North End Community Center
Programming and Siting Study

Martin J. Walsh, Mayor
City of Boston
Public Facilities Department Project #7111
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Executive Summary

In 2017 the City of Boston’s Public Facilities Department engaged the Sasaki and their consultant team to work with Boston Centers for Youth and Families (BCYF) to study the existing Nazzaro Community Center in the North End, programming needs and options for this facility, and master plan options for renovating or relocating the facility. The study included analysis of potential relocation sites and concept cost estimates of the top three options for renovating or building a new facility. The project included a community process that sought public feedback on the existing center, program needs, and site selection. As part of the public process the study team convened a Community Advisory Committee (CAC) comprised of dedicated users of the current Nazzaro Center and members of other community groups affiliated with the Nazzaro. The CAC met several times throughout the study, a public meeting was held in the fall of 2018, and two different surveys were issued to the larger North End community at different points during the study.

The existing building assessment showed that the Nazzaro Center is in moderately good condition, needing upgrades and repairs in specific areas of the interiors, envelope, structure, and building systems. However the building is undersized for the current and desired programs. In particular, the size of the existing gymnasium is a severe constraint. Renovation options for the building would not be able to “find” significantly more space in the building due to its dimensional constraints. The building has some historic character and is well-liked in the community but carries no official historic designation.

The programming process with BCYF and the community revealed that, while the existing center is well-used, there is demand for both more space and more programs. The team developed three versions of the program: an option to “right-size” existing spaces (e.g. the gym) without adding new ones; an “ideal” program including everything on the community’s wish list; and a middle option included adding key program spaces and right-sizing others. This middle option became the basis for the site test fits.

Through the site analysis phase, the team determined whether the program would fit each site and weighed the pros and cons of each, including location, community reaction, traffic patterns, available land, regulatory processes and constraints, sea level rise vulnerability, and potential for public-private development partnership. Together with PFD, BPDA, the Housing Innovation Lab, and the Mayor’s Office, three sites were selected for further study and concept pricing.

The final recommendation of the study is to proceed with a new community center on the site adjacent to the existing Mirabella Pool.
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1.2  Project Schedule + Methodology

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2.1 Neighborhood + Site Overview

THE NORTH END

The North End has been settled since the 1630s, and was home to Colonial-era figures such as Cotton Mather and Paul Revere. In the 19th century the neighborhood became one of the densest in Boston, and was home to Irish, European Jewish, and Italian immigrants. By the early 20th century the neighborhood was predominantly Italian-American, a cultural identity that persists today even as the neighborhood has become more diverse.

Today, the neighborhood remains very dense, with most residents living in apartments and condominiums. According to census data, the neighborhood is predominantly female.

The urban fabric of mid-rise brick and stone buildings was mostly built in the late 19th century. Construction of the Sumner and Callahan Tunnels and the Central Artery in first half of the 19th century caused the neighborhood’s borders to contract and many buildings to be demolished. Until the Central Artery was removed in the early 2000s, the neighborhood was relatively isolated from the rest of the city, which contributed to its strong identity. The north end has relatively few open green spaces but does have waterfront access via the Harborwalk.

(Sources: Wikipedia, 2010 Boston Census)
BCYF IN THE NORTH END

Boston Centers for Youth and Families (BCYF) is Boston’s largest youth and human services agency. BCYF describes its mission as follows:

“We offer affordable programs for residents of all ages across the City. Our goal is to provide quality programs that enrich the lives of residents and meet the needs of the community.”

In the North End, many of BCYF’s programs focus on providing after-school and camp care for children and sports and fitness programs for area schools. However, the North End staff operate a diverse range of programming out of a small facility.

The graphs on the following pages show BCYF’s program and visit data from Fiscal Year 2016.
North End Community Center Study

City Of Boston Property & Facilities Department Project #7111

### Nazzaro Gym Visits by Type of Activity

- **Yoga**: 15%
- **Recreational Gym**: 2%
- **Recreational Games - Team-building Activities**: 3%
- **Gymnastics**: 29%
- **Combined Fitness/Sports**: 53%
- **Basketball**: 0%

### Arts Visits by Age of Visitor

- **0-5**: 13-20
- **06-12**: 60-120
- **13-20**: 13-20
- **21+**: 13-20

### Civic Engagement Visits by Age of Visitor

- **0-5**: 13-20
- **06-12**: 60-120
- **13-20**: 13-20
- **21+**: 13-20

### Sports Visits by Age of Visitor

- **0-5**: 13-20
- **06-12**: 60-120
- **13-20**: 13-20
- **21+**: 13-20

### Education Visits by Age of Visitor

- **0-5**: 13-20
- **06-12**: 60-120
- **13-20**: 13-20
- **21+**: 13-20
2.2 Existing Building Overview

**OVERVIEW**

BCYF operates two facilities in the North End: the Nazzaro Center and the Mirabella Pool. This assessment focuses on the Nazzaro Center.

