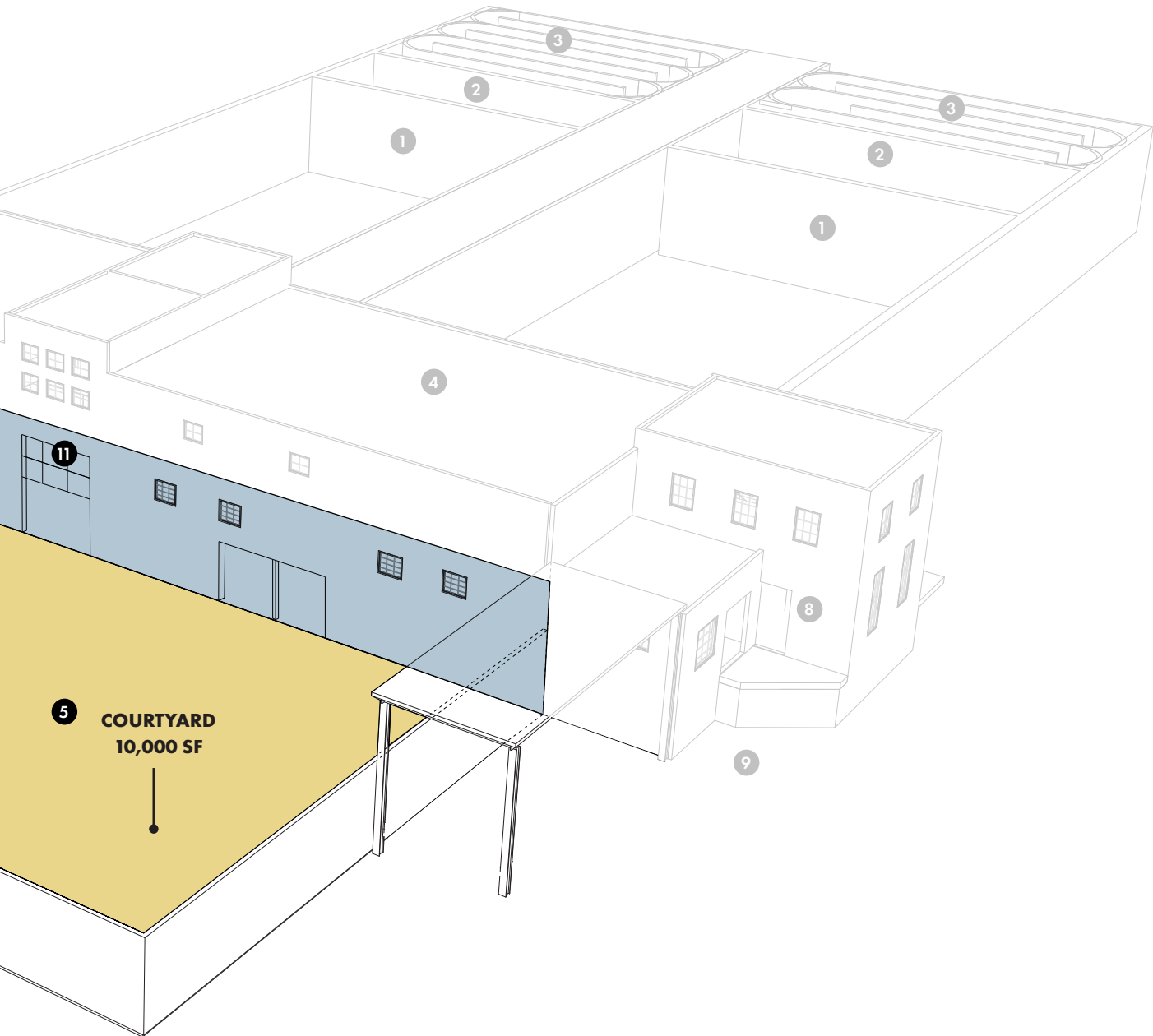
 VENDOR SPACES (FOOD/ DRINK/ RENTALS)	 OCCUPIED GREEN ROOF
 RESTAURANT/ DISTILLARY/ MICROBREWERY	 COURTYARD/ GATHERING SPACE
 EVENT SPACE	 OFFICE/COWORKING
 OUTDOOR ENTERTAINMENT SPACE	

Alternate):

Phase 2 (Alternate Program)*:

+ Outdoor Venues at Courtyard and Vendor Spaces at Pipe Room (11)

*See end of document for comprehensive narrative



- 1 SETTLING BASIN
- 2 MECHANICAL CLARIFIER
- 3 MIXING BASIN
- 4 FILTER ROOM

- 5 CLEAR WELL
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- 7 TRANSFORMER ROOM
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- 9 LOADING DOCK
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Potential Program - Option One:

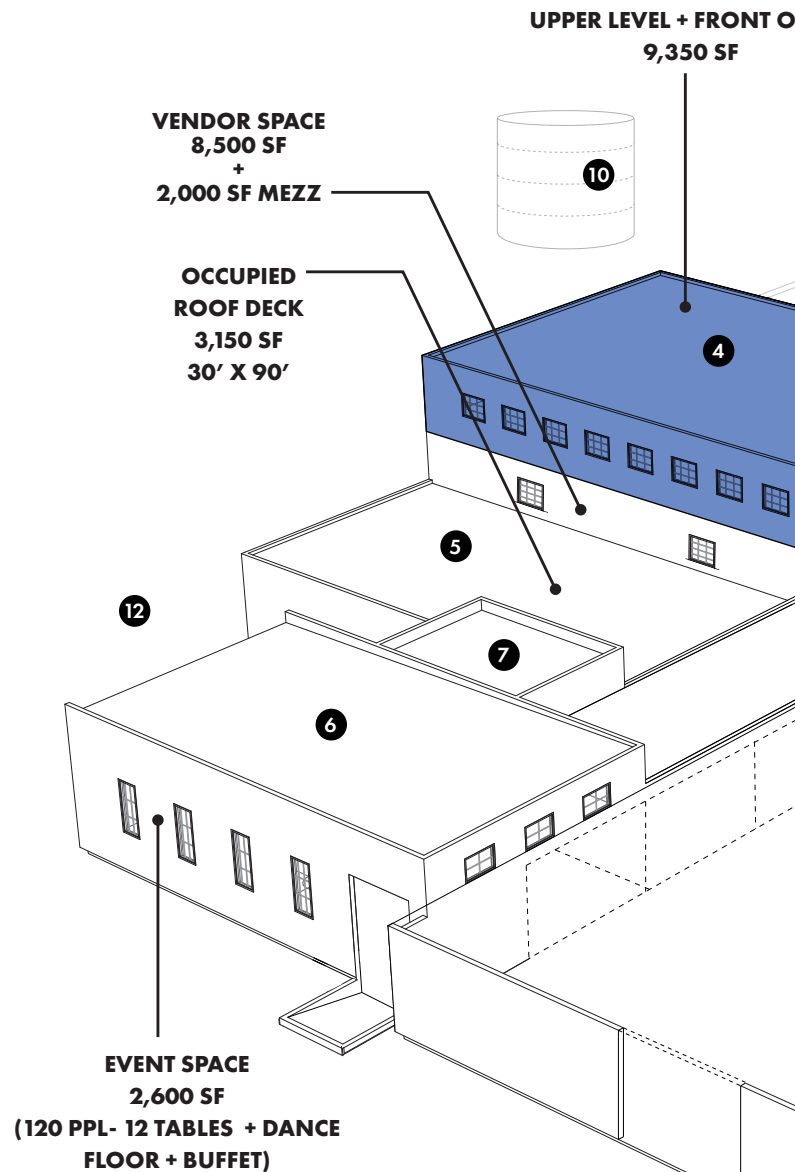
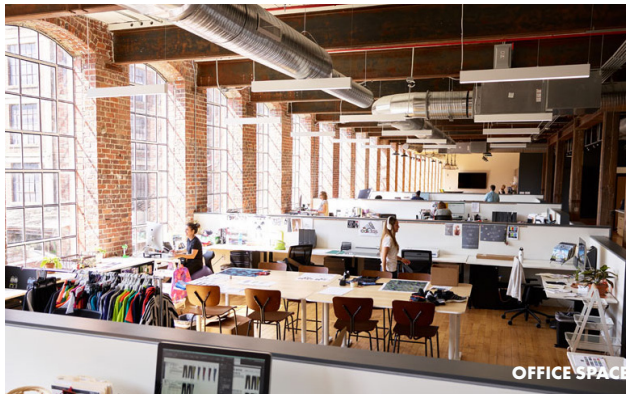


