



NYC



Parks

Recreation



Center

Design

Manual



NYC Parks Recreation Center Design Manual

The NYC Department of Design and Construction has had the opportunity to provide multiple accessible, quality recreation centers throughout the five boroughs on behalf of the Department of Parks and Recreation (NYC Parks). The NYC Parks Recreation Center Design Manual collects, synthesizes, and refines the work our agencies have done in partnership on these projects to provide design teams with the tools they need to plan, design, and build better for the City of New York.

The Manual describes performance-based systems and project requirements to maximize opportunities for flexibility and innovation in the team's approach to design. Together with NYC Parks, DDC conducted workshops to collect lessons learned from the design, construction, and operation of centers all over the city. Drawing from an archive of technical documents and refined with this real-world feedback, the Manual provides the basis for design teams to develop a contextual approach that is responsive to community needs. Rather than a checklist of mandates, it is a live document that will evolve over time, listing NYC Parks goals, preferences, priorities, and “asked-and-answered” questions to give teams a head start on each unique site.

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PART 1 – PROJECT DESCRIPTION

1010 – PROJECT SUMMARY

1. SUMMARY

NYC Parks Recreation Centers share core common programs that offer opportunities for all New Yorkers to engage in a wide variety of recreational opportunities—sports, individual and group fitness, after-school activities, arts and culture. They typically feature a gymnasium, multipurpose rooms, cardio and strength training rooms, locker rooms and media labs. Some may have more specialized programs like an indoor swimming pool or an indoor track.

2. PROJECT GOALS

1. The design of a new Parks Recreation Center should reflect its role as an important recreational asset that provides enhanced facilities to a vibrant urban area. The new facility should be an inviting and welcoming destination to users of all ages, abilities, and needs.
2. The building and site design must respond to the challenges of the site's immediate urban context and proximity to infrastructure. The design of the facility should signal its purpose and presence to each at an appropriate scale.
3. Entry to the site and building should be readily perceptible from surrounding streets and must accommodate visitors arriving from the surrounding neighborhood via public transportation, by car, motorcycle, and bicycle, as well as pedestrian visitors.
4. Public buildings must continue to provide value to the city throughout their useful life. Consider overall strategies for flexibility and resiliency, and for how this facility may adapt to a changing neighborhood, technological innovation, and climate change.
5. Construction activities and sequencing should be sensitive to neighbors and surroundings. The site will likely be adjacent to buildings and spaces where the users will be sensitive to noise and construction impacts. Consider access and use needs of neighbors during construction.
6. Careful consideration should be given to spatial quality and finishes to create a friendly, safe, and welcoming space for exercise, play, education, and collaboration.
7. Interior and exterior materials should be selected for durability, resistance to tampering, and ease of maintenance. Select equipment and fixtures with easily replaceable parts and components, and with straightforward maintenance requirements. Where applicable, vandal-resistant fixtures should be selected. Consider ease of cleaning without additional equipment. Lighting fixtures should be kept to a minimum number of unique fixtures to reduce burden to NYC Parks for replacement of lamps and/or fixtures. Where possible, use fixtures on NYC Parks' list of preferred fixtures.
8. Create a usable, safe, and welcoming work environment for NYC Parks staff.
9. Visual communication between interior recreation programs and surroundings is encouraged, with consideration for safety and security. A high degree of visibility is preferred within the building at primary program spaces and high circulation areas (corridors and stairs) to promote Active Design.
10. Meet City sustainability goals through an integrated design process. Include sustainable features to the greatest sensible and achievable degree possible. Consider seasonal environmental factors in the massing, orientation, and fenestration design to optimize daylighting and natural ventilation and minimize energy use. Design building systems to complement each other for greatest

efficiency and effectiveness. Consider embodied carbon in materials selection. Consider the ecology of the project site in developing strategies for sustainability, stormwater management, landscape and plant selection.

3. DESIGN APPROACH

01. REGULATORY REQUIREMENTS

Although not all new Recreation Centers will be located on NYC Parks property, sites within NYC that are zoned as parkland are exempt from NYC zoning regulations.

NYC Parks does not place restrictions on the height of or number of stories in a new Recreation Center. The new building should nonetheless be designed to fit in harmoniously with its surroundings in both scale and character.

Redundancies related to vertical design should be avoided.

Recreation Centers will typically be classified by the 2022 NYC Building Code in Assembly Group A-3, though a detailed code analysis should be performed for each specific project. Code compliance is the responsibility of the Architect of Record but all analyses will be subject to review by NYC Parks prior to implementation.

As of June 2022, a list of applicable regulatory requirements pertinent to the design of new NYC Parks Recreation Centers will likely include (but may not be limited to):

NYC LOCAL LAWS AND MAYORAL EXECUTIVE ORDERS

1. LL 31&32/2016: NYC Green Buildings Law
2. LL 94/2019: Sustainable Roofing Zone
3. LL97/2019 Reduction of Greenhouse Gas Emissions
4. LL 113/2005: Noise Control
5. LL 130/2013: Electrical Vehicle Charging
6. LL 6/2016: Geothermal System Assessment
7. LL 51/2017: Hearing Induction Loop
8. LL185&186/2018: Lactation Room Requirement
9. LL 15/2020: Bird Friendly Glazing
10. Executive Order 359-2013: Active Design
11. Executive Order No. 91 (43 RCNY Chapter 6) and CEQR Rules of Procedure (62 RCNY Chapter 5):
12. LL 3/2010: Tree Restitution
13. NYS OCFS School-Age Child Care (SACC) requirements.

CITY ENVIRONMENTAL QUALITY REVIEW

New Recreation Centers are typically subject to environmental review. This process may require the participation of the design team.

FEDERAL LAWS AND POLICIES

14. Americans with Disabilities Act
15. Clean Air Act
16. Endangered Species Act
17. National Environmental Policy Act
18. Federal Water Pollution Control Act (Clean Water Act)
19. Resource Conservation and Recovery Act

20. Migratory Bird Treaty Act

02. SCOPE AND PROGRAM

1. The scoping process for a new Rec Center will originate with NYC Parks and DDC but will likely also be influenced by community feedback and by the design process. NYC Parks typically considers community input in designing programs for each individual Center, but also evaluates suggestions against what has worked historically and can be managed by NYC Parks staff.
2. A NYC Parks Recreation Center typically provides facilities for physical fitness, group recreation, and youth programming, and should be designed to accommodate regular special events including (but not limited to) sport competitions, performances, movie screenings and lectures.
3. NYC Parks programs do not typically exceed 350 occupants.
4. NYC Parks does not typically rent space to outside entities or events but does sometimes partner with local organizations for programming. Space designated for community-based partner programming should be flexible enough to be used for other needs.
5. NYC Parks does not operate drop-off programs for very young children. Drop-off programming (afterschool programs, camps) typically serve school-aged children and teens. This distinction is important for building requirements, including separation of facilities, restroom accommodations, and staffing.
6. Spaces with very specific programming and spatial needs (e.g., batting cages, bowling alleys) should be avoided. Versatility is paramount.
7. NYC Parks will only consider concessions or retail spaces in facilities designed for a very large number of occupants. In most recreation centers, the logistical needs and the mission of commercial activities can conflict with the mission of a public recreational facility and may not provide a benefit.
8. NYC Parks does not operate boxing programs.
9. Medical and dental clinics or services cannot be effectively accommodated and should be avoided.
10. NYC Parks does not usually build specific program space for people with disabilities. All programming should be inclusive, and programs for users with special needs can take place in multi-purpose spaces. Program spaces should allow for the control of light and sound to better accommodate users with sensory sensitivities.
11. A gymnasium and large multi-purpose rooms are the most important program spaces, since they can serve the widest range of programming functions. Most spaces in NYC Parks recreation centers end up being used as multi-purpose rooms. NYC Parks prefers larger multi-purpose rooms that can be subdivided to multiple smaller rooms. Motorized acoustic dividers are preferred, but curtains are acceptable in very large spaces where acoustic separation is difficult, like in gymnasiums.

12. Most music programming can take place in multi-purpose spaces, so dedicated music rooms are not required or preferred. Some centers do feature a recording studio as part of the media lab space.
13. Circulation should be efficient. Breakout areas for spaces with high occupancy numbers should be provided, but in general, circulation areas should be designed to move users toward program spaces. Un-programmed open spaces that are not easily observed and managed by NYC Parks staff should be avoided. Small seating areas can be provided at public areas to accommodate seniors and others who might need a seat.
14. Program spaces should be acoustically separated.
15. In general, separate storage rooms are preferred to closets.
16. Partial height / inaccessible mezzanine floors are discouraged.
17. Corridor width and door width should be sized appropriately in areas where large equipment will be used.
18. Comprehensive wayfinding signage system should be integrated with the design. Colors and graphics to follow NYC Parks Signage Guidelines and signage should be coordinated with NYC Parks Marketing and Design team.
19. Where furniture, fixtures, or equipment are furnished and installed by others, the designer is responsible for providing furniture layouts and allowing for MEP/power/data/empty conduit as required.
20. Consider providing additional electrical outlets beyond code requirements for programmatic and M&O needs as indicated in room data information.
21. Wi-Fi to be provided throughout the building.
22. The security of the facility is a primary concern.
 1. Security system to provide maximum coverage (entire building perimeter, roof programming area, nooks & less visible portions of building). System should be monitored from within the building (Reception Desk, Manager's Office) as well as remotely. All systems should be open-source systems fully programmable by NYC Parks consultants. Coordination with NYC Parks consultants should be a priority.
 2. All solid doors to have vision lites (except M&O rooms and where privacy is required, such as Restrooms)
 3. Visibility at public areas is preferred for safety.
 4. A full card reader system may be preferred—coordinate with NYC Parks.

03. EXTERIORS AND SITING

1. Decisions about building siting, form, and envelope composition should be integrated with the design of spaces and systems from the earliest phases of design to ensure a path to

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compliance with the NYC Green Building Laws. The design team should prepare and employ a “shoebox” energy model as early in the design process as possible.

2. For buildings on park sites which are exempt from NYC zoning regulations, it is recommended that designers study adjacent zoning in order to maintain a complementary relationship between new buildings and existing context. The design of a functional building should take precedence over the design of exterior open space, unless otherwise noted.
3. Impact on any adjacent open space should also be studied, so that any new building does not negatively impact existing park programming.
4. The preservation of existing trees should be secondary to the design of a successful building. NYC Parks’ aim is not to preserve trees above all else, and they will consider the removal and replacement of healthy trees if necessary. Tree restitution costs determined by Local Law 3/2010 may apply and should be considered.
5. Consider [Parks Without Borders](#) principles for new building site design and connectivity to existing parkland.
6. Landscaping should be provided at plaza / entry areas. The site design should support the effective design of the new recreation center and complement the landscape design of surrounding parkland.
 1. The installation of new fencing, paving materials, and site furnishings is to be coordinated with NYC Parks needs and standards.
 2. New site furnishings to be selected from NYC Parks standard site furnishings.
 3. Seat walls are not preferred.
 4. Dedicated on-street parking for NYC Parks staff, using signage or modification of street parking regulations, may be proposed.
 5. Electric charging stations for NYC Parks fleet vehicles are preferred and contribute to LEED certification.
 6. Areas for service access, delivery drop-offs and trash collection to have minimal visibility from the main entrance.
 7. Site lighting should be provided throughout the Project Site. Park lighting to follow DOT security lighting standards for parks. Exterior building lighting to be provided at new facility entrance and entire perimeter. Consider adjacent residential neighbors and potential concerns with nighttime light levels.
7. The Recreation Center may have operational hours that extend beyond those of the surrounding park and is intended to be fully operational during all seasons.
8. If applicable, maintain access to existing parkland where needed during construction.
9. Vehicular access for fire access, for NYC Parks vehicles, for the plowing of snow, and for deliveries and service to be considered.

10. Centers with a natatorium will have specific requirements for the delivery of pool chemicals.
11. Exterior areas on the project site can be considered for Percent for Art intervention.

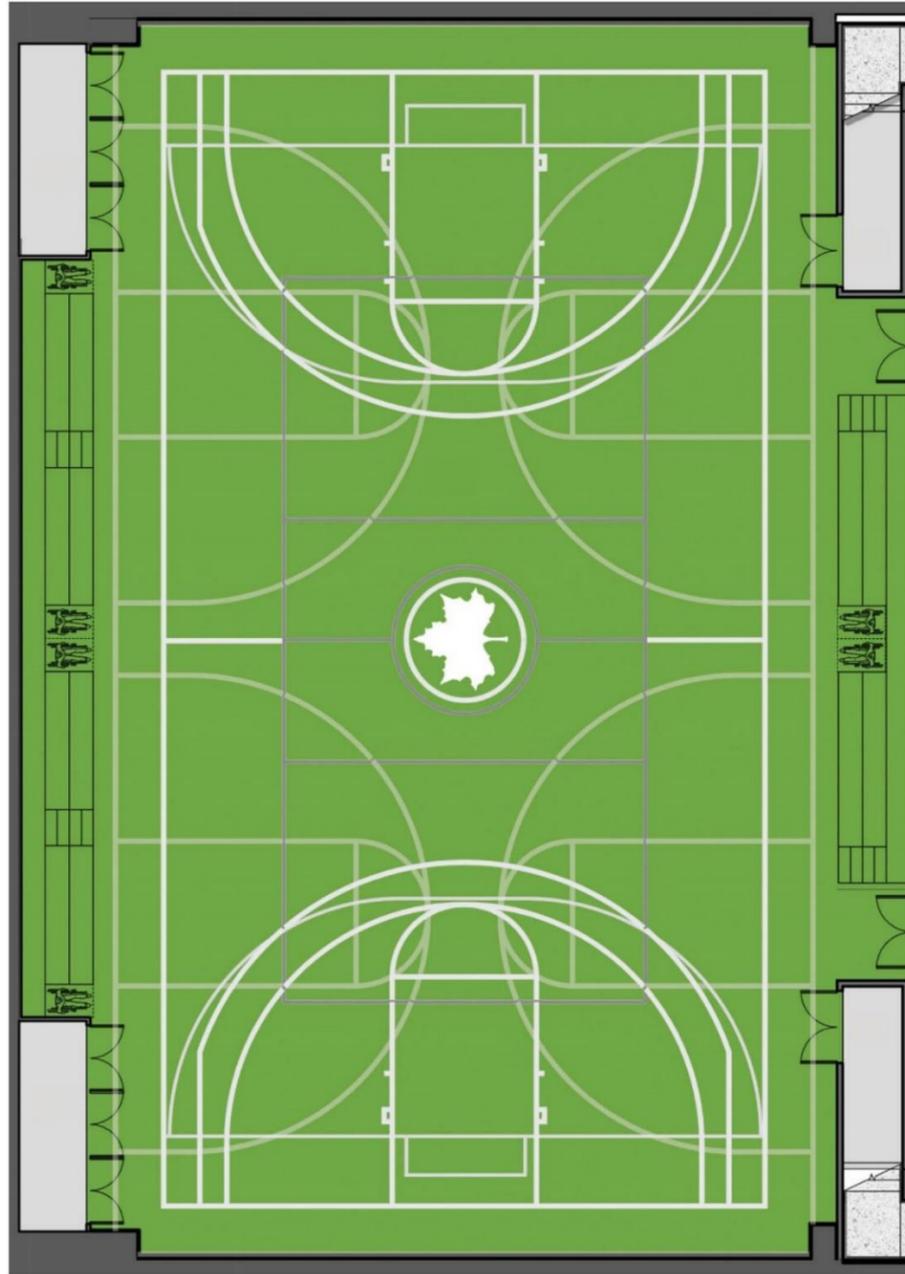
04. SYSTEMS AND SERVICES

- A. NYC Parks does not restrict the types of building systems that can be used in a new Recreation Center. Any system permitted by codes and regulations can be considered as long as selections are made for best performance and can serve the needs of the new building well. Simplicity and ease of maintenance should be the guiding principles for systems design--all systems to be tried-and-true systems that will not present new or novel approaches or challenges. The requirement for, and availability of, an on-site engineer should be discussed early in the design as it affects system selection.
 1. The NYC Green Building Laws will be a strong driver in the selection of HVAC systems. HVAC systems should be designed in an integrated fashion with the building form, location on the site, and envelope design.
 2. Simple systems are preferred, particularly for the controls. Systems that are very complex pose challenges for operation, maintenance, and repair. Parts and components should be selected for ease of replacement by NYC Parks staff.
 3. Complementary and coordinated equipment should be selected—avoid too many different equipment types.
 4. Equipment locations should be sensitive to surroundings, adjacent green space, and neighboring buildings.
 5. The building design should allow for natural ventilation during shoulder seasons and in case of mechanical system down-time.
 6. If a geothermal system is used, NYC parks preference is for a closed-loop system.

1020 – PROGRAM ELEMENTS

See diagrams on the following sheets. Plan diagrams are representative examples and are provided for reference only.

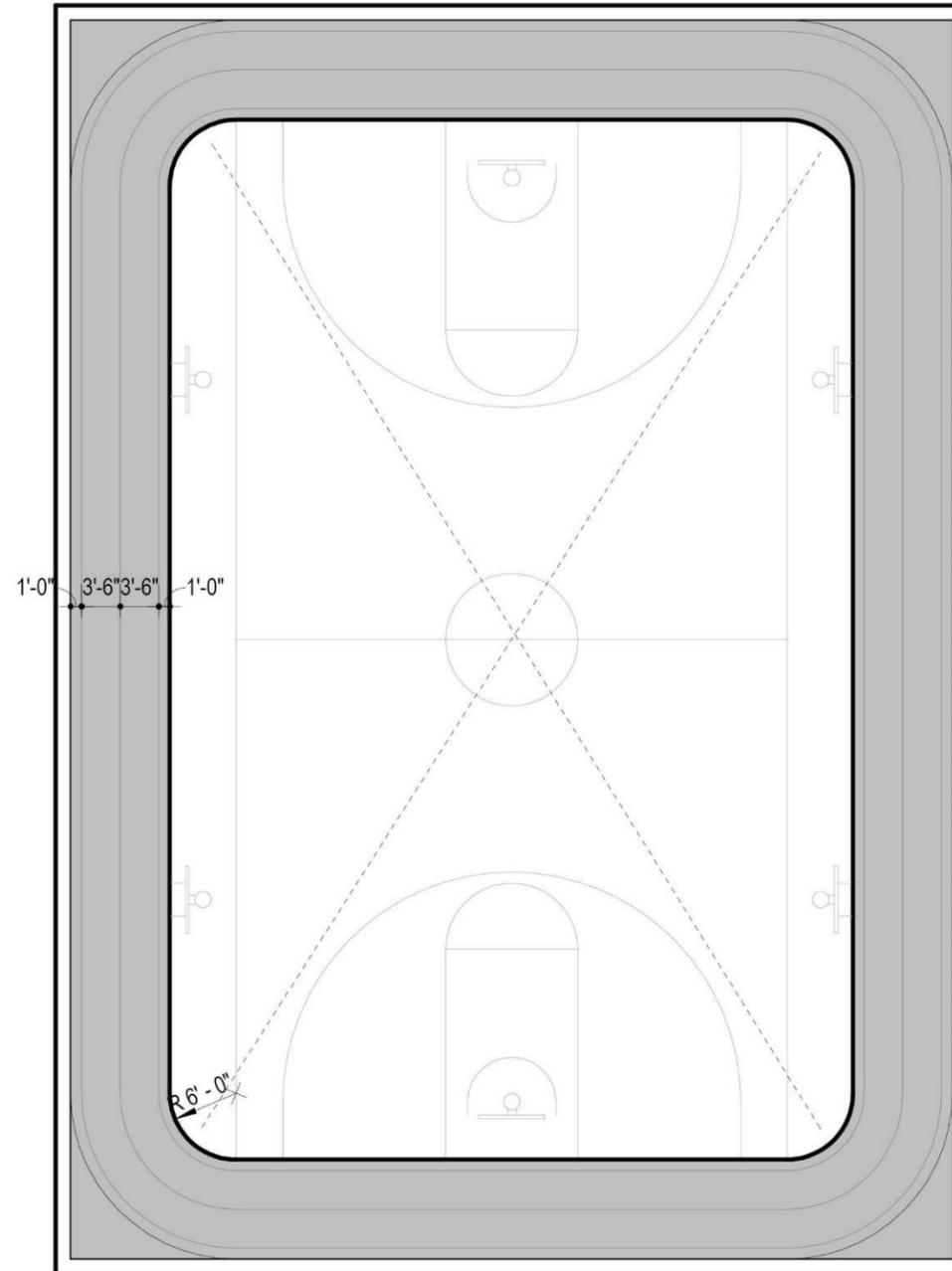
1. GYMNASIUM



Example Gymnasium for reference.

SIZE	<ul style="list-style-type: none"> • 7280-12000 SF • Minimum 700 SF additional for bleachers
FUNCTIONAL NARRATIVE	<ul style="list-style-type: none"> • Basketball Court with markings for one full court and four half-courts Minimum 84' x 50' with 10' buffer (High School Regulation) Preferred 94' x 50' with 10' buffer (NCAA Regulation) • Markings for alternate sports, such as Basketball and Pickleball. • Sports to be confirmed based on community needs • Functions as large multi-purpose space • Include Staff office within gym
ACCESS & CIRCULATION	<ul style="list-style-type: none"> • Provide appropriate breakout space for large events • Consider large equipment when sizing doors • Preferred on first floor for moving equipment • Provide at least two double-door entrances
ADJACENCIES	<ul style="list-style-type: none"> • Locker Rooms / Rest Rooms • Gym Equipment storage Rooms • Visibility from Lobby Preferred
FURNISHINGS & EQUIPMENT	<ul style="list-style-type: none"> • (6) Retractable basketball hoops • Retractable wood bleachers with good sight lines. Wood bleachers are easiest to repair. • Motorized space divider/curtain with manual override between courts. This does not require acoustic separation. • Mounted multi-sport scoreboard in center of court • PA system / audio equipment • Retractable projection screen and projector for movie showings
STORAGE NEEDS	<ul style="list-style-type: none"> • Adjacent storage rooms with high ceilings preferred to closets • Includes: chair storage for seated events, sports equipment storage, folding tables
FINISH REQUIREMENTS	<ul style="list-style-type: none"> • Maple hardwood flooring preferred. If located above pool, provide vapor barrier below flooring. • Impact resistant windows and glazing
LIGHTING REQUIREMENTS	<ul style="list-style-type: none"> • Natural lighting access via clerestory windows • Impact Resistant LED Lighting with maintenance access
MEP REQUIREMENTS	<ul style="list-style-type: none"> • Noise reduced HVAC system with in-room temperature control • Gym to be single HVAC zone • Humidity control for wood flooring • Min 3 water bottle filling stations and 1 water fountain • Multiple electrical outlets placed around gym walls
1010.3 DESIGN APPROACH	<ul style="list-style-type: none"> • 01. Regulatory Requirements - 7, 10 • 02. Scope and Program - 2, 3, 4, 7, 8, 11, 13, 15, 17, 22

2. INDOOR WALKING TRACK



Example track layout for reference.

SIZE

- Minimum (2) 42" wide lanes, 3-4 preferred.

FUNCTIONAL NARRATIVE

- Non-competitive walking track
- Performance features, like banked corners, should not be included
- Should not impact basketball clearances if located above basketball court
- Avoid unused areas and corners. If corners are provided, should be large enough for clear delineation of function
- Consider standard track length so distance can easily be tracked
- Consider screen or high railing to protect track users

ACCESS & CIRCULATION

- Nearby areas for sitting and stretching are beneficial, but should not create obstacles for track
- Should not be crossed to access other program
- Should not be at Gymnasium floor
- Preference for indoor track due to maintenance and security

ADJACENCIES

- Gymnasium

FURNISHINGS & EQUIPMENT

- N/A

STORAGE NEEDS

- N/A

FINISH REQUIREMENTS

- Durable synthetic rubber running surface appropriate for indoor use per design & location
- Consider vibration control at floor surface

LIGHTING REQUIREMENTS

- Natural lighting access
- Impact resistant LED lighting

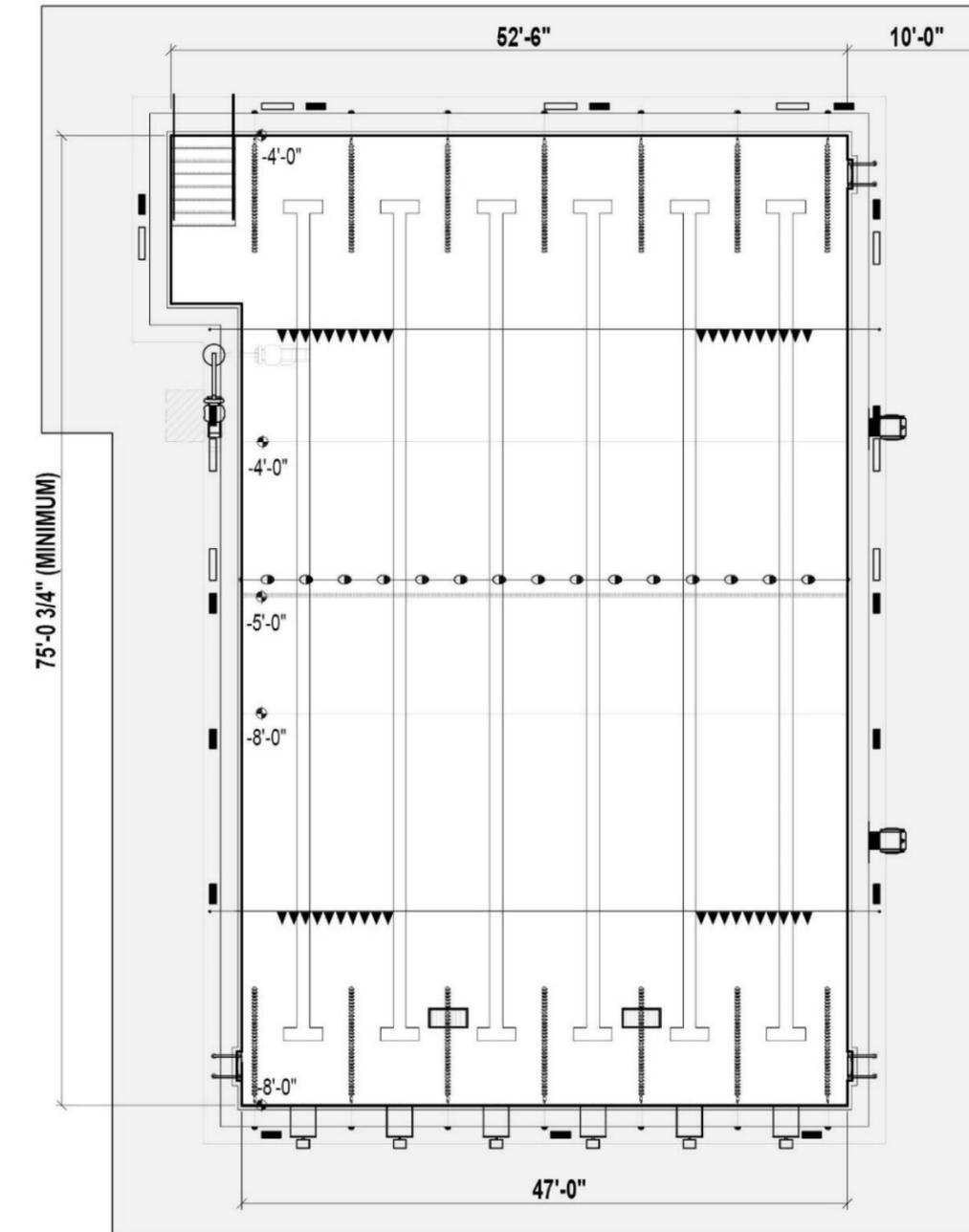
MEP REQUIREMENTS

- N/A

1010.3 DESIGN APPROACH

- 01. Regulatory Requirements - 10

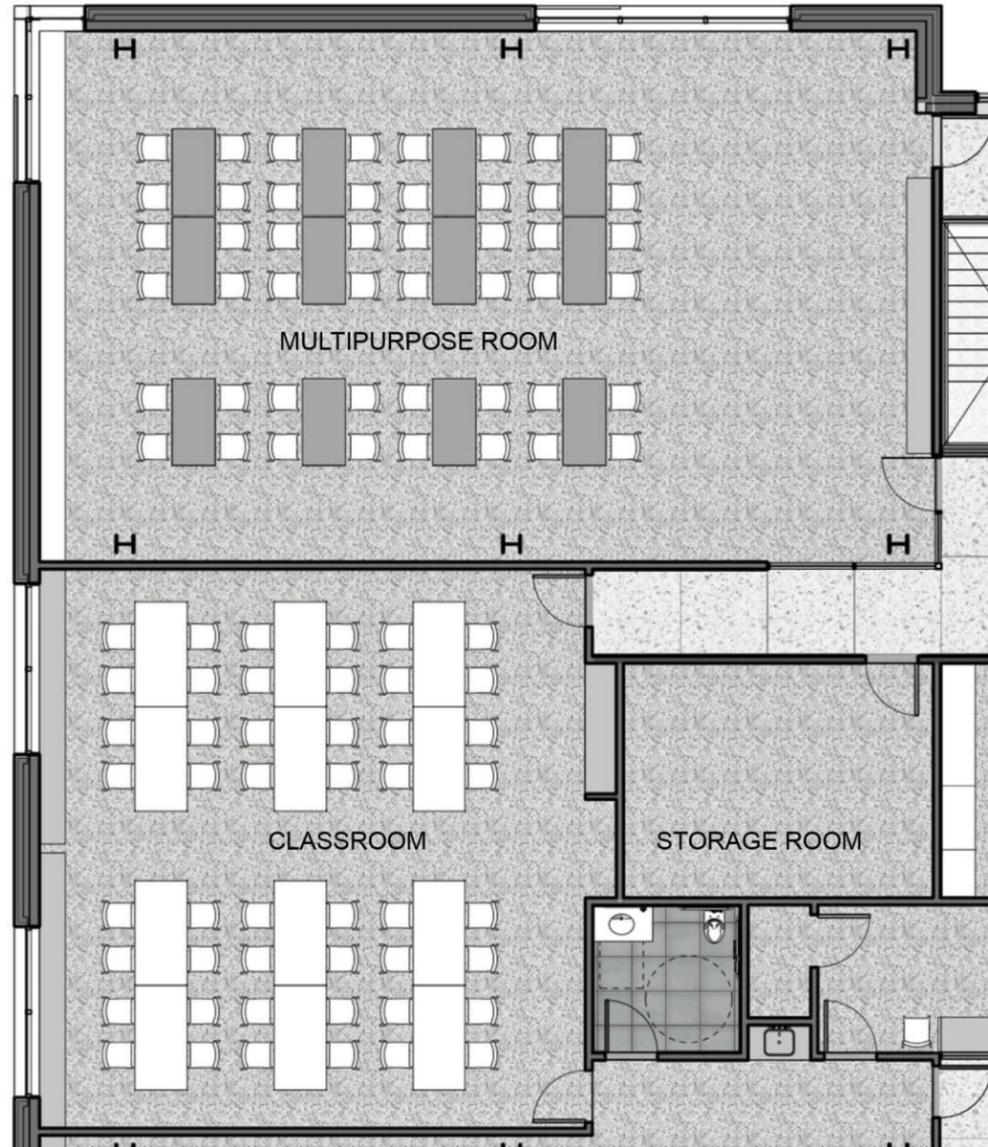
3. POOL



Example indoor swimming pool layout for reference.