**Nazzaro Community Center**

The Nazzaro Center, located at 30-32 North Bennet Street, houses most of BCYF’s North End programs. According to BCYF, the Center is used as follows:

- **Monday through Friday**
  - 10am - 2pm Seniors, Toddlers
  - 2pm - 5pm After School Programs
  - 5pm - 9pm Teen Programs
- **Youth and Adult Sports Leagues**
- **Open Gym**
- **Community Meetings**

Highest demand is from 2-9pm.

The building was built in 1907 as the North Bennet Street Bath House and Gymnasium. It was built along with three similar facilities to serve city residents who did not have bathtubs or showers in their apartments. The gymnasium was an original part of the program as well. As late as 1976, when the building was converted to recreational use, a reported 900 households in the North End did not have access to bathing facilities.

The architect of the Nazzaro Center was Maginnis, Walsh & Sullivan. The building has a cast-iron frame and masonry exterior in a Renaissance-revival style. Although a description of the building is included in the inventory of historic assets maintained by the Massachusetts Historic Commission (a copy of which is included in appendix section A.2 of this report), the building is not protected by local, state, or federal Landmark status. The building’s most recent renovation was carried out by the City of Boston in 2004 to upgrade interior finishes, drywall partitions, and mechanical systems.

**Mirabella Pool**

BCYF also operates the Mirabella Pool at 475 Commercial Street. The facility consists of a single-story CMU bath house built in 1999; an outdoor lap pool; an outdoor deep pool (without diving boards); and a publicly-accessible splash pad. The pool is open seasonally.

This study does not review the existing conditions of the pool. Depending on the final outcome of the site selection process, this study may recommend preserving or replacing the entire pool or portions thereof.
2.3 Building Condition Assessment

EXISTING DRAWINGS
All drawings courtesy of City of Boston Public Facilities Department.

Scale: 1/16" = 1'-0"
EXISTING DRAWINGS

All drawings courtesy of City of Boston Public Facilities Department.

Scale: 1/16" = 1'-0"
EXISTING DRAWINGS
All drawings courtesy of City of Boston Public Facilities Department.

Scale: 1/16" = 1'-0"
EXISTING CONDITIONS: EXTERIOR

The following represents observations and opinions about the Nazzaro Center’s interior condition based on site visits on 12 June and 3 August, 2017 and an examination of the most recent CAD drawings provided by the City of Boston.

The masonry walls of the building are generally in good condition. The walls are primarily brick with a limestone base and banding at the third floor, carved limestone ornament around windows, and granite steps at the front entrance. The historic character of the building’s architecture and ornament have generally been preserved. Two windows on the front of the building, however, have been filled in with mismatched brick.

The building’s windows at the lower levels have been replaced with modern metal-clad windows. The gymnasium windows appear to be original. Some of the windows are protected with expanded metal covers. In a recent renovation, mechanical louvers were inserted into existing masonry openings to serve new systems.

BCYF staff report leaking on the exterior masonry walls along North Bennet Street during wind-driven rain. The observed area of leaking is the brick at the first and second floors in the first two structural bays (see elevation).

Roof

The roof overhangs several feet beyond the perimeter of the walls. Rafter extensions are clad in copper in good condition. Copper gutters are visible at the perimeter. The roof of the vestibule is also copper.

The roof was not accessible on our visits, but satellite imagery shows that the pitched portions of the roof have slate shingles. The top, low-slope portion of the roof appears to have a rubber membrane with few visible patches. Anecdotally from BCYF staff, the roof is in good repair. Some small rooftop equipment is located on the roof as well as the original copper-clad skylight.
Outdoor Spaces
A small courtyard to the south of the building is part of the Nazzaro Center parcel. This space is enclosed by an iron fence and is well-used by the community for gardening, socializing, and resting in the shade of mature trees. A mural decorates one of the walls. This space also provides at-grade access via a side door to the adult program room.