FIGURE 37 | 3D view south - phase 3: OFFICE/ CO-WORKING/ LEARNING

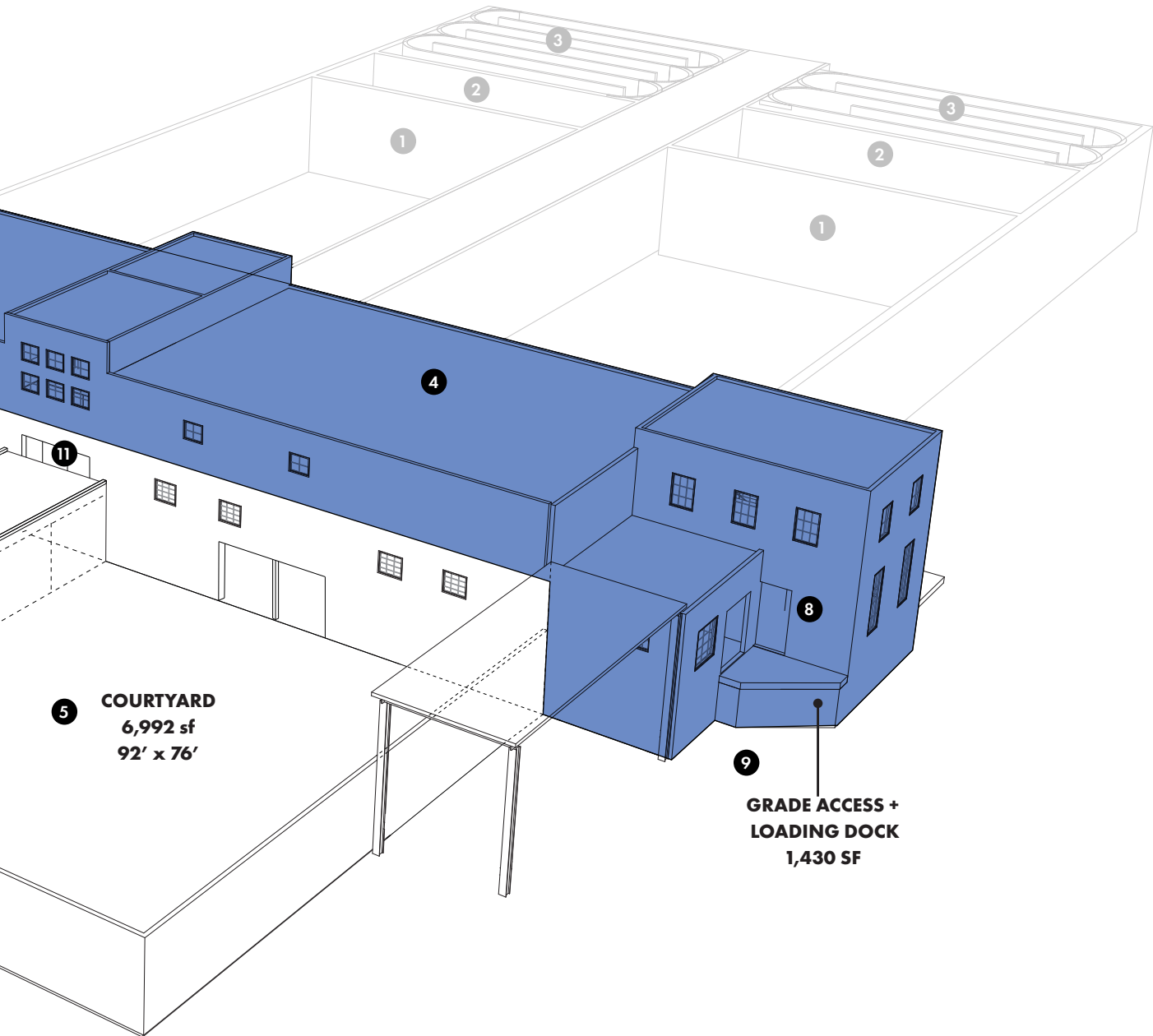
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|--------------------------------------|----------------------------|
| VENDOR SPACES (FOOD/ DRINK/ RENTALS) | OCCUPIED GREEN ROOF |
| RESTAURANT/ DISTILLARY/ MICROBREWERY | COURTYARD/ GATHERING SPACE |
| EVENT SPACE | OFFICE/COWORKING |
| OUTDOOR ENTERTAINMENT SPACE | |

Phase 3 Program:

- + Dedicated Offices for COB/Park and Recreation Dept., Co-working Space, and Community Learning Space.

*See end of document for comprehensive narrative

FFICE



G SPACE

- 1 SETTLING BASIN
- 2 MECHANICAL CLARIFIER
- 3 MIXING BASIN
- 4 FILTER ROOM

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- 6 PUMP ROOM
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Potential Program - Option One:

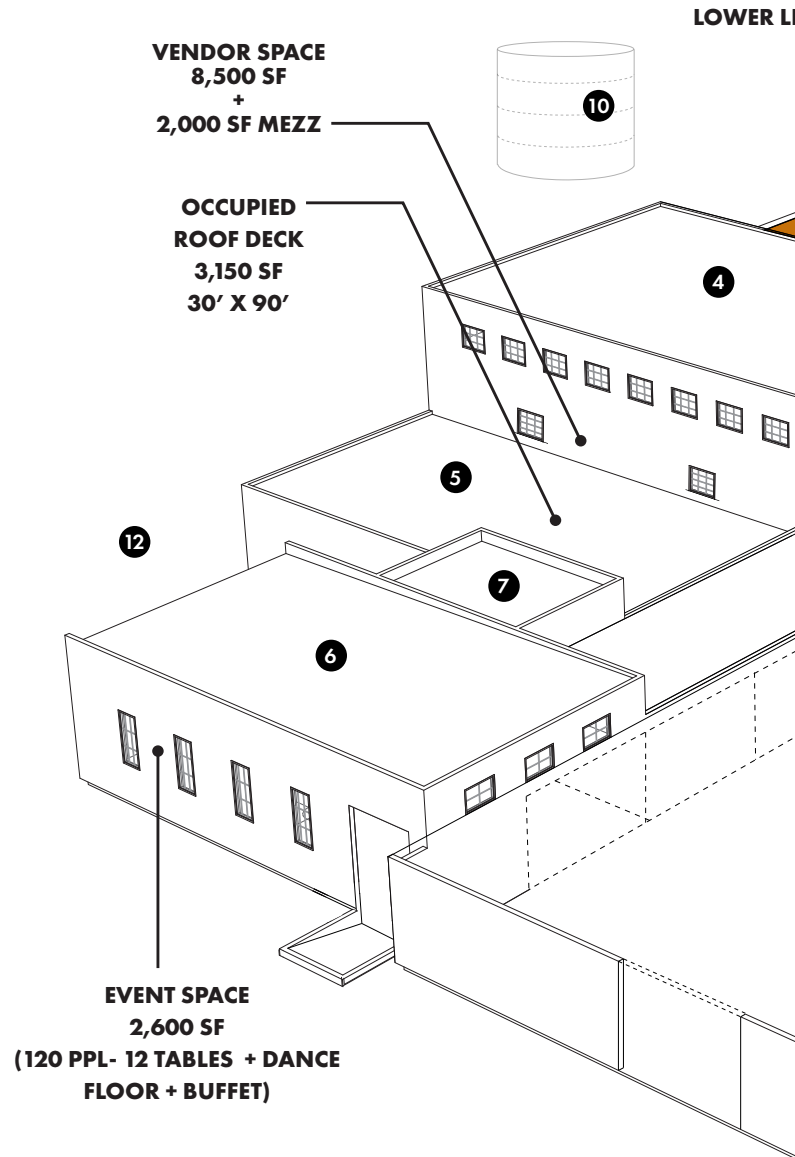
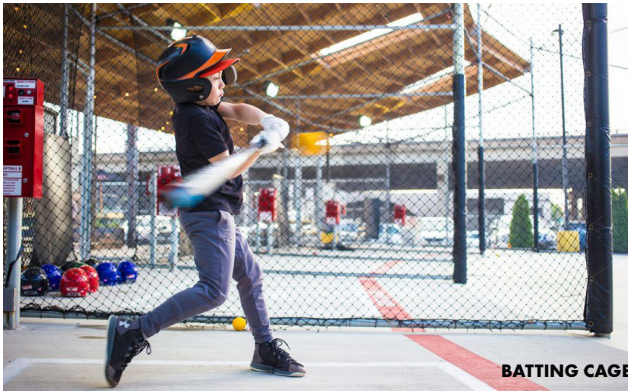


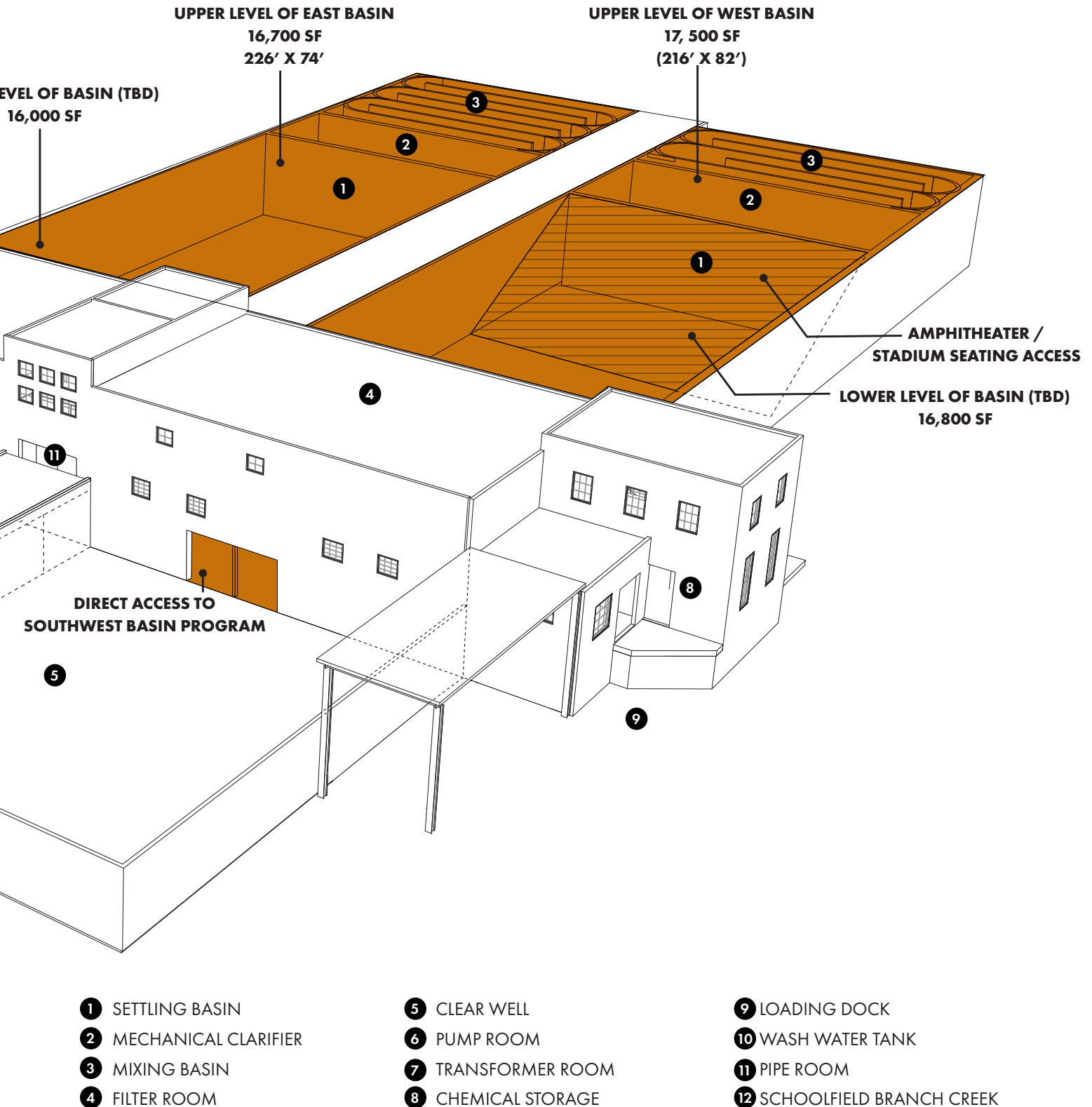
FIGURE 38 | 3D view south - Phase 4: ACTIVE USES IN BASIN

VENDOR SPACES (FOOD/ DRINK/ RENTALS)	OCCUPIED GREEN ROOF
RESTAURANT/ DISTILLARY/ MICROBREWERY	COURTYARD/ GATHERING SPACE
EVENT SPACE	OFFICE/COWORKING
OUTDOOR ENTERTAINMENT SPACE	

Phase 4 Program*:

- + Create Active Outdoor Space (e.g., Batting Cages, Lawn Games, etc.) with an Adjacent Amphitheater for Outdoor Entertainment (e.g., Music Venues, Movie Screening, Theatrical Performances, etc.) at Basins (1, 2, & 3).

