

FLOOD EMERGENCY ACTION PLAN FOR GEORGETOWN UNIVERSITY BOATHOUSE

Prepared for:



Rev No	A	—	—	—	—
Issue Purpose	Client Approval				
Date	5/29/2026				
By	AK				
Checked	BS				
Approved	MP				

Prepared by:



INTRODUCTION

This Flood Emergency Action Plan (“EAP”) for Georgetown University New Non-Motorized Boathouse identifies actions to be taken by specific personnel who monitor weather on a daily basis and are responsible for implementing emergency actions prior to, during and after a flooding event. Those personnel responsible for these specific preparedness and emergency tasks are referred to as “Site Emergency Coordinators” and the following are the actions for which they assume responsibility:

- monitoring flood warnings and flood predictions by the National Weather Service;
- implementing procedures for notifying staff, residents and temporary guests within the various uses of the building of an impending flood;
- initiating deployment of any manual floodproofing measures;
- initiating evacuation of the building;
- managing the return to normal operations after the threat of flood no longer exists; and
- implementing periodic flooding drills (can be coordinated with fire drills).

The Georgetown University New Non-Motorized Boathouse is located along the Potomac River waterfront in the Georgetown neighborhood of Washington, D.C., near the base of the Francis Scott Key Bridge within the Chesapeake and Ohio Canal National Historical Park. The site is situated adjacent to the Potomac River and within a mapped floodplain area that is susceptible to riverine flooding during significant storm events and elevated river stages. Flooding at the site is primarily influenced by conditions within the Potomac River watershed, including heavy rainfall events, upstream river flows, tidal influences, and coastal storm systems affecting the Washington, D.C. metropolitan region.

The Georgetown University New Non-Motorized Boathouse site is located within areas identified as being subject to both the 100-year and 500-year flood events. Although the facility is intended to be designed with critical elevations above applicable flood protection criteria, active monitoring of weather forecasts, river conditions, flood warnings, and emergency notifications will remain necessary to ensure the safety of building occupants and visitors and to support timely implementation of evacuation procedures when flood conditions are anticipated.

This EAP must always be kept current, as indicated by the date on the cover, with not only content but with the individuals identified and who have accepted responsibility as the “Site Emergency Coordinators” who will manage the tasks of monitoring the weather on a daily basis for the potential of a flood event and, when necessary, implementing emergency

actions as outlined in this EAP to ensure the safety of staff, students, visitors, temporary guests, and the facility when a flood is expected.

Although this EAP documents personnel identified as the Site Emergency Coordinators responsible for implementing these EAP protocols, there are many other personnel required to meet the demands of effectively implementing flood protection at this site. This EAP expects that while the Site Emergency Coordinators have overall coordinating responsibilities, there will also be a Lead Facilities Point of Contact (POC) who will directly implement the orders of the Site Emergency Coordinators in terms of monitoring physical flooding conditions, assessing the status of the building, and coordinating evacuation of the facility when necessary. The Lead Facilities POC will be directly responsible for coordinating the staff, operations personnel, and property management support necessary for such implementation.

SITE EMERGENCY COORDINATOR – RESPONSIBLE PARTY

The Building Owner(s) are ultimately responsible for ensuring that there are always personnel identified as the Site Emergency Coordinators responsible for monitoring flooding conditions and implementing both warning and evacuation protocols. The Building Owner(s) must designate a primary and a secondary Site Emergency Coordinator to act as the responsible party, who must be clearly identified with current contact information listed following so it is clear who is managing the Flood EAP for the facility. Delegation of this responsibility may be transferred to another responsible party. If at any point the Site Emergency Coordinators listed below are not able to perform the duties, a new responsible party shall be identified as the Site Emergency Coordinator(s) and listed below in this EAP.

The following person(s), by their signatures applied below, hereby agree to act as the Site Emergency Coordinators for monitoring flooding conditions and implementing flood protection, flood warning, and flood evacuation protocols as outlined in this EAP.

**SITE EMERGENCY COORDINATOR - RESPONSIBLE PARTY CONTACT
INFORMATION:**

PRIMARY CONTACT:

SECONDARY CONTACT:

NAME: _____

NAME: _____

TITLE: _____

TITLE: _____

PHONE: _____

PHONE: _____

SIGNATURE: _____

SIGNATURE: _____

DATE: _____

DATE: _____

**FACILITY'S ADDITIONAL POINT OF CONTACT – CONTACT
INFORMATION:**

PRIMARY CONTACT:

SECONDARY CONTACT:

NAME: _____

NAME: _____

TITLE: _____

TITLE: _____

PHONE: _____

PHONE: _____

SIGNATURE: _____

SIGNATURE: _____

DATE: _____

DATE: _____

This EAP is meant to be a living document to be edited as needed to remain current and informative for those responsible for implementing the EAP protocols for the Georgetown University New Non-Motorized Boathouse site. The “Site Emergency Coordinator - Responsible Party” listed above must always be kept up to date to ensure flood safety protocols are maintained without interruption. Their signatures indicate that they have agreed to accept this responsibility. This document must always be updated with the current Responsible Party at all times during the life of the building. The date on the cover must be updated whenever any change is made to this EAP.