SIZE	<ul style="list-style-type: none"> • 7050 SF (includes pool stair and pool deck) • 47' x 75' Pool with 6 Lanes, 25 yard competition pool
FUNCTIONAL NARRATIVE	<ul style="list-style-type: none"> • Provides members with access to year-round swimming and free aquatics programs. Program includes recreation, adaptive wellness & therapy, instruction, and competitions • Water depths of 3'-7" at shallow end, 7'-8" minimum at deep end • Water temperature between 78-82 degrees F
ACCESS & CIRCULATION	<ul style="list-style-type: none"> • 10'-12' pool deck preferred, should not be reduced by pool stair • Provide monolithic stairs instead of ladders where allowable by code and DOH bathing establishment requirements, ladders to be removable. • Ramp can be provided instead where space allows
ADJACENCIES	<ul style="list-style-type: none"> • Pool Area Locker Rooms, Restrooms, Showers, • Additional showers on pool deck preferred • Pool Bleachers - not to be located on pool deck
FURNISHINGS & EQUIPMENT	<ul style="list-style-type: none"> • Water-powered ADA chair lift, 500 lb capacity, with in-deck ground hydrant • State of the art timing system and LED video scoreboard • Starting blocks, recreational, single post preferred, removable • Lifeguard chairs • Pool cover on wall mounted reels, automatic with manual override • Built in PA system, accessible audio equipment, induction loop
STORAGE NEEDS	<ul style="list-style-type: none"> • City furnished equipment, including lifeguard chair backboard (min 2), neck-brace for each backboard, rescue tube (1 per chair), oxygen tank (1 per chair), Fire safety blankets (min 2), Shepherd's Hook with pole (min 2) • Wet storage closet area and storage cages on deck • Storage closets for swimming equipment, vacuum, and cleaning equipment
FINISH REQUIREMENTS	<ul style="list-style-type: none"> • All building components and finishes to be natatorium-appropriate • Pool vessel finish to be large format tile or liquid PVC membrane with tile handhold at overflow gutter • Pool deck to be durable, waterproof, moppable and non-skid large format tile
LIGHTING REQUIREMENTS	<ul style="list-style-type: none"> • Natural day lighting and high ceiling • 50 fc light level required at surface of water, avoid underwater lights • Light fixture lamps to be accessible while pool is filled
MEP REQUIREMENTS	<ul style="list-style-type: none"> • Provide drains on pool deck, water spigots (min 2) for cleaning • Natatorium grade HVAC system, high grade dehumidification system • Outlets around pool deck area
1010.3 DESIGN APPROACH	<ul style="list-style-type: none"> • 01. Regulatory Requirements - 4, 7 • 02. Scope and Program - 2, 15, 16, 17, 20, 22 • 03. Exteriors and Siting - 10 • 04. Systems and Services - 1, 2, 3, 4

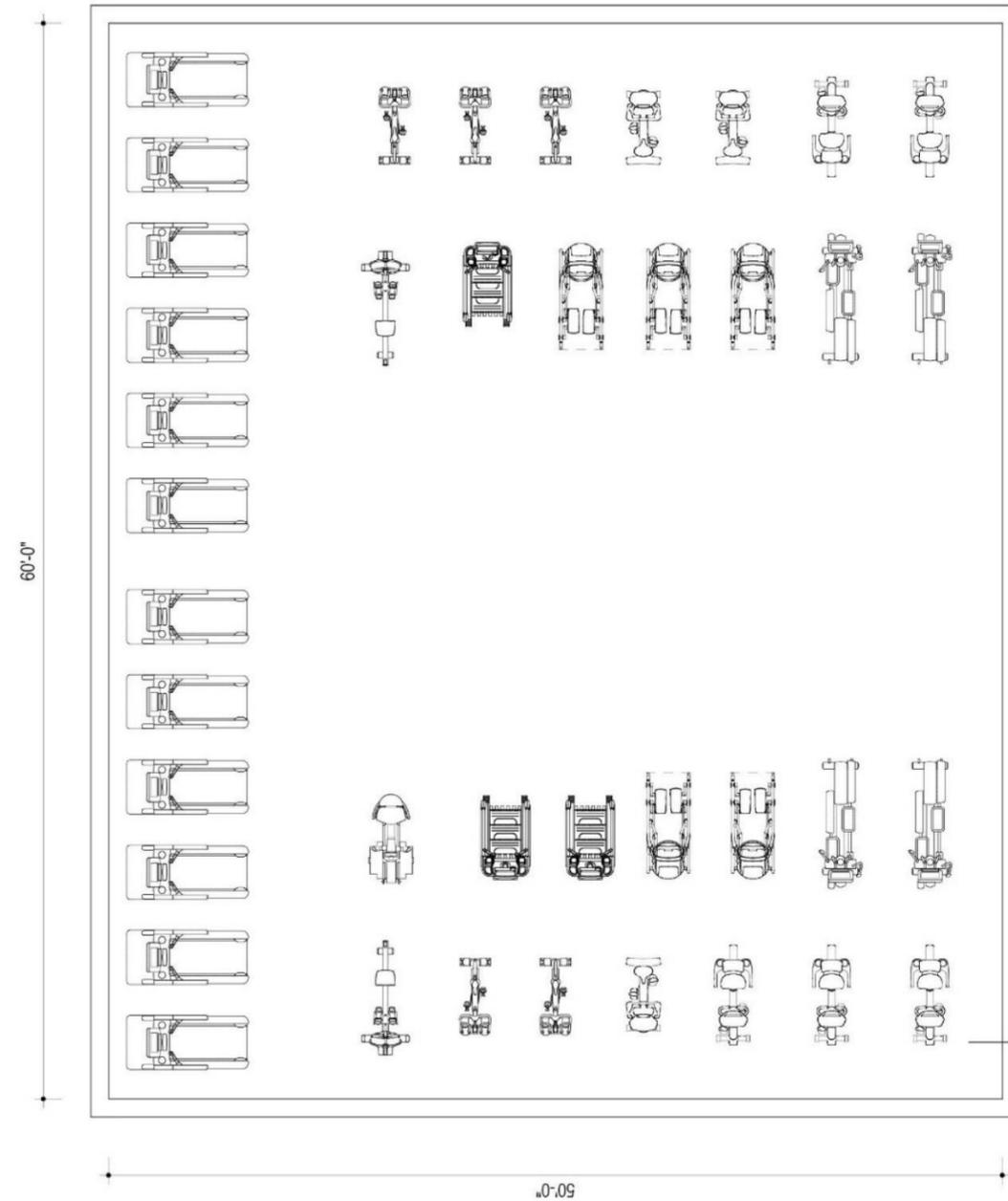
4. MULTIPURPOSE / CLASSROOM



- SIZE**
 - 1500-2000 SF for Multipurpose room; 900-1600 sf for Classroom
- FUNCTIONAL NARRATIVE**
 - Sub-dividable room used for widest range of activities, including classes, summer day camp, after school programming (ages 5-13), teen activities and dance
 - Rooms for dance or after school programming have additional requirements
 - (50-130) Estimated occupants, depending on function
- ACCESS AND CIRCULATION**
 - N/A
- ADJACENCIES**
 - If Multipurpose room or Classroom is used for after school programming, After school Coordinator Office and Private Single User Rest Room to be included. Should also be separated from exercise and recreation program spaces
 - Storage Room
 - Media Room
- FURNISHINGS AND EQUIPMENT**
 - Motorized acoustic room divider with door entry
 - If used for dance program, include dance barres
 - If used for after school programming, include refrigerator and double basin sink
 - Artwork display rails
 - Whiteboard with tracking system
 - Built in PA system, audio equipment, and induction loop
- STORAGE NEEDS**
 - For after school programming, cubby units for participants to secure belongings
 - Storage room for chairs and folding tables
 - Large storage closets with shelving units
- FINISH REQUIREMENTS**
 - Dark vinyl flooring or approved equal
 - For dance program, sprung wood dance floor and replaceable full height mirrors
 - Acoustic wall paneling
 - Bright color accent walls, to be designed by NYC Parks marketing team
- LIGHTING REQUIREMENTS**
 - If used for dance program, bright studio lighting, dimmable
 - Operable windows by staff only
 - Sensor LED lighting, with manual override not easily accessible by public, dimmable
- MEP REQUIREMENTS**
 - Separate HVAC Zones
 - Electrical Outlets throughout Room
- 1010.3 DESIGN APPROACH**
 - 01. Regulatory Requirements - 7, 13
 - 02. Scope and Program - 2, 3, 4, 5, 9, 10, 11, 12, 13, 15, 17, 19, 20, 22
 - 04. Systems and Services - 5

Example Multipurpose Room and Classroom for reference.

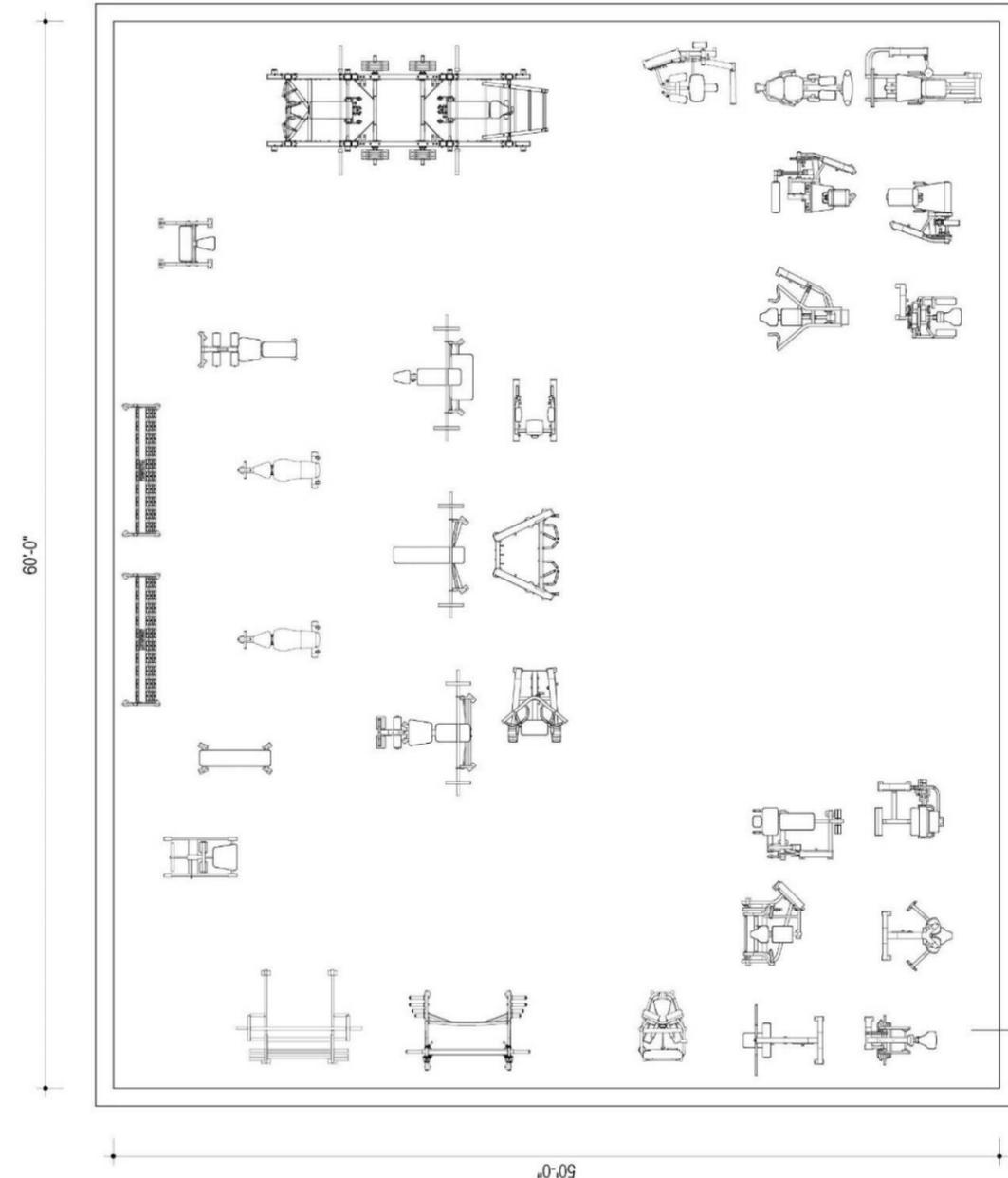
5. CARDIO FITNESS ROOM



Example Cardio Fitness room size and layout for reference.

- SIZE**
 - 2000 - 3000 SF
- FUNCTIONAL NARRATIVE**
 - Should be physically separated from Strength Room, since each room typically serves different client groups and has different acoustic environment.
 - Allow for separate zones for different types of equipment.
 - Not used for dance programming
- ACCESS AND CIRCULATION**
 - Room should be large enough to accommodate stretching, floor exercises, and circulation.
- ADJACENCIES**
 - Strength Room
 - Locker Rooms / Rest Rooms
 - Treadmills to face mirrors or windows, not blank walls
- FURNISHINGS AND EQUIPMENT**
 - NYC Parks to provide a floor plan of equipment prepared by an authorized fitness equipment vendor
 - 2-3 Large Screen TVs Throughout Space
 - Built in PA system and audio equipment
 - Min (1) water bottle filling station
- STORAGE NEEDS**
 - Storage racks for exercise balls
 - Storage closet for accessory equipment
- FINISH REQUIREMENTS**
 - Dark rubber fitness flooring
 - Wall mirrors, starting 2' to 3' above finish floor
 - Resilient base from floor to bottom of mirrors
 - Bright color accent walls, to be designed by NYC Parks marketing team
- LIGHTING REQUIREMENTS**
 - Daylight Adjacent and Outside Visibility, with priority to equipment users
 - Operable windows by staff only
 - Impact resistant sensor LED lighting, with manual override not easily accessible by public, dimmable
- MEP REQUIREMENTS**
 - Noise reduced HVAC system with ability to control temperature in room
 - Isolated electrical breaker for room
 - Additional GVAC 220V recessed covered outlets built into the middle of the room to allow for equipment relocation in the future
 - Ceiling Fans to improve air flow
- STRUCTURAL REQUIREMENTS**
 - Consider vibration and noise control for surrounding rooms and floor below
- 1010.3 DESIGN APPROACH**
 - 01. Regulatory Requirements - 7, 10
 - 02. Scope and Program - 2, 10, 11, 13, 14, 15, 19, 20, 22
 - 04. Systems and Services - 5

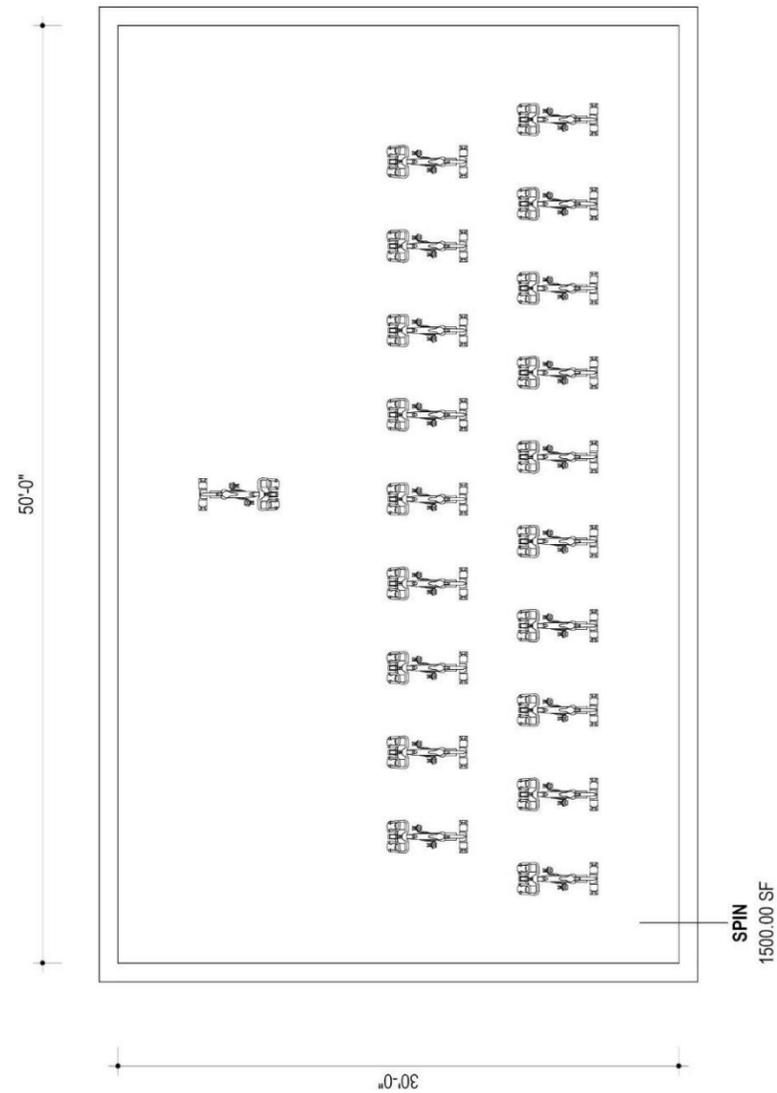
6. STRENGTH ROOM



Example Strength Room size and layout for reference.

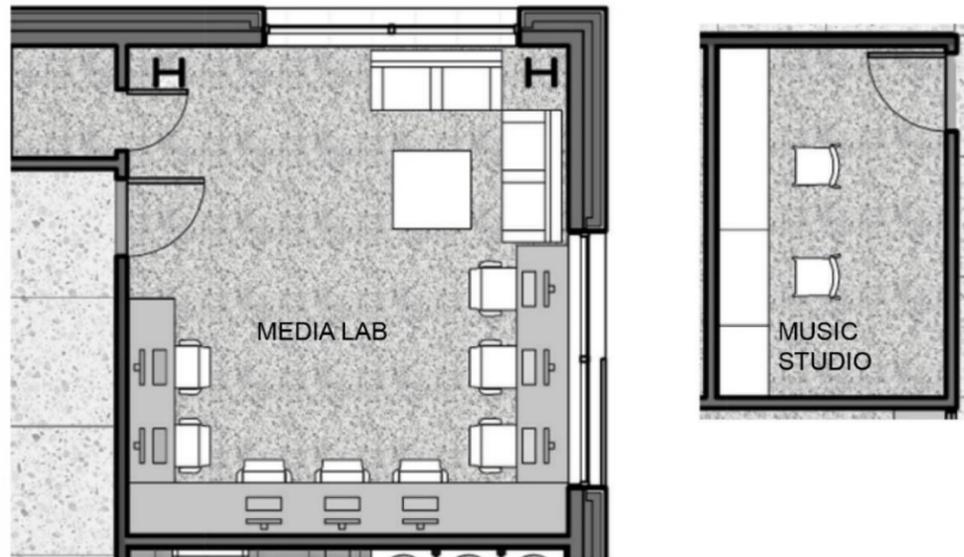
- SIZE**
 - 2000 -3000 SF
- FUNCTIONAL NARRATIVE**
 - Should be physically separated from Cardio / Fitness Room, since each room typically serves different client groups and has different acoustic environment.
 - Allow for separate zones for different types of equipment.
 - Not used for dance programming
- ACCESS AND CIRCULATION**
 - Room should be large enough to accommodate stretching, floor exercises, and circulation.
- ADJACENCIES**
 - Cardio / Fitness Room
 - Locker Rooms / Rest Rooms
- FURNISHINGS AND EQUIPMENT**
 - NYC Parks to provide a floor plan of equipment prepared by an authorized fitness equipment vendor
 - 2-3 Large Screen TVs Throughout Space
 - Built in PA system and audio equipment
 - Min (1) water bottle filling station
 - Ceiling Fan
- STORAGE NEEDS**
 - Storage racks for free weights
 - Storage closet for accessory equipment
- FINISH REQUIREMENTS**
 - Dark rubber fitness flooring
 - Shock absorbing flooring where free weights will be used
 - Wall mirrors, starting 2' to 3' above finish floor
 - Resilient base from floor to bottom of mirrors
 - Acoustic surfaces to control reverberation from weights
 - Bright color accent walls, to be designed by NYC Parks marketing team
- LIGHTING REQUIREMENTS**
 - Daylight Adjacent
 - Operable windows by staff only
 - Impact resistant sensor LED lighting, with manual override not easily accessible by public, dimmable
- MEP REQUIREMENTS**
 - Noise reduced HVAC system with ability to control temperature in room
 - Isolated electrical breaker for room
- STRUCTURAL REQUIREMENTS**
 - Consider vibration and noise control for surrounding rooms and floor below
- 1010.3 DESIGN APPROACH**
 - 01. Regulatory Requirements - 7, 10
 - 02. Scope and Program - 2, 10, 11, 13, 14, 15, 17 19, 20, 22
 - 04. Systems and Services - 5

7. SPIN / STRETCHING ROOM



- SIZE**
 - 1500 SF
- FUNCTIONAL NARRATIVE**
 - Used for stretching prior to or after workouts, as well as for spin and yoga classes
 - Should be flexible enough to serve as multipurpose room if needed
 - Max proportion of room to be 2:1
 - Can accommodate remote instruction
 - (100) Max estimated occupants
- ACCESS AND CIRCULATION**
 - Room should be large enough to accommodate stretching, floor exercises, and circulation
- ADJACENCIES**
 - Cardio / Fitness Room
 - Strength Room
 - Locker Rooms / Rest Rooms
- FURNISHINGS AND EQUIPMENT**
 - (20) Spin bikes
 - Portable riser for instructor
 - Drop-down projection screen and projector
 - Built in PA system, audio equipment, and induction loop
 - Blackout shades, manual
- STORAGE NEEDS**
 - Prefer adjacent storage room for spin bikes
 - Storage for yoga mats, stability balls, accessories
- FINISH REQUIREMENTS**
 - Dark rubber fitness flooring
 - Wall mirrors, starting 2' to 3' above finish floor
 - Resilient base from floor to bottom of mirrors
 - Acoustic surfaces to control reverberation from weights
 - Bright color accent walls, to be designed by NYC Parks marketing team
- LIGHTING REQUIREMENTS**
 - Studio lighting, black lights
 - Operable windows by staff only
 - Impact resistant sensor LED lighting, with manual override not easily accessible by public, dimmable
- MEP REQUIREMENTS**
 - Noise reduced HVAC system with ability to control temperature in room
 - Isolated electrical breaker for room
 - Ceiling Fans to improve air flow
- 1010.3 DESIGN APPROACH**
 - 01. Regulatory Requirements - 7, 10
 - 02. Scope and Program - 2, 6, 10, 11, 13, 14, 15, 19, 20, 22
 - 04. Systems and Services - 5

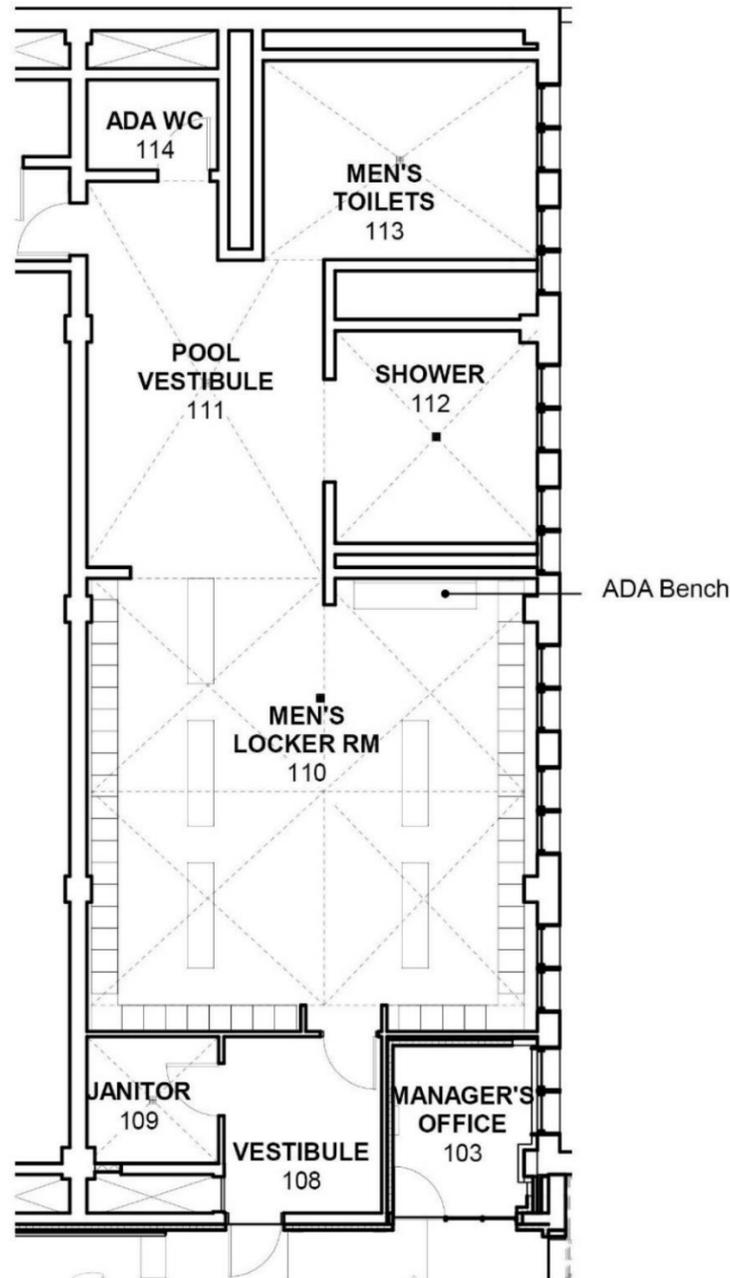
Example Spin / Stretching room size and layout for reference.



Example AV Media Lab with Music Studio, Type C, for reference.

SIZE	<ul style="list-style-type: none"> • 700 SF, plus 150 SF server room • 150 SF music studio, if requested
FUNCTIONAL NARRATIVE	<ul style="list-style-type: none"> • Relaxed teaching environment, with instructor desk in the middle of room • Three types: A) Fixed Computer Lab Layout; B) Maker Space/Robotics Lab with Portable Equipment; C) AV Media Lab with Sound Proof Music Studio • Will not be used as a multipurpose room, but versatility in configuration and layout is preferred when possible • Prefer that computers and tables face the instructors instead of walls
ACCESS AND CIRCULATION	<ul style="list-style-type: none"> • N/A
ADJACENCIES	<ul style="list-style-type: none"> • Multipurpose Room • Server Room, place outside of room to avoid interruption • For Type C, Music Studio
FURNISHINGS AND EQUIPMENT	<ul style="list-style-type: none"> • Type A: <ul style="list-style-type: none"> • Desktop Computers, Smart board • Type B: <ul style="list-style-type: none"> • Portable Laptops, 3d Printer, moveable tables and seating • Type C: <ul style="list-style-type: none"> • Similar to Type A, with audio recording and editing equipment • Dedicated Wifi router in middle of the room, cable organizers • Built in Surround Audio • Lounge area for collaboration • Ceiling hung projector and screen, green screen or green painted wall • Blackout and light filtering shades for glare • Acoustic wall divider, if room size permits
STORAGE NEEDS	<ul style="list-style-type: none"> • Lockable large closet with shelves for media equipment • Printer paper, 3d printing media • For Type B, tools, craft materials, and robotics parts
FINISH REQUIREMENTS	<ul style="list-style-type: none"> • Dark rubber flooring • Acoustic wall paneling • Bright color accents
LIGHTING REQUIREMENTS	<ul style="list-style-type: none"> • Minimize windows, operable windows by staff only • Sensor LED lighting, with manual override not easily accessible by public, dimmable
MEP REQUIREMENTS	<ul style="list-style-type: none"> • Separate HVAC Zones • Electrical Outlets throughout Room, desk height or in-floor boxes
1010.3 DESIGN APPROACH	<ul style="list-style-type: none"> • 02. Scope and Program - 4, 12, 14, 15, 19, 20, 22 • 04. Systems and Services - 5

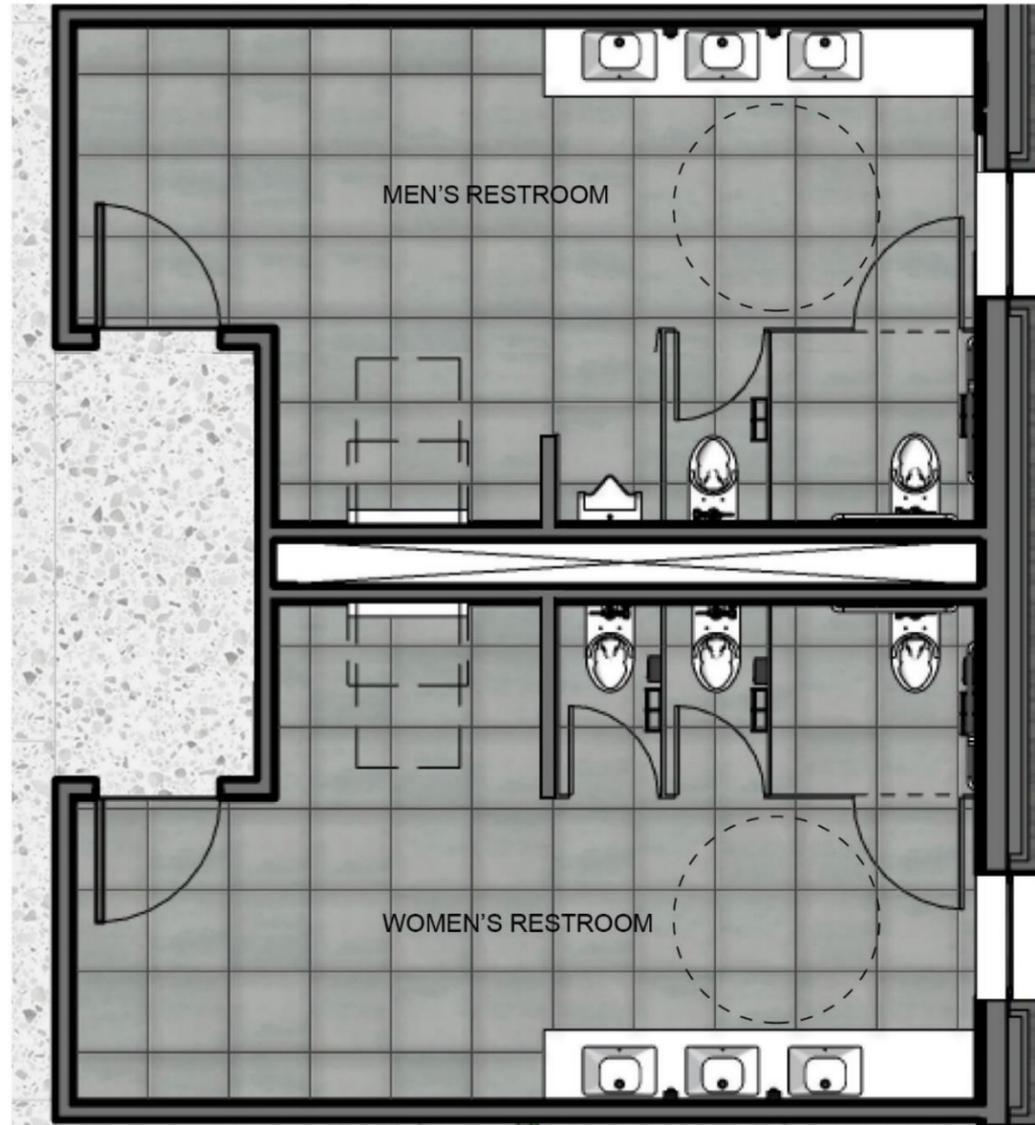
9. LOCKER ROOMS



Example locker room for reference.