*See end of document for comprehensive narrative



Potential Program - Option One:

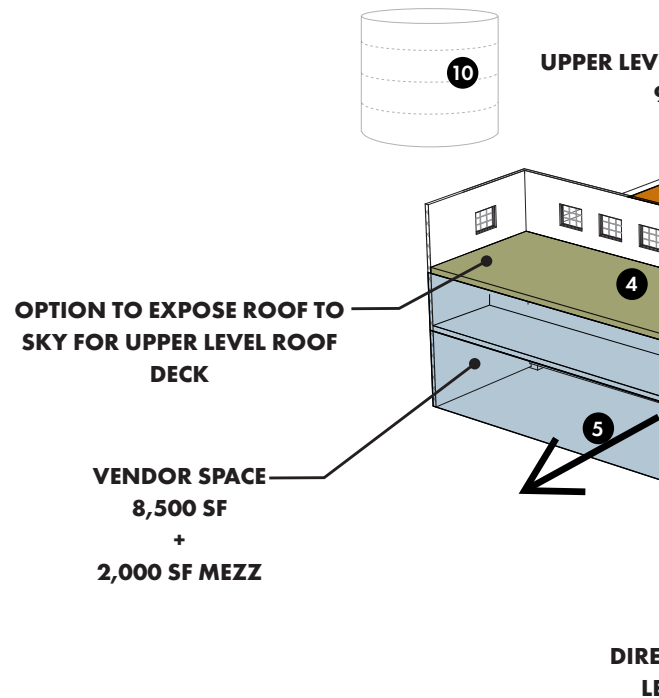
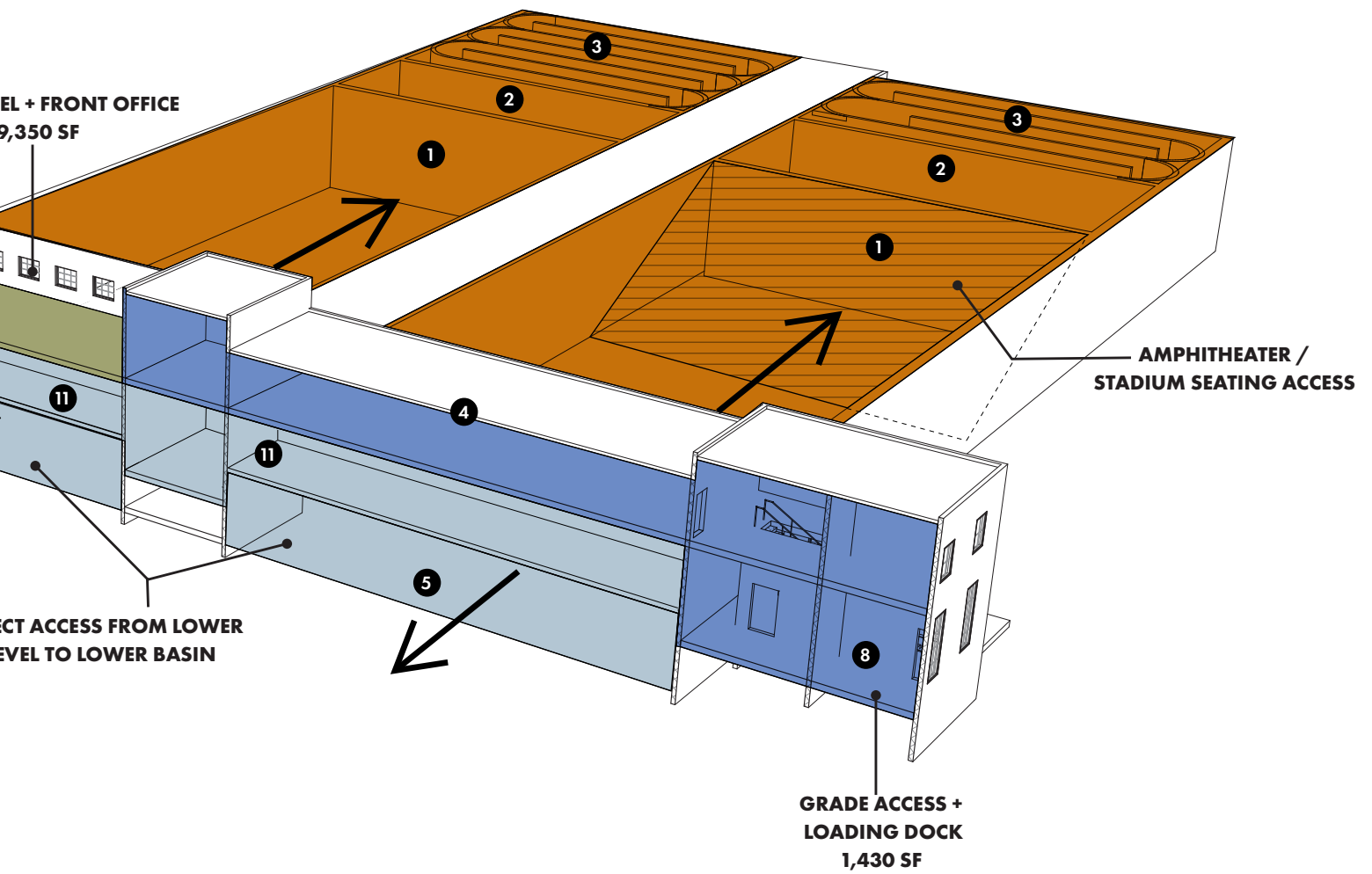


FIGURE 39 | 3D section phase 0-4: vendor WITH ACCESS TO BASIN

VENDOR SPACES (FOOD/ DRINK/ RENTALS)	OCCUPIED GREEN ROOF
RESTAURANT/ DISTILLARY/ MICROBREWERY	COURTYARD/ GATHERING SPACE
EVENT SPACE	OFFICE/COWORKING
OUTDOOR ENTERTAINMENT SPACE	

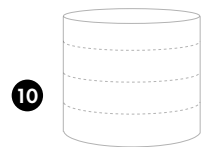


- 1 SETTLING BASIN
- 2 MECHANICAL CLARIFIER
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- 4 FILTER ROOM

- 5 CLEAR WELL
- 6 PUMP ROOM
- 7 TRANSFORMER ROOM
- 8 CHEMICAL STORAGE









- 9 LOADING DOCK
- 10 WASH WATER TANK
- 11 PIPE ROOM
- 12 SCHOOLFIELD BRANCH CREEK

Potential Program - Option Two:



LO
EAST SET

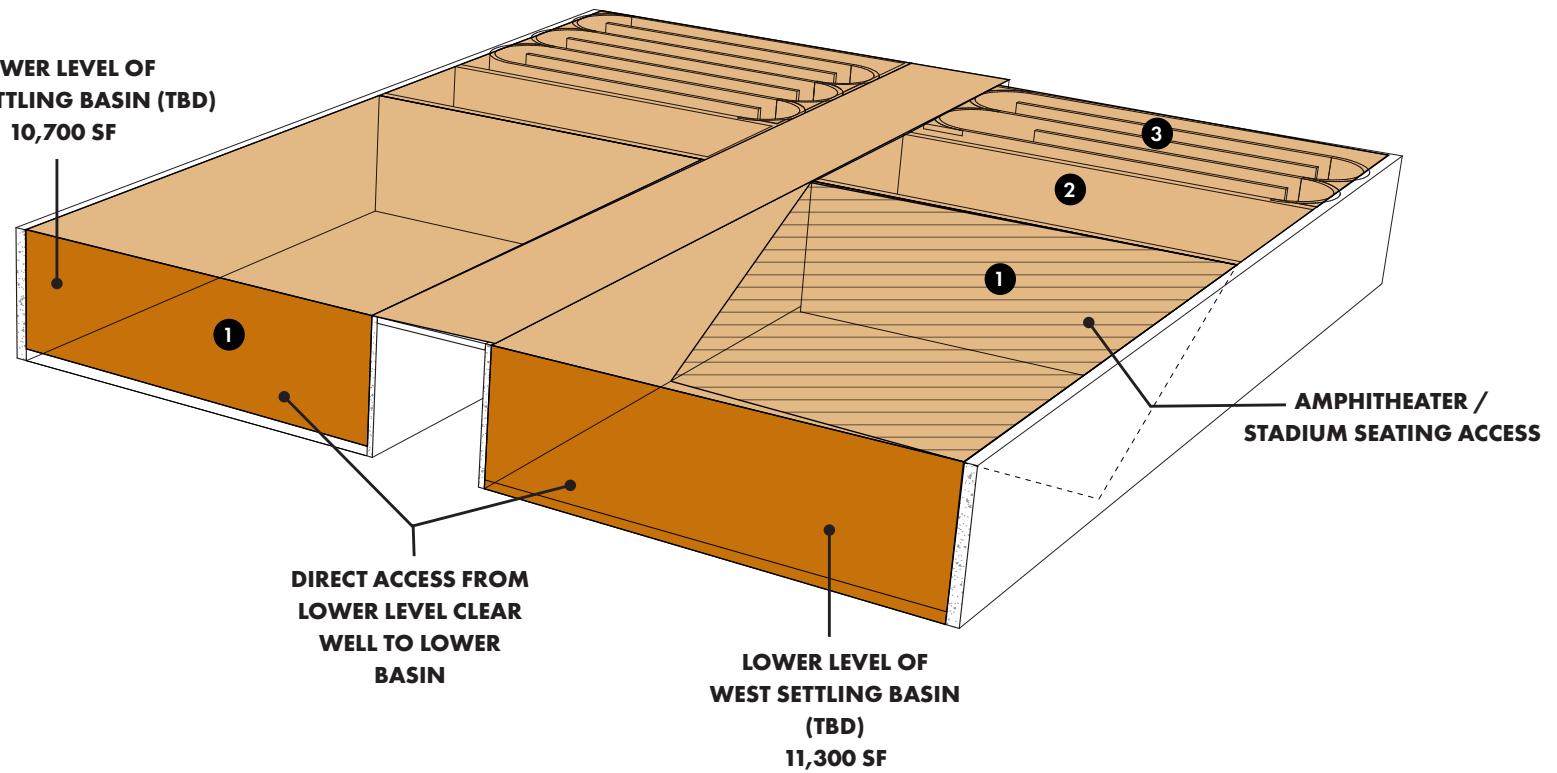
FIGURE 40 | 3D section through basin

	VENDOR SPACES (FOOD/ DRINK/ RENTALS)		OCCUPIED GREEN ROOF
	RESTAURANT/ DISTILLARY/ MICROBREWERY		COURTYARD/ GATHERING SPACE
	EVENT SPACE		OFFICE/COWORKING
	OUTDOOR ENTERTAINMENT SPACE		DEDICATED TENANT

Option 2 Program* (cont)

- + Public Program (Passive): See Option 1 phase 1-2A
- + Public Program (Active): See Option 1 phase 4
- + Private Program: Dedicated Commercial Tenant with small dedicated office space for COB in lieu of Phase 3 in option 1.

*See end of document for comprehensive narrative



- ① SETTLING BASIN
- ② MECHANICAL CLARIFIER
- ③ MIXING BASIN
- ④ FILTER ROOM

- ⑤ CLEAR WELL
- ⑥ PUMP ROOM
- ⑦ TRANSFORMER ROOM
- ⑧ CHEMICAL STORAGE

- ⑨ LOADING DOCK
- ⑩ WASH WATER TANK
- ⑪ PIPE ROOM
- ⑫ SCHOOLFIELD BRANCH CREEK

Potential Program - Option Two:

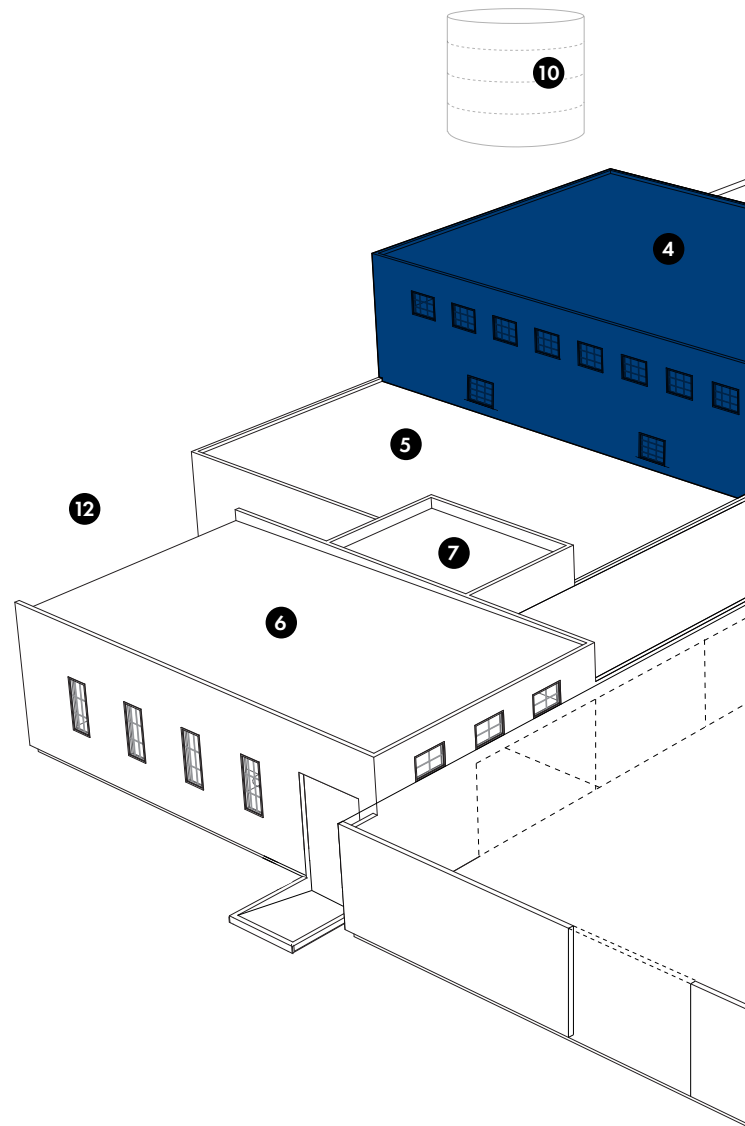


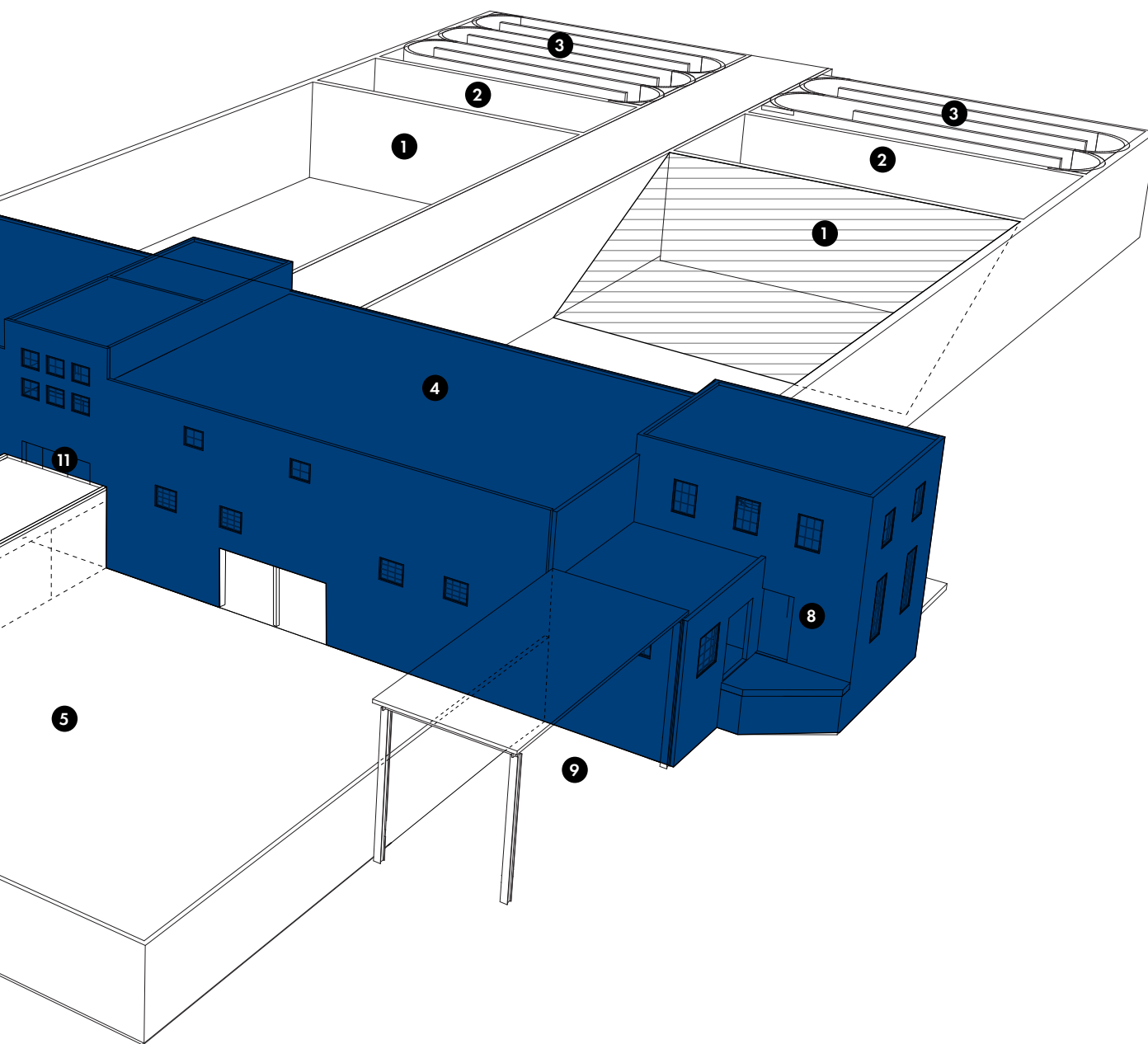
FIGURE 41 | 3D view south - phase 4: Option 1 + dedicated tenant

 VENDOR SPACES (FOOD/ DRINK/ RENTALS)	 OCCUPIED GREEN ROOF
 RESTAURANT/ DISTILLARY/ MICROBREWERY	 COURTYARD/ GATHERING SPACE
 EVENT SPACE	 OFFICE/COWORKING
 OUTDOOR ENTERTAINMENT SPACE	 DEDICATED TENANT

Option 2 Program*:

- + Public Program (Passive): See Option 1 phase 1-2A
- + Public Program (Active): See Option 1 phase 4
- + Private Program: Dedicated Commercial Tenant with small dedicated office space for COB in lieu of Phase 3 in option 1.

*See end of document for comprehensive narrative



- | | | |
|-------------------------------|---------------------------|------------------------------------|
| 1 SETTling BASIN | 5 CLEAR WELL | 9 LOADING DOCK |
| 2 MECHANICAL CLARIFIER | 6 PUMP ROOM | 10 WASH WATER TANK |
| 3 MIXING BASIN | 7 TRANSFORMER ROOM | 11 PIPE ROOM |
| 4 FILTER ROOM | 8 CHEMICAL STORAGE | 12 SCHOOLFIELD BRANCH CREEK |