1.0 MONITORING FLOOD CONDITIONS

1.1 General Flood Broadcast Terminology

The National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS) collects and interprets rainfall, river stage, tidal, and coastal storm data from monitoring stations located throughout the Potomac River watershed and the Washington, D.C. metropolitan region. Using this information, the NWS develops forecasts and issues flood advisories, watches, and warnings associated with riverine and coastal flooding conditions that may affect the location of the Georgetown University New Non-Motorized Boathouse and surrounding areas along the Potomac River.

A “Flood Watch,” “Flood Warning,” and “Flash Flood Warning” are issued for flooding associated with heavy rainfall, urban drainage systems, streams, and low-lying inland areas throughout the District of Columbia region. In addition, a “Coastal Flood Advisory,” “Coastal Flood Watch,” and “Coastal Flood Warning” are issued for flooding conditions associated with elevated water levels along the Potomac River and tidal waterways. A “Coastal Flood Advisory” means that minor coastal flooding is occurring or expected. A “Coastal Flood Watch” indicates that significant coastal flooding is possible. A “Coastal Flood Warning” means that significant coastal flooding is occurring or imminent.

The Georgetown University New Non-Motorized Boathouse is located directly adjacent to the Potomac River and may be susceptible to flooding during significant rainfall events, elevated river stages, tidal surges, and coastal storm events. Therefore, the Site Emergency Coordinator shall use these NWS advisories, watches, and warnings as general indicators of potential flooding conditions and situational awareness, but not as the sole indicator for implementing emergency response protocols.

Step 1: Monitor the Weather for Flood Events

The first step in monitoring flood conditions at this site is to regularly review weather forecasts and river conditions for the Washington, D.C. region. The on duty Site Emergency Coordinator shall check the 7-day weather forecast each morning to remain aware of developing storm systems, heavy rainfall forecasts, and potential flood-producing events.

A “Weather Log” should be maintained by the Site Emergency Coordinator to document whether significant rainfall, coastal storm activity, or elevated river conditions are forecasted within the next three days. This log will provide the first indication of a potential flood event that may affect the facility.

Step 2: Receive Emergency Broadcasts

In addition to reviewing the general weather forecast each morning, the Site Emergency Coordinator shall prepare to receive and monitor flood announcements and emergency

broadcasts issued by the NWS. These broadcasts can be received through local radio stations, NOAA Weather Radio stations, and mobile emergency notification systems.

NWS emergency broadcasts for the Washington, D.C. region may be received from the following NOAA Weather Radio stations operated by the Baltimore/Washington Forecast Office:

- Baltimore (Pikesville), MD — KEC-83 on 162.400 MHz at 1000 Watts
- Hagerstown (Clear Spring), MD — WXM-42 on 162.475 MHz at 1000 Watts
- Manassas (Independent Hill), VA — KHB-36 on 162.550 MHz at 1000 Watts
- Moorefield, WV — WXM-73 on 162.400 MHz at 500 Watts
- Frostburg, MD — WXM-43 on 162.425 MHz at 300 Watts
- Charlottesville (Covesville), VA — KZZ-28 on 162.450 MHz at 1000 Watts
- Washington (Silver Spring), MD — WNG-736 on 162.450 MHz at 300 Watts
- Fredericksburg, VA — WZ-2527 on 162.425 MHz at 300 Watts

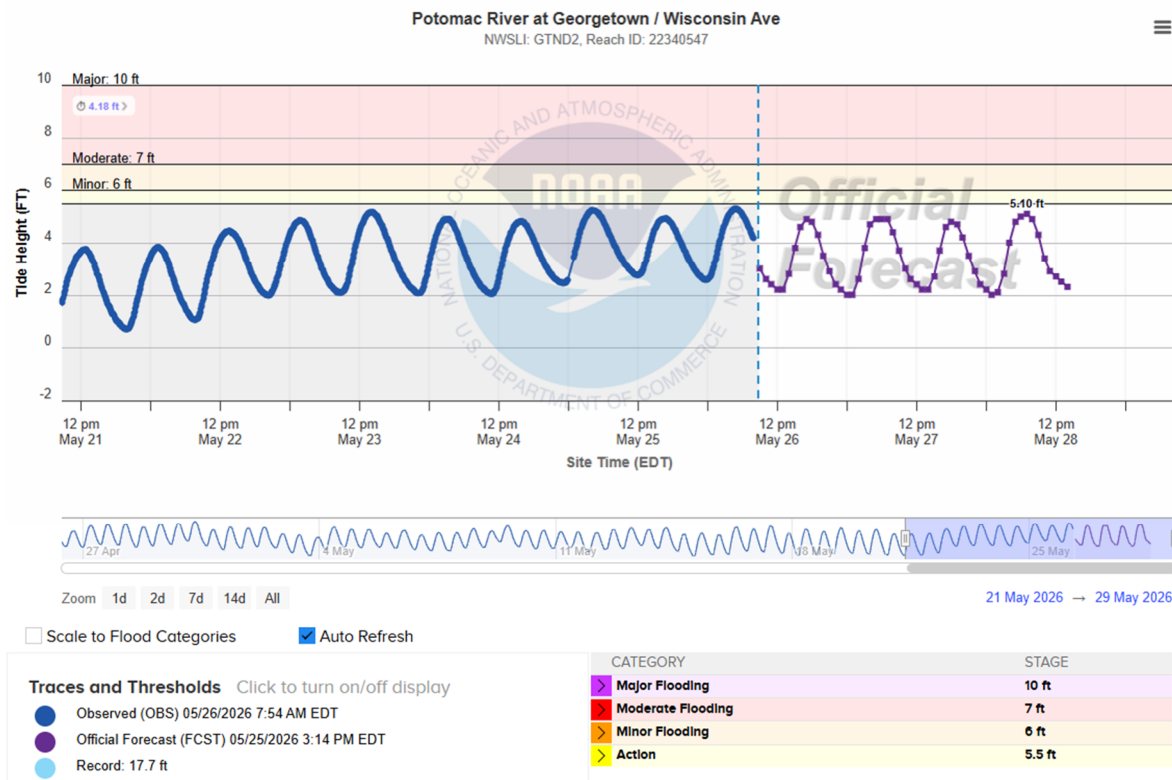
Emergency alerts for the Washington, D.C. area are also distributed through wireless emergency alerts and the District's "AlertDC" notification system. The Site Emergency Coordinator shall register for AlertDC notifications and maintain a dedicated NOAA Weather Radio receiver on-site, such as a Midland NOAA Weather Monitor Model WR-100, or equivalent device capable of continuously receiving NOAA weather broadcasts and emergency notifications.