SIZE	<ul style="list-style-type: none"> • 1400-2200 sf total, spacious locker room preferred • (80) Two tier lockers in dry space, (60) Two tier lockers in wet space
FUNCTIONAL NARRATIVE	<ul style="list-style-type: none"> • Provide members with dedicated locker area and changing areas for indoor swimming pool (wet) and for fitness spaces (dry) • Preference is to separate wet and dry locker rooms
ACCESS AND CIRCULATION	<ul style="list-style-type: none"> • Privacy barrier placed at entrance • 2 entry/exits preferred in each locker room • Clear circulation with min 60" access aisles with good visibility and no nooks that obscure lines of sight • Lockers, benches, and showers to be ADA accessible as required by Accessibility Code
ADJACENCIES	<ul style="list-style-type: none"> • Dry locations - Strength Room, Cardio Room, Stretching/ Spin Room • Wet locations - Swimming Pool • Family Changing Room • General required water closets and lavatories can be combined with locker rooms, provided that code-required fixture count is met • Min (2) water closets and (2) lavatories directly accessible from each locker room
FURNISHINGS AND EQUIPMENT	<ul style="list-style-type: none"> • Two-Tier Stainless steel lockers, include accessible lockers • Freestanding benches throughout room • Baby changing stations • Accessible showers with doors (not curtains), handshower bars, and soap dispensers • Wall hung ceramic fixtures (refer to Restrooms), stainless steel privacy partitions
STORAGE NEEDS	<ul style="list-style-type: none"> • Storage closet with shelving for maintenance supplies and slop sink
FINISH REQUIREMENTS	<ul style="list-style-type: none"> • Textured flooring to prevent slips. Durable, waterproof, moppable surface. • Tile floor and walls preferred in wet locker room
LIGHTING REQUIREMENTS	<ul style="list-style-type: none"> • Bright LED Lighting, controls to be circuited to central location accessible only to Rec center staff
MEP REQUIREMENTS	<ul style="list-style-type: none"> • Temperature controls to be circuited to central location accessible only to Rec Center staff • Outlets throughout locker rooms • Floor drains throughout, provide back up drains • Design for easy plumbing and HVAC maintenance access
1010.3 DESIGN APPROACH	<ul style="list-style-type: none"> • 02. Scope and Program - 10, 20, 22

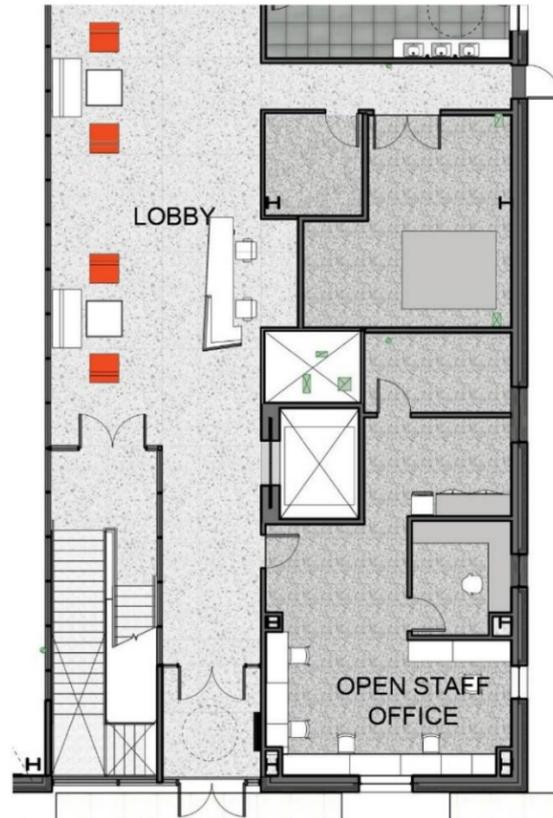
10. RESTROOMS



- SIZE**
 - 850 sf combined, provided on all publicly occupied floors
- FUNCTIONAL NARRATIVE**
 - Preference for restrooms to be located on publicly occupied floors
 - Provide single user restroom adjacent to lobby
 - Can be integrated with changing rooms
- ACCESS AND CIRCULATION**
 - N/A
- ADJACENCIES**
 - Close proximity to Changing Rooms
 - Family Restroom
 - Janitor Closet
 - Coordinate with plumbed walls and stacks
- FURNISHINGS AND EQUIPMENT**
 - Toilets and lavatories to be vitreous china porcelain and wall mounted
 - Provide stainless steel floor mounted, OH braced privacy partitions
 - Barrier free dual mounted drinking fountains
 - Recessed or slim wall mounted automatic hand dryer
 - Wall mounted liquid soap dispenser
 - Floor standing waste receptacle
 - Bright polished stainless steel mirror
 - 2 Roll Toilet Tissue Dispenser
 - Refer to NYC Parks comfort station fixture standards and accessories, but note that a recreation center is a fully staffed building, and all comfort station vandal resistant standards may not apply
- STORAGE NEEDS**
 - Toilet paper, soap, cleaning supplies
- FINISH REQUIREMENTS**
 - Full height ceramic tile walls and porcelain tile floors preferred
 - Mildew resistant painted ceiling
 - Durable, waterproof, and moppable surface
 - Provide tiled wall with a minimum of 7'-0" between toilet stalls / urinals and lavatories / changing areas.
- LIGHTING REQUIREMENTS**
 - Lighting controls to be circuited to central location accessible only to NYC Parks staff
 - Bright LED lighting
- MEP REQUIREMENTS**
 - Temperature controls to be circuited to central location accessible only to Rec Center staff
 - Include floor drains for cleaning
 - Design for easy plumbing and HVAC maintenance access
- 1010.3 DESIGN APPROACH**
 - 02. Scope and Program - 20, 22

Example restrooms for reference.

11. ENTRY / ORIENTATION AND INTERIOR PUBLIC SPACES (LOBBY AND MEMBERSHIP OFFICE)



Example lobby for reference.



Example staff office layout for reference.

SIZE

- 800-1000 sf lobby
- Efficient circulation area, prioritize area for programmed space

FUNCTIONAL NARRATIVE

- Lobby as security screening area to welcome members and monitor individuals entering and leaving the facility
- Visibility at Public Areas and circulation is preferred for safety
- Lobby should make a good first impression to the public
- Minimize lounge seating and include waiting area to seat 3-4 people
- Includes front desk, ideally centered on entrance and facing doors

ACCESS AND CIRCULATION

- Lobby to serve as main entrance with two sets of automatic doors
- Desk is a control point for elevator and stair access, can buzz people in from vestibule for security purposes

ADJACENCIES

- Open Staff Office behind the front desk
- Lobby adjacent to Membership Office

FURNISHINGS AND EQUIPMENT

- Front desk to seat 2-3 members of staff with one entry
- Desk to include accessible transaction counter, privacy protection for computer, lockable file cabinet, security system monitoring, provide power, with (2) computers with monitors, keyboard, mouse and associated accessories, (2) phones
- (1) membership card scanning machine and CityTime device
- (1) large screen TV
- Waiting area seating, to be easy to clean and maintain
- For membership office, desk and chair for (1) staff member, chairs for (2) guests, lockable filing cabinets and shelving, (1) computer with monitor and associated accessory devices, (1) phone, (1) network printer, (1) pinboard / whiteboard

STORAGE NEEDS

- (30) lockable small lockers for member personal belongings

FINISH REQUIREMENTS

- Hard, durable, and scrubbable wall finish, painted ceiling
- Durable, waterproof, and moppable floor surface
- Welcoming colors, materials, and signage, but not cluttered. Colors to be approved by NYC Parks marketing team.
- Metal walk-off mat at entry vestibule

LIGHTING REQUIREMENTS

- Inviting LED Lighting, Lighting controls to be circuited to central location accessible only to Rec Center staff

MEP REQUIREMENTS

- Temperature controls to be circuited to central location accessible only to Rec Center staff
- Provide adequate outlets and power to front desk

1010.3 DESIGN APPROACH

- 01. Regulatory Requirements - 8, 10
- 02. Scope and Program - 13, 18, 19, 20, 22

1030 –PROJECT CRITERIA

1. ACCESSIBILITY

All facilities should aspire to universal accessibility whenever possible.
NYC Parks does not typically plan or build dedicated spaces for people with disabilities.

2. RESILIENCY

01. Climate Resiliency Design Guidelines (CRDG): All projects must comply with the CRDG to the extent feasible given the project requirements.

3. SUSTAINABILITY

01. All-Electric Facility:

In alignment with Climate Leadership and Community Protection Act (CLCPA) and NYC's climate target of 80x50 and interim target of 40x30, an all-electric facility is preferred.

02. LL31/2016:

1. DDC has determined the target source EUI for buildings similar to most Recreation Centers is 132.9 kBtu/sf/year for the projected areas of each space type. This value may not be applicable to buildings that include natatoria.

The following information is to be used to comply with LL31/2016.

1. Energy Use Intensity (EUI) baseline:
 - a. For capital projects with more than one occupancy group utilizing the benchmarking path as the baseline, where the area of an individual occupancy group exceeds 10 percent of the gross floor area, a blended EUI, based on the area of each occupancy group, may be used in lieu of the primary occupancy group's limit.
 - b. If utilizing the ASHRAE 90.1-2013 path to determine the target source EUI, the EUI baseline must be calculated using an energy modeling software in compliance with ASHRAE 140–2017 and the ASHRAE 90.1-2013 Appendix G energy modeling protocol, the Performance Rating Method, with addenda.
2. Design energy use intensity (EUI):
 - a. The calculation methodologies used to develop the ASHRAE 90.1-2013 path's target source EUI baseline are to be used to develop the design source EUI for all paths, including the site to source energy conversion ratios.
3. Onsite Renewable Energy:
 - a. While onsite renewable energy may be used towards compliance with achieving the EUI target for the project, onsite renewable energy should not be considered an Energy Conservation Measure (ECM) in the energy analysis, but rather as an energy offset measure.

03. LL94/2019: Sustainable Roofing Zone.

Roof recreational programming may affect compliance path.
NYC Parks generally prefers the installation of a green roof to roof-mounted photovoltaic systems.

04. LL97/2019 Reduction of Greenhouse Gas Emissions

Although individual City-owned buildings are exempt, NYC Parks buildings will be evaluated for compliance with LL97 as a portfolio. Since many NYC Parks buildings are older buildings still in

use, it is critical that newer buildings are designed to reduce greenhouse gas emissions to the greatest degree feasible.

5. PUBLIC DESIGN COMMISSION

Permanent structures, landscape architecture and art proposed on or over New York City-owned property are subject to review and approval by the Public Design Commission (PDC).

6. PERCENT FOR ART

Participation in the New York City Percent for Art program is defined under [Local Law 65/1982, Chapter 9 § 224 of the New York City Charter](#).

The purpose of the Percent for Art Law is to bring artists into the design process, enrich the City's civic buildings and infrastructure, enhance the neighborhood in which projects are located, and celebrate the arts that make the City the world's cultural capital.

New Art Work

There will be one, possibly two unique permanent public art opportunities for a new NYC Parks Recreation Center: (1) for an established artist and (2) Community based artist.

Percent for Art Recommendations

- A substantial public art opportunity for an established artist
- A potential additional public art opportunity for a community-based artist
- For exterior artwork siting opportunities, consider the presence of adjacent infrastructure
- Percent for Art interventions to be incorporated into the building design and visible to the public. (e.g., Façade)
- Artwork designed using universal (non-proprietary) building materials
- Consider siting artwork in interior locations
- Permanence – artworks last for 40+ years
- Accessibility – located in spaces open to the public
- Durability and maintenance considered

Art Work commissioned under the Percent for Art program requires review and approval by PDC. The selected artist(s) will be responsible for the design, fabrication and installation of the artwork. The design should accommodate the underlying artwork, location, attachment details and coordination to be detailed in the construction documents.

1040 –PROJECT BACKGROUND

1. PROJECT HISTORY AND NEIGHBORHOOD CONTEXT

01. NEIGHBORHOOD CONTEXT

NYC Parks may have available historic and existing conditions documentation for designers' use. All consultants will have access to NYC Parks' archived materials, but it is the responsibility of the designer to coordinate access. Please contact Rebekah.Burgess@parks.nyc.gov and Paola.Viteri@parks.nyc.gov with requests to begin the process.

02. COMMUNITY ENGAGEMENT

Coordinate with DDC and NYC Parks from the beginning of the design process to understand the history of prior conversations with the public, elected officials, and other City Agencies. Obtain any information from community engagement sessions that have already taken place, as well as understand future responsibilities to assist in the coordination and planning of future sessions.

Discussions should cover topics such as these listed below, but should be tailored to the specific project and its history:

A. GENERAL PUBLIC	
1	Has the City has made a public announcement to the general public for this project? If so, please describe what the message was and when it took place.
2	Has the City has made a schedule commitment to the public for this project? If so, please describe what the message was and when it took place.
B. ELECTED OFFICIAL(S)	
1	Are there any Elected Officials such as City Council members or a Borough President who have been involved with this project? If so, please describe their involvement.
2	Will any there be any updates to these elected officials that might require materials or in-person support from the designer of record?
C. COMMUNITY BOARD(S)	
1	Has this project, in any form, been presented to the Community Board? If so, please describe when, in what form, and provide any comments or minutes from the meeting.
2	Are there Community Boards other than the assigned district that are important for this project? If so, please describe which one and why.
3	Are there community board presentations other than those required for AHJ approval that the designer or record is required to attend or present at?
D. OTHER COMMUNITY-BASED ORGANIZATIONS	
1	Are there any additional community-based organizations that require project updates? If so, please describe who they are and what they will require from the designer of record.
E. PREVIOUS COORDINATION WITH AHJs	
1	Has there been communication or coordination with applicable AHJ's on this project? Example, has DDC engaged with PDC yet?
2	Are there unique relationships, contacts, or coordination protocols with AHJ that DDC would like to describe here? Example, DDC will facilitate communication with the MTA.
3	Are there any known issues with site utility connections or existing infrastructure that should be identified? Example, DEP and force main/sewer construction.
F. ADJACENT NEIGHBORS AND PROPERTIES	

NYC PARKS RECREATION CENTER DESIGN MANUAL

1	Are there lot/property line encroachments? If so, please describe the City's plan for resolving this.
2	Has there been communication with the adjacent properties and neighbors about an upcoming construction project? If so, describe when and what the communication has consisted of.
3	Will any specific updates to these neighbors be required during the project? Will they require specific materials such as digital presentations from the designer of record?
G. OTHER STAKEHOLDERS	
1	Please identify any additional individuals or groups that have been engaged, or that should be engaged during the project.

PART 2 – PROJECT SCOPE: TECHNICAL REQUIREMENTS AND SPECIFICATIONS.

A – SUBSTRUCTURE

A10 – FOUNDATIONS

Foundation construction shall not damage nor compromise any adjacent structures or utilities

A1010 – FOUNDATIONS GENERAL

1. Preferred Foundation Types
Concrete spread footings below columns, concrete raft or mat slabs, concrete linear strip footings below loadbearing walls, and concrete cantilever retaining wall foundations, where required to support long-span, high-volume spaces such as the indoor pool and gymnasium if programming is located below-grade, are preferred over deep foundations.
2. Not Preferred Foundation Types
 - a. Treated wood foundations.
 - b. Untreated wood foundations.
 - c. Foam plastic insulation below-grade foundations.
3. Settlement of Foundations Supporting Pool
Designer must design the foundations supporting the pool and other fluid retaining structures such that minimal settlement occurs that may cause concrete cracking of the fluid retaining structures. Foundations to be designed with an allowable total settlement of 1 inch and an allowable differential settlement of 0.5 inches. Evaluate the serviceability of foundations utilizing passive soil pressure for force resistance since excessive settlement and movement may occur prior to mobilizing passive soil resistance.
4. Special Load Combinations – Pool Support Structure
Consider in foundation design all loading scenarios of the Building Code and ASCE 7 and consider that the pool structure may be partially-filled, filled or empty prior to the completion of permanent structural systems during the life of the project. Concrete tank structures may be filled, empty or a combination of either load scenario for maintenance, repair, and daily functions. The foundations of these structures must consider all potential unbalanced and balanced loading scenarios in the design of the foundations for the project.
5. Concrete Service Life – Building
Evaluate and design corrosion protection measures and processes of the substructure to meet the service life requirements. The concrete service life is defined as the number of years before major restoration with minimal maintenance performed. Major restoration is defined as repairs requiring jackhammering or other destructive means of concrete repair preparation. It must be assumed that no repairs or maintenance are ever possible for foundations. The minimum design service life (target performance expectation) for all building foundations must be 75 years.
6. Concrete Service Life – Supporting Natatorium (Indoor Swimming Pool)
Evaluate and design corrosion protection measures and processes of the substructure to meet the service life requirement. The concrete service life is defined as the number of years before major restoration with minimal maintenance. Major restoration is defined as repairs requiring jackhammering or other destructive means of concrete repair preparation. It must be assumed that no repairs or maintenance are ever possible for foundations supporting the indoor swimming pool. The minimum design service life (target performance expectation) for foundations supporting the indoor pool, the pool shell/basin, pool tanks, concrete utility tunnels, and foundations for mechanical rooms, chemical storage rooms and tanks used in the function of the pool must be 75 years.

7. Durability Requirements:
 - a. Evaluate and design corrosion protection measures and processes to meet or exceed the concrete durability requirements of ACI 350 for natatorium concrete structures and ACI 318 for all building substructure elements.
 - b. Corrosive Environment: Exposure classes S1, S2, S3, C1 and C2 as defined by ACI 318 Table 19.3.1.1, saltwater pool water or chlorinated pool water, and soils with pH values between 6.5 and 4.0 must be considered corrosive environments. Structural concrete elements subject to these exposure categories must be adequately protected by suitable materials, methods, and processes. Fluid retaining structures must meet or exceed the concrete durability requirements of ACI 350.
 - c. Effectiveness of Protection: The effectiveness of protective materials, methods, and processes must have been thoroughly established by satisfactory service life records of products used or other evidence that demonstrates the effectiveness of such protective measures with suitable numerical modeling.
 - d. Numerical Modeling: For concrete structures in corrosive environments, computerized modelling programs must be used in conjunction with ACI 365 to predict chloride ion profile as a function of depth, time and exposure. Sulfate exposure must also be evaluated. The use of LIFE 365 by M.D.A. Thomas and E.C. Benz for chloride ion exposure and STADIUM by SIMCO Technologies for chloride and/or sulfate exposure for quantitative determination of effectiveness, estimating service life, and comparing various protective measures. The following must be assumed for the numerical modeling:
 - i. Concrete Cover – The concrete cover for numerical analysis must be taken as the specified concrete cover minus the allowable cover tolerance as defined by ACI 117.
 - ii. Corrosion Threshold – The chloride ion content, at the reinforcing steel depth, necessary to initiate corrosion must be taken as 0.05 percent by mass of concrete for uncoated (black) and epoxy coated (green) reinforcing steel.
 - iii. Propagation Time – The corrosion propagation time must be taken as 10 years for uncoated (black) steel reinforcement and 20 years for epoxy-coated (green) reinforcement.

A20 – SUBGRADE ENCLOSURES

A2010 – WALLS FOR SUBGRADE ENCLOSURES

1. General Requirements

The settlement requirements, special load combinations, service life duration, and durability requirements of section A1000 - Foundations General are applicable to this section. Elements subject to the service life and durability requirements include building foundation walls, pool basin/shell, pool tanks, concrete utility tunnels, and chemical storage rooms, where applicable.
2. Serviceability – Crack Width

Design the subgrade concrete walls of the natatorium, pool shell/basin, locker rooms and chemical storage room, where applicable, to minimize the crack widths on the finished surface in addition to meeting all durability requirements. The design must meet the

requirements of ACI 224.1R, Causes, Evaluation, and Repair of Cracks in Concrete Structures, and other applicable guidelines.

3. Preferred Subgrade Enclosure Types
Cast-in-place concrete foundation walls are preferred for building subgrade walls and below-grade retaining foundation wall and tank structures.
4. Not Preferred Subgrade Enclosure Types
 - a. Treated wood foundation walls.
 - b. Untreated foundation walls.
 - c. Foam plastic insulation below-grade foundation walls.
 - d. Unit masonry foundation walls.

A40 – SLABS ON GRADE

A4010 – SLABS-ON-GRADE GENERAL

1. General Requirements
The settlement requirements, special load combinations, service life duration, and durability requirements of section A1000 - Foundations General are applicable to this section. Elements subject to the service life and durability requirements include pool basin/shell pool slabs-on-grade, pool tank slabs-on-grade, concrete utility tunnels, and chemical storage room slabs-on-grade, where applicable.
2. Floor Flatness and Levelness
Provide concrete slab flatness and levelness meeting the finish manufacturers' written requirements and coordinated with finishes required in each space. In spaces to receive maple flooring, the flatness and levelness requirements of the Maple Flooring Manufacturer's Association (MFMA) must be met.
3. Serviceability – Crack Width
Design the slabs-on-grade of the natatorium, pool shell/basin, locker rooms and chemical storage room, where applicable, to minimize the crack widths on the finished surface in addition to meeting all durability requirements. The design must meet the requirements of ACI 224.1R, Causes, Evaluation, and Repair of Cracks in Concrete Structures, ACI 360 R, Designs of Slab-on-Grade, and other applicable guidelines.
4. Durability – Chemical Storage Rooms
Coordinate the durability of concrete slabs-on-grade in chemical storage rooms with the pool chemicals to be used in the function of the pool to ensure proper surface coatings and concrete durability meets the service life requirements in section A1010 – Standard Foundations.

A90 – SUBSTRUCTURE RELATED ACTIVITIES

A9010 – SUBSTRUCTURE EXCAVATION

1. All soft or loose subgrades should be removed and replaced with controlled fill. All subgrades must be compacted to 95% of maximum dry density within 3% of optimum moisture content based on the Modified Proctor Test

B - SHELL

B10 – SUPERSTRUCTURE

B1000 – SUPERSTRUCTURE GENERAL

1. Superstructure Types

NYC Parks does not require or exclude any specific structural system. Concrete, steel, or mass timber framing systems, as well as hybrid systems, are acceptable. Structural systems should be designed to be economical, efficient, durable, sustainable, and flexible for future modifications and reconfigurations of spaces meeting the loading, serviceability, durability, and vibration requirements of the Building Code, ASCE 7, and other applicable guidelines. Evaluate and design lateral force resisting systems (LFRS) that are efficient and economical and appropriate for the gravity structural framing system. The ability of the superstructure to allow for future structural load changes and upgrades is most beneficial.
2. Not Preferred Superstructure Types
 - a. Light-gauge load-bearing metal framing systems.
 - b. NYC Parks has concerns about vandalism and maintenance of mass timber elements in areas where they would be accessible to users. If mass timber elements are used, consider protection from potential vandalism.
3. Vibration Design of Structural Systems
 - a. Design the structural systems, including long-span structural systems to meet, or improve where feasible, the structural vibration performance limits in the guidelines applicable for the appropriate structural material being evaluated, specifically AISC Design Guide 11 for structural steel construction, CRSI Design Guide for Vibrations of Reinforced Concrete Floor Systems for reinforced concrete construction, Woodworks U.S. Mass Timber Floor Vibration Design Guide for mass timber and glulam construction, ATC Design Guide 1 for precast concrete construction, and other applicable vibration design guidelines.
 - b. Evaluate, design, and, where feasible, stack spaces with dynamic and rhythmic activities (fitness and dance spaces) over other dynamic spaces. Evaluate and design the superstructure to minimize vibrations caused by dynamic spaces on adjacent office, reading or multi-purpose room spaces to meet vibration limits of the applicable structural vibration guidelines in these spaces.
4. Natatorium (Indoor Swimming Pool) Durability Design Requirements
 - a. Corrosion Protection and Coordination with MEP Systems: The structural systems at the natatorium must be coordinated with mechanical systems. The durability design and corrosion resistance design of the structural systems must be in coordination with the natatorium humidity, chlorine vapor, and air change requirements, and must not rely upon excessive maintenance as a method of protection and elongating the service life of the structural systems. Evaluate and design corrosion protection systems appropriate for the structural systems of the natatorium and include proper design and detailing with proper anti-corrosion coatings, hot-dipped galvanizing, duplex systems, increased concrete cover and sound structural detailing where necessary to ensure that the corrosion protection of structural elements meet, or exceed where feasible, the service life duration defined elsewhere in this guideline

- b. Service Life of Natatorium Superstructure: Evaluate and design corrosion protection measures and processes of the concrete superstructure elements to meet the service life requirements. The concrete superstructure service life is defined as the number of years before major restoration with minimal maintenance. Major restoration is defined as repairs requiring jackhammering or other destructive means of concrete repair preparation. The minimum design service life (target performance expectation) for concrete superstructure elements of the natatorium, including roof superstructure above the pool, and superstructure for mechanical rooms and chemical storage rooms used in the function of the pool must be 75 years. See section A1000 for more information for service life modeling requirements.
- c. Serviceability – Crack Width: Design concrete superstructure elements of the natatorium, pool shell/basin, locker rooms and chemical storage room, where applicable, to minimize the crack widths on the finished surface in addition to meeting all durability requirements. The design must meet the requirements of ACI 224.1R, Causes, Evaluation, and Repair of Cracks in Concrete Structures, and other applicable guidelines.
- d. Structural Steel Framing Protection and Service Life: Evaluate and design corrosion protection measures and processes of the structural steel superstructure elements to meet the service life requirements. Major restoration is defined as repairs requiring removal of deteriorated structural steel via grinding, flame torch or saw cut removal or other destructive means of structural steel repair preparation. Evaluate and design structural steel protective systems utilizing modern materials and current technologies to meet corrosion service life requirements. Shop or field-applied coatings must be considered the minimum level of protection required for galvanized structural steel. Increase corrosion protection measures if feasible. Corrosion protection of structural steel elements, including metal decking, acoustic decking, steel connections and the like, must be sufficiently designed to meet a minimum 50-year design service life before major corrosion-related repairs are required. The strategy for meeting the design service life must not rely upon excessive maintenance as a method of protection and elongating the service life of the structural systems.

5. Floor Flatness and Levelness

Provide concrete slab flatness and levelness meeting the finish manufacturers' written requirements and coordinated with finishes required in each space. In spaces to receive maple flooring, the flatness and levelness requirements of the Maple Flooring Manufacturer's Association (MFMA) must be met.

B1080 – STAIRS

1. Interior stairs to be visible to corridor spaces to encourage active design.

B20 – EXTERIOR VERTICAL ENCLOSURES

1. An energy model shall be used from the earliest phases of design to best determine appropriate area of glazing and the most effective exterior envelope composition.

2. NYC Parks prefers the use of standard and standardized material and component sizes for façade elements in order to facilitate future replacement.
3. Since façade glazing may be limited by energy use reduction requirements, exterior glazing should be proposed for those areas where it is likely to offer the greatest benefit.
4. EIFS may not be used.

B2010.10 EXTERIOR CLADDING

1. Exposed finish materials at base of building and other exterior surfaces accessible by pedestrians to be non-porous and have inherent anti-graffiti characteristics. Cladding to be easily cleanable by power washing. NYC Parks has had most success with glazed brick masonry cladding in these conditions.
2. Other cladding materials can be explored at higher elevations or at areas that are inaccessible to pedestrians.
3. Provide anti-graffiti coatings at exposed steel and concrete at grade.
4. The use of rainforest wood is prohibited.

B2020 – EXTERIOR WINDOWS

1. Operable windows to be provided in spaces that would benefit from natural ventilation during shoulder seasons. Windows to be lockable with key access for staff. Operable window use to be limited to cleaning, emergency ventilation in case of HVAC down-time, and potential natural ventilation during swing seasons. Windows to be manually operated and not tied into building management system or control of AC units.
2. Continuous air sealing of building to be maintained when windows are closed.
3. Provide screens at all operable windows. Window screen frames are to match the color of the window frame.
4. Interior windowsill surfaces to be hard, non-porous material that allow for easy cleaning and disinfecting. Homogenous solid surface is preferred.
5. Glazing at street level to be impact-resistant and easily replaceable. Size and shape of units should be considered. Outer glass lite to be laminated with non-yellowing interlayer. NYC Parks should be able to purchase replacement units from local vendor; however, this concern should be weighed against required envelope performance criteria.
6. Sightlines and glare should be considered at windows and glazing installed at Gymnasium.
7. Based on a life cycle cost analysis (LCCA), select windows and glazing with the best possible performance from a U-factor, Solar Heat Gain Coefficient (SHGC) and Visible Transmittance (VT) for the fenestration in accordance with the National Fenestration Rating Council.
8. Optimize the emissivity coatings to control both heat gain into the building due to solar radiation and heat loss from the building.
9. Select framing that includes advanced thermal breaks of polyester-reinforced nylon.
10. Wherever possible, select system that incorporate pressure-equalized technology.
11. Provide distraction markers as required at glass lites. Applied decals are not preferred due to maintenance and durability concerns.
12. Windows in offices, storage rooms, reception and other areas with furnishings should be located at or above desk height.