Precedents for Program

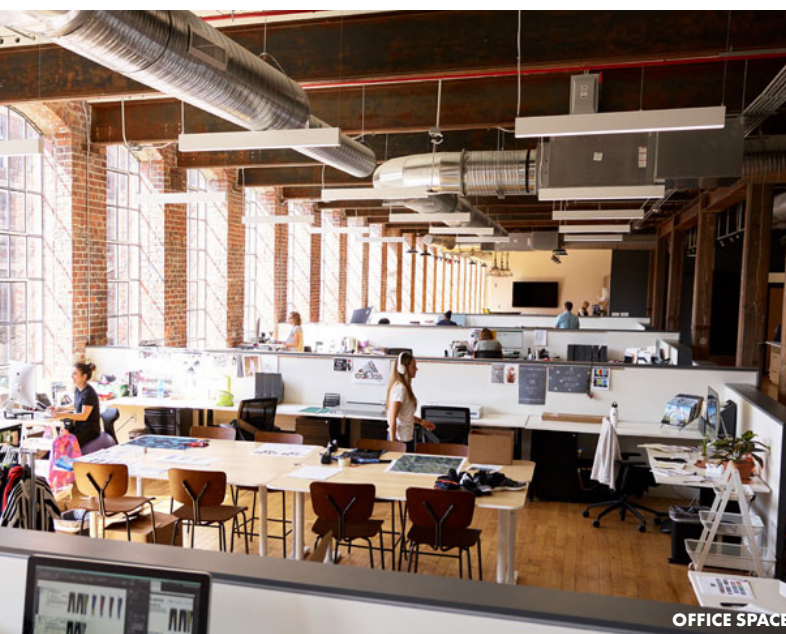




RETAIL



RESTAURANT WITH OUTDOOR COURTYARD

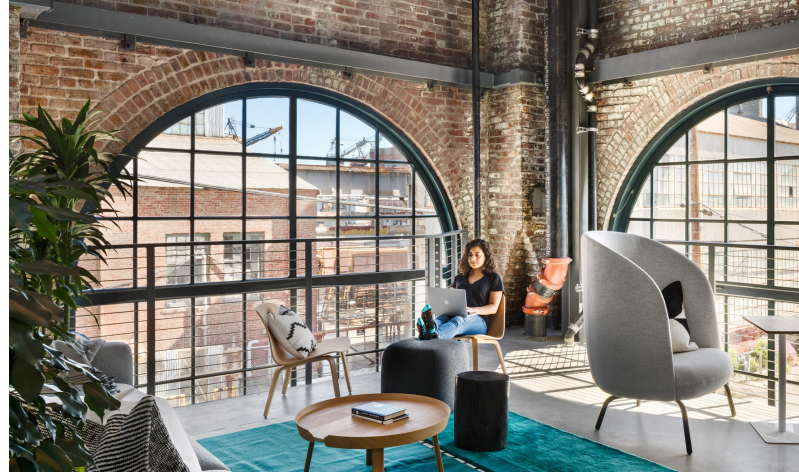


OFFICE SPACE



RESIDENTIAL

Precedents for Program





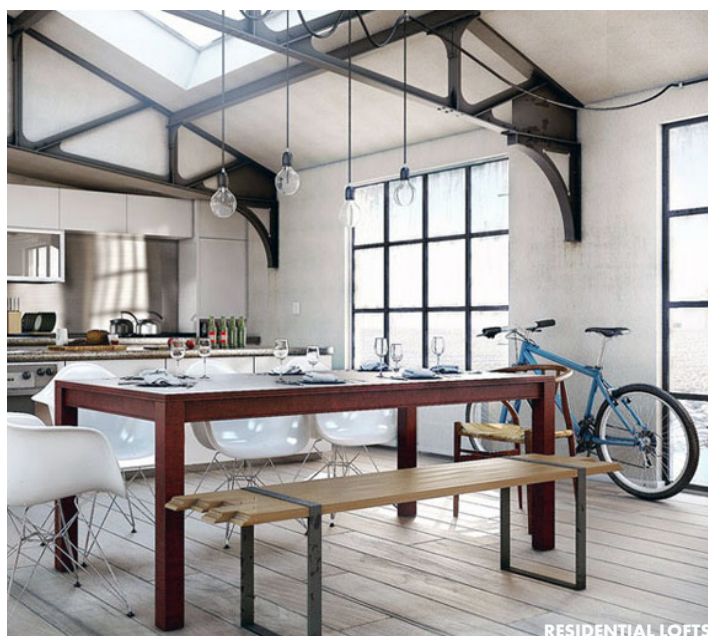
COMMUNITY GATHERING



OUTDOOR ENTERTAINMENT AND FOOD VENUE



ARTISANAL CRAFTSPERSONS (E.G. BREWERY)



RESIDENTIAL LOFTS

Implementation Phasing

PHASING RECOMMENDATIONS

GENERAL NOTES & ASSUMPTIONS

See Fig 22: Filtration Plant Buildings for referenced areas

- + Assume elevator will not be required in existing construction
- + Current stairs do not meet IBC code requirements. Historic provisions of IEBC may permit the existing guardrails to remain without modifications if approved by the local authority having jurisdiction

+ New MEPF and AV/Teledata infrastructure is required throughout

* Development of the site design is provided in the conceptual plan for the Schoolfield Woods and Filtration Plant. See the Final District Plan for information on parking, access, green-scape and hard-scape.

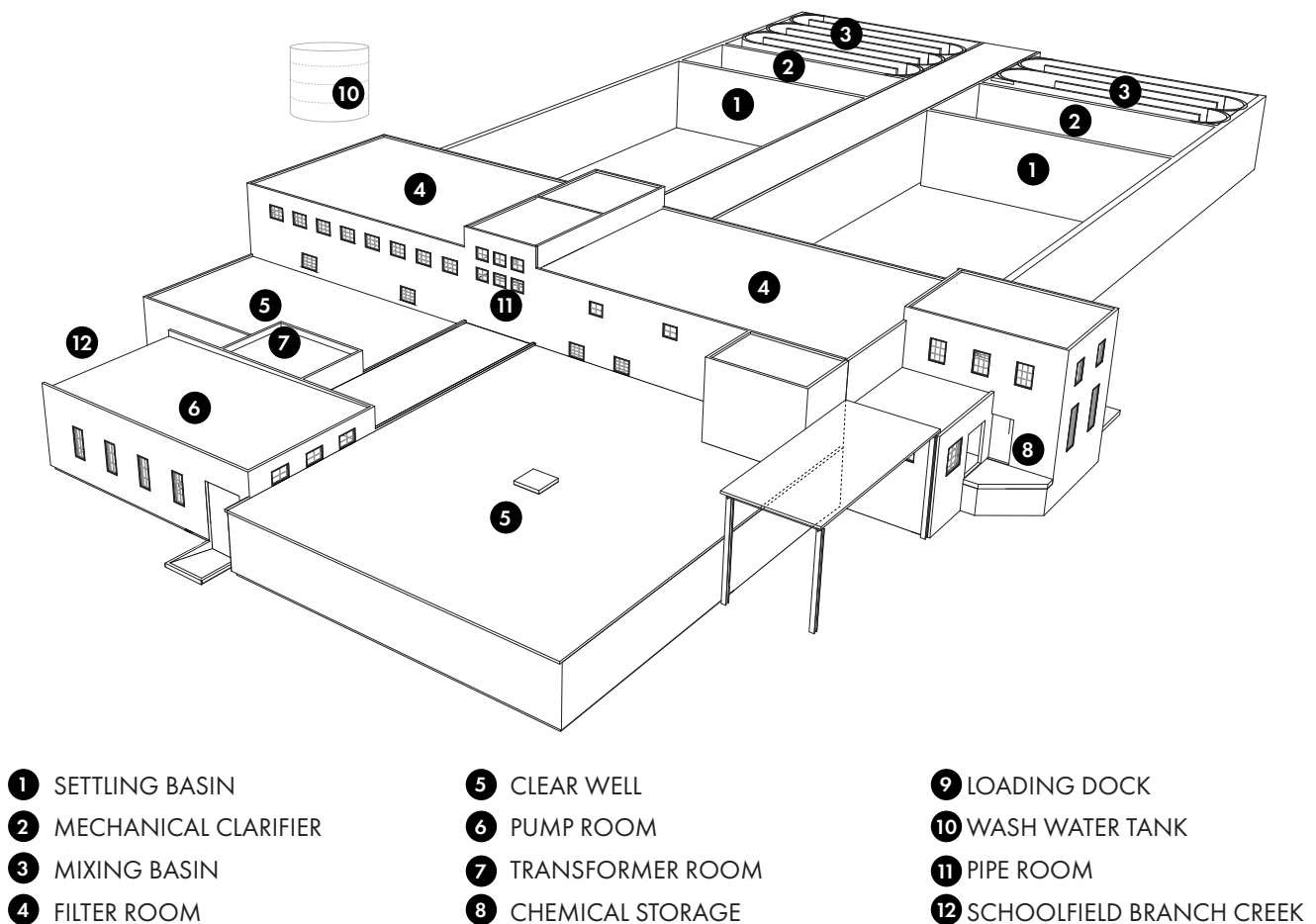


FIGURE 42 | 3d view- existing structure

OPTION 1: PUBLIC/ COMMUNITY VENUE WITH DEDICATED VENDORS

Phase 0: Preliminary Work Prior To Construction

- + Confirm disconnections to existing external infrastructure (e.g. hydroelectric power plant and former Dan River Textile Mill)
- + Perform a comprehensive structural analysis. Stabilize existing structures as required.
- + Undergo a Phase 1 Environmental Site Assessment (ESA) for environmental recommendations.
- + Provide temporary infill at all openings to create a secure site