The weather radio/receiver shall remain operational on the premises and dedicated solely to receiving NOAA weather broadcasts and emergency warnings, which are updated and repeated regularly during active weather and flood events.

Step 3: Monitor Potomac River Water Levels

After becoming aware of any potential rainfall event, coastal storm system, or elevated river condition over the following several days, the Site Emergency Coordinator shall monitor forecasted Potomac River water levels and flood stage predictions by accessing the National Weather Service (NWS) gauge information for Georgetown, Washington, D.C. at:

<https://water.noaa.gov/gauges/GTND2>



This live chart displays both the actual “Observed” river water levels and the anticipated “Forecast” water levels for the Potomac River in the Georgetown waterfront area as shown in the figure above. Observed water levels are shown as a dark blue line, while forecasted water levels are shown in purple. These forecasts provide advance notice of rising river conditions and possible flooding that could affect the Georgetown University New Non-Motorized Boathouse facility.

According to the National Weather Service, minor flooding within the Georgetown and Washington, D.C. waterfront region generally begins when river levels exceed approximately elevation 6.0 feet at the Georgetown gauge. Moderate flooding begins at approximately elevation 7.0 feet, while major flooding occurs when water levels exceed approximately elevation 10.0 feet.

(Note that the elevations reported on the NWS Georgetown gauge are measured from a local station datum, while elevation data used in the site plans and construction documents for the Georgetown University New Non-Motorized Boathouse are based on NAVD88. At this site, the station datum is approximately 2.3 feet below NAVD88. Therefore, elevations shown on the NWS gauge are approximately 2.3 feet higher than the corresponding NAVD88 elevations.)

For the Georgetown University New Non-Motorized Boathouse, the lower level of the structure is intended for non-habitable boathouse and operational uses and may experience flooding during elevated river conditions. The primary occupied and habitable spaces, including the mezzanine level and the main building entrance, are located at approximately

elevation 15.0 feet NAVD88. This elevation corresponds to approximately 17.3 feet on the Georgetown NWS gauge..

The Site Emergency Coordinator shall closely monitor the Georgetown Potomac River gauge whenever forecasted water levels approach this elevation, as flooding impacts to occupied spaces, building access, utilities, operations, and evacuation procedures may become necessary. Because the NWS flood categories are regional indicators, the 10-foot station datum elevation shall be used as the site-specific reference elevation for evaluating when additional monitoring, flood protection measures, building closure procedures, or evacuation coordination may be necessary, given that this is the elevation at which NOAA considers major flooding to begin at the surrounding area, and evacuations may be needed.

The following data sheet provides a summary of applicable flood elevations and key building elevations relative to the project datum and referenced river gauge datum used by the National Weather Service.

KEY ELEVATIONS DATA SHEET

	Elevation (feet above NAVD88)	Elevation (feet above station datum)
Flood Plain Elevation from FEMA Flood Insurance Study:		
100 Year Flood Level	17.0	19.3
Historic Flood Levels – 3 Highest Levels at NOAA Washington, DC - Station ID: 8594900		
October 17, 1942	9.7	12.0
March 20, 1936	9.2	11.5
September 19, 2003	8.9	11.2
Key Site Elevations		
Elevation of First Floor Slab	6.0	8.3
Elevation of Mezzanine Level Finish	15.0	17.3
Elevation of Entrance	15.0	17.3
Elevation of Second Floor Finish	25.5	27.8

Note that all storms develop differently and so the amount of time between the issuance of any flood watch, warning, or predicted flood levels and when the peak of a flood actually occurs at the site may vary significantly. Historical storm events affecting the Potomac River and Georgetown waterfront area demonstrate that the amount of time between the onset of a storm event and peak flood conditions can range from only several hours to more

than 30 hours. Therefore, closely monitoring forecasted and observed water levels at the Georgetown Potomac River gauge is extremely important for protecting life, property, and building operations at this location.