B2050 – EXTERIOR DOORS AND GRILLES

1. Exterior doors to have the following requirements:
 - a. Exterior Door panels to have a maximum height of 84” and to be protected from wind and ice. Doors over 84” to be approved by NYC Parks.
 - b. Doors to be lightweight, durable, and safe. Where required, they should include durable, heavy-duty, surface-mounted door closers. Concealed closers are not preferred.
 - c. Durable automatic door operators to be provided at each entrance with accessible actuator.
 - d. Doors must allow for FDNY access during emergencies.
 - e. No revolving doors at main building entrance.
2. Main entrance doors to provide visual communication between the interior and exterior and should be identifiable as main pedestrian entrance. Doors to have durable, thermally broken frames with insulated glass infill. Doors to be rated for high traffic applications. Thermal performance of insulated frames, insulated glass units, and complete door assemblies to be verified by energy model.
3. Secondary service access doors should be simple, opaque, and durable. No glass infill to be used.

B2080 – EXTERIOR WALL APPURTENANCES

1. For rooftop playgrounds subject to ball playing (those with open areas), provide stainless steel netting and cage, enclosed on all sides (12’ clear height) to be engineered fully during the design phase. Provide overhead netting when play areas abut adjacent taller buildings with overlooking windows. The enclosure must be designed with children’s’ safety in mind – no sharp edges, bolt ends, etc. should be exposed to the students.

B30 – EXTERIOR HORIZONTAL ENCLOSURES

B3010 ROOFING

1. A wearable surface shall be used over a durable membrane roofing system at rooftop recreational spaces. Avoid rooftop turf finish. Recreational space surface to be glare free.
2. Green roof system:
 - a. If a green roof is used, a lightweight, extensive green roofing system is preferred. Parks will provide a preferred green roof system specification.

B3020 – ROOF APPURTENANCES

1. Provide maintenance access to all roofs. If roof area is not accessible by stair, provide permanent ladders inside of building to reach roofs and bulkheads.

B3080 – OVERHEAD EXTERIOR ENCLOSURES

B3080.30 – EXTERIOR BULKHEADS

1. Stair bulkhead to maintain all performance requirements of the vertical and horizontal enclosures. Provide secure maintenance access to all bulkhead roofs.

C – INTERIORS

C10 – INTERIOR CONSTRUCTION

1. Provide energy efficient, durable, sustainable, and easily maintainable construction materials.
2. The use of rainforest wood is prohibited.

C1010 – INTERIOR PARTITIONS

1. All partitions to be slab to structure above; and sealed at all edges and openings.
2. Masonry partitions to be high-impact, filled and reinforced CMU per ASTM C129, C645 C1596.
3. Electrical rough-in to be coordinated with all masonry partitions. All junction boxes should be recessed and installed flush with wall finish.
4. Interior partitions to be capable of supporting heavy-duty shelving, tool racks and equipment.
5. Visibility is preferred at public areas for safety
6. Acoustic construction and finishes/finish panels to mitigate sound transfer from fitness spaces to adjacent spaces in fitness and high-volume areas.

C1010.50 – INTERIOR OPERABLE PARTITIONS

1. Operable partitions that provide acoustic separation are preferred, though divider curtains are acceptable at very large spaces, like gymnasiums. Operation to be automated with manual override. Panels to be continuously hinged with automatic top and bottom seal. Panel finish to be durable. Folded partition to sit flush in wall pocket.

C1020 – INTERIOR WINDOWS

1. Visibility into principal program areas from entry/lobby areas to be prioritized.
2. Use insulated glazing where separating dissimilar conditioned spaces, per ASTM C1048 [Heat-Strengthened Glass].
3. Windows may be operable for improved ventilation and/or communications.
4. Interior window and storefront distraction markers and privacy markings to be integral with glass lite and not an applied decal.
5. Provide visibility between offices and program / public spaces. All glazing in offices or spaces with furnishings to be located at or above desk height.

C1030 – INTERIOR DOORS

1. Provide vision lites at solid door panels separating public and private spaces. Small lites preferred at Offices and Multipurpose spaces. Do not include vision lites at restrooms, storage rooms, and utility rooms.
2. Visibility at vertical circulation is encouraged to promote active design.

C1090.20 – INFORMATION SPECIALITIES

1. A comprehensive interior wayfinding signage package should be included in building design. Colors and graphics to follow NYC Parks Signage Guidelines.
2. The building must have a means to display facility hours.
3. Refer to NYC Parks signage standards for specific signage design criteria.

C1090.25 – COMPARTMENTS AND CUBICLES

1. Increased privacy at toilet partitions preferred, including continuous top and hinge at doors, occupancy indicators and high doors and panels. Floor-mounted supports are strongly preferred. Coordinate position of partitions to not impede maintenance access to floor drains.

C1090.35 – WALL AND DOOR PROTECTION

1. Provide high-impact resistant, chemical and stain resistant, fungal and bacteria resistant, resilient, or stainless-steel crash rails, corner guards, wall panels and door protectors.

C1090.40 – TOILET & BATH ACCESSORIES

1. Refer to NYC Parks fixture standards and accessories, but please note that a recreation center is a fully staffed building, and all comfort station standards may not apply.

C1090.70 – STORAGE SPECIALTIES

1. Lockers to be durable, vandal resistant, water and humidity resistant, and provided with simple metal hasps for locks provided by patrons. Stainless steel lockers are preferred.
2. Lockers to have sloped tops if top surface is exposed.
3. Polycarbonate lockers are preferred in pool areas.

C20 – INTERIOR FINISHES

1. Avoid overly institutional appearance. Materials and finishes should be selected for durability but should still present a friendly and inviting appearance. Bright accent colors within NYC Parks color palette and guidelines may be used. NYC Parks approved mark can be used throughout, as specified and approved by NYC Parks design team.
2. Provide durable, sustainable, and easily maintained and replaceable finish materials
3. Do not use building materials that exhibit hygroscopic properties and may lose their structural and functional properties when exposed to sustained humidity.
4. Use cementitious wall board as a tile base. Comply with the stricter of IBC Section 2509 Showers and Water Closets of the New York City Building Code.
5. Painted wood trim is prohibited.

C2010 – WALL FINISHES

1. Exposed CMU is not an acceptable wall finish for public areas.
2. Wall finishes to conceal all electrical conduit at public areas.

C2010.10 – TILE WALL FINISH

1. Medium or large-format ceramic tile typically used for Natatorium walls. To be durable and aesthetically pleasing. Select materials appropriate for use in a Natatorium and based on successful use in similar facilities.
2. Conform to ANSI 137.1 [Tile-Slip Test]
3. Heavy Commercial Class, Abrasion Resistance Class V, Chemical and Stain Class A
4. ASTM C1027 and C650 [Abrasion Resistance & Chemical Resistance]
5. Conform to ANSI 108 for tile installation.

C2030 – FLOOR FINISHES

1. Where indicated, provide floor accessories and receptacles (including but not limited to floor outlets, sport equipment posts sleeves). Detail to be flush with floor finish and prevent trip hazards.
2. All floor finishes to be level with each other throughout building. This must be coordinated with floor slab construction.
3. Cork flooring is not an acceptable floor material.
4. Floor air grilles and diffusers are not preferred.
5. Warping of wood floors is a primary concern. Refer to Section D30 for Mechanical Recommendations.
6. Floor finishes, including plain concrete, are to have the highest abrasion resistance, water resistance, resistance to gouging, punctures, cuts, and impacts, as well as, rolling and sliding (dynamic) loads and standing (static) loads.
7. Provide concrete sealer at all unfinished concrete floors.

C2030.20 – TILE FLOORING

1. Pool Vessel Tile: Large format tile preferred over mosaic tiles. Select materials appropriate for use in a pool and based on successful use in similar facilities.
2. Pool Deck: Smaller tile preferred for durability and traction. Select materials appropriate for use in a pool setting and based on successful use in similar facilities.
3. Tile Substrate: Should a concrete pool be preferred with a fully tiled interior, it is recommended that the pool shell be designed around ACI 350 as a baseline structural standard. This is applicable to liquid containing vessels and results in a watertight pool shell. A watertightness test would be required to verify that the bare concrete does not lose more than 0.1% of the pool volume per day prior to the application of any finishes. A waterproof membrane would be required at the pool tank, wrapping up and onto the pool deck should spaces be accessible below the deck or on the backside of the pool walls.
4. For additional recommendations on Pools, refer to Section F1050.10.

C2030.30 – SPECIALTY FLOORING

1. Static-resistant flooring is required in the Server Room.
2. Chemical-resistant flooring is required where pool chemicals are stored.

C2030.50 – RESILIENT FLOORING

1. Where resilient flooring is indicated, provide slip-resistant and durable resilient flooring in a dark color that minimizes the appearance of dirt and scuff marks. Bright accents / speckled flooring / patterns can be used.
2. Use materials and adhesives not subject to delamination and adhesion loss from water and moisture.
3. Surface should not act as a substrate for bacterial growth and have exceptionally low VOC content.

C2030.60 – TERRAZZO FLOORING

1. Where provided as a floor finish, a cove terrazzo wall base is preferred.

C2030.80 – ATHLETIC FLOORING

1. Maple flooring is preferred in the Gymnasium.
2. Finish for wood gymnasium flooring to be selected for maximum durability.
3. Include sleeves in floor (with caps) for volleyball nets.
4. Sprung Wood Floor is preferred in areas specifically designed for dance activities.
5. Rubber flooring is preferred in athletic areas and exercise spaces. Dark colors preferred to minimize the appearance of dirt and scuff marks. Bright accents / speckled flooring / patterns can be used.
6. Sound and shock absorbing athletic flooring to be used at heavy free weight area. Flooring is required to be durable and have exceptionally low VOC emissions. Final installation height should be level with adjacent floor finishes. Dark colors preferred to minimize the appearance of dirt and scuff marks. Bright accents / speckled flooring / patterns can be used.
7. Indoor Track flooring should be vulcanized rubber running/walking surface.

C2030.85 – ENTRANCE FLOORING

1. Provide drained, heavy-duty, slip-resistant walk-off grate floor system in Type 316 Stainless Steel.

C2040 – STAIR FINISHES

1. Stair material at primary circulation to be hard, durable, and easy to clean.
2. Provide metal nosing and anti-slip metal inserts.

C2050 – CEILING FINISHES

1. Exposed ductwork and conduit to be painted in areas with exposed ceilings.

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2. The following must be considered in the ceiling finish of all spaces: acoustic performance, maintenance and cleaning, material durability and ease of repair / replacement, required equipment access.

D – SERVICES

D10 – CONVEYING

D1010 – VERTICAL CONVEYING SYSTEMS

1. NYC Parks preference is for at least (2) passenger elevators, even where only one is required by code.
2. All elevators should travel to all floors.
3. Consider transport of large equipment in cab sizing.
4. Provide simple and durable finishes. Reduced maintenance and maximum resilience to be prioritized.
5. Consider noise and vibration control in design of system.
6. Proprietary systems or mechanisms are to be avoided.

D20 – PLUMBING

1. Design must include measures to account for ground water management if proposed design involves excavating below ground water depth. Confirm design approach is viable and all waterproofing and any dewatering is provided as necessary.
2. Provide BMS monitoring of plumbing systems including, but not limited to sewage ejector, sump, booster, tank and recirculation pump status, water temperature at inlet and outlet of heating equipment, high level alarms in all sumps and tanks, leak detector in all drip pans.

D2010 – DOMESTIC WATER DISTRIBUTION

1. Preference is to electrify equipment to extent feasible and eliminate the use of gas if possible. Do not use fuel oil-fired water heaters.
2. Provide domestic water sub-meters to monitor and measure the total potable cold and hot water use. Additional sub-metering of plumbing fixtures and other water uses to be included as indicated by LEED. Connect meters to BMS system for monitoring and recording of water usage.

D2010.60 – PLUMBING FIXTURES

1. Provide showers on pool deck and means to drain water. Provide hose bibbs on the pool deck for maintenance and cleaning.
2. Frost-free hose bibbs must be provided around the perimeter of the building and at the roof.
3. Stainless steel or overly institutional water closets and lavatories are not permitted.

D2020 – SANITARY DRAINAGE

1. Provide a minimum of one floor drain in each mechanical room. Provide additional floor drains where required to eliminate horizontal drainage piping from equipment exceeding 10 feet.
2. Provide ejector pumps at appropriate locations to keep water from backing up through drains.

3. Provide floor drains on pool deck. Consider area drain below pool water testing station. Coordinate means to drain pool.
4. Provide floor drains in locker rooms and utility rooms.
5. Provide means to drain water for showers on pool deck. Drains and floor must be designed to prevent water from shower from flowing into pool.
6. Provide drain and piping for pool filtration system. Drain by gravity or provide pump if required. Coordinate location and size with pool equipment design. Filtration equipment should drain into sump; coordinate with pool designer and architect.
7. If required, provide sump pumps for hydraulic elevator pits indirectly connected to the plumbing system. An automatic pump shutdown sequence must be incorporated to prevent accidental discharge of oil-laden wastewater into the sanitary system.
8. All underground waste piping to be extra heavy cast iron hub and spigot with neoprene gaskets.

D2030 – BUILDING SUPPORT PLUMBING SYSTEMS

2030.10 – STORMWATER DRAINAGE EQUIPMENT

1. A grey water system is to be considered for use with site irrigation and water closets. If provided the system must be simple to operate and not require significant manual operation or maintenance. The potential use of grey water for irrigation of areas within the park, but outside the site of construction, may be considered provided that existing-to-remain systems are not disturbed to install new piping or equipment.
2. Select and coordinate roof and area drains to be easily maintainable and to accommodate anticipated activities at outdoor program spaces.

D30 – HVAC

1. All HVAC equipment/systems must be sized and designed to maintain typical space temperatures. Expanded setpoints may be considered but would be an operational implementation. Equipment capacities should not be reduced based on these potential expanded setpoints. Cooling for spaces where physical exercise takes place must account for the anticipated level of occupant activity.
2. Typical humidity levels should be maintained at 40-60% unless otherwise noted. Humidification should be provided where required to maintain materials or called for elsewhere in the documents. Humidification is to be provided for the gymnasium if required to prevent the floor from warping or otherwise being damaged. The humidity level of the gym should be selected based on the floor manufacturer guidelines.
3. The design of HVAC systems and associated BMS must be kept simple and easily operable and maintainable to extent feasible. Proposed HVAC systems and BMS must include clear information about maintenance and troubleshooting regimens and required operational skills for NYC Parks' review and approval.
4. All systems and components to be corrosion-proof, insulated and provided with flexible connectors, expansion and contraction means of control, and vibration and seismic control, as required.
5. Any equipment installed outside on grade, on roof, or otherwise potentially accessible by public is to be concealed, secured, and enclosed so that only NYC Parks personnel have access.

6. Coordinate layout of any equipment installed on roof in coordination with proposed roof program space.

D3010 – FACILITY FUEL SYSTEMS

1. No oil-fired systems or equipment will be permitted other than for an emergency generator if required. Preference is for any emergency generators to be gas-powered, but fuel oil is acceptable where required by code.

D3020 – HEATING SYSTEMS

1. Preference is to electrify equipment to extent feasible and eliminate the use of gas if possible.
2. Pool water heating may be by dedicated stand-alone equipment or integrated with natatorium dehumidifier and/or building mechanical heating systems. Preference is to electrify equipment and avoid use of gas. See pool section for criteria regarding pool temperature and heating requirements. All piping, equipment, and components in contact with the chlorinated pool water must be designed accordingly. Typical materials may not be suitable in several instances. Coordinate all materials with pool designer and select those suitable for the designed installation.

D3030 – COOLING SYSTEMS

1. Consider Desert Aire or approved equal for natatorium dehumidification unit. Certain manufacturers may not be suitable depending on type of equipment selected for design. Preference is not to use Dectron units as replacement parts are difficult to obtain.
2. Gymnasium will be used for both sports with participants and spectators present as well as large, seated events. Mechanical design to consider both conditions when determining peak cooling and ventilation loads for space.

D3030.70 – DECENTRALIZED COOLING

1. Server/MDF room must have a dedicated AC unit with the ability to provide cooling 24 hours a day, year-round. Some level of redundancy is also required. See D6010.10 for additional information. Options for redundant cooling include direct outside air intake and spill or supply air from a base-building AC system. The server room AC unit must provide a minimum of 1.5 tons of sensible cooling. Designer to calculate heat loads and determine whether greater cooling capacity is required.
2. IDF rooms, if provided, must include a dedicated cooling unit and redundant cooling in same way as server/MDF room.

D3050 – FACILITY HVAC DISTRIBUTION SYSTEMS

1. Mechanical systems must have vibration isolation to minimize noise and vibration through the structure or other components of the building.

D3050.10 – FACILITY HYDRONIC DISTRIBUTION

1. Grooved end piping systems (including piping, couplings, fittings, valves and accessories) is not acceptable.

2. All steel piping must be Type ASTM-A-53-Grade B seamless (Type S) or electric-resistance welded (Type E).
3. Type "M" copper tubing is not permitted. Hydronic systems, when constructed of copper piping, are to be type "K". Type "L" is acceptable for cooling coil condensate drain piping.
4. All welded elbows must be long radius elbows ANSI B16.9.
5. All steam piping over 2" must be butt-welded. Piping 2" and under may be socket-welded.
6. Water, glycol, and all other fluids used in mechanical systems must be treated to prevent corrosion, algae growth, buildup of deposits, disease, and bacteria, and to prolong equipment life.
7. Prior to use, all piping systems must be thoroughly flushed out with approved cleaning chemicals to remove pipe dope, slushing compounds, cutting oils, and other loose extraneous materials. This also includes any piping systems which are not listed as requiring water treatment. Water must not be introduced into piping system without water treatment. Prior to flushing, temporarily remove, isolate, or bypass dirt sensitive equipment and devices.
8. All piping systems must be tested to a hydrostatic pressure at least 1-1/2 times the maximum operating pressure (but not less than 125 psig) for a sufficiently long time, but not less than 4 hours, without losing pressure, to detect all leaks and defects.
9. Install units on housekeeping pads. Provide pad of sufficient height or additional supports to allow for installation of properly sized trap and pitch of drain pipe from cooling coil condensate drain pans.
10. Provide service valves on supply and return piping connections to all equipment.
11. Triple-duty valves are not permitted.
12. There must be external indication of disc/ball/plug position on all valves.
13. There must be approved strainers in the inlet connections to each steam trap, each water feeder and make-up connection, each water regulating valve, each pump, each vent and each control valve. The intention is to protect, by strainers, all apparatus of an automatic or manual character whose proper functioning would be interfered with by dirt on the seat, or by scoring of the seat.
14. All strainers in waterlines (including all pump inlets) and in steam lines must be Y-pattern, line size, set in a horizontal (or vertical downward) run of pipe. Where this is not feasible, strainers may be of the enlarged cross-section type.

D3050.50 – HVAC AIR DISTRIBUTION

1. Provide separate temperate control zones as required for occupant comfort and where required by LEED. Separate HVAC zoning to be provided for each half of rooms with operable dividers such as the afterschool space. However, separate HVAC zones are not required on either side of a divider in the gymnasium, if provided.
2. Fully ducted return systems are preferred. Plenum returns may be permitted in some circumstances if required due to space restrictions. Mechanical rooms may not be used as mixing plenums.
3. Provide a duct system with minimum resistance to airflow. Take-offs must be throated and transitions made as gradual as possible. 'Bullhead' or sharp take-offs are not acceptable. Branch take-offs must be 45 deg entry type. Straight tap or butt flanged connections are not acceptable. Clinch lock connections are preferred.

4. Size ductwork over or within occupied spaces to account for acoustic requirements. Take into account the nature of the space and the ceiling construction (if present). Air velocity in final branch ducts to diffusers should not exceed 500 FPM.
5. The use of flexible ductwork is not permitted. Provide rigid duct connections to each air inlet/outlet.
6. All ductwork must be a minimum of 24 gage. 26 gage or lighter is not permitted.
7. Ductwork serving areas of high humidity must be constructed of aluminum.
8. Provide flexible connector where ductwork connects to fans, air handling units and other rotating equipment.
9. The ductwork and air inlets/outlets in the gymnasium are to be heavy gage and able to withstand anticipated impacts. Any duct distribution installed high should be as tight to the ceiling/structure above as space conditions and airflow design allow.
10. A displacement ventilation system for the gymnasium is preferred and should be reviewed as an option.
11. Air inlet/outlets installed in floors are not preferred.
12. Volume dampers must be provided on all supply ducts to diffusers and exhaust/return ducts from air inlets. Dampers integral with registers or diffusers must not be considered volume dampers for the purpose of balancing. Locate damper as far as possible from the air inlet/outlet to avoid noise transmission.
13. Dampers used for modulating service must be opposed blade type.
14. All dampers exposed to ambient conditions must be constructed of aluminum with stainless steel linkages, fittings, etc.
15. Damper end switches must be devices that directly detect the desired position of the damper blades. The switch must not be a component of the actuator, nor may it be mounted on the damper shaft.
16. All automatic dampers (mechanical control and life safety) must be provided with end switches to allow the BMS to monitor the position of the damper.
17. Curtain type fire dampers must be type where damper blades are out of the air stream (Type "B" or "C" frame). Type "A" mountings are not permitted.
18. Provide test and reset switch for each smoke and fire/smoke damper.
19. Variable frequency drives (VFDs) must have a manual bypass independent of the drive.

D3050.51 – HVAC Air Cleaning Devices

1. MERV 13 filters are agency standard and are minimum required. Both outside and return air should be filtered in occupied areas.
2. Reference latest CDC and ASHRAE guidelines regarding the mitigation of COVID-19 and consider future projection of COVID mitigation techniques. Consider the use of technologies to supplement filters such as UV lighting at coils and bi-polar ionization.
3. Replace all filters after all equipment startup testing and commissioning is done prior to turn over of space to owner.

D3050.52 – Natatorium

1. Specification of natatorium HVAC equipment must be fully coordinated with pool designer. Equipment needs to exceed minimum requirements for longer life cycle of equipment and space. Design of system and selection of all material and components must be coordinated with architect and structural engineer to ensure that

no materials within the space corrode and to prevent the build-up of condensation on surfaces.

2. The design must meet the requirements set out by ASHRAE and the Model Aquatic Health Code (MAHC). It is anticipated that ventilation and air change rates will need to exceed the minimum recommendations provided in these standards. The following must all be accounted for when determining the airflow requirements: the quantity and activity of bathers as well as spectators, aquatic features used, the agitation level of the water, the water temperature and chemistry, the space height, area, and layout as well as type, size, and location of glazing. Utilize design multiplication factors that account for the water agitation and other criteria as well as standard load calculations when determining airflows.
3. The natatorium space temperature is to be maintained 2 deg F above pool water temperature. Maintain the space relative humidity at 55-60%. Provide active monitoring of the humidity at the unit and within the space.
4. Maintain all surfaces with the natatorium above the dewpoint to prevent condensation. Arrange air outlets to direct warm air along glazing or other surfaces likely to experience low surface temperatures during the heating season.
5. The natatorium should be designed to a negative pressure of 0.05 to 0.15 in WG relative to the exterior and adjacent building spaces to prevent the migration of chloramines and humidity into neighboring spaces. The pressure between the natatorium and adjacent spaces are to be actively monitored and control the exhaust/outside air ratio of the natatorium unit to ensure the natatorium remains negatively pressurized.
6. The system must have the ability to run at 100%, or a very high percentage of, outside air to purge the space of chloramines at certain times. The operator should have the ability to manually initiate the higher airflow setting for purge events.
7. The air handling/dehumidifier unit(s) must be designed specifically for use serving natatorium spaces and produced by a manufacturer specializing in the fabrication of such units. The unit(s) should be designed with the primary function of controlling humidity within the space.
8. Air handling unit components should be constructed of aluminum where possible. Plate heat exchangers if provided should be made of aluminum, and coils should be completely coated with an elastic baked epoxy or phenolic coating. Components that must be made of steel for strength, such as fan isolation bases, should have an epoxy or phenolic coating. All components must be designed for use in a natatorium environment and able to withstand the expected conditions without corroding.
9. The ductwork distribution must include both low and high return/exhaust inlets to exhaust chloramines that concentrate near the surface of the pool and deck and also prevent any build-up of stagnant humid air in cavities or at the top of the space. The air inlet and outlet layout should prevent stratification of air and avoid short-circuiting between outlets and inlets.
10. HVAC ductwork in the natatorium is to be aluminum. Use epoxy coated materials where required for corrosion resistance such as for duct hanger components that are not aluminum. Fabric or other non-metal ductwork is not preferred as it is difficult to repair/replace. The ductwork serving the pool chemical storage exhaust system should be selected based on the chemicals and conditions expected for that system.
11. The air velocity for 8 feet above the pool and deck should not exceed 25 FPM to avoid creating a chill due to evaporation on the wet skin surface. Air velocities at spectator areas should be higher.

D3050.90 – FACILITY DISTRIBUTION SUPPLEMENTARY COMPONENTS

D3050.91 – Instrumentation and Control

1. The BMS is to be open protocol. BACNet is the agency standard and LONWorks is not acceptable. All equipment must be BACNet compatible and integrated with the BMS. If equipment, for example a generator if provided, does not have native BACNet compatibility it must be provided with a gateway card and integrated into the BMS system. All new HVAC equipment should have factory installed BACnet MS/TP and or BACnet/IP Communication capabilities compliant with the ASHRAE 135-2016 Standard. Administrative passwords and all tools to modify the BMS programming are to be provided to NYC Parks. Setup where reliance on vendor is required to access and modify BMS sequences or graphics is unacceptable.
2. The BMS must be accessible remotely to allow monitoring and control of systems from offsite.
3. The BMS is to be separate from the fire alarm and lighting controls systems. Recreation staff typically controls the lighting while MEP staff control the BMS.
4. A dedicated BMS workstation and portable laptop should be provided.
5. Any equipment, HVAC or otherwise, that requires internet connectivity must be identified early in the design to allow the necessary time for the required security review process.
6. Operable windows are to be manual, not automated, and should not be tied into the BMS or control of AC units in any way. For example, window sensors that automatically disable the space air conditioning when a window is opening should not be used.
7. Proportional/analog actuator control is preferred over floating-point type control for modulating devices. All control valves and modulating dampers at air handling units must be proportional control.
8. BMS must be capable of monitoring the fire alarm system including the open/close status of all smoke, fire/smoke, and motorized fire dampers. As noted above, the BMS and fire alarm systems are to be separate. Monitoring of dampers and other equipment is to be done by end switches, current sensors, and other monitoring devices connected to the BMS and provided in addition to any devices that are required for the fire alarm system. These additional devices for BMS monitoring are to be separate from the fire alarm system.
9. The filter status of all large air handling equipment is to be monitored at the BMS via pressure drop and a reminder initiated when filters require replacement.
10. Relevant points for equipment associated with systems other than HVAC should be connected to the BMS for monitoring or control where applicable.
11. Provide BMS monitoring of plumbing systems including, but not limited to: sewage ejector, sump, booster, tank and recirculation pump status, water temperature at inlet and outlet of heating equipment, high level alarms in all sumps and tanks, leak detector in all drip pans. Monitor any fire protection pumps for alarms, power, and low suction.
12. Provide BMS monitoring of electrical systems including, but not limited to: heat trace, UPS and ATS alarms, and all points associated with an emergency generator if provided. Monitor the FA system for alarms or loss of power.

13. Pool equipment should be integrated into building BMS for control and monitoring to extent possible. Monitor pump VFDs, all sensors, and all devices with BACNet capability (such as chemical controller).
14. Install leak detectors connected to the BMS in the pool utility tunnels to provide early indication of any leaks.
15. The Building Management System (BMS) application program must be written to communicate specifically utilizing BACnet protocols. Software functions delivered on this project must include password protection, scheduling (including optimum start), alarming, logging of historical data, full graphics including animation for the operator interface, after-hours billing program, demand limiting, full suite of field engineering tools including graphical programming and applications. All software and associated passwords required to program application specific controllers and all field level devices and controllers will be left with the owner. All software and associated passwords required to make any program changes anywhere in the system along with scheduling, and trending applications will be left with the owner. All software and associated passwords required to program and make future changes to field engineering tools including graphical programming and applications will be left with the owner.
16. Building controllers must include complete energy management software, including scheduling building control strategies with optimum start and logging routines. All energy management software and firmware must be resident in field hardware and must not be dependent on the operator's terminal. Operator's terminal software is to be used for access to field-based energy management functions only. Provide zone-by-zone direct digital logic control of space temperature, scheduling, runtime accumulation, equipment alarm reporting, and override timers for after-hours usage.
17. All application controllers for every terminal unit (VAV, HP, UV, etc.) air handler, all central plant equipment, and any other piece of controlled equipment must be fully programmable. Application controllers must be mounted next to controlled equipment and communicate with building controller via BACnet.
18. Alarm feature must allow user configuration of criteria to create, route, and manage alarms and events. It must be possible for specific alarms from specific points to be routed to specific alarm recipients. System must be capable of routing alarms to recipients via email and texting.
19. Multiple-level password access protection must be provided to allow the user/manager to user interface control, display, and database manipulation capabilities deemed appropriate for each user, Based on an assigned password.
20. A graphical display for time-of-day scheduling and override scheduling of building operations must be provided. The graphics application program must be supplied as an integral part of the User Interface. It must be possible to change values (set points) and states in systems-controlled equipment within the Web browser interface. A graphic editing tool must be provided that allows for the creation and editing of graphic files. The graphic editor must be capable of performing/defining all runtime binding.
21. All numeric, binary or data points in the system database must allow their values to be logged over time (trend log). Each historical record must include the point's name, a time stamp including time zone, and the point's value. The history data table view must allow the user to hide/show columns and to filter data based on time and date. The history data table must allow exporting to .txt, .csv, or .pdf file formats.

D3060 – VENTILATION

1. Fans should be considered in cardio and strength rooms. They should be ceiling-mounted or otherwise designed so as not to direct high velocity air directly at occupants as per guidelines to mitigate COVID-19 spread.
2. Provide DOAS (dedicated outside air system) units by AAON or equivalent where applicable. If design requires units with more custom features or components not available by AAON or equivalent, then procure units from a custom AHU manufacturer.

D3060.30 – EXHAUST AIR

1. Provide dedicated exhaust for pool chemical storage rooms. Select suitable fan, ductwork and all components for use with the chemicals to be stored. Refer to pool sections. Provide high and/or low exhaust inlets based on the density of the chemical stored relative to air. Aluminum may not be suitable depending on the chemicals present. Provide coated ductwork as required.
2. Provide exhaust systems as required by code. Provide separate systems as required.