A prefabricated shed in the courtyard is used for storing maintenance equipment.

The forecourt of the building is used for staff parking, although it is technically part of Polcari Playground, a Boston Parks and Recreation Facility. Polcari Playground contains an outdoor basketball court, which is used recreationally in the community as well as for BCYF programs.

Brick pavers, ornamental fencing, and canopy trees contribute to the quality of these spaces as an urban oasis.
EXISTING CONDITIONS: INTERIOR

The following represents observations and opinions about the Nazzaro Center’s interior condition, code compliance, and accessibility based on site visits on 12 June, 31 July, and 3 August 2017 and an examination of the most recent CAD drawings provided by the City of Boston.

**Basement**

Plans of the basement are not available. The basement appears to be smaller than the first floor above.

**Access and Egress**

The basement is reached by a cast-iron stair. This stair is steeper and the handrails are lower than currently allowable by code.

There does not appear to be a direct exit to the outdoors from the basement.

**Finishes**

The floor of the basement is exposed slab. There are significant areas of water infiltration through walls and possibly through seepage from below through the floor slab. Standing water was observed. The worst water infiltration through walls and slab is located at the northeast corner of the basement, where the utility entrances are.

The walls are painted exposed structure with some painted CMU partitions. These partitions are nonstructural and do not extend to the ceiling. Paint is in poor condition, probably due to water.

Ceilings are exposed structure with some areas of unpainted gypsum board. Gypsum board appears to have been added to protect occupants from spalling concrete.

Steam and water pipes - some in use, some abandoned in place - run throughout the space. Insulation on some of these pipes is of the age and type likely to contain asbestos.

**Lighting**

Lighting is via fluorescent pendant fixtures and is adequate for the uses.

**Uses**

In addition to mechanical and plumbing equipment, the basement is being used for storage. Items are being stored in plastic bags and in piles. No shelving is provided. Space is adequate for the items being stored, but the lack of shelving and damp conditions are not ideal for storage. The items being stored looked to mostly be seasonal decorations and youth program supplies. Loose bricks were observed piled in one of the storage rooms.
First Floor
The first floor consists of the vestibule and lobby, the two main spaces—adults’ and children’s rooms—and single-user bathrooms, closets, and an office to serve the main spaces.

Access and Egress
The main entrance to the building is up several steps and is not wheelchair-accessible. Entry is through a vestibule and into the lobby. Once inside the lobby, there is an elevator leading to the upper floors. The majority of the first floor, however, is several steps down from the lobby, at approximately the level of exterior finish grade. Wheelchair access to these first-floor spaces is via a side door from the garden.

An ornamental stair leads from the lobby to the upper floors. A shallow set of stairs leads down from the lobby into the two main rooms. This stair has handrails but lacks handrail extensions.

The two main spaces on the ground floor have second means of egress directly to the outdoors. The egress door from the children’s room is difficult to open, but both doors do have the required hardware.

The adult room and the children’s room can be combined into a single space by opening doors in the central wall into the adult room.

Finishes
The lobby and vestibule floor is a marble mosaic tile in good condition. Loose walkoff mats are in use. Lobby walls are painted plaster. Original wood trim is in fairly good condition, and wood casework wainscoting and radiator covers have been added in a past renovation. The metal screens on the radiator covers are broken. The lobby is open to a vaulted ceiling in good repair.

Flooring throughout the rest of the first floor is VCT in poor condition, dull and scratched with some broken tiles. The walls are generally painted CMU or plaster and the trim and casework is not original. In some locations, there is quarry tile on the walls which is falling off.

There is a dropped ACT ceiling in reasonable condition with some cosmetic flaws. Kitchen casework is in good condition with some solid surface and some laminate countertop and laminate cabinetry.

The children’s room includes a wall-hung accordion partition that seems to be in usable condition.

The bathrooms are have painted CMU walls
and tile floors. They are adequately sized and appear to have the correct accessories and fixtures for ADA compliance. Doors and frames are painted hollow metal.

**Lighting**

Lighting is direct fluorescent recessed into the ACT ceiling grid with frosted diffusers. Light levels are adequate. Lighting is not dimmable.