Given the variability in storm development, river response, and available warning time before peak flooding occurs, the Site Emergency Coordinator shall initiate the following protocols when storm events are occurring and forecasted water levels at the Georgetown Potomac River gauge exceed the following trigger elevations. All trigger elevations below are relative to the MLLW datum as reported by the National Weather Service.

Forecast Flood Level 1 – Elevation 6.0 feet station datum:

A forecasted flood elevation of 6.0 feet or greater at the Georgetown Potomac River gauge indicates that a significant storm event is occurring and that flooding of low-lying exterior areas near the waterfront may be possible. Although this level of flooding is not anticipated to affect the habitable portions of the Georgetown University New Non-Motorized Boathouse, it shall be used as an early warning threshold for the Site Emergency Coordinator to remain alert for changing weather and river conditions that could result in higher flood levels.

Because forecasted water levels are based on evolving meteorological and hydrologic conditions, changing storm conditions may result in rapid increases in predicted flood elevations. Therefore, when the NWS forecasts water levels of 6.0 feet or greater at the Georgetown gauge, the Site Emergency Coordinator shall continually monitor both observed and forecasted water levels for any increase beyond Forecast Flood Level 1.

PROTOCOL 1: When it is anticipated that a Forecast Flood Level 1 will be exceeded, the Site Emergency Coordinator shall notify the Lead Facilities Point of Contact (POC) to alert all necessary staff of the potential of a significant flood event and ensure their availability to arrive at the facility ready to implement evacuation of occupants and safety protocols of the building if weather conditions worsen and exceed Level 2.

Forecast Flood Level 2 – Elevation 7.0 Feet station datum

A forecasted flood elevation of 7.0 feet or greater at the Georgetown Potomac River gauge indicates that a significant storm event is occurring and that flooding impacts to the lower non-habitable portions of the boathouse facility, surrounding access areas, docks, utilities, and exterior spaces may occur. When Forecast Flood Level 2 is predicted to be exceeded, the Site Emergency Coordinator shall implement the following protocols:

PROTOCOL 1: Contact the Lead Facilities POC to inform them that a flood event is anticipated within the next 6 to 12 hours and direct them to immediately deploy staff to inspect the site, monitor actual flood levels, and assess the safety of surrounding areas and access routes.

PROTOCOL 2: Inform all staff, students, visitors, and building occupants that a Coastal Flood Warning has been issued by the National Weather Service and that weather and

flooding conditions are being actively monitored. Inform occupants that although evacuation of habitable areas is not mandatory at this time, preparations should begin in the event temporary evacuation becomes necessary, including relocation of vehicles, equipment, and personal belongings from low-lying areas.

PROTOCOL 3: Continue monitoring weather conditions, observed river levels, and forecasted flood elevations while assisting any voluntary evacuations and continuing inspections of the building, docks, utilities, and surrounding infrastructure for safety concerns.

PROTOCOL 4: If forecasted water levels at the Georgetown gauge are expected to rise above elevation 10.0 feet, inform all occupants that evacuation of the premises is strongly recommended until dangerous conditions have subsided and notice is provided that it is safe to return.

PROTOCOL 5: Document, to the best extent possible, which occupants, staff, or authorized personnel remain on-site. If emergency conditions develop, this information may be required to assist emergency responders and public safety personnel.

Forecast Flood Level 3 – Elevation 10 Feet station datum

A forecasted flood elevation of 10 feet or greater at the Georgetown Potomac River gauge indicates that major flooding is expected adjacent to the Georgetown University New Non-Motorized Boathouse. When Forecast Flood Level 3 is predicted to be exceeded, the Site Emergency Coordinator shall implement the following protocols:

PROTOCOL 1: Inform the Lead Facilities POC that mandatory evacuation of occupants should be implemented due to anticipated flooding impacts to habitable portions of the facility.

PROTOCOL 2: Inform all occupants that evacuation of the premises is mandatory until dangerous conditions have subsided and notice is provided that it is safe to return to the building. Occupants shall evacuate to designated assembly areas using established emergency evacuation routes.

PROTOCOL 3: If floodwaters rise to levels that inundate surrounding access areas, roadways, or the land between the facility and adjacent higher ground, the Site Emergency Coordinator shall evacuate the premises and relocate to a safe location while continuing to monitor site conditions and coordinate with emergency response personnel as necessary.