D3060.60 – AIR-TO-AIR ENERGY RECOVERY

1. Provide energy recovery systems where required by code and to meet local law energy requirements. Consider energy recovery equipment even where not code required. Assess all air systems for potential energy recovery and select best technology based on recovery efficiency, desired inclusion or exclusion of latent transfer, available space, maintenance requirements, and accounting for any code restrictions that may prevent or limit the types of energy recovery that can be implemented.

D40 – FIRE PROTECTION

D4010 – FIRE SUPPRESSION

1. Schedule 10 steel piping is not permitted. A thicker gage must be installed.
2. Flexible type sprinkler heads are not permitted.
3. Fire sprinkler heads used in the natatorium should be non-corrodible. Epoxy painted galvanized piping with white polyester heads is an option. Stainless steel or other uncoated ferrous metals should be avoided.

D50 – ELECTRICAL

D5010 – FACILITY POWER GENERATION

D5010.10 – PACKAGED GENERATOR ASSEMBLIES

1. Provide emergency generator if required to serve code-required life-safety systems. Generator, if provided, must be screened from public view and provided with sound attenuation equipment if necessary.

2. Demand-type generation should be considered to support City grid needs in case of emergency.
3. Gas-fired generators are preferred where permitted by code.

D5010.20 – BATTERY EQUIPMENT

1. An uninterruptible power supply (UPS) is required for the IT, security, and other critical building systems.
2. Provide a UPS for emergency lighting, egress and circulation paths, and life safety backup unless an alternate source of backup power is provided.

D5010.30 – PHOTOVOLTAIC COLLECTORS

1. NYC Parks has had difficulty with the maintenance of photovoltaic systems in the past, but use of PVs may be required by regulatory requirements or to meet energy use reduction targets.
2. Coordinate any installation of panels with roof program space.
3. Battery storage will be determined by quantity of solar panels used to achieve proposed energy targets.
4. DCAS programs that provide funding and maintenance for PV systems should be considered during pre-design discussions.

D5020 – ELECTRICAL SERVICE AND DISTRIBUTION

1. All major electrical equipment and sub-systems must be monitored and metered. The electrical power monitoring system must include at a minimum, volt, ampere, kilovolt-ampere, kilowatt, kVAR, power factor, and hertz for both single and three-phase equipment. Monitoring must be available in real time, and historical data must be stored. NYC Parks' uses demand control response and must be able to monitor the power draw of different equipment and systems in real time.
2. Building switchboards and switchgear must be sized to power all building loads plus minimum 30% spare capacity.
3. Interior distribution transformer must be sized to power all building 208 volt and 120 volt loads plus minimum 20% spare capacity.
4. Branch circuit panelboards and distribution boards must be sized in accordance with NYC Electrical Code requirements to power all related building loads plus minimum 20% spare capacity. Provide copper wiring in conduit feeders from building switchboard to all distribution boards and power panels.
5. Provide any flow switches and interlocks between various components of pool system as required to ensure proper function and monitoring of pool equipment. Coordinate requirements with pool designer.
6. All drives, starters, and panels located within the pool filter room should be installed within a NEMA 3R or 4X enclosure depending on the environment. All wiring must be within conduit.

D5030 – GENERAL PURPOSE ELECTRICAL POWER

1. Provide dedicated receptacle power for kitchen appliances and other large equipment.
2. Include minimum (2) electric vehicle chargers for NYC Parks vehicles parked on site.

D5040 – LIGHTING

1. Limit the number of different light fixture types as much as feasible. Disposable fixtures are not preferred and should be avoided. LED-lamped fixtures are preferred over disposable fixtures.
2. Preference for lighting fixtures in gymnasium is to have them installed as tight to ceiling/structure above as space conditions allow. Fixtures are to be impact resistant.
3. Natatorium lighting must be easily accessible by NYC Parks personnel without the use of specialized equipment or requiring that the pool be drained. Light fixtures should not be located over the surface of the water. If fixtures are located over the water a means to access them must be provided. Lighting over the pool must adhere to the code required distance between wiring and water (20' minimum). Natatorium lighting must be designed to minimize glare at the water surface. Glare from artificial light is more likely if the angle of incidence of the main light beam is less than 50 degrees from vertical. Underwater lighting is not preferred.
4. Lighting should be provided around the entire exterior perimeter of building, fixtures to be vandal resistant and easily maintained. Ensure building entrances are well lit.
5. Provide a minimum of 20% spare capacity in the power distribution system for lighting.

D5040.10 – LIGHTING CONTROL

1. Lighting controls are to be simple hard-wired controls. Do not use 'power over ethernet' (POE) or wireless type systems.
2. Lighting control should be a separate system from the HVAC BMS and FA systems as utilized by different staff members.

D5080 – MISCELLANEOUS ELECTRICAL SYSTEMS

1. Snow melt systems for sloped roofs should be provided at any locations where falling ice poses a potential danger.
2. Snow melt systems at building entrances and outdoor paths may be beneficial.
3. Consider redundant systems or methods for snow removal in case of snow-melt system failure.

D60 – COMMUNICATIONS

D6010 – DATA COMMUNICATIONS

D6010.10 – Data Communication Network Equipment

1. Provide an MDF room with the following:
 - a. Electrical power connection.
 - b. A separate dedicated cooling system and additional backup cooling. Cooling is to be a minimum of 1.5 RT. See D3030.70 for additional cooling requirements.
 - c. If the distance to computers from the MDF room exceed 300 ft, provide additional IDF closets with similar space and cooling requirements as the MDF room.
 - d. The MDF room can house equipment for the security system, including but not limited to a 4-post rack with 4'-0" clearance on all sides.
2. Provide data communication routers, switches and hubs, and wireless access points.

D6030 – AUDIO-VIDEO COMMUNICATION

1. Provide video screens as specified for program elements.
2. The Gymnasium video screen may be combined with the timing system if the system allows.
3. Design for data and power as required.

D6060 – DISTRIBUTED COMMUNICATIONS AND MONITORING

D6060.10 Distributed Audio-Video Communication Systems

1. Provide public address systems at the Gymnasium, Pool, and Fitness Rooms.

D6060.50 Distributed Systems

1. Coordinate installation of CityTime devices furnished by NYC Parks.

D70 – ELECTRONIC SAFETY AND SECURITY

D7010 – ACCESS CONTROL AND INTRUSION

1. Provide full card-reader system throughout building. Card-readers should be compatible with Genentech security system. System shall be complete with wiring, software and 40-inch flat panel monitors at the front desk, card access and magnetic locks at outside door.
2. Provide power and conduit for card-readers at building entrances.
3. System to comply with NYC Department of Information Technology and Telecommunications (DOITT) requirements and standards.

D7030 – ELECTRONIC SURVEILLANCE

1. Provide the following for a facility-wide security system:
 - Security system to be Genentech or Genentech-compatible to meet New York City standard.
 - Proprietary systems that limit the ability of NYC Parks to service should be avoided. Open source is preferred.
 - Security for the exterior premise should provide maximum coverage of the exterior to include, but not necessarily be limited to, the building exterior entrances and exits, building perimeter, rooftop recreation area, and service parking/charging stations.
 - All entrances and exits must be covered with an assumed view of the people entering, including but not limited to, fire exits and delivery areas.
 - Security cameras should be monitored from within the building at the front desk and manager's office. Security cameras should be accessible remotely.
 - Provide a minimum of 60-day data storage. Coordinate with NYC Parks IT Department
2. Security cameras on the exterior must not have exposed cabling. If cables are not run in the building, they must be in conduit.

3. Provide interior cameras at the pool tunnel and filter plant to monitor for flooding.
4. Surveillance cameras to have weather and vandal-resistant lenses. Ensure coordination with exterior lighting.
5. Watchmen access for FDNY emergencies to be provided.
6. System shall be complete with wiring, software and 40-inch flat panel monitors at the front desk, card access and magnetic locks at outside doors.

D7050 – DETECTION AND ALARM

D7050.10 – Fire Detection and Alarm

1. Fire Alarm system must be accessible and editable without requiring contact through vendor. Must be open-source panel coding.

D80 – INTEGRATED AUTOMATION

D8010 – INTEGRATED AUTOMATION FACILITY CONTROLS

1. Refer to D3050.90 for BMS requirements.

E – EQUIPMENT AND FURNISHINGS

E10 – EQUIPMENT

E1060 – RESIDENTIAL EQUIPMENT

1. Kitchen appliances to be residential grade, durable and easily cleanable. Stainless steel finish preferred where feasible.

E1070 – ENTERTAINMENT AND RECREATIONAL EQUIPMENT

E1070.50 – ATHLETIC EQUIPMENT

1. NYC Parks can provide a project-specific list of desired exercise equipment for fitness areas.
2. Gymnasium wall padding to be easily removable, preferably with Velcro. To meet requirements for ASTM F2440 impact protection standard and ASTM E-84 Class “A” fire rating for NFPA-101. To be mildew and rot resistant. Upholstered finish to be durable and easy to clean.
3. Gymnasium divider curtains to be motorized with manual override. Assembly does not require acoustic performance criteria. To be Class A Fire Rated for NFPA-101. Track to be heavy duty. Curtain material to have low VOC content. All components of system to be supplied by a single manufacturer.
4. Gymnasium LED multisport scoreboard to be impact resistant.
5. Basketball backboards to be retractable.

E20 – FURNISHINGS

E2010 – FIXED FURNISHINGS

1. Materials with high recycled content to be considered.

E2010.10 – FIXED ART

1. Refer to section 1030.05 for Percent for Art requirements. Artwork should be interactive or integrated into building.
2. Artwork should be easy to maintain and hung securely if over a public area.

E2010.20 WINDOW – TREATMENTS

1. Window shades to be manually operated for ease of maintenance and repair.

E2010.30 – CASEWORK

1. Casework is defined here as all built-in storage, cabinets, and shelving. This includes both prefabricated casework and custom millwork.

2. Casework to have durable, humidity stable, cleanable surfaces that allow for easy cleaning and disinfecting. Material must meet surface burning requirements of ASTM E84-14 and should not support microbial growth.
3. All casework countertop surfaces and interior sills to be made of hard, non-porous surfaces that allow for easy cleaning and disinfecting. Homogenous solid surface is preferred. To meet surface burning requirements of ASTM E84-14 and should not support microbial growth.

E2010.70 – FIXED MULTIPLE SEATING

1. Gymnasium bleachers to be retractable with wood seats and cladding. Telescopic feature to be automated with manual override. Wood to have durable, low maintenance finish.
2. Pool spectator seating recommended to be reinforced plastic or other plastics appropriate for natatorium environment. Plastic seating to contain high recycled content. Appropriate material for natatorium to be used for spectator seating railings.

F – SPECIAL CONSTRUCTION AND DEMOLITION

F10 – SPECIAL CONSTRUCTION

F1050 – SPECIAL FACILITY COMPONENTS

F1050.10 – POOLS

1. GENERAL

Both stainless steel panel wall pool construction (Myrtha system or approved equal) and concrete pool vessel (complying with the requirements of ACI-350) are acceptable.

Pool design must comply with NY DOH requirements.

2. OVERFLOW SYSTEM

Perimeter overflow system and surface cleaning be maintained under all conditions of normal operation and that no water be discharged to waste except when cleaning the filters or emptying the pool(s).

If a stainless steel pool vessel is designed, stainless steel overflow for the pool(s) must consist of a continuous overflow channel and filtered water supply line around the entire perimeter of the pool. The entire system must be integrated into the stainless steel wall panels and a “skin” must be provided as a complete steel pool solution.

3. PUMPING EQUIPMENT

Horizontally mounted centrifugal pumps must be utilized for all the pool recirculation pumps and must be certified by the National Sanitation Foundation (NSF) and bear the certification mark. Two (2) pumps must be provided for the recirculation system. Each pump must be sized for the full recirculation flow rate for redundancy. Pump motor must be totally enclosed, fan cooled (TEFC) and premium efficiency. Pump impeller must be enclosed type of cast bronze or 316L stainless-steel, statically and dynamically balanced, and trimmed for the specified design conditions. The impeller must be trimmed to the maximum diameter based on the rated motor horsepower. Bronze materials must be suitable for use in a chlorinated environment. Suction and discharge flanges must be provided and tapped for gauge connections. Provide steel or cast-iron bases with equivalent epoxy coating for corrosion protection. Provide a hair and lint strainer, for each pump, of fiberglass or epoxy coated stainless steel construction with a clear observation top. Pressure gauges must be installed on the discharge of the pumps and compound gauges must be provided at the intake port of the pumps, after the hair and lint strainer. Provide variable frequency drive starters (VFD) for the pool pumps. Ensure that equipment is provided with the correct operating voltage and that interconnected electrical and electronic equipment must adequately communicate and operate the specified pumping equipment. Equipment installations must meet or exceed the requirements of the National Electric Code and other local and state regulations. Provide a manual bypass consisting of a door interlocked main fused-disconnect pad lockable in the off position, a built-in motor starter and a four-position switch controlling three contactors. A motor selection contactor (CMS) consisting of a

panel mounted contactor motor select switch with three positions. Motor 1 / Auto / Motor 2 must be provided so that the VFD can manually alternate by hand between two pump motors.

4. FILTRATION EQUIPMENT

The filter system must consist of regenerative media filter tanks. Every aspect and component of the filter system must be certified by the National Sanitation Foundation (NSF) and bear the certification mark.

The filters must filter the pool water at a minimum every six (6) hours (at a rate not to exceed 1.3 gallons per minute per square foot). Filter room and filter face piping must be Schedule 80 PVC piping used throughout the pool piping system because of its noncorrosive quality; however, only molded fittings are recommended. All flanges must be reinforced with a steel ring molded into the flange to avoid cracking due to vibration. Pool heater bypass piping must be CPVC.

5. RECIRCULATION FITTINGS

Main drains must be PVC/Fiberglass box with PVC grating or 12-gauge 316L stainless-steel. Grate openings must not exceed 11/32 inch in width, providing an open flow area to allow water velocity not to exceed 1.5 fps. Exposed edges of main outlets must be rounded and smooth, free of burrs and sharp edges. Main drain covers must comply with the Virginia Graeme Baker Act and ANSI/APSP-16 2017.

Hydrostatic relief valves should be provided consisting of a 2" cyclac relief valve connected to an FPT commercial style Schedule 80 PVC collector tube. The collection tube must have seepage holes, 3/8 inch in diameter, and must be screwed securely to the valve body.

Wall inlet fittings must be cyclac directional inlets mounted in threaded fittings. Adjustable floor inlet fittings must be provided each consisting of an ABS plastic body and adjusting top plate with a positive locking device.

A sight sump frame and cover should be provided for access to the vertical sight sump standpipe.

Anti-vortex plates must be provided at the suction points of the main recirculation pump(s) in the surge tank(s). The plate must be located 4 inches above the finished floor of the surge tank. Manufactured fiberglass or PVC anti-vortex plates should be provided.

6. PIPING SYSTEMS

Exposed piping in the filter room and surge tank must be Schedule 80 PVC for strength and resistance to corrosion. All piping below the floor of the pool shell must be encased in concrete and must be Schedule 40 PVC.

All valves must be identified in the filter room. Valves must be described as to their function and referenced in the operating instruction manual and wall mounted piping diagram to be prepared by the contractor.

7. SODIUM HYPOCHLORITE (LIQUID CHLORINE)

Sodium hypochlorite will provide the primary chemical sanitizing for the pool(s). The sodium hypochlorite tanks must be located to have the ability to be filled via truck remotely. A fill box located on the building must be provided with the location, size and connection point coordinated with the chlorine delivery service. The halogen requirement of the pool(s) must be automatically monitored and controlled by water chemistry controller capable of monitoring 0 to 6 parts per million of chemical and showing oxidation reduction potential (ORP) in addition to the two traditional readings of sanitizer and pH.

8. PH BUFFERING SYSTEM (MURIATIC ACID)

Chemical feeders for muriatic acid must be diaphragm type pumps. Fifteen (15) gallon acid drums must be provided. Chemical feed pumps must be furnished and connected to the filtered water return lines to the pool(s) as shown on the pool plans. The pumps must be capable of feeding a solution to the pool(s) to maintain pH level against the back pressure involved and must be fully adjustable while in operation.

9. PH BUFFERING SYSTEM (CO₂)

Provide a system for feeding and regulating carbon dioxide for pH reduction for the pool(s). The system must consist of CO₂ storage tanks, a lockable fill box for bulk delivery, a pressure reducing/automatic changeover valve, a feed unit with rate of flow adjustment, diffusion injection fittings, duckbill check valves, and all necessary interconnection tubing. The CO₂ tanks must be located to have the ability to be filled via truck remotely.

10. ULTRAVIOLET DECHLORAMINATION AND DISINFECTIONS SYSTEM

Swimming pool water to be routinely monitored and treated by UV sterilization in the range of 220nm to 400nm to kill bacteria, viruses, molds and their spores and to continuously remove chloramines. The concentration of free chlorine residual must at all times meet the requirements of the Health Department authority having jurisdiction over the swimming pool. Any proposed UV system must have a UL listing on the complete system and be listed under NSF Standard 50.

11. WATER CHEMISTRY MONITORING AND CONTROL SYSTEMS

A programmable chemical automation system must be furnished for the pool(s) for continuous monitoring of water chemistry (ORP, PPM, pH, free, total and combined chlorine and temperature), Langelier Saturation Index, and for automatic control of the chemical feeders, heater, and water level. Installation of the system must be as specified by the manufacturer and no exceptions must be taken. A factory-authorized representative must provide training to the owner and the training must be videotaped. The water chemistry controller must be able to be connected to the Building Management System for remote monitoring.

12. FLOW METER AND WATER METER

Digital flow meters must be installed in the filtered water return lines to the pool and installed in the backwash piping.

A water meter must be furnished and installed. The water meter must be installed downstream of the slow closing solenoid valve located at the fresh water supply over the fill funnel. The water meter must have a non-corrodible main case, measuring chamber, and hermetically sealed register.

13. WATER LEVEL CONTROLLERS

An automatic water level controller must be provided to maintain the correct water level in the pool at all times. It will consist of a proximity switch type control unit and a coaxial control wire to be connected to the plumbing system's make up water solenoid valve. A manual fill valve will also be available to bypass the automatic system.

14. INSERTS AND ANCHOR SOCKETS

Anchors for grab rails and stair railings must be provided.

Anchors for backstroke stanchions and water polo goals must be provided.

Heavy-duty cup anchors for all swimming lanes must be provided.

Anchors for starting blocks must be provided.

Anchors for the handicap lift must be provided.

15. DECK EQUIPMENT

Deck equipment must comply with DOH equipment codes.

Removable ladders for the pool(s) must be provided. Ladders must be fabricated of one continuous length of polished and buffed tubing. The tubing must be ASTM-A-554 grade 316L stainless-steel, 1.50-inch OD x 0.120-inch wall thickness, and must be passivated, in compliance with ASTM A967-99, incorporating organic acid passivation techniques for maximum corrosion resistance.

Backstroke stanchions must be provided. The backstroke stanchions must be fitted with pennants.

Starting platforms must be provided for the pool(s). These may be removed from the deck when not in use. Platform block height must be 29-1/2" inch above water level. The platform top must be 24" wide x 32" deep and intermediate rear/side step (8" x 12") must be constructed of UV inhibited high density polypropylene. The surface must have a non-skid dual cross-grooved sand textured finish. The top must be permanently positioned at a 10° tilt towards the pool. Frames must be 2.5 square inch x 0.125-inch wall thickness 304 stainless-steel tubing with a powder coated finish. Backstroke bar must be 1" diameter and allow both horizontal and vertical grab positions.

Deck mounted water polo goals must be provided.

Lifeguard chairs to meet the minimum standards of state regulations must be provided in portable units that may be stored out of the way during periods when lifeguards are not required.

Surge tank access hatch must be a single door 2 ft.-6 in. x 2 ft.6 in with 1" fillable pan to receive ceramic tile and grout or concrete deck fill. The frame must be 1/4-inch extruded aluminum with built in neoprene cushion and continuous

anchor flange. Door must be ¼" aluminum plate reinforced with aluminum stiffeners as required.

Surge tank ladder rungs must be 1/2-inch Grade 60 steel encased with co-polymer polypropylene plastic.

One (1) handicap lift must be provided to meet ADA guidelines. ADA lift must be water powered. A deck hydrant must be provided in close proximity to the lift.

16. LOOSE EQUIPMENT

Loose equipment must comply with DOH equipment codes

4" diameter lane markers must be provided with an adequate number of storage reels.

Backstroke flags must be made of Vinyl material, triangular in shape (12" wide x 17" long), and alternating in color, butted end to end on vinyl covered stainless-steel cable.

Lane line storage reels must be fabricated from a heavy-duty aluminum reel joined together by a 1-1/2-inch aluminum axle. This unit must ride easily on four hard rubber wheels.

Lifeline must be 3/4-inch blue and white polyethylene rope with floats that are 5-inch diameter by 9-inch-long. Floats to be spaced on five-foot centers.

17. MAINTENANCE EQUIPMENT

Wall brush must be a flexible polyethylene material with five (5) rows of nylon bristles. Pool brush holder must be permanent mold cast aluminum with hydrofoil flap.

Skimming net head must consist of one-piece molded plastic frame with a reinforced, integral handle bracket suitable for quick attachment to a standard 1¼ or 1 ½ inch diameter handle using bolts and wing nut.

Adjustable telescopic and stainless-steel poles to must be provided.

Testing kit to feature liquid reagents, color comparator, waterproof instructions and treatment charts, chemistry guide and watergram. Test kit to have the ability to test for free and total chlorine (0.5 – 5.0 ppm), bromine (1-10 ppm), pH (7.0 – 8.0), acid and base demand, total alkalinity, calcium hardness and cyanuric acid.

Robotic pool cleaner must be provided with electric motor.

Stainless steel vacuum cleaner must be provided (one (1) required per body of water).

18. SAFETY EQUIPMENT

Loose equipment must comply with DOH equipment codes

Life hook and an aluminum extension pole must be provided (minimum 2).

An oxygen tank must be provided for each lifeguard chair.

Fire safety blankets must be provided for each lifeguard chair (minimum 2).

Spineboards (minimum 2) must be provided with head immobilizer (size adult and youth), head strap, body straps, side roll ups, adhesive strips and required staples.

First aid kits must be a 24-unit kit per American Red Cross standards as manufactured by Swift First Aid, or equal.

Rescue tube for each lifeguard.

Safety eyewash station must be a self-contained system in which eyewash bottles are securely positioned in a portable holder. Eyewash bottles must be 32 ounces and easily removable from case, and shall contain a sterile, saline solution with the ability to neutralize a varying quantity acids or caustics.

Safety eyeglasses dispenser station containing ten (10) pairs of safety glasses must be provided.

19. THERMOMETERS

Portable thermometer must be a molded ABS plastic tube body type with the ability to measure temperature in both degrees Fahrenheit and Celsius. A 3 ft. polyethylene cord is to be attached to thermometer.

Inline thermometer to be near the heating loop and must have a 9-inch adjustable angle with a minimum 6-inch stem.

20. FINISHES

Furnish and install a fiberglass reinforced composite membrane with tile accenting that is mechanically secured to the modular stainless steel panels. Tile should be large format mosaic tiles at the waterline to aid in cleaning. Handhold tile piece should be provided at the waterline.

21. WATERPROOFING

The interior surfaces of surge tank(s), backwash pit must be coated with a high build 100% solids epoxy specifically intended for the application.

22. SEALANTS

Sealants must be provided that are specifically intended for the application and approved for a submerged application.

23. POOL COVERS

The swimming pool cover system must be of the energy conservation type. The covers must be supplied in panel sections, allowing for ease of storage, and ease of installation and removal. The automatic pool covers must be mounted on the natatorium walls. The automation for the systems will be motorized with a switch operation for application and removal.

24. SWIMMING POOL TIMING SYSTEM

A LED timing system and scoreboard with video display must be provided. A timing system should be provided consisting of touchpads, storage caddies, wall plates for the various course configurations, titanium deck plates, a timing system console.

G – SITEWORK

G10 – SITE PREPARATION

G1010 – SITE CLEARING

1. A tree survey by a certified arborist should be performed to determine condition of existing trees.
2. All trees marked for conditional removal should be removed as part of project demolition, and all trees marked to remain should receive tree protection fencing during demolition and construction.
3. Any tree remediation should be noted and accounted for in cost estimates.
4. Cost of Tree Restitution fees as set by NYC Parks should be accounted for in cost estimates.

G1020– SITE ELEMENTS DEMOLITION

1. Planning for the salvage of items designated by NYC Parks should be included in design documentation.

G1070 – SITE EARTHWORK

1. A cut and fill analysis should be performed to determine if soils will need to be brought to the site or removed from the site due to grading and excavation of the landscape and from the excavation of subgrade levels. Existing soils, if available, are assumed to be reused and/or protected in place. Existing soils to remain in place and to be planted as part of this project will require soil amendments. It should be assumed that all excavated material for the new building will be legally disposed of off-site.
2. Testing of the soil to determine contamination should be done as needed to inform whether contaminants exist on site and if mitigation is required.

G20 – SITE IMPROVEMENTS

G2000 – SITE IMPROVEMENTS GENERAL

1. Paved Areas
 - a. Paving should be simple and robust with good edge and transition detailing.
 - b. Vehicular access and turning radii for the plowing of snow to be considered in site design. NYC Parks uses single or double-cab pickup with plow attachment, so an 8'-0" wide clear path is preferred. Plow is preferred over hand shoveling.
 - c. Materials should be selected from NYC Parks standard landscape materials.
2. Site Furnishings
 - a. Site furnishings should adhere to NYC Parks standard materials and furnishings and should be consistent with existing park furnishings if applicable.
 - b. Seat walls to be avoided in final design: not accessible, attract skateboarders, and are targets of vandalism and graffiti.
 - c. Tropical hardwood should not be used in any site furnishing.

G2050 – ATHLETIC, RECREATIONAL, AND PLAYFIELD AREAS

1. Ground-level outdoor space:
 - a. Any outdoor recreational space should be used as a flexible space for outdoor programming of various types and configurations.
 - b. No permanent sports programming elements should be included in outdoor open space.
 - c. Artificial turf may be preferred for outdoor recreational space over natural lawn. Heavy use of such space will make natural lawn difficult to maintain.
 - d. If possible, all open outdoor space on the project site area should be contiguous.
2. Roof Outdoor Space:
 - a. Open rooftop recreation space should be contiguous.
 - i. Mechanical equipment and bulkheads to be located so that it doesn't divide or obstruct recreation space in order to maximize programmable area.
 - b. Roofing/paving material to be durable and intended for multipurpose use.
 - i. If artificial turf is utilized on the roof, consider how maintenance and cleaning of turf may produce dust blown off the roof.

G2060 – SITE DEVELOPMENT

- 1, Proposed fencing should, when possible, adhere to the [Parks Without Borders](#) initiative.

G2060.30 – EXTERIOR SIGNAGE

1. Identifying building signage should be integrated with the façade design and fixed to the building.

G2080 – LANDSCAPING

1. Planting
 - a. Planting should be simple rather than complex, robust, and easily maintainable.
 - b. Planting should be included at building entrances and plazas, and at building envelope if applicable.
 - i. Shade trees to be planted where possible in generous 5'x10' mulched tree pits. Tree pits must comply with all current NYC Parks requirements.
 - ii. Pavements, sitting areas and hard surfaces should be shaded by trees for human comfort and heat island mitigation.

G40 – ELECTRICAL SITE IMPROVEMENTS

G4050 – SITE LIGHTING

1. Provide for outdoor lighting and electrical power systems and building illumination where required. Generally, unobtrusive lighting designs and luminaire placement is preferred. Site luminaires should complement and be integrated with other site elements. Place luminaires to reduce glare and light pollution.
2. Exterior lighting should meet the requirements of lighting for parks found in the [DOT Street Design Manual](#)

3. Neutral white illumination is preferred. Luminaires must be resistant to vandalism and easily replaceable. Consider photovoltaic site lighting in lieu of hard-wired where cost effective.
4. Full cut-off fixtures and other technologies and methods that reduce nighttime light trespass are strongly preferred. Where feasible, using a larger number of shorter, more closely spaced, lower wattage fixtures are preferable to using a smaller number of higher, widely spaced, high wattage fixtures.

PART 3 – APPENDIX

1. PRODUCT SPECIFICATIONS

NYC Parks Preferred Vehicle Charging Station Specification
NYC Parks Standard Plumbing Fixtures and Accessories
NYC Parks Standard Lighting Fixtures

2.. NYC PARKS DESIGN DIRECTIVES

NYC Parks Signage Guidelines
NYC Parks Standard Site Materials and Furnishings

3. RELATED RESOURCES

[Parks Without Borders Initiative](#)
[DOT Street Design Manual](#)

PRODUCT SPECIFICATIONS
NYC PARKS PREFERRED VEHICLE CHARGING STATION

Express 250

Specifications and Ordering Information



Express 250

Ordering Information

The order codes below represent specific product configurations. Other product options are available. Please contact ChargePoint Sales for information and order codes.

Hardware

Description		Order Code
Model	Express 250 Station (50 kW) includes 2x Power Modules, 1x CCS1 cable, 1x CHAdeMO cable (NA)	CPE250C-CCS1-CHD
	Express 250 Station (50 kW) includes 2x Power Modules, 1x CCS2 cable, 1x CHAdeMO cable (NA)	CPE250C-CCS2-CHD
Option	Other cable combinations are available using CCS1, CCS2 and CHAdeMO connectors.	Please contact ChargePoint sales

Cloud Plans and Software

Description	Order Code
ChargePoint Cloud Plan	Please contact ChargePoint sales
ChargePoint Assure — Prepaid Assure Plan for one Power Module. Express 250 requires 2x EXPRESS-ASSURE n to cover the two Power Modules and the CPE250 station.	EXPRESS-ASSURE n ¹
ChargePoint Assure — Assure Plan for one Power Module and invoiced annually. Express 250 requires 2x EXPRESS-ASSURE n to cover the two Power Modules and the CPE250 station	EXPRESS-ASSURE n -COMMIT ¹
Software upgrade token for Express 250 to increase max power from 50 kW to 62.5 kW	CPE250C-625-UPGRADE
Station Activation and Configuration	CPSUPPORT-ACTIVE

All CPE250 stations require a cloud plan.