**Furniture & Equipment**

Furniture in the adults’ room consists of lightweight banquet tables and padded chairs. The furniture is in usable condition but does not harmonize with the room. The kitchen includes high-end residential appliances and a range hood.

The children’s room furniture is functional and appropriate to the uses, with stacking chairs and laminate tables. Wooden bookshelves are well-used but still solid. A reading nook has been created with rugs and pillows but there is no soft furniture in this room.

**Uses**

The first floor spaces house a broad range of programming and are used in a flexible way. These spaces, when combined, are also used for most of the community meetings in the North End.

**Second Floor**

The second floor includes the weights and fitness area, the teen room, offices, and locker rooms. The lobby is a double-height spaces that extends into the second floor. The wide corridor at the north side of the floor is used for arts and drama activities.

**Access and Egress**

Access is via the main stair or the elevator. There is an additional egress stair serving this level in the southwest corner of the building.

**Finishes**

Most of the second floor is finished in VCT of poor quality. The walls are painted. Doors and frames are painted hollow metal.

The circulation space has no ceiling and is open to the structure above, which is visually interesting but has peeling paint.

The weight room has loose-laid rubber tile flooring in poor condition and an ACT ceiling. Wall paint in this space is chipping. Mirrors are small and infrequent.

The locker rooms and bathrooms have porcelain tile walls, solid surface counter tops, and plastic partitions, all in good condition.
A painted interior storefront partition in good condition separates the teen room and director’s office.

**Lighting**
Lighting on this level is provided by suspended up/down fluorescent fixtures in good condition. There is excellent natural light in the circulation spaces from the large windows. Bathroom lighting is from recessed fixtures and is pleasant.

**Furniture & Equipment**
The weight room equipment is old and worn. Teen room furniture is relatively new and in good condition.

**Uses**
With the exception of the circulation space (which is used by camps and child care programs as overflow space for arts and drama activities as noted above), each space on the second floor has a single dedicated use. Anecdotally, the weight room and locker rooms are not heavily used because they are so small. The offices on this floor are small and cramped.

**Third Floor**
The third floor is entirely occupied by the gym. A running track once ran along the perimeter of the room but no longer exists.

**Access and Egress**
Access is via the main stair or the elevator. There is an additional egress stair serving this level in the southwest corner of the building.

**Finishes**
The gym floor is a traditional sprung wood athletic floor and is in good condition. Walls are painted. The ceiling and exposed structure suffers from peeling paint.

**Lighting**
Lighting is provided by suspended fixtures and by the large skylight and windows on both sides. The natural light in the space is ample, pleasant, and balanced. Ceiling fans are provided for air circulation.

**Furniture & Equipment**
Basketball backboards, divider curtain, time clock, and seating are all in serviceable condition.

**Uses**
Storage space appears adequate in the storage room adjacent to the elevator. The
gym is heavily used by several programs and demographics (refer to the usage data, pages 17 and 18 of this report). The dimensions of the gym, and the fact that the stair and elevator enclosures intrude into the runoff area, make this space unsuitable for competition play.

**Vertical Circulation**
The elevator is small but in good condition.

The main stair is an iron stair with outdated rise:run and handrail dimensions. The primary code concern is that the stairwell enclosure is open to the double-height lobby via large windows infilled with decorative iron grilles. This likely does not provide the correct fire separation.

The rear stair in the southwest corner of the building provides emergency egress and is also used to access the attic. This is also a wrought-iron stair with outdated rise:run and handrail dimensions. The attic access ladder is a vertical ladder without any cage protection.

Both stairwells are being used for storage.
EXISTING CONDITIONS: STRUCTURAL

The existing building is a three-story multi-wythe brick structure, with classrooms and offices on the first two floors and a gymnasium on the third floor. According to the listing in the Inventory of Historic Assets of the Commonwealth maintained by The Massachusetts Historical Commission the building was constructed circa 1907. A site visit was carried out on August 3rd, 2017 to evaluate the existing structural condition of the building. The following documents were made available to RSE Associates:

- Architectural floor plans and roof plans dated May 17, 2004
- Massachusetts Cultural Resource Information record

This report presents our findings based on a review of the structural components accessible at the time of the visit and excludes below grade elements such as footings, etc.