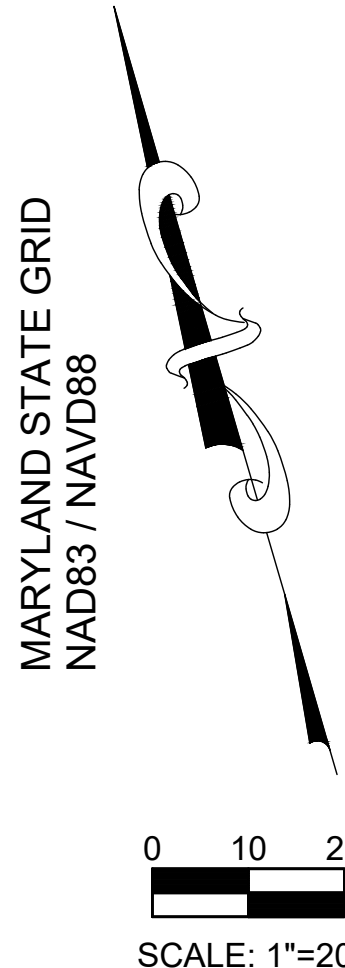
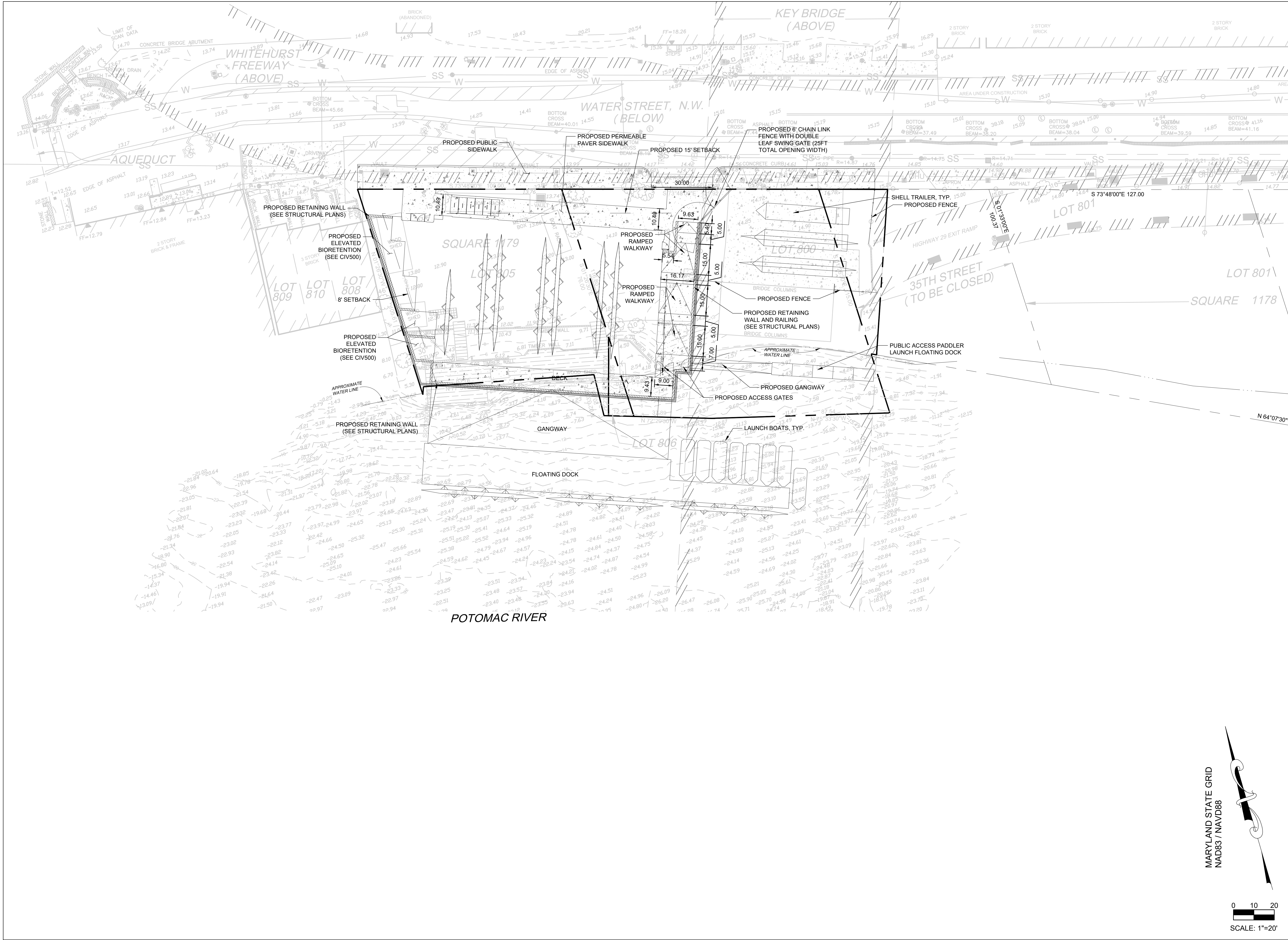
PROTOCOL 4: Upon confirmation that both observed and forecasted river levels are receding and actual floodwaters surrounding the site have dropped below elevation 7.0 feet, the Site Emergency Coordinator shall return to the facility to inspect conditions inside and outside the structure and document any damage requiring maintenance or repair.

PROTOCOL 5: Once river levels have receded below elevation 6.0 feet for more than six continuous hours and forecasts no longer predict water levels above 6.0 feet within the

following three days, the Site Emergency Coordinator shall contact the Lead Facilities POC and direct staff to begin cleanup and recovery operations within and around the facility.