¹ Substitute desired years of service (1, 2, 3, 4, or 5 years) for n

Order Code Examples

If ordering this...	...the order code is
Express 250 Station (50 kW) includes 2x Power Modules, 1x CCS1 cable, 1x CHAdeMO cable (NA)	CPE250C-CCS1-CHD
3 years of prepaid Assure coverage upon successful site validation. Assure covers Power Modules & station. Express 250 requires 2x EXPRESS-ASSURE3 for its 2 Power Modules.	2 x EXPRESS-ASSURE3
Station Activation and Configuration	CPSUPPORT-ACTIVE

Express 250 Specifications

Station Electrical Input

Input Rating	400V AC, 3-phase, 96A, 50 Hz 480V AC, 3-phase, 80A, 60 Hz
Wiring	L1, L2, L3, Neutral & Earth

Station Electrical Output

Max Output Power	62.5 kW*
Output Voltage, Charging	200–1,000V DC
Max Output Current	156A
Max Modules per Station	2

* Default is 50kW, upgrade token is required to access 62.5kW

Paired Station Electrical Output

Paired Max Output Power	125 kW
Paired Max Output Current	CCS1: 174A CCS2: 200A CHAdeMO; US: 140A, EU: 125A

Power Module

Max Output Power per Module	31.25 kW
Max Output Current per Module	78 A

Station Functional Interfaces

Max Connector Types per Station	Up to two different connector types per station
Supported Connector Types	CHAdeMO, CCS1 (SAE J1772™ Combo), CCS2 (IEC 61851-23)
Cable Length with Swing Arm	Full Horizontal Reach: 4.27m (14')*
Driver Interaction Display	Full-color 254 mm (10 in) LCD display for driver interaction
Top Display	Full-color 508 mm (20 in) LED display for notifications
Authentication	RFID: ISO 15693, ISO 14443, NEMA EVSE 1.2-2015 (UR) Tap to Charge (NFC on Apple & Android) Plug and Charge: IEC 15118-1 Remote: Mobile and in vehicle (if supported by vehicle)

* Horizontal reach to typical vehicle charging port: 3.76m (12'4")

Connectivity Features

Local Area Network	2.4 GHz and 5 GHz WiFi (802.11 b/g/n)
Wide Area Network	4G LTE (fall back to 3G GSM)
Supported Communication Protocols	OCPP
Service and Maintenance	Remote system monitoring, diagnostic, and proactive maintenance

Energy Management Features

Dynamic Power Management	Allows a fixed maximum power output per station or lets the system dynamically manage the power distribution per station
Remote Energy Management	Manage output power via the ChargePoint Admin Portal, API, and Open ADR 2.0b VEN

Safety and Operational Ratings

Vehicle Safety Communication	CHAdeMO – JEVS G104 over CAN, CCS1 – SAE J1772 over PLC and CCS2 — IEC 61851-23
Plug-out Detection	Power terminated per JEVS G104 (CHAdeMO), SAE J2931 (CCS1) and IEC 61851-23 (CCS2)
Station Enclosure Rating	Type 3R, IP54
Safety Compliance	UL and cUL listed: complies with UL 2202, UL 2231-1, UL 2231-2, CSA 107.1 CE marking: complies with IEC 62196, IEC 61851
Station Surge Protection	Tested to IEC 6100-4-5, Level 5 (6 kV @ 3,000A). In geographic areas subject to frequent thunder storms, supplemental surge protection at the service panel is recommended.
EMC Compliance	U.S.: FCC part 15 Class A; EU: EN55011, EN55022 and IEC61000-4
Power Module Conversion Efficiency	Up to 96%
Power Factor	0.99 at full load
Harmonics	iTHD < 5% (Complies with IEEE 519 Requirements)
Power Module Cooling	Liquid Cooling Technology
Operational Altitude	<3,000 m (<9,800 ft)
Operating Temperature	-30°C to 50°C (-22°F to 122°F)
Storage Temperature	-40°C to 50°C (-40°F to 122°F)
Operating Humidity	Up to 95% @ 50°C (122°F) non-condensing

Generic Specifications

Station Dimensions	2,230 mm x 712 mm x 420 mm (7'4" x 2'4" x 1'4")
Station Weight (without Modules)	250 kg (551 lb)
Power Module Dimensions	760 mm x 430 mm x 130 mm (2'6" x 1'5" x 5")
Power Module Weight	45 kg (98.5 lb)

ChargePoint, Inc. reserves the right to alter product offerings and specifications at any time without notice, and is not responsible for typographical or graphical errors that may appear in this document



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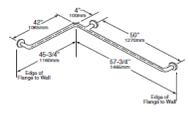
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PRODUCT SPECIFICATIONS
NYC PARKS STANDARD PLUMBING FIXTURES AND ACCESSORIES
(FOR REFERENCE - TO BE USED AS APPLICABLE)

PLUMBING FIXTURE SCHEDULE

KEY	FIXTURE	DESCRIPTION	IMAGE	SPECIFICATION	CUT SHEET LINK
P-1	WATER CLOSET BARRIER-FREE DESIGN / 'RIGHT HEIGHT' / A.D.A.	TOILET-WALL HUNG WITH MANUAL EXPOSED FLUSH VALVE, BARRIER-FREE DESIGN & ADA COMPLIANT SEAT HEIGHT (17" AFF)		AMERICAN STANDARD #3351.101: ELONGATED BOWL ONLY; TOP SPUD, WHITE VITREOUS CHINA 'MILLENNIUM-FLOWWISE' FLUSHOMETER TOILET;	
		OPEN FRONT WHITE SEAT		5905.100 EXTRA-HEAVY DUTY, OPEN FRONT WHITE SEAT (LESS COVER);	
		CARRIER		JAY R. SMITH 0210Y SINGLE HORIZONTAL CARRIER UNIT	
		FLUSH VALVE EXPOSED MANUAL FLUSHOMETER		SLOAN CO.-ROYAL 111-1.28 CHROME-PLATED, 1.28GPF FLOW AND 1" COLD WATER INLET	
P-2	URINAL BARRIER-FREE DESIGN / 'RIGHT HEIGHT' / A.D.A.	WALL-MTD. URINAL WITH MANUAL EXPOSED-TYPE FLUSH VALVE WITH RIM SET TO ADA STDS.		AMERICAN STANDARD #6590.001; WASHBROOK FLOWWISE-UNIVERSAL URINAL; WASHOUT TYPE, 3/4" TOP INLET SPUD, WHITE VITREOUS CHINA;	
		IN-WALL SUPPORT CARRIER UNIT		IN-WALL JOSAM SUPPORT CARRIER UNIT 17560 Series (BOLTED TO FLOOR)	
		FLUSHOMETER VALVE		ROYAL FLUSHOMETER VALVE #186-0.25(GPF) WITH ADA-COMPLIANT HANDLE AND 3/4" IPS SUPPLY INLET CONN	
P-3	LAVATORY BARRIER-FREE DESIGN / A.D.A	BASIN, WALL-HUNG, VITREOUS CHINA WITH MANUAL SELF-CLOSING FAUCET; BARRIER-FREE DESIGN/ADA & GENERAL USE		AMERICAN STANDARD #-MURRO' UNIVERSAL DESIGN WALL-HUNG LAVATORY, WHITE VITREOUS CHINA (WITH 'EVERCLEAN'); FOR CONCEALED ARM SUPPORT AND VIT. CHINA SHROUD/KNEE CONTACT GUARD #0055.020EC; LAVATORY TOP SET AT ADA COMPLIANT HEIGHT A.F.F.; WITH (3) FAUCET HOLES, WITH (2) HOLES-4" O.C.;	
		WALL CARRIER UNIT WITH CONCEALED ARMS		JAY R. SMITH #0700-Z-27 BEHIND WALL CARRIER UNIT WITH CONCEALED ARMS	
		FAUCET		1340.227 CENTERSET-TYPE, METERING FAUCET; PRESSURE COMPENSATING VANDAL-RESISTANT SPRAY; LEAD-FREE, SEPARATE HOT & COLD SPRING-TYPE PUSH-DOWN HANDLES AND MEETS ADA STANDARDS.	
		P-TRAP		MCGLURE #201C-'P' TRAP (BRASS); HOT & COLD WATER SUPPLIES WITH CONCEALED BRASS ANGLE STOPS (LOOSE-KEY TYPE). HOT WATER IS 110" FROM THERMOSTATIC MIXING VALVE BEHIND TOILET ROOM WALL.	
P-4	SERVICE SINK	SERVICE SINK, WALL-HUNG, ENAMELED CAST IRON WITH TWO-HANDLE FAUCET AND FLOOR MOUNTED TRAP STANDARD P-TRAP		AMERICAN STANDARD - 'AKRON' SERVICE SINK #7695.008, WITH WALL HANGER AND RIM GUARD; DRILLED BACK WITH (2) HOLES 8" O.C., NOMINAL SIZE-24"X20 1/2"; INSTALL WITH #7798.030 CAST IRON 'P' TRAP STANDARD WITH ADJUSTABLE FLOOR BASE AND STRAINER FOR 3" IRON PIPE.	
	FAUCET	Wall-Mount Utility Faucet Top brace. 6" cast brass spout with vacuum breaker.		AMERICAN STANDARD 8344.012 Exposed Yoke Wall-Mount Utility Faucet Top brace. 6" cast brass spout with vacuum breaker. Ceramic disc valves. Integral supply stops. Vandal-resistant metal lever handles. Bucket hook. 3/4" threaded hose end. 1/2" NPT female inlets.	
P-5	BARRIER-FREE DESIGN / A.D.A	FREEZE-RESISTANT, "HI-LO" BARRIER-FREE, WALL MOUNTED, DUAL SATIN FINISH STAINLESS STEEL DRINKING FOUNTAINS		ADA/BARRIER-FREE COMPLIANT, OUTDOOR-TYPE FREEZE-RESISTANT, WALL-MTD. DRINKING FOUNTAIN; DRINKING FOUNTAIN STAINLESS STEEL, DOUBLE-BOWL/BUBBLER INSTALL COMPLETE WITH MODEL #SK-1 STAINLESS STEEL ADA FOUNTAIN SKIRT; MODEL #6700.4 'HI-LO' UNIVERSAL MOUNTING OUTDOOR TYPE PLATE AND MODEL #6800 UNIVERSAL IN-WALL MOUNTING SUPPORT FRAME. INSTALL PER MFR. STDS. AND ADA HEIGHT REQUIREMENTS. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL DETAILS & INFORMATION. (INSIDE WALL) A MODEL #6521FR VALVE AND TRAP ACCESS BOX.	
		Freeze Resistant In-Wall Valve			
P-6	FLOOR DRAIN	FLOOR DRAINS WITH DEEP SEAL TRAPS		JAY R. SMITH' #2515S-NB-U, FLOOR DRAINS WITH INTEGRAL TRAP AND CLEANOUT; 4" OUTLET, VANDAL-PROOF SCREWS, DUCO CAST IRON BODY AND STAINLESS STEEL TOP.	
		DRAIN CLEAN OUT		LIQUID-BREAKER/GREEN DRAIN CO #GD104 (4"SIZE), TRAP SEAL MAINTENANCE DEVICE.	

ACCESSORIES SCHEDULE

KEY	FIXTURE	DESCRIPTION		SPECIFICATION
	TOILET TISSUE DISPENSER	2 ROLL FLIP FRONT		VANDAL STOP PRODUCTS VSP-OFUX2
	MIRROR	23 1/2" W x 35 1/2" H (60 x 90cm).		BOBRICK B-1156-2436 Bright-polished stainless steel. Mirror has 1/4" (6mm) return concealing 1/4" (6mm) tempered masonite backing. Furnished with four mounting screws.
	HAND DRYER	SURFACE MOUNTED HAND DRYER		SLOAN EHD-501 8 second dry time 110-120V – 11.3-12.2 Amps, 1240-1450 Watts, 50/60 Hz
	TOILET PARTITIONS	FLOOR MOUNTED OH BRACED		SCRANTON PRODUCTS HINEY HIDERS
	GRAB BAR	42" W x 54" D (107 x 137cm), 1-1/4" (32mm) dia.		BOBRICK B-5897 Constructed of 18-gauge (1.2mm), type 304 satin-finish stainless steel tubing. Concealed mounting flange 1/8" (3mm) thick, type 304 stainless steel plate, 2" W x 3 1/8" H (50 x 80mm), with screw holes for concealed anchors. Cover is 22-gauge (0.8mm), type 304 stainless steel with satin finish, 3 1/4" (85mm) diameter. Cover snaps over mounting flange to conceal screws.
	GRAB BAR	18" VERTICAL BAR		BOBRICK B-5806
	SOAP DISPENSER	(LIQUID) VERTICAL – SURFACE MOUNTED		AMERICAN SPECIALTIES 0347
	WASTE RECEPTACLE	FLOOR STANDING		BOBRICK B-2260 Open top. Vinyl wall bumper, rubber feet. Liner hooks. 13-gal. (49.2-L) capacity. Unit 13-3/8" x 13-3/8" (340 x 340mm) at top, 21-3/4" (553mm) high
	LOCKERS	1 BANK, 2 LOCKERS NO BASE, FULL LENGTH LATTICE MESH VENTING		SCRANTON PRODUCTS TUFFTEC 2.0

PRODUCT SPECIFICATIONS
NYC PARKS STANDARD LIGHTING FIXTURES
(FOR REFERENCE - TO BE USED AS APPLICABLE)

Fixture Type	Type	Manufacturer	Model	Model #	Wattage	Note
Downlight	Recessed - 6" - Round	Rab	Rough-in 6" Round 26W	ND6R26D	26	Must order both for a complete fixture
	Trim Module - 6" - Round		Trim Module 6" Round	NDLED6RD-80NHC-W-W	N/A	
	Recessed - 6" - Round - Battery back up	Rab	ROUGH-IN 6" ROUND 26W 0-10V EMERGENCY BATTERY BACKUP	ND6R26D/E2	26	Must order both for a complete fixture
	Trim Module - 6" - Round		Trim Module 6" Round	NDLED6RD-80NHC-W-W	N/A	
	Recessed - 6" - Round - Insulation Contact	Rab	ROUGH-IN IC RATED 6" ROUND 26W	NDIC6R26D	26	Must order both for a complete fixture
	Trim Module - 6" - Round		Trim Module 6" Round	NDLED6RD-80NHC-W-W	N/A	
	Recessed - 6" - Round - Remodeler	Rab	6" Round Remodeler	RDLED6R26D-80NHC-W-W	26	
2 x 4	Recessed	Rab	2' x 4' EZPAN Edgellit LED Panel	EZPAN2X4-50N/D10	50	
	Recessed - Battery back up	Rab	2' x 4' EZPAN Edgellit LED Panel Emergency Battery Back-up	EZPAN2X4-50N/D10/E2	50	
	Mounting Kit - Recessed	Rab	Recessed Mounting Kit for LED Panels	RMKPANEL2X4	N/A	
	Mounting Kit - Surface	Rab	Surface Mounting Kit for LED Panel	SMKPANEL2X4	N/A	
2 x 2	Recessed	Rab	2' x 2' EZPAN Edgellit LED Panel	EZPAN2X2-40N/D10	40	
	Recessed - Battery back up	Rab	2' x 2' EZPAN Edgellit LED Panel Emergency Battery Back-up	EZPAN2X2-40N/D10/E2	40	
	Mounting Kit - Recessed	Rab	Recessed Mounting Kit for LED Panels	RMKPANEL2X2	N/A	
	Mounting Kit - Surface	Rab	Surface Mounting Kit for LED Panel	SMKPANEL2X2	N/A	
1 x 4	Recessed	Rab	1' x 4' Recessed LED Panel	PANEL1X4-52N/D10	52	
	Recessed - Battery back up	Rab	1' x 4' Recessed LED Panel Emergency Battery Back-Up	PANEL1X4-52N/D10/E2	52	
	Mounting Kit - Recessed	Rab	Recessed Mounting Kit for LED Panels	RMKPANEL1X4	N/A	
	Mounting Kit - Surface	Rab	Surface Mounting Kit for LED Panel	SMKPANEL1X4	N/A	
Highbays	Pendant - Up to 25 FT	Rab	RAIL High Bay	RAILP95NW/D10	95	
	Pendant - Up to 30 FT	Rab	RAIL High Bay	RAILP150NW/D10	150	
	Pendant - Up to 50 FT	Rab	RAIL High Bay	RAILP225NW/D10	225	
Wrap	Surface - 4ft	Rab	4 ft. LED GUS Surface Wrap	GUS4-50NW/D10	50	
	Surface - 2ft	Rab	2 ft. LED GUS Surface Wrap	GUS2-25NW/D10	25	
	Joiner Bracket	Rab	Joiner bracket for Surface Wrap GUS 2ft and 4ft.	GUS JCAP	N/A	
Surface - Round	Surface - Round - Big	Rab	SKEETXL Decorative LED Surface Mount Fixture Round	SK21XL25RDN	25	
	Surface - Round - Small	Rab	SKEET LED Surface Mount Fixture Round	SK9RYNW	9	
Stairwell	Surface	Rab	LED Stairwell Treadsafe 4'	TSLED4-36N/D10/US/BL	36	
	Surface - Battery back up	Rab	LED Stairwell Treadsafe 4' Emergency Battery Back-Up	TSLED4-36N/D10/US/BL/E2	36	
Vaporproof	Surface - 4ft	Rab	SHARK Linear LED Washdown 4 foot	SHARK4-50NW/D10	50	
	Surface - 4ft - Battery back up	Rab	SHARK Linear LED Washdown 4 foot Emergency Battery Back-Up	SHARK4-50NW/D10/E2	50	
	Surface - 2ft	Rab	SHARK Linear LED Washdown 2 foot	SHARK2-25NW/D10	25	
Upscale	Pendant - 4ft	Rab	4 ft. Suspended Pendant Linear Slot Lights	BOA4P-40D10-40N-W	40	
	Pendant - 4ft - Battery back up	Rab	4 ft. Suspended Pendant Linear Slot Lights Emergency Battery Back-Up	BOA4P-40D10-40N-W/E2	40	
Wallpack	Surface - Traditional Shape	Rab	LED WP3 Wallpacks	WP3LED55N/PC	55	Cutoff and Full Cutoff can be specified Thermal Shock-Resistant die-cast aluminum
	Surface - Traditional Shape	Rab	LED WP3 Wallpacks	WP3LED82N/PC	82	
	Surface	Rab	LED 104W Wallpacks	WPLED104N/PCS	104	
	Surface	Rab	LED 52W Wallpacks	WPLED52N/PCS	52	
Vapor Proof-LED Heavy Duty	Surface	Rab	LED 26 W Wet location downlight	VXBRLED26DG	26	

NYC PARKS SIGNAGE GUIDELINES



NYC PARKS SIGNAGE GUIDELINES

NYC Parks

Signage Style Guide

About NYC Parks

NYC Parks is the steward of 29,000 acres of land—14 percent of New York City’s real estate—including more than 5,000 individual properties ranging from Coney Island Beach and Central Park to community gardens, greenstreets, woodland, wetlands, and salt marsh ecosystems.

Parks operates more than 800 athletic fields and nearly 1,000 playgrounds, 550 tennis courts, 66 public pools, 48 recreational facilities, 17 nature centers, 13 golf courses, and 14 miles of beaches. The agency cares for 1,200 monuments and 23 historic house museums, and looks after 600,000 street trees, and two million more in parks. In addition, the agency is New York City’s principal provider of recreational and athletic facilities and programs, and serves as home to free concerts, world-class sports events, and cultural festivals.

This brand identity is the result of an expansive review of the way in which Parks’ iconic leaf is used—arguably one of the strongest and most recognizable logos in New York City. The agency was extremely fortunate to work with Pentagram, one of the world’s leading design firms, who undertook this project on a pro bono basis.

Welcome to the NYC Parks Signage Identity.

Standard Signage Brand Guidelines: The Mark

The NYC Parks Mark is a Leaf within a perfect Circle so that the width and height remain fixed and equal. This is the mark that is on all signage to identify NYC Parks.

RESTRICTIONS

Do not use any of the elements that comprise the Mark separately from the Mark itself.
(see figure A)

Do not modify any of the elements that comprise the Mark.
(see figure B)

Do not stretch the Mark so that the height and width are disparate.
(see figure C)



A



B



C



Standard Signage Brand Guidelines: Colors

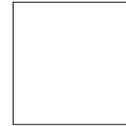
The signage color system is limited to two colors. A green background must be used with white type or icons unless there is a legal requirement for color representation.

Colors shown on this page are not accurate for color matching. Please refer to the current Pantone Color Formula Guide to ensure that color reproduction is accurate. The colors shown have not been evaluated by Pantone Inc. for accuracy (Pantone® is a registered trademark of Pantone, Inc.).

*(u) Uncoated Process, (c) Coated Process



GREEN
PMS 447C
CMYK (u)* C66, M49, Y77, K45
CMYK (c)* C16, M0, Y31, K82
RGB R63, G63, B56
HEX #3F3F38



WHITE
CMYK C0, M0, Y0, K0
RGB R255, G255, B255
HEX #FFFFFF

Standard Signage Brand Guidelines: Typography

The primary typeface for NYC Parks is Akkurat. Italic options for Akkurat are also available for use, but not shown here.

The Akkurat type family is to be used on all signage.

Akkurat Bold should be used for headlines and Akkurat Regular should be used for the secondary text.

Akkurat–Bold

**ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890@\$%&?!*.,(-)**

Akkurat–Regular

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890@\$%&?!*.,(-)

Standard Signage Brand Guidelines: Typography, Foreign Languages

When using foreign languages, each language should be shown in the specific typefaces listed here. The typefaces were chosen to emulate Akkurat when Akkurat cannot be used, due to limited characters in the Akkurat type family.

Arabic

Arial-Regular

مرحباً

Arial-Bold

مرحباً

Chinese

Heiti TC-Light

欢迎光临

Heiti TC-Medium

欢迎光临

Greek

PF DinText Pro-Regular

Καλώς ήρθατε

PF DinText Pro-Bold

Καλώς ήρθατε

Japanese

Osaka-Regular

スイミングプール

Korean

Nanum Gothic-Regular

수영장

Nanum Gothic-Bold

수영장

Russian

PF DinText Pro-Regular

Добро пожаловать

PF DinText Pro-Bold

Добро пожаловать

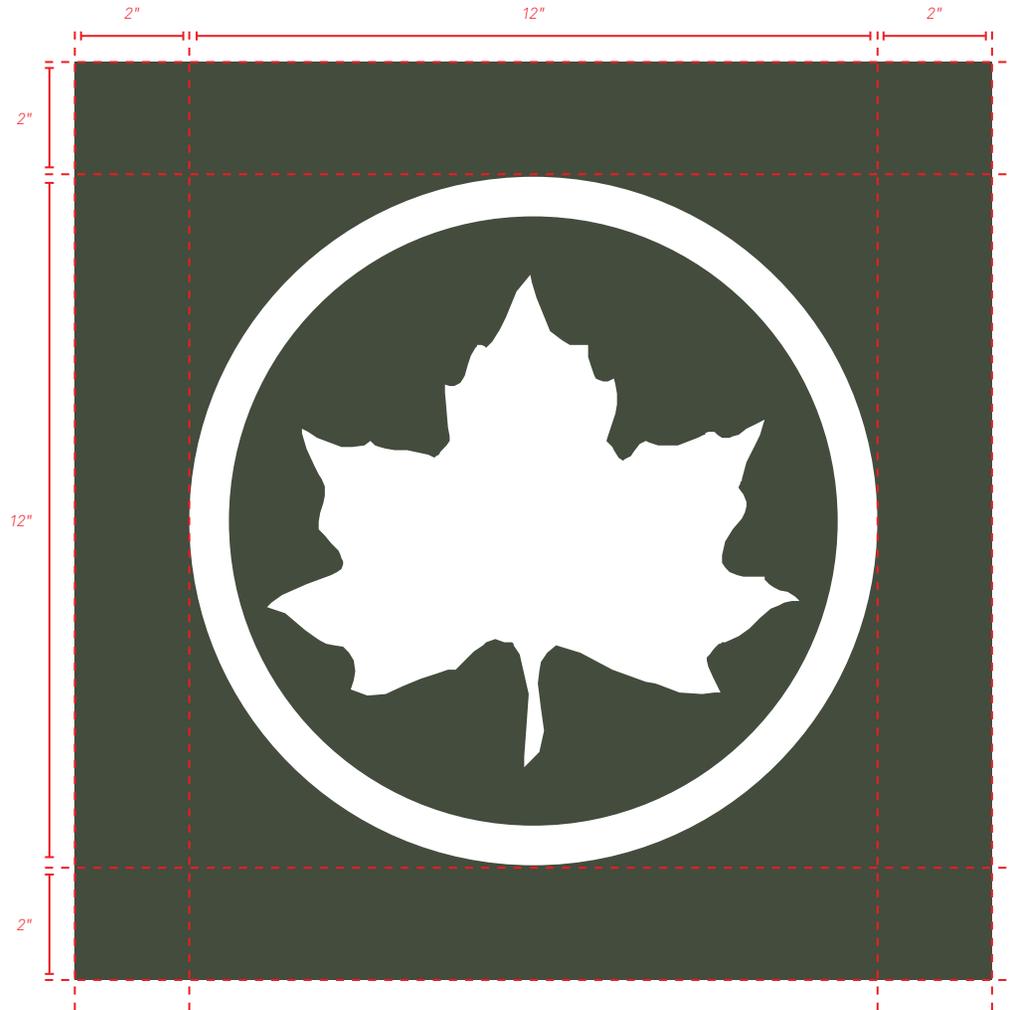
Standard Signage Guidelines: Parks Leaf Panel

The NYC Parks mark is a leaf within a perfect circle so that the width and height remain fixed and equal. This is the mark that is on all signage to identify NYC Parks.

DIMENSIONS

Width: 16"

Height: 16"



Standard Signage Guidelines: Park Name Panel

Panels should follow the type and spacing guidelines in the example.

DIMENSIONS

Width: 16"

Height: 8" or variable in 4" increments depending on length of name.



Standard Signage Guidelines: Hours of Operation Panel

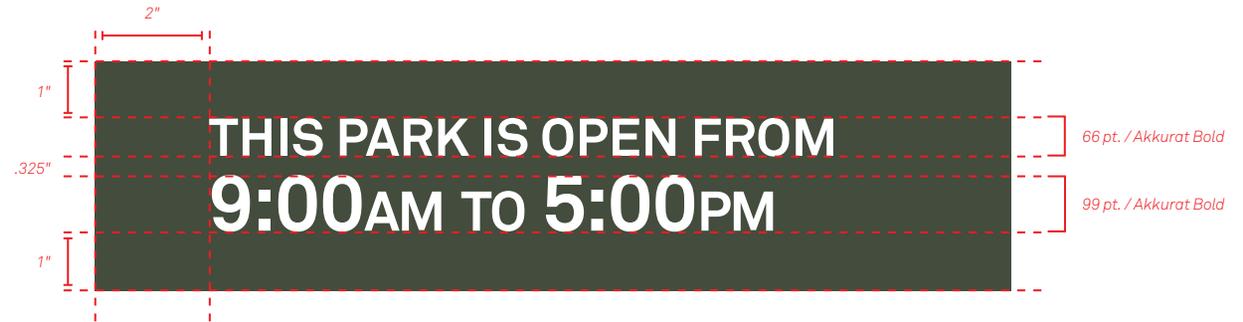
Panels should follow the type and spacing guidelines in the example.

DIMENSIONS

Width: 16"

Height: 4" for short hours, 8" for long hours

Hours of Operation Panel



Pool Hours of Operation Panel



Standard Signage Guidelines: City of New York Panel

Panels should follow the type and spacing guidelines in the example.

DIMENSIONS

Width: 16"

Height: 4"



Standard Signage Guidelines: Icon Panel

Panels should follow the spacing guidelines in the example.

DIMENSIONS
Width: 16"
Height: 4"



Standard Signage Guidelines: Contact Information Panel

Panels should follow the type and spacing guidelines in the example.

DIMENSIONS

Width: 16"

Height: 4"



Interpretive Signage Guidelines: History Sign, Image and Text, Horizontal Layout

This is an example of a horizontal interpretive sign. All such signs should follow the type and spacing guidelines in this example.

All history signs that refer to an entire park or area must include the acreage; history signs that refer only to a specific park feature do not need to include acreage.

DIMENSIONS

Width: 24"
Height: 16"

THE ARSENAL

an eminent British paleontologist, set up a studio on the second and third floors, where he reconstructed dinosaur skeletons.

A Gallery of Art occupied the first floor in the early 1870s, and the Municipal Weather Bureau's instruments were kept on the Arsenal roof from 1869 to 1918. The building fell into disrepair, and was largely vacant from 1914 to 1924, when it underwent a renovation that added the central turrets and clock facing the zoo.

When Robert Moses (1888–1981) was appointed the first citywide Parks Commissioner in 1934, the Arsenal again underwent extensive renovation and the stucco was removed from the exterior brickwork. The lavish murals inspired by images of old New York in the lobby were part of a Works Progress Administration project in 1935–36 by artist Allan Saalburg (1899–1987). The front entrance was also redesigned to include military-style decorative drums over the door, and cast-iron musket replicas supporting the banisters.

In 1967, the Arsenal was designated an official city landmark. Since 1976, the central chamber on the third floor has been used as a public gallery. Its military origins long ago replaced by civilian functions, the historic Arsenal is home today to Parks' central administration and the Wildlife Conservation Society.

www.nyc.gov/parks

Top of Panel
ARSENAL
American Museum of Natural History, Reception Day, 1875
Frank Leslie's Illustrated Weekly

The historic Arsenal is one of two buildings in Central Park predating the park. It was designed by esteemed architect Martin T. Thompson (1786–1877) and built between 1847 and 1851 by the State of New York as a storage repository for munitions. Thompson designed a fortress-like stuccoed structure, with a crenulated cornice and rooftop turrets. The cast-iron eagle over the doorway is also an original feature. The project's funding was overseen by state comptroller Millard Fillmore, later President of the United States.

The building's military use was short-lived, and in 1857 the City purchased the Arsenal for \$275,000, removed all arms, and established park administrative functions on the premises. Over the ensuing decades it has served diverse roles. At the outset the 11th Police Precinct was stationed here. In 1859 the Menagerie (later the zoo) was created in and around the Arsenal. When the American Museum of Natural History was founded, its first home was the Arsenal, from 1869 to 1877; also at that time B. Waterhouse Hawkins.

NYC Parks

60 pt. Akkurat Bold

18 pt. / 22 pt. Akkurat Regular

Copy type size may be increased to fill the space but must be no larger than 25 pt.