Phase 1: North Courtyard and Site

Program: Outdoor Events And Mobile Vendors At Courtyard With Temporary Facilities

- + Demo:
 - + Remove roof of north Clear Well (5).
 - + Remove addition to Pipe Room (11) and Filter Room (4) at southwest corner of courtyard.
 - + Remove portion of wall at north Clear Well (5) for new entrance.
- + Adaptive Reuse:
 - + Restore masonry envelope where exposed around north Clear Well (5)
 - + Reuse of concrete and steel structure
- + New Construction:
 - + New entrance at north Clear Well (5)
 - + Implementation of landscape design at new courtyard (hard-scape and soft-scape)
 - + New electrical to building
 - + New potable water connection
 - + Temporary toilets

- + Provide new doors and windows at all existing openings where occupied
- + *New driveway access at Wood Ave
- + *New loading area at north off Wood Ave
- + *New parking for 85 cars at north
- + Opportunities: Public Art, park facilities, interpretive signage, temporary food and beverage locations with local food vendors, and community gathering areas.

Phase 2: Event Venue + Vendors with Occupied Roof Deck

Program: Outdoor Venues at Courtyard and Occupied Roof Deck, Event Space at Pump Room (6) (e.g., Catered Weddings, Music Performance, etc), Maker-Space at Southwest Clear Well (5) and Vendor Spaces at Pipe Room (11)

- + Demo
 - + Create new opening into Pump Room (6)
 - + Create new openings at north Clear Well (5) masonry walls into existing spaces beyond to support program
 - + Create new window openings at southwest Clear Well (5) to Schoolfield Woods
 - + Removed decommissioned pumps and other equipment throughout (potentially salvage for sculptural installation elsewhere)
 - + Remove existing roof deck and steel beams/ trusses at southwest Clear Well (5) and passageway between Pipe Room (11) and Pump Room (6)
- + Adaptive Reuse:
 - + Restore masonry and concrete envelope where exposed from demo
 - + Reuse of concrete and steel structure

Implementation Phasing

PHASING RECOMMENDATIONS (CONT)

+ New Construction

- + New roof membrane, paver system and structural decking and beams/columns sized to support an assembly loading at Pump Room and Transformer Room
- + New infrastructure to support permanent program (MEPF)
- + Infill floor openings in filter room with new concrete on metal deck and floor framing to align with adjacent existing floor.
- + New finished interior to support program:
 - + Event space for 150 people in Pump Room (6)
 - + Maker-space at southwest Clear Well (5)
 - + Commercial kitchen(s) at Pipe room (11)
 - + Dining at occupied roof deck (5)
- + Dedicated toilets
- + Provide new doors and windows at all existing openings where occupied
- + *Access to Schoolfield Woods from Occupied roof deck of Clear Well (5)

+ Opportunities: Revenue making spaces

Phase 3: Office/ Co-working plus Community Learning Space

Program: Dedicated Offices for COB/Park and Recreation Dept., Co-working Space, and Community Learning Space.

+ Demo

- + Interior as required to implement program at Filter Room (4). May include some double height spaces between Filter Room (4) and Pipe Room (11)

+ Adaptive Reuse

- + Restore masonry and concrete envelope where exposed from demo
- + Reuse of concrete and steel structure

+ New Construction

- + New Roof as required
- + New finished interior to support program
 - + Office Spaces
 - + Community Learning spaces
 - + Co-Working Spaces
- + Provide new doors and windows at all existing openings where occupied
- + Dedicated toilets

+ Opportunities: Revenue making spaces, offices for park affiliated individuals, and Community Center

Phase 4: Activate Southwest Basins

Program: Create Active Outdoor Space (e.g., Batting Cages, Lawn Games, etc.) with an Adjacent Amphitheater for Outdoor Entertainment (e.g., Music Venues, Movie Screening, Theatrical Performances, etc.) at Basins (1, 2, & 3).

+ Demo

- + Dredge sediment at Basins (1, 2, and 3)
- + Create new opening at new vendor area (11) to Basin (1)

+ Adaptive Reuse

- + Restore masonry and concrete envelope where exposed from demo
- + Reuse of concrete and steel structure

+ New Construction

- + Amphitheater structure configured with structural fill and concrete risers, seats, and steps.
- + Provide new doors and windows at all existing openings where occupied
- + Implementation of landscape design at basins (1, 2, & 3) (hard-scape and soft-scape)
- + *Parking and vehicular access to basins from Schoolfield Woods

+ Opportunities: Revenue making spaces, public space for community, and active play space for adults and children

OPTION 2: OPTION 1 WITH DEDICATED TENANT IN PHASE 3

Public Program (Passive): See Option 1 phase 1-2A

Public Program (Active): See Option 1 phase 4

Private Program: Dedicated Commercial Tenant with small dedicated office space for COB in lieu of Phase 3 in option 1.

- + Implement Phase 1, 2A and 4
 - + Occupied Roof deck implemented
 - + No public program in area 4 and 11
 - + Implement amphitheater and landscape design at basins
 - + Adaptive reuse of Filter Room (4) and Pipe Room (11)
- + Demo
 - + Interior as required to implement program at Filter Room (4). May include some double height spaces between Filter Room (4) and Pipe Room (11)
- + Adaptive Reuse
 - + Restore masonry and concrete envelope where exposed from demo
 - + Reuse of concrete and steel structure
- + New Construction
 - + New Roof as required
 - + Warm lit shelled space (21,000 GSF) for dedicated tenant
 - + New finished interior to support program
 - + Office Spaces for COB
 - + Provide new doors and windows at all existing openings where occupied
 - + Dedicated toilets

Order of Magnitude Cost

For historic adaptive reuse of commercial buildings in 2022 in the mid-Atlantic region, we used an average base value of \$262/SF plus a design/construction contingency of 15%, plus an additional multiplier of 10 % to allow for recent inflation:

$$(\$262 \times 1.15 \times 1.10 = \$332/\text{SF})$$

To re-purpose outdoor basins, assume \$60/SF plus a design/construction contingency of 15%, plus an additional multiplier of 10 % to allow for recent inflation:

$$(\$60 \times 1.15 \times 1.10 = \$76/\text{SF})$$

While multiple phases may increase this number over the long term, it might be necessary due to funding.

FILTRATION PLANT:

Under roof: 22,534 SF x \$332 = \$ 7.48 MM

Outdoor basins: 37,000 SF x \$76 = \$ 2.81 MM

TOTAL: \$ 10.3 MM