PROTOCOL 6: Determine when conditions are safe for occupants to return to the premises. When safe conditions are confirmed, notify evacuated occupants that reentry is permitted. If unsafe conditions remain, notify the appropriate parties, including engineers, facilities personnel, or emergency response agencies, before allowing reoccupation of the building.

EXHIBIT A:
SITE PLAN



MUSE KIRWAN ARCHITECTS 7401 Wisconsin Avenue, Suite 300, Bethesda, MD 20814 Phone: 301.718.8118 www.musekirwan.com	
GEORGETOWN UNIVERSITY NEW NON-MOTORIZED BOATHOUSE	
24.07	
DD DRAFT DRAWING SET 2026 APRIL 3	
SITE PLAN	
SHEET NO. CIV300	

DEWBERRY ENGINEERS, INC. (Civil Engineering Consultant)
5401 Arlington Blvd., Fairfax, VA 22031 Tel: 703.599.0100
EHELETT/BRYAN, INC. (Structural Engineering Consultant)
8609 Westwood Center Drive, Suite 800, Tysons, VA 22182 Tel: 703.827.9552
JAMES POSEY ASSOCIATES (Mechanical, Electrical, Plumbing Engineering Consultant)
11155 Red Run Boulevard, Suite 310, Baltimore, MD 21117 Tel: 410.265.6100