Image Location:
9 pt. / 11 pt.
Akkurat Italic

Caption Title:
11 pt. / 13 pt.
Akkurat Bold

Caption Text:
11 pt. / 13 pt.
Akkurat Regular

Photo Credit:
6.5 pt. / 9 pt.
Akkurat Regular

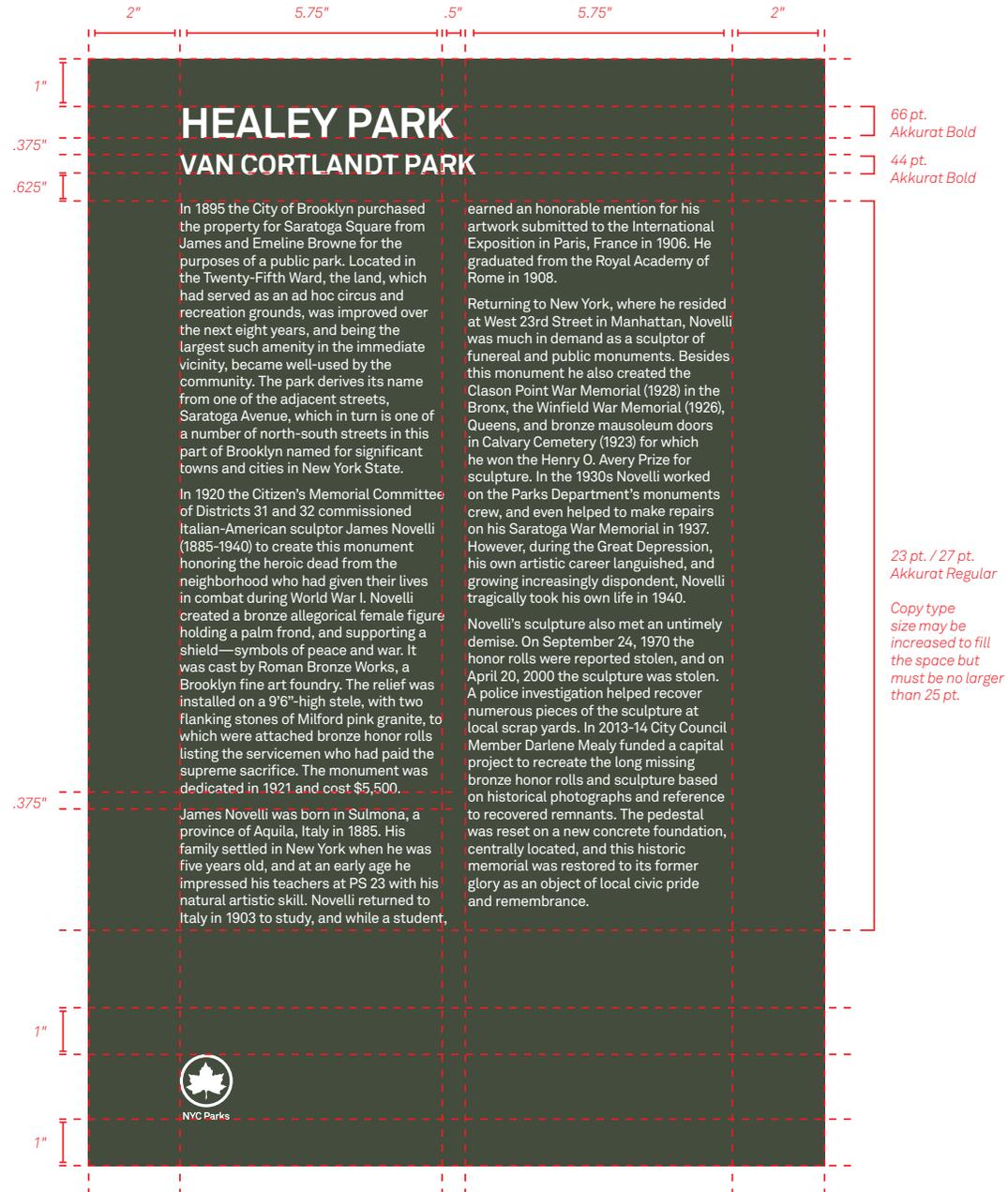
Interpretive Signage Guidelines: History Sign, Text Only, Vertical Layout

This is an example of a vertical history sign. All such signs should follow the type and spacing guidelines in this example.

All history signs that refer to an entire park or area must include the acreage; history signs that refer only to a specific park feature do not need to include acreage.

DIMENSIONS

Width: 16"
Height: 24"



66 pt.
Akkurat Bold

44 pt.
Akkurat Bold

23 pt. / 27 pt.
Akkurat Regular

Copy type
size may be
increased to fill
the space but
must be no larger
than 25 pt.

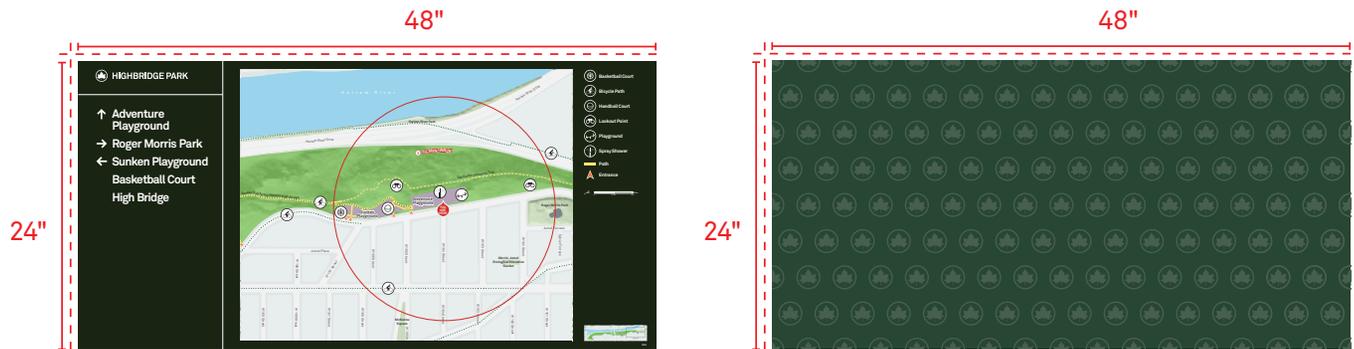
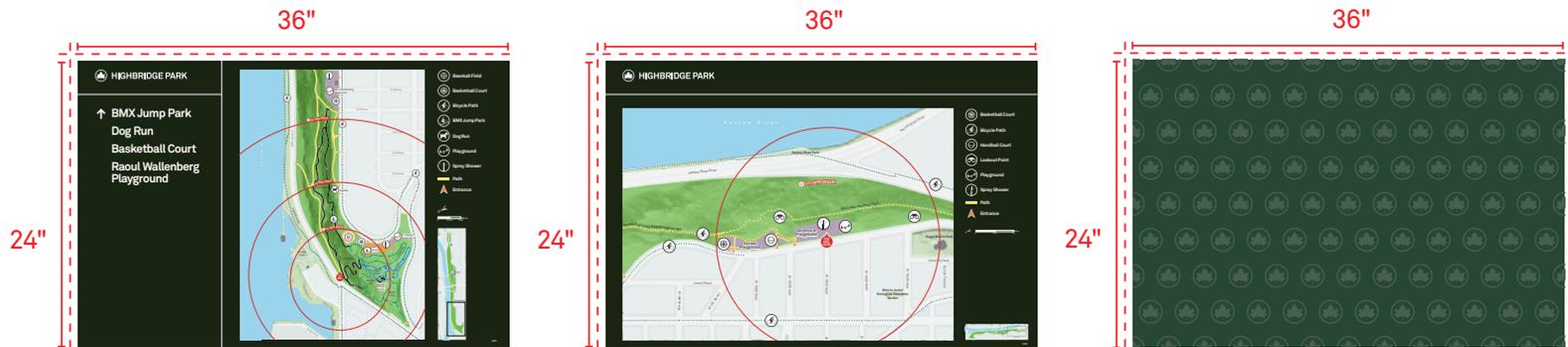
Wayfinding Signage

Pedestrian Wayfinding Signage

Wayfinding signage aims to improve the experience of Parks visitors by providing quick, clear, and concise directions to significant destinations and facilities.

Wayfinding signage is produced at several sizes: 12" x 18", 12" x 24", 36" x 24", and 48" x 24". Each size has an optional reverse layout that features the Parks mark.

All sizes, as well as each sign's optional reverse pattern, are seen to the right (not to scale). Each sign type is described in greater detail on the following pages.



Pedestrian Wayfinding Signage: Sign Content

Wayfinding signs of all sizes feature a list of destinations below a Parks mark and property identifier.

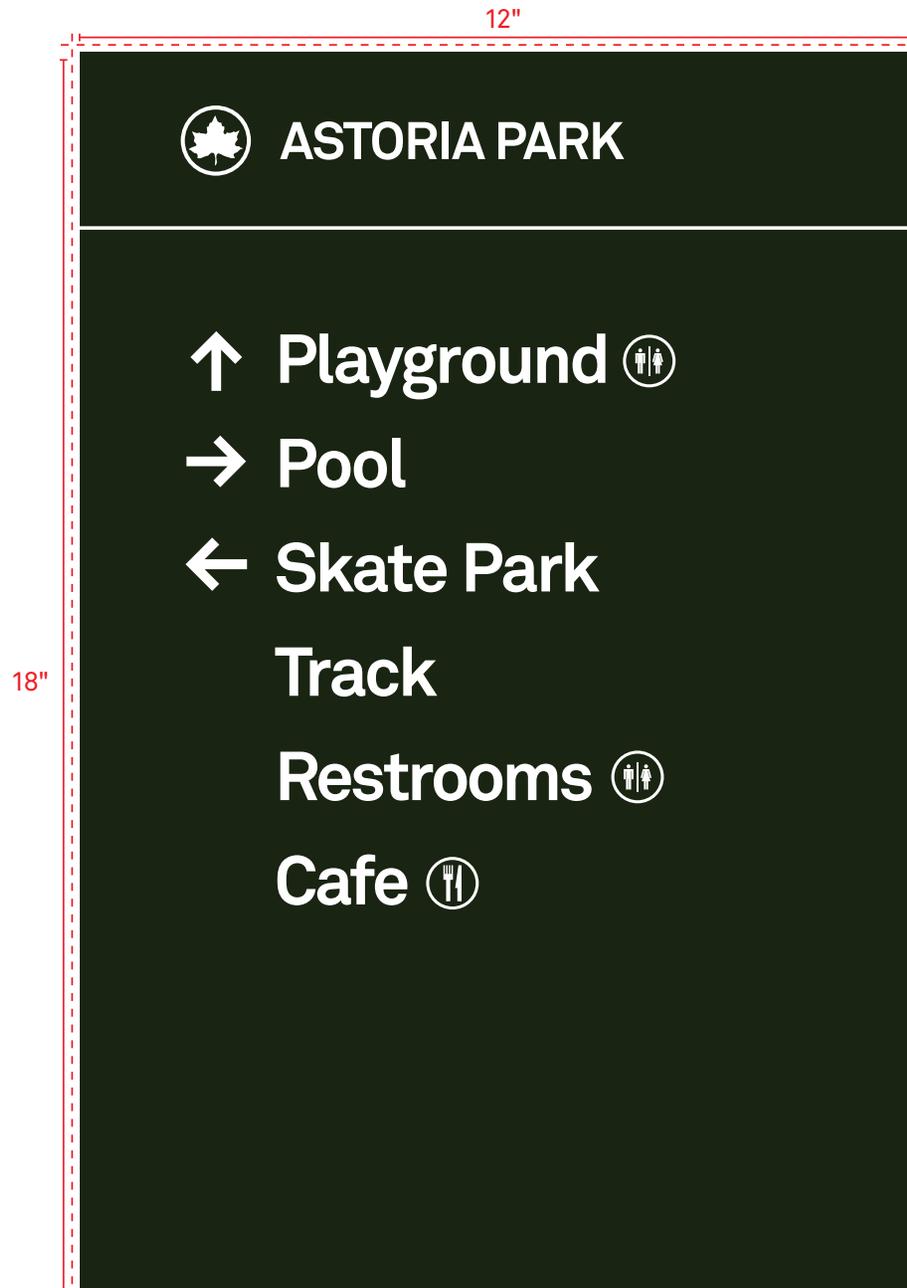
“Forward” destinations requiring an up arrow are listed first, followed by “right” destinations, then “left.”

Multiple destinations under the same direction are ordered from nearest to farthest.

The first destination in any direction is vertically aligned with a corresponding arrow. Subsequent destinations in the same direction do not require an additional arrow.

The 12" x 18" sign can accommodate up to nine single-line destinations, five double-line destinations, or any combination thereof.

Wayfinding signage may also include a partner logo. See page 102 for additional details on partner logo lockup standards.



Pedestrian Wayfinding Signage: 12" x 18" Sign Setup (Front)

A standard 12" x 18" wayfinding sign comprises two elements: the property name and Parks mark, and a list of destinations paired with directional arrows. These are divided by a 3.6-pt white rule set 3 inches below the top of the sign.

All type is Akkurat Bold. The property name is set at 52 pt. / 54 pt in all-caps. Destinations listed below are set at 70 pt. / 72 pt in title case.

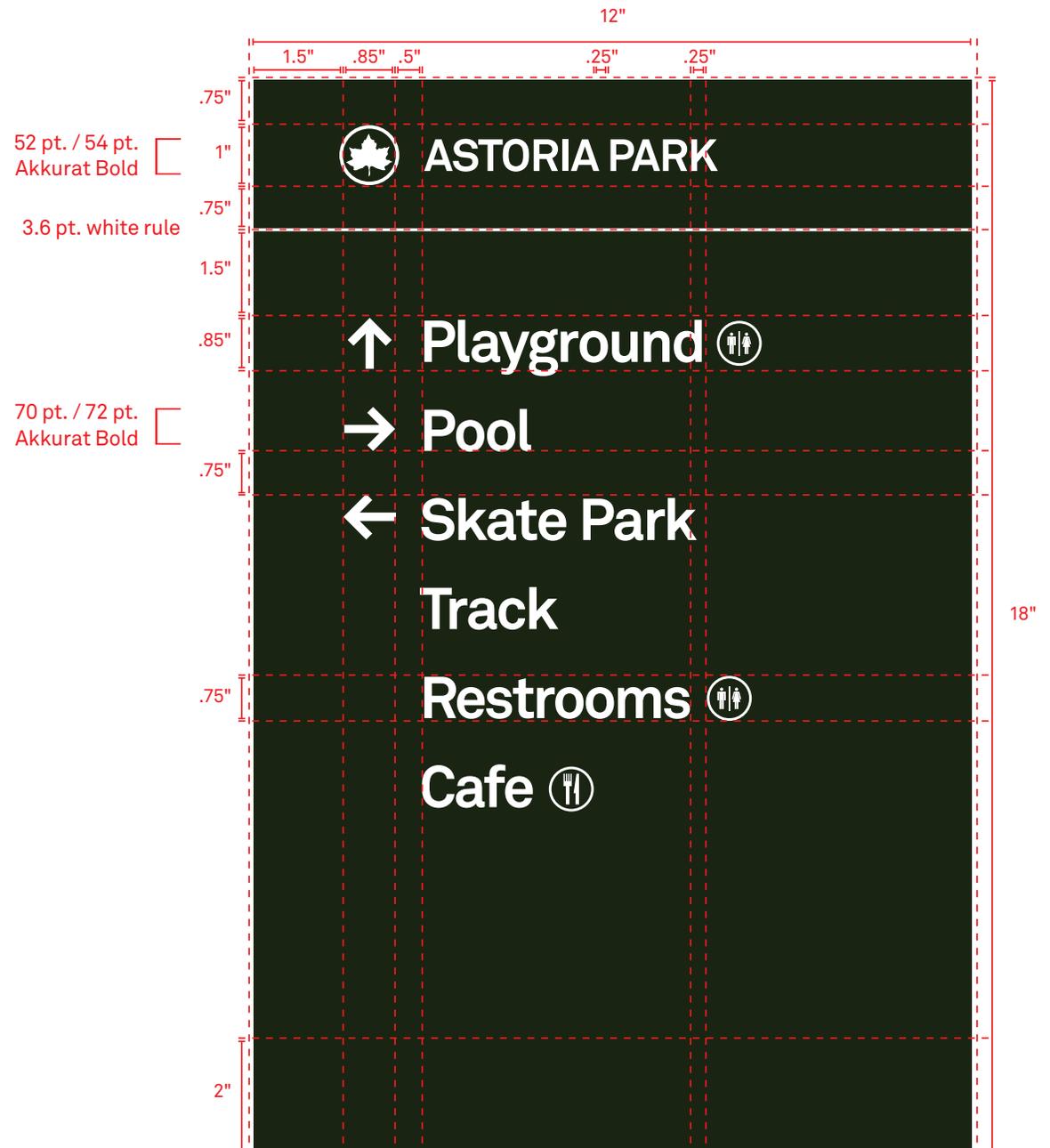
The Parks mark at the top is 1 inch in diameter. The top outer edge of the circle sits .75 inch from the top of the sign. The left inner edge of the circle is aligned 1.5 inches from the sign's left edge. The property name is set .5 inches from the right inner edge of the circle. The property name is aligned vertically with the center of the mark.

Directional arrows are bound within two vertical axes that correspond to the inner edges of the mark. Horizontal arrows measure .85 inch at their widest points. Vertical arrows are inverted and measure .85 inches tall.

The destinations list is left-aligned along a vertical axis with the property name. The first destination line is set 1.5 inches below the white rule. Destinations, which may extend to a second line if needed, are separated vertically by .75 inches.

When an icon is used, it should be placed .25 inch to the right of and vertically aligned with its corresponding text. Icons are .75 inches in diameter. Multiple icons may be used for a single destination and should also be separated by .25 inches.

No destination line should begin closer than 2 inches from the sign's bottom edge.



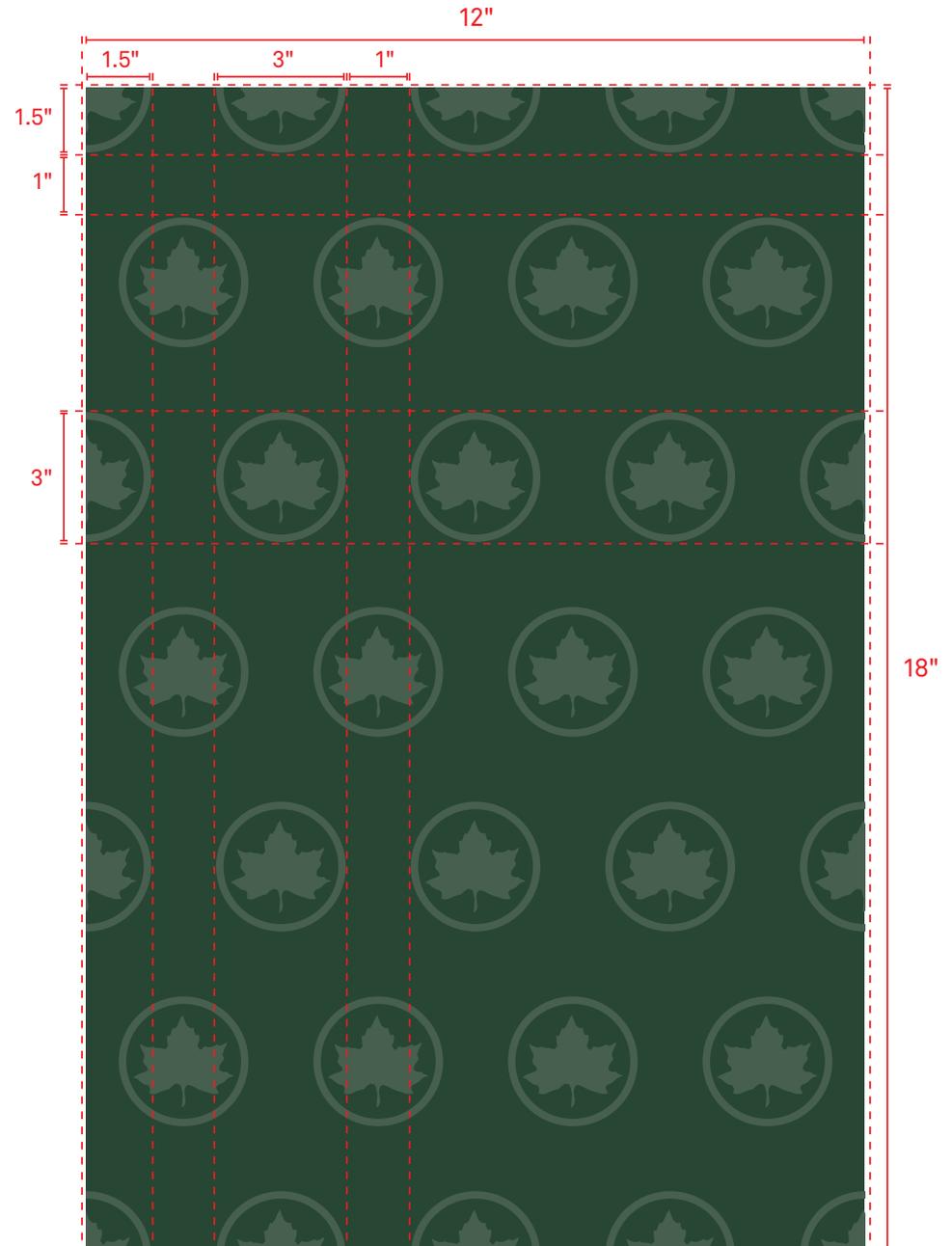
Pedestrian Wayfinding Signage: 12" x 18" Sign Setup (Reverse)

When the reverse of a 12" x 18" sign is not being used for wayfinding purposes, it should include the design shown at right.

A pattern of alternating rows of 3-inch Parks marks are spaced exactly 1 inch apart, horizontally and vertically.

When a mark is broken over the edge of the sign, horizontally or vertically, it should be split as a perfect half.

The marks are shown in Parks' standard PMS553C green at an 85 percent tint.

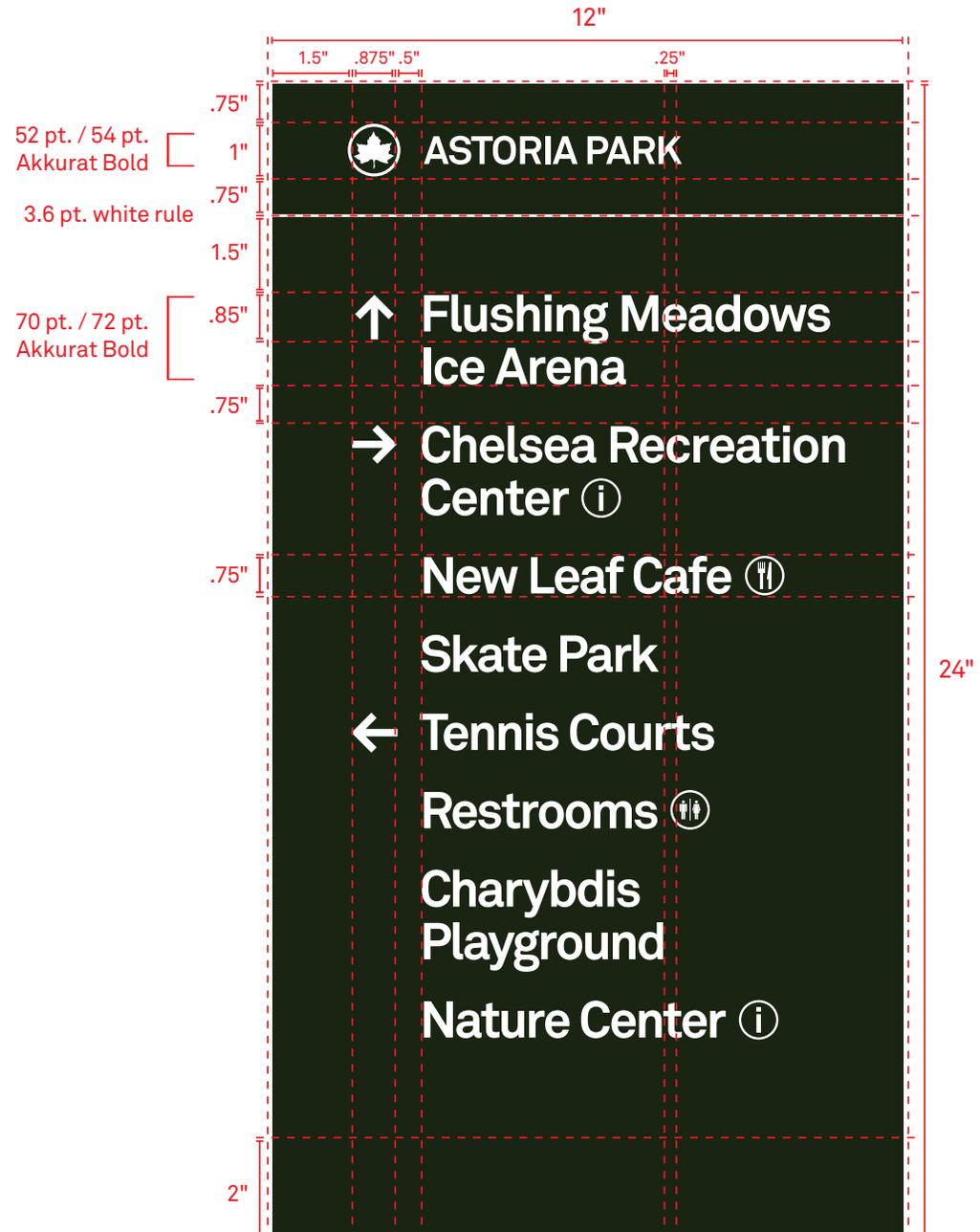


Pedestrian Wayfinding Signage: Extended Size Setup (Front)

An extended 12" x 24" wayfinding sign is used when space is needed to accommodate additional destinations.

The 12" x 24" sign can accommodate up to 13 single-line destinations, seven double-line destinations, or any combination thereof.

Internal measurements and type specifications are unchanged from the smaller sign size. Please see Page 111 for a detailed description.



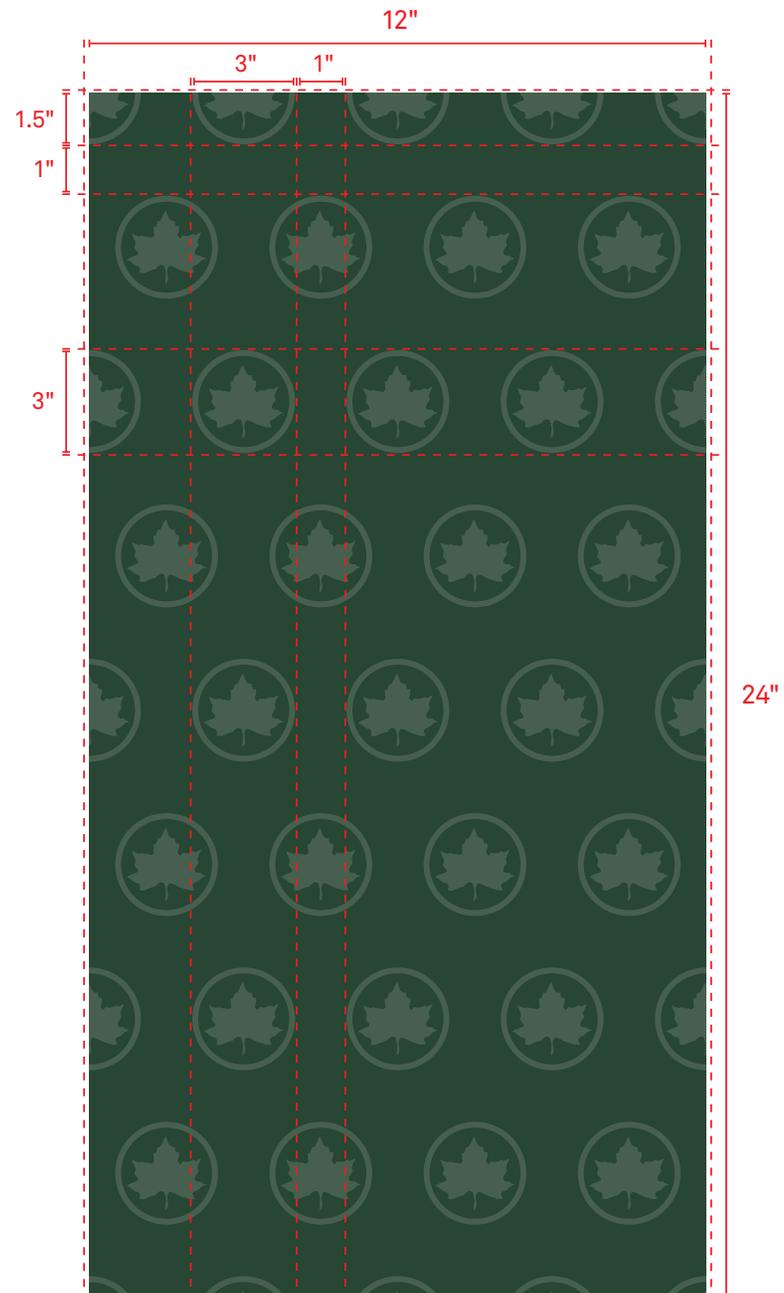
Pedestrian Wayfinding Signage: Extended Size Setup (Reverse)

When the reverse of a 12" x 24" sign is not being used for wayfinding purposes, it should include the design shown at right.

A pattern of alternating rows of 3-inch Parks marks are spaced exactly 1 inch apart, horizontally and vertically.

When a mark is broken over the edge of the sign, horizontally or vertically, it should be split as a perfect half.

The marks are shown in Parks' standard PMS553C green at an 85 percent tint.



Pedestrian Wayfinding Signage: 48" x 24" Superdirectional Setup (Front)

The 48" x 24" superdirectional comprises a vertical wayfinding list locked up with a horizontal map on a single sign.

The sign's left portion forms a 12" x 24" panel. This panel can accommodate up to 13 single-line destinations, seven double-line destinations, or any combination thereof.

All internal measurements and type specifications for the wayfinding panel are unchanged from previously described sizes. Please see Page 111 for a detailed description.