1.0 Original Building

The overall condition of the exterior of the structure is good. The exterior brick, stone, and concrete have minimal wear and cracking. There is an area of spalled concrete with exposed, rusted rebar at the west side of the building near grade, photo 1. The exterior multi-wythe brick bearing walls are exposed throughout the building and most are in good condition. There is a significant vertical crack, that goes through brick as well as mortar, at the third floor between the stairwell and the main building, photo 2.

Foundation:

The building has a partial basement that was accessible during the site visit. Concrete foundation walls were visible and it is assumed that these foundation walls are bearing on strip footings. The basement floor is a concrete slab, it is in good condition. There are two 1'-8" wide concrete bearing walls running the width of the building with a series of archways in them. Most of these archways had shear cracks that ranged from hairline to 1/4" wide, photo 3. These walls were otherwise in good condition. The exterior concrete walls had some areas of honeycombing, efflorescence and spalling, the worst being in the utility room, photo 4. There were areas of moisture in the basement, including standing water and dampness on the walls and floor, photo 5.

First Floor Framing:

The first floor framing of this building consists of reinforced concrete slabs spanning to drop beams. The surface of the beams are concrete, but it is unknown whether they are reinforced concrete beams or steel beams encased in concrete. The beams span to concrete bearing walls. The underside of the slab was visible in the basement and there were numerous areas of spalled concrete, the most severe was located under the lobby where the spalled concrete exposed rusted diamond mesh reinforcement. There were cracks in the tile of the lobby floor that lined up with the location of the first floor beams. Many of the dropped beams had been covered with gypsum board, photo 6. Due to the moisture level in the basement, it is assumed that this was done to protect the beams from further exposure and to protect occupants from falling spalled concrete.

Second and Third Floor Framing:

The second and third floor framing is concrete slabs spanning to dropped concrete beams. It is unclear whether these beams are reinforced concrete or steel beams encased in concrete. The concrete beams are spaced at approximately 7'-6" and span to deeper concrete girders, again these could be reinforced concrete or steel beams encased in concrete. The girders span to three concrete columns that run down the center of the building, these columns were exposed on the second floor and measured approximately 1'-6" in diameter. Much of the second floor framing was covered by a dropped ceiling. A ceiling tile was removed and the slab and concrete beam that could be seen were in good condition. The third floor framing was exposed in many places and was in good condition, photo 7. There was an area of spalled concrete adjacent to hvac piping in the rear corner of the building on the underside of the third floor slab, photo 8. Otherwise, on both the second and third floor, the areas of the structure that were exposed appeared sound.

The second floor is open at the lobby area as this is a two story space. There were no signs of distress to the wall and ceiling finishes, in the lobby. The entire third floor is made up of a gymnasium with basketball court. Horizontal steel channels had been added at the large windows, photo 9.

Roof Framing:

The roof framing of this building is steel roof trusses that span the width of the building and bear on the exterior multi-wythe brick walls, photos 10-11. There is concrete infill spanning between the trusses, most likely a lightweight concrete with mesh reinforcement or a perlite concrete. There is also a steel framed skylight at the center of the roof structure. The limited area of the structure that was visible appeared to be sound and there are no signs of distress to the finished ceiling in the gymnasium space. Steel beams have been hung off the roof structure for support of a dividing curtain and basketball backboards in the gymnasium, photo 12.
2.0 Observations

The overall condition of the building is good, with the exception of the first floor framing which is in fair condition. This is due to the moisture level in the basement which has caused deterioration of the concrete.

3.0 Implications of Potential Work

Minor changes to the existing structure such as floor openings or infills for ductwork and piping, etc. can be accommodated by the existing slabs and walls. The locations of these openings would require structural review and miscellaneous steel framing may be required to frame new openings. Steps should be taken to mitigate the moisture problems in the basement as this will lead to further deterioration of the exposed structure in this space.

Significant floor openings and changes to the interior bearing walls could possibly trigger seismic analysis of the building, potentially requiring seismic upgrade.

4.0 Photos

![Photo 1](image1)

![Photo 2](image2)

![Photo 3](image3)

![Photo 4](image4)

![Photo 5](image5)
EXISTING CONDITIONS: BUILDING SYSTEMS

The information included below was developed by Cosentini Associates from:

- Review of the existing MEP Record