EXHIBIT B:
EMERGENCY EVACUATION ROUTE

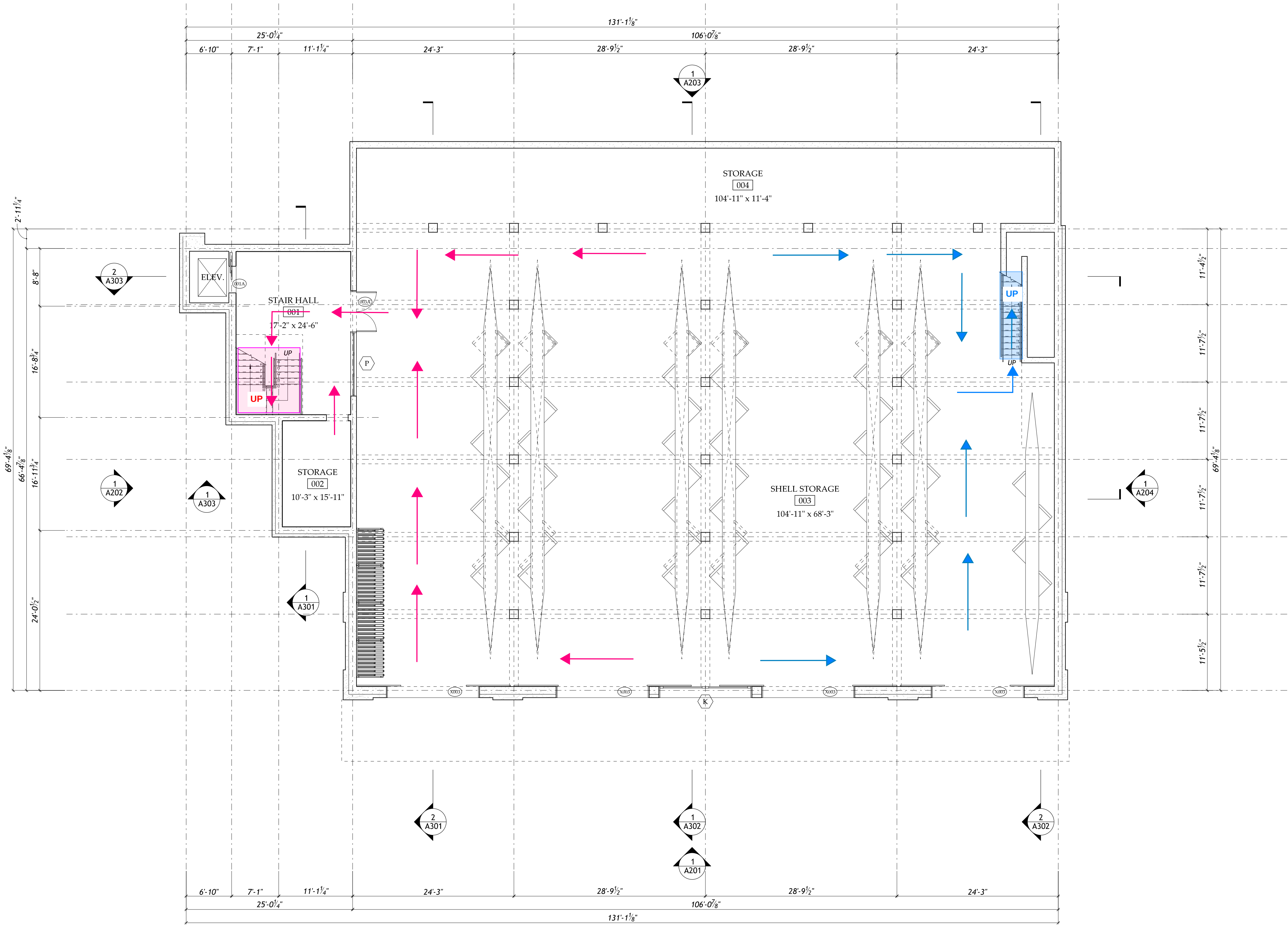
TOTAL SHELL CAPACITY

	MINIMUMS	PROVIDED
EIGHTS:	18	18
FOURS:	18	18
PAIRS/DOUBLES:	14	13
SINGLES:	12	13
TOTAL:	62	62

OAR STORAGE PROVIDED: 320

OCCUPANT LOAD

	FLOOR AREA	OCCUPANT LOAD FACTOR	OCCUPANTS
SHELL STORAGE:	8,391 SF	/300 GROSS	28 OCCUPANTS
GROUND FLOOR TOTAL:			28 OCCUPANTS
BUILDING TOTAL:			450 OCCUPANTS