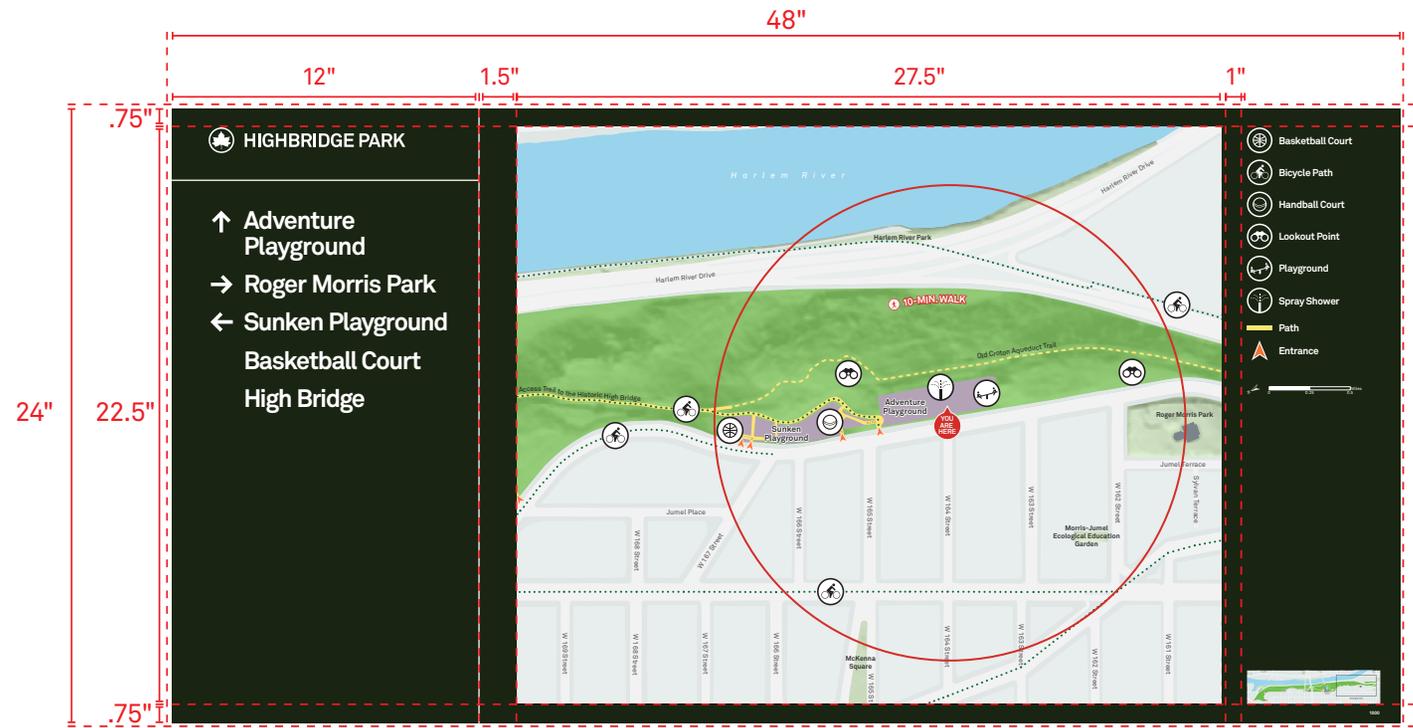
A 3.6 pt. white vertical rule is set 12 inches from the sign's left edge.

The map is set 1.5 inches to the right of the rule and .75 inches from the top of the sign. The map is 27.5 inches wide and 22.5 inches tall. The map is inset .75 inches from the top and bottom edges of the sign.

A legend is set 1 inch to the right of the map and .75 inches from the top of the sign. Icons in the legend are 1 inch in diameter and text is Akkurat Bold at 28 pt. / 30 pt.

Maps should adhere to Parks maps guidelines, available separately. If the park is large enough that it takes more than 15 minutes to walk half of its length, the map should include circles indicating destinations that can be reached within a 10-, 15- and 20-minute walk as needed. Maps should also include a "you are here" indicator for reference.

In the case of very large parks, some maps may only show a small section of a park. In this case, maps should also include an inset at the bottom of the legend to show the user what section of the park they're currently in.



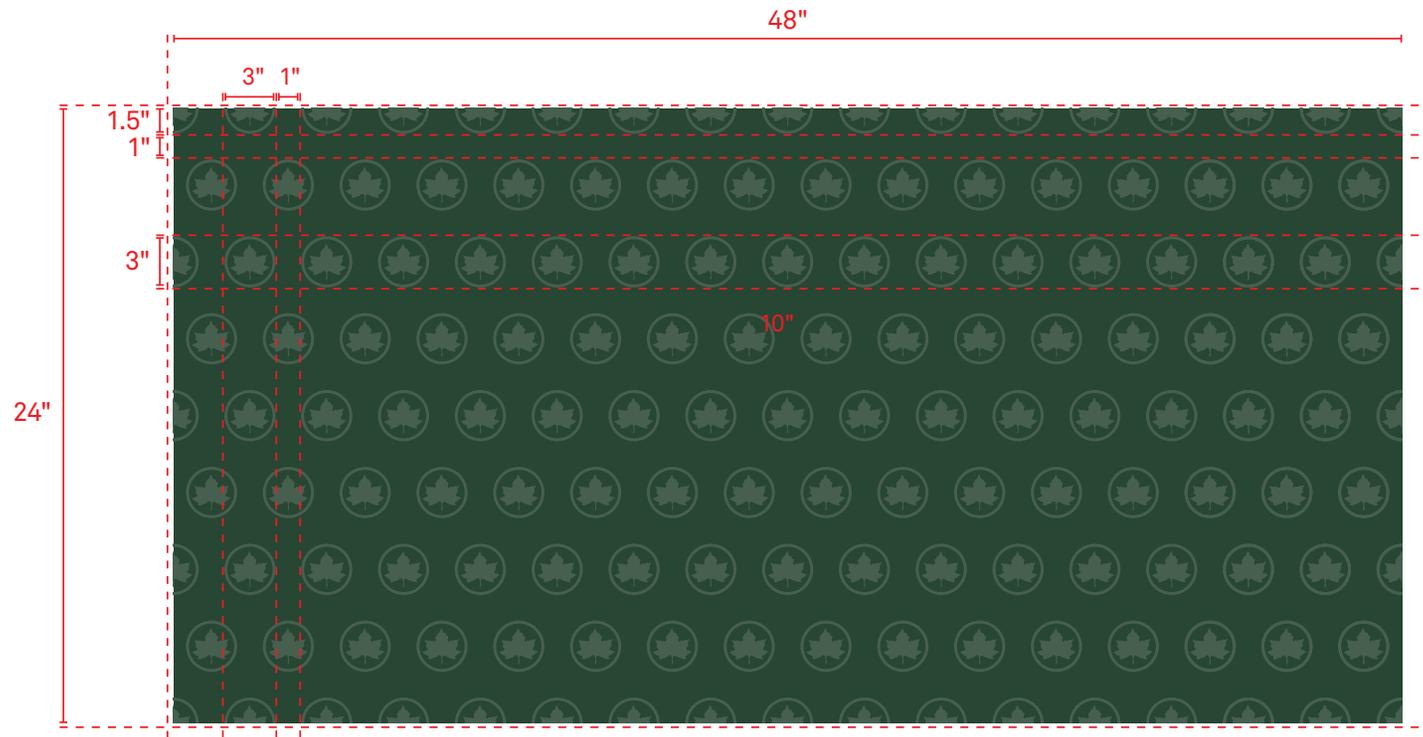
Pedestrian Wayfinding Signage: 48" x 24" Superdirectional Setup (Reverse)

When the reverse of a 48" x 24" superdirectional sign is not being used for wayfinding purposes, it should include the design shown at right.

A pattern of alternating rows of 3-inch Parks marks are spaced exactly 1 inch apart, horizontally and vertically.

When a mark is broken over the edge of the sign, horizontally or vertically, it should be split as a perfect half.

The marks are shown in Parks' standard PMS553C green at an 85 percent tint.



Pedestrian Wayfinding Signage: 36" x 24" Superdirectional Setup (Front)

The 36" x 24" superdirectional comprises a vertical wayfinding list locked up with a vertical map on a single sign.

The sign's left portion forms a 12" x 24" panel. This panel can accommodate up to 13 single-line destinations, seven double-line destinations, or any combination thereof.

All internal measurements and type specifications for the wayfinding panel are unchanged from previously described sizes. Please see Page 111 for a detailed description.

A 3.6 pt. white vertical rule is set 12 inches from the sign's left edge.

The map is set 1.5 inches to the right of the rule and .75 inches from the top of the sign. The map is 15.5 inches wide and 22.25 inches tall. The map is inset .75 inches from the top and bottom edges of the sign.

A legend is set 1 inch to the right of the map and .75 inches from the top of the sign. Icons in the legend are 1 inch in diameter and text is Akkurat Bold at 28 pt. / 30 pt.

Maps should adhere to Parks maps guidelines, available separately. If the park is large enough that it takes more than 15 minutes to walk half of its length, the map should include circles indicating destinations that can be reached within a 10-, 15- and 20-minute walk as needed. Maps should also a "you are here" indicator for reference.

In the case of very large parks, some maps may only show a small section of a park. In this case, maps should also include an inset at the bottom of the legend to show the user what section of the park they're currently in.



Pedestrian Wayfinding Signage: 36" x 24" Map-Only Setup (Front)

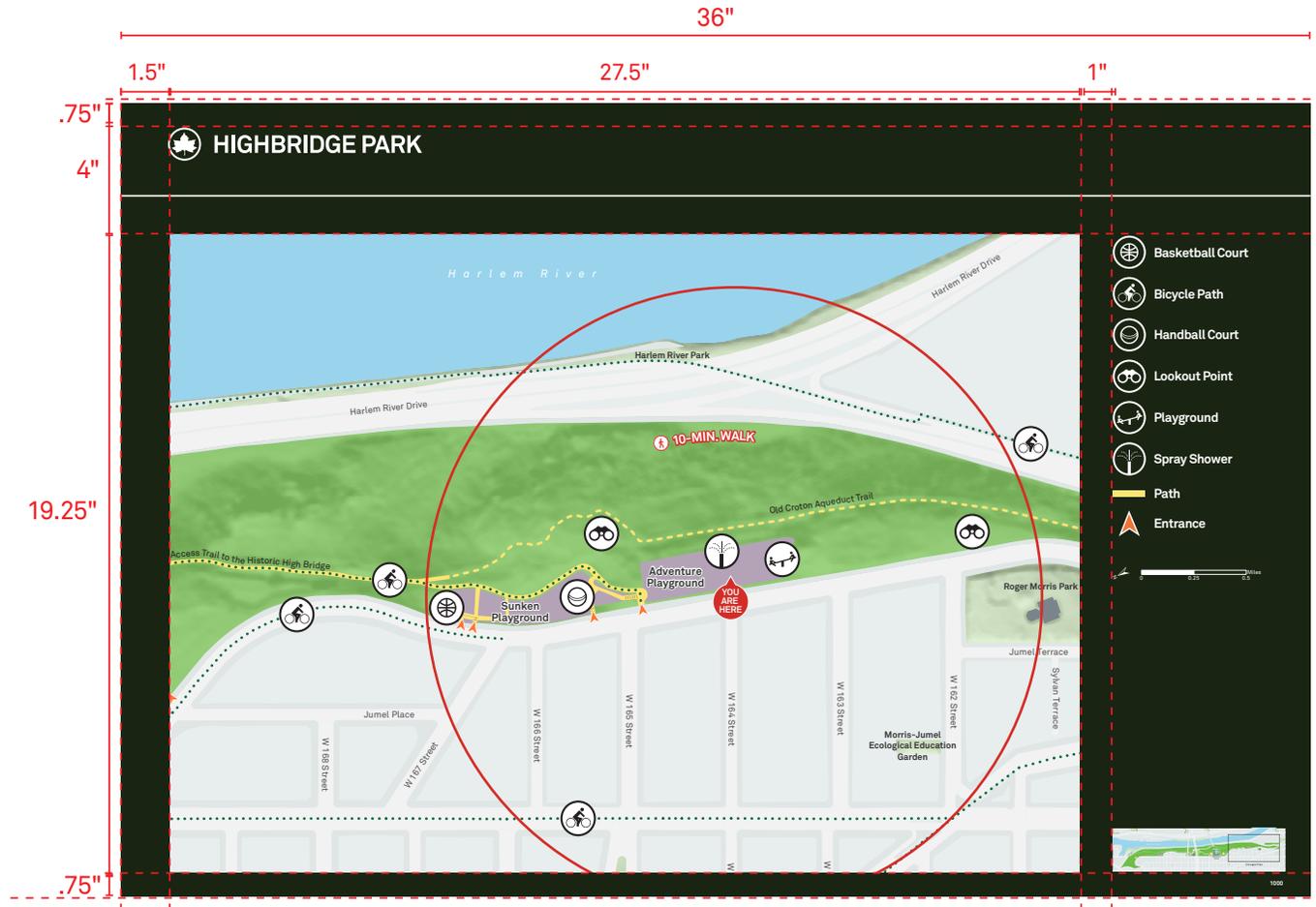
The 36" x 24" map-only sign comprises the park name at top along with a large version of the park map. This is used in instances where a map is desired but wayfinding is not necessary (at a trailhead, for example).

The map is set 1.5 inches in from the left edge of the sign and 4 inches from the top edge of the sign. The map is 27.5 inches wide and 19.25 inches tall. The map is inset .75 inches from the bottom edge of the sign.

A legend is set 1 inch to the right of the map and 4 inches from the top of the sign. Icons in the legend are 1 inch in diameter and text is Akkurat Bold at 28 pt. / 30 pt.

Maps should adhere to Parks maps guidelines, available separately. If the park is large enough that it takes more than 15 minutes to walk half of its length, the map should include circles indicating destinations that can be reached within a 10-, 15- and 20-minute walk as needed. Maps should also include a "you are here" indicator for reference.

In the case of very large parks, some maps may only show a small section of a park. In this case, maps should also include an inset at the bottom of the legend to show the user what section of the park they're currently in.



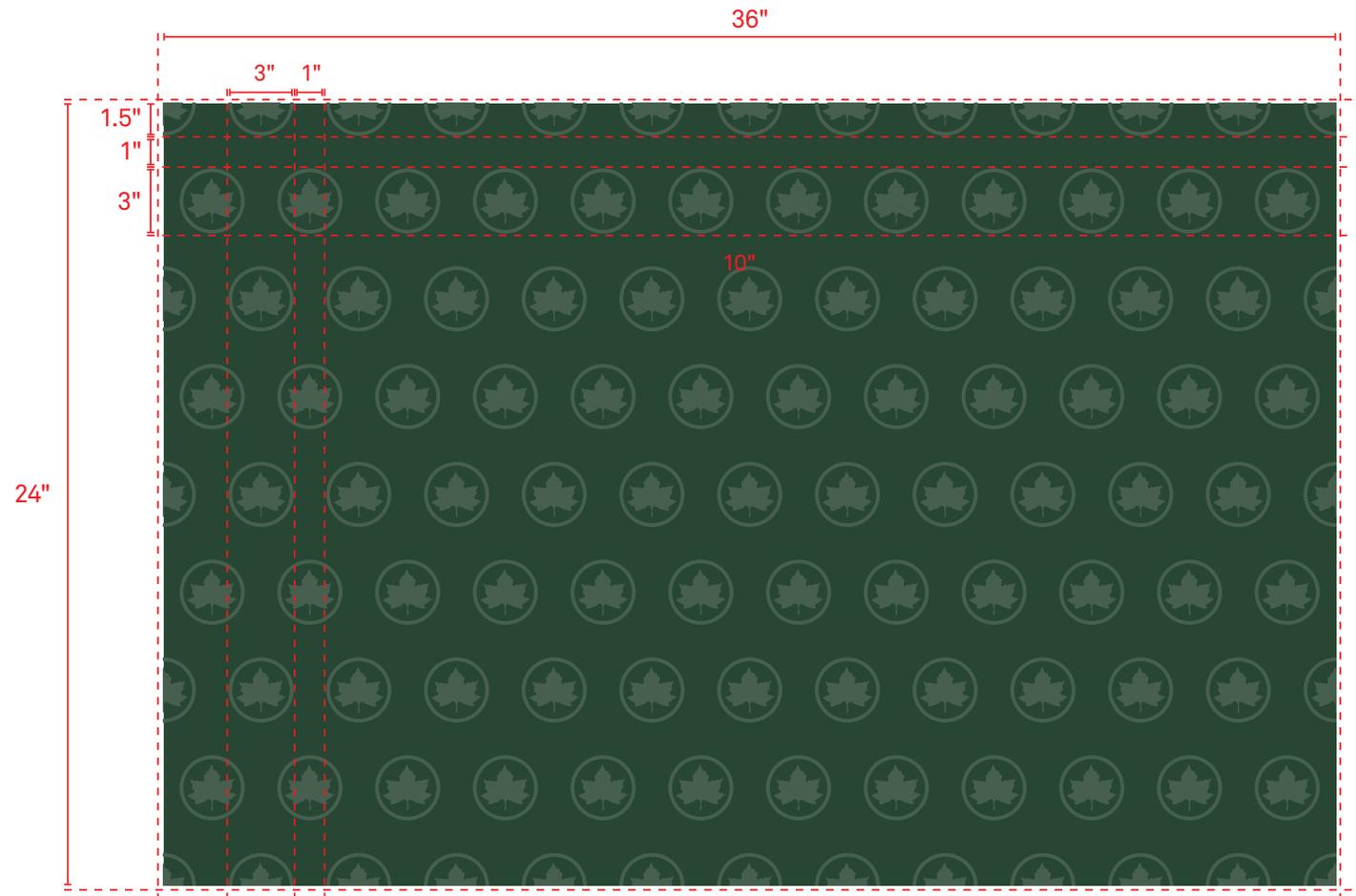
Wayfinding Signage: 36" x 24" Superdirectional Setup (Reverse)

When the reverse of a 36" x 24" superdirectional sign is not being used for wayfinding purposes, it should include the design shown at right.

A pattern of alternating rows of 3-inch Parks marks are spaced exactly 1 inch apart, horizontally and vertically.

When a mark is broken over the edge of the sign, horizontally or vertically, it should be split as a perfect half.

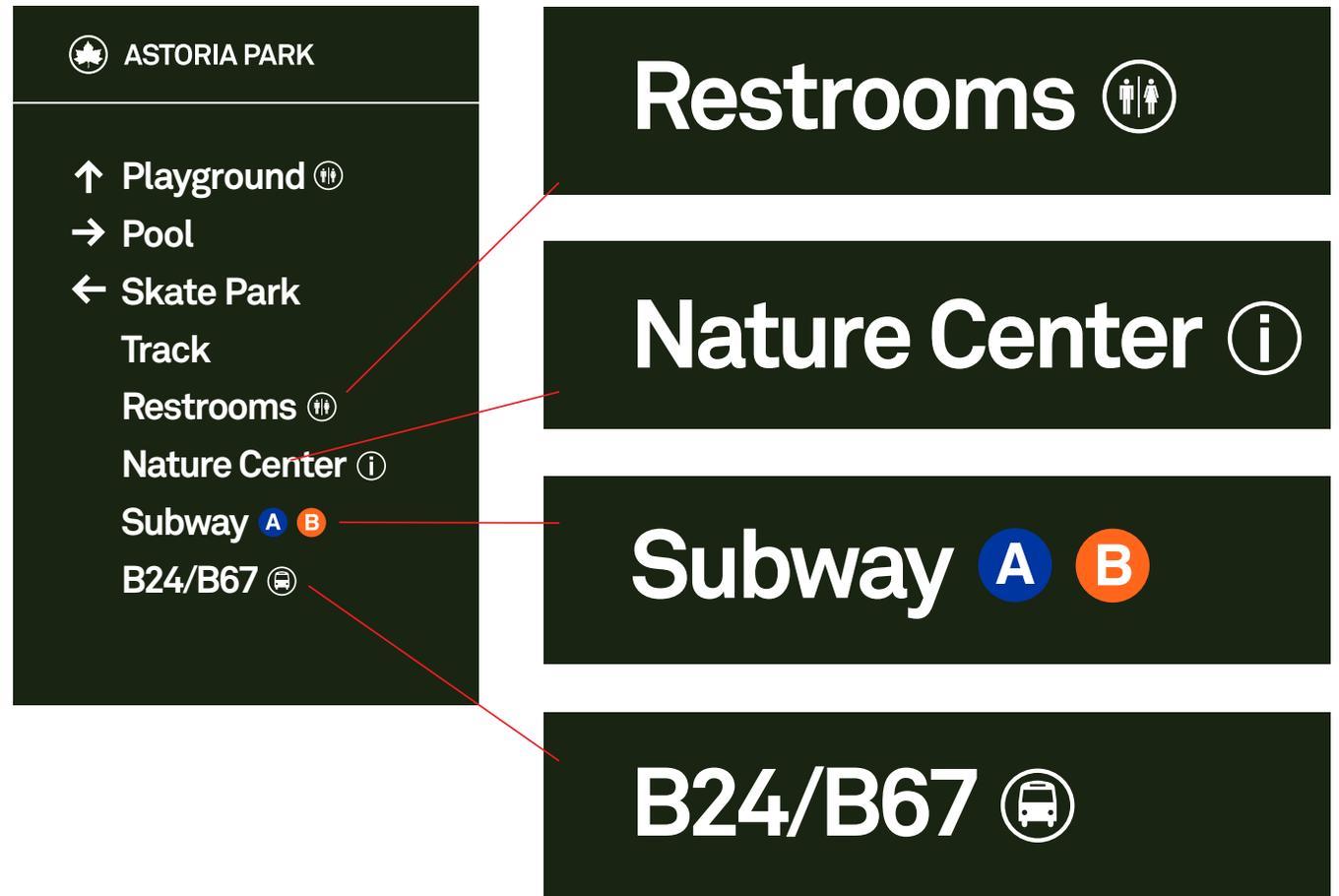
The marks are shown in Parks' standard PMS553C green at an 85 percent tint.



Wayfinding Signage: Icons

Certain destinations on wayfinding signage may be accompanied by one or more universal icons.

Icons are used to illustrate restrooms, food, information, and public transit.

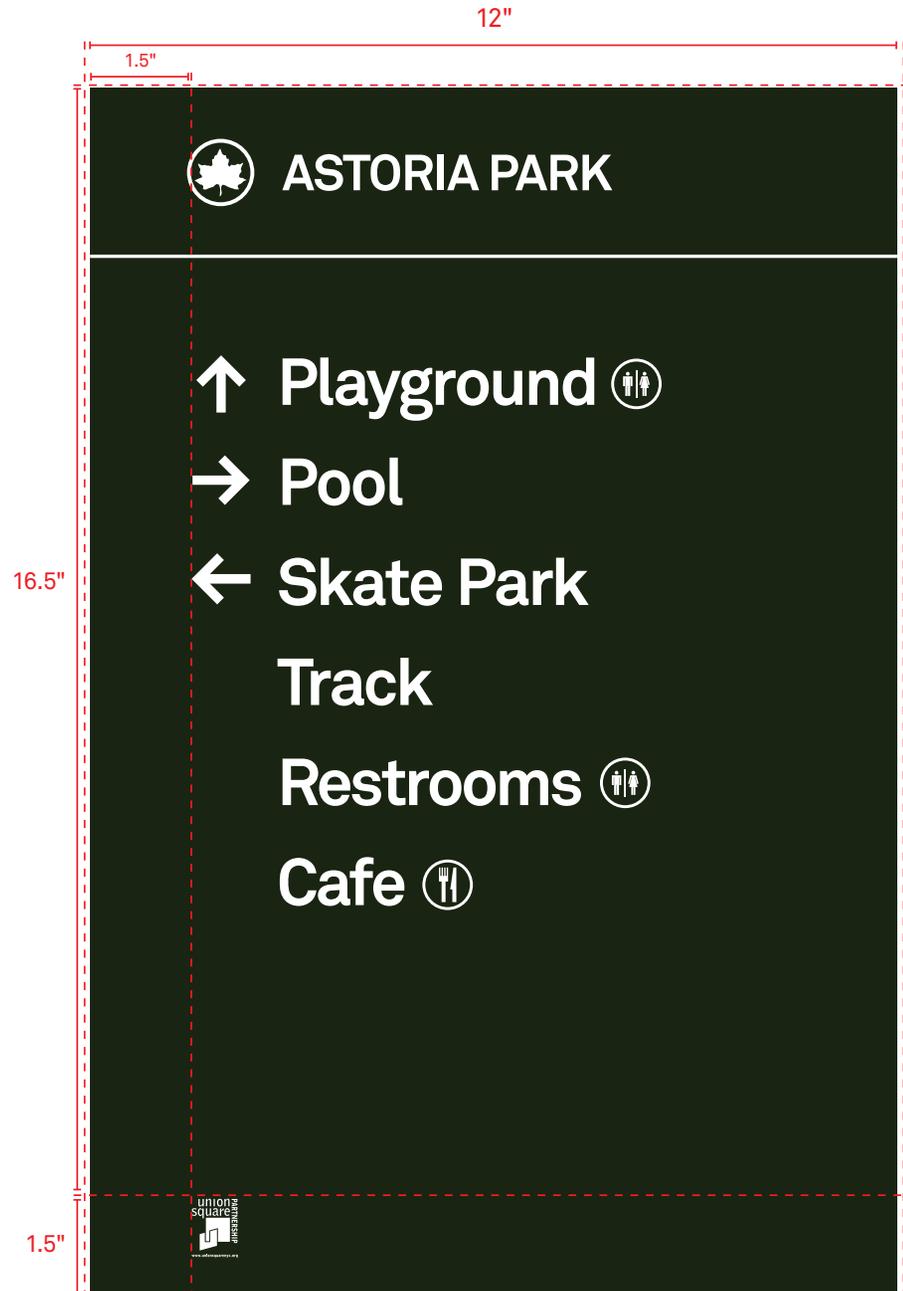


Wayfinding Signage: Co-Branding

Wayfinding signage of all sizes may include a partner logo.

Partner logos should be set 1.5" from the bottom of a sign, regardless of sign size. Logos should be set 1.5" from a sign's left edge, in alignment with the inner-left edge of the Parks Mark's circle and with the left-hand edges of wayfinding arrows.

Partner logos should be set in white and scaled to match the height of the Parks mark.



NYC PARKS STANDARD MATERIALS AND FURNISHINGS

Standard Materials and Furnishings

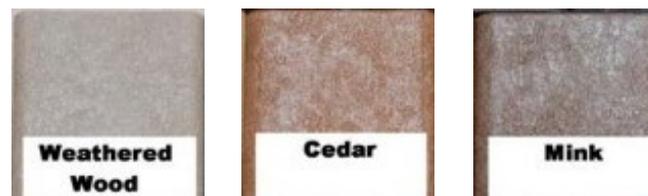


Type A Bench (1939 World's Fair Bench)
Black painted supports



1964 World's Fair Bench
Hot dipped galvanized supports

As of 2010, NYC Parks no longer specifies wood slats for benches. Recycled plastic lumber in the same size is used for our standard benches. There are three standard colors: weathered wood, cedar, and mink.



NYC Parks Bench Preferences

- Parks prefers 4'-0" and 8'-0" long benches rather than 6'-0" to discourage sleeping.
- Don't skimp on benches. Designs should include sufficient seating for everyone.
- In parks with playgrounds, seating should be provided for those who are in the park without a child.
- ADA companion seating must be provided.
- Some benches should be arranged to encourage conversation.
- Benches should have good views.





Standard Materials – Preferred Tables & Chairs



Decorative Bins (Historic Properties)



Trash Compactor Receptacles



Public Space Receptacle Bins

Note: Recycling bins to be included only if the Parks Borough Commissioner indicates they have the staff to maintain. All designs should include space for future recycling bins should they be added later on.



Standard Materials – Trash Receptacles



Bottle Filler w/Hi-Lo Drinking Fountains Basins

High maintenance item: NYC Parks prefers to install a stand-alone bottle filler paired with one of our cast Hi-Lo drinking fountains.



Bottle Filler



Bottle Filler w/ Dog Bowl

New Standard Bottle Fillers

- **Manufacturers:** Elkay, MDF, Murdock, or approved equal
- **Styles:** Bottle Filler, Bottle Filler w/ Dog Bowl, Bottle Filler w/Hi-Lo Drinking Fountain Basins
- **Colors:** silver, black, dark green, and blue.
- **Decal:**



NYC Water logo

References: Design Directive 2015-1 Water Bottle Fillers and Drinking fountains



NYC Parks

Standard Materials – OneNYC Drinking Fountain/Bottle Filler Initiative



Type F Hi-Lo



Type E Hi-Lo



Building Mounted Hi-Lo

References: Design Directive 2015-1 Water Bottle Fillers and Drinking fountains



NYC Parks

Standard Materials – Drinking Fountains

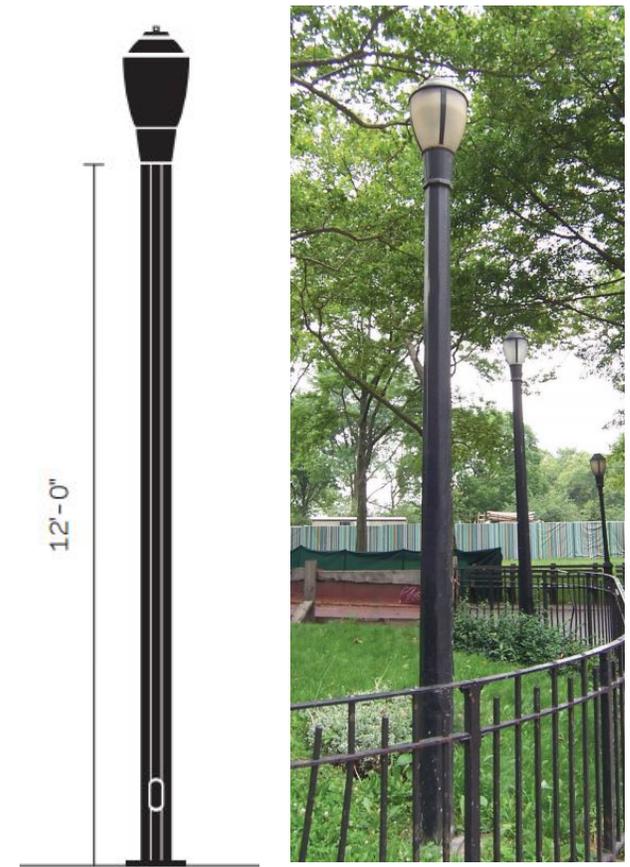
Note: To meet ADA, Parks standard Type E and F drinking fountains now come with two bowls, one each of the required ADA “hi-lo” heights. The “hi” bowl is for those who have difficulty bending and the “lo” bowl for those who use wheelchairs.



Type B Luminaire and Pole



Flushing Meadows Luminaire and Pole



World's Fair Luminaire and Pole

References: NYC DOT Street Design Manual

Note: All park reconstruction projects should install park lighting with appropriate light levels per NYC DOT guidelines.



Standard Materials – Park Security Lighting



DOT's CityRack
(NYC Parks Specification *BICYCLE RACK- HOOP*)



Standard Materials – Bicycle Racks

Historic-Traditional



Type A Bench



Type E Hi-Lo



Black/Dark Green Bottle Filler



Decorative Bin



Type B Luminaire and Pole



Contemporary-Modern



1964 World's Fair Bench



Type F Hi-Lo



Silver Bottle Filler



Public Space Receptacle Bins



Flushing Meadows Luminaire and Pole



Transitional



Type A Bench



Type F Hi-Lo



Black Bottle Filler



Decorative Bin



Flushing Meadows Luminaire and Pole



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