1
A100
GROUND LEVEL FLOOR PLAN
SCALE: 1/8" = 1'-0"

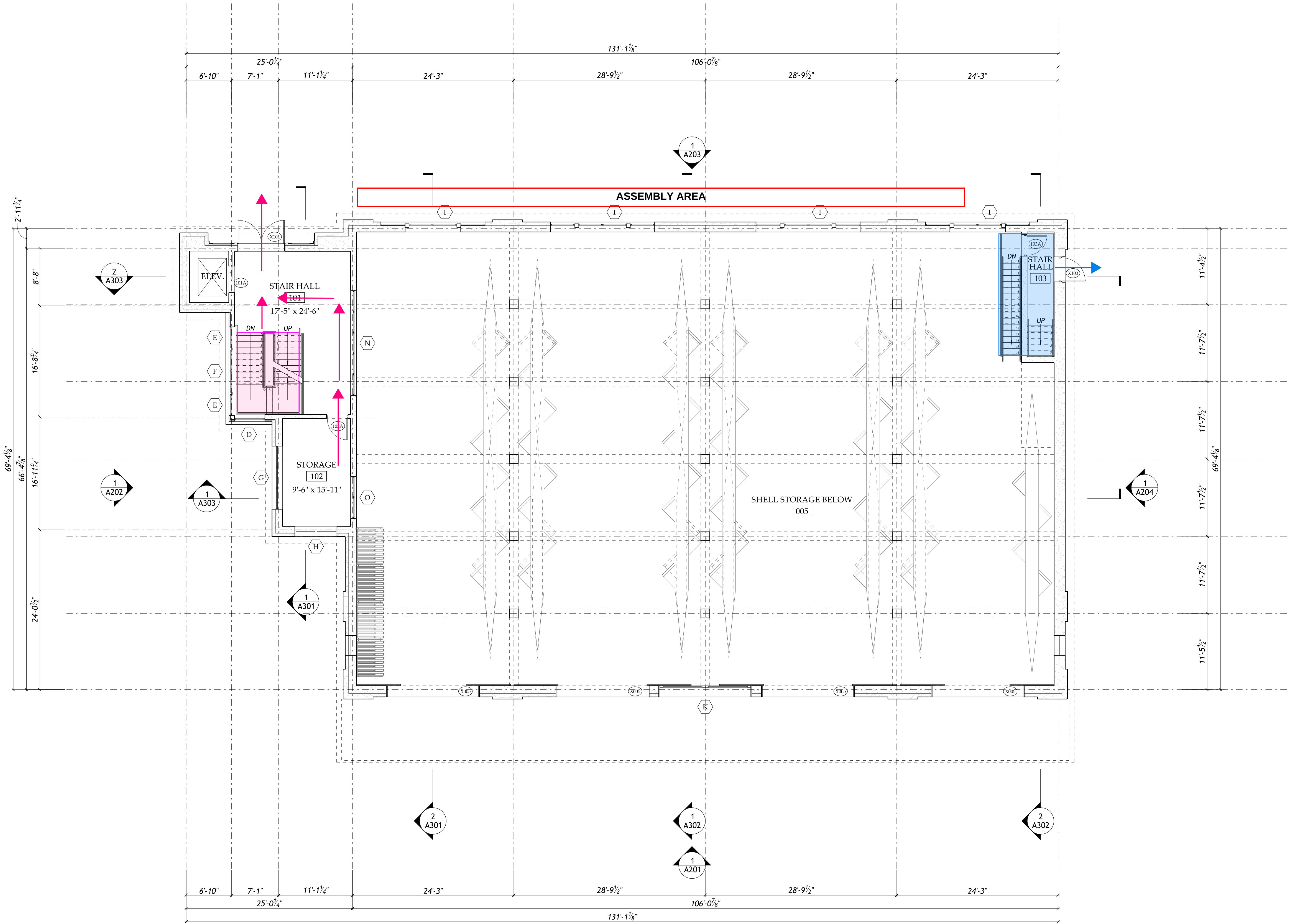
TOTAL SHELL CAPACITY

	MINIMUMS	PROVIDED
EIGHTS:	18	18
FOURS:	18	18
PAIRS/DOUBLES:	14	13
SINGLES:	12	13
TOTAL:	62	62

OAR STORAGE PROVIDED: 720

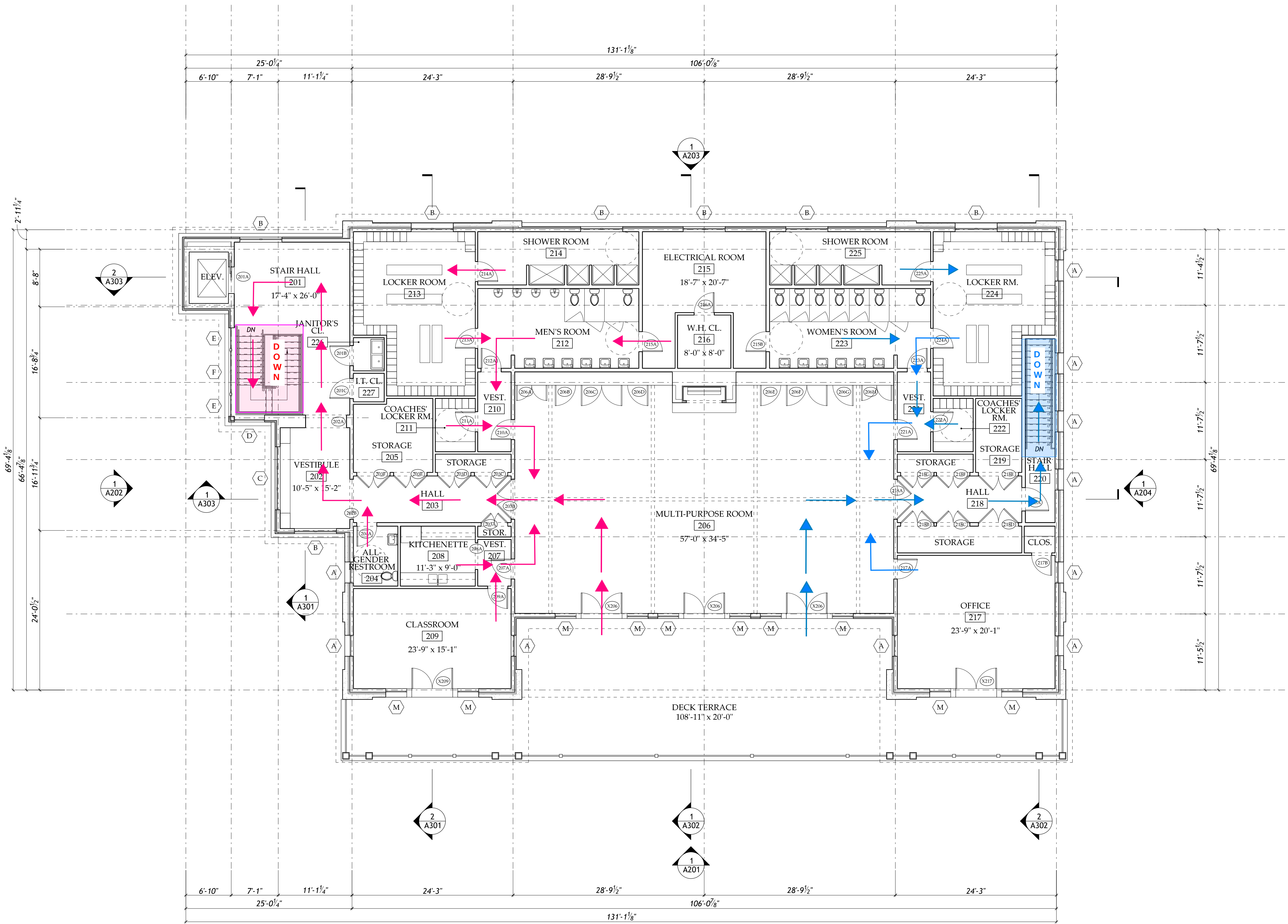
OCCUPANT LOAD

	FLOOR AREA	OCCUPANT LOAD FACTOR	OCCUPANTS
STORAGE:			0 OCCUPANTS
MEZZANINE FLOOR TOTAL:			0 OCCUPANTS
BUILDING TOTAL:			450 OCCUPANTS



1
A101 MEZZANINE LEVEL FLOOR PLAN
SCALE: 1/4" = 1'-0"

	FLOOR AREA	OCCUPANT LOAD FACTOR	OCCUPANTS
MULTI-PURPOSE ROOM:	1,935 SF	/7 NET	277 OCCUPANTS
DECK:	1,556 SF	/15 NET	104 OCCUPANTS
CLASSROOM:	357 SF	/20 NET	18 OCCUPANTS
COACHES' OFFICE:	476 SF	/100 GROSS	5 OCCUPANTS
MEN'S LOCKER ROOM:	377 SF	/50 GROSS	8 OCCUPANTS
WOMEN'S LOCKER ROOM:	352 SF	/50 GROSS	8 OCCUPANTS
MECHANICAL EQUIPMENT ROOM:	382 SF	/300 GROSS	2 OCCUPANTS
SECOND FLOOR TOTAL:			422 OCCUPANTS
BUILDING TOTAL:			450 OCCUPANTS



1
A102 SECOND LEVEL FLOOR PLAN
SCALE: 1/4" = 1'-0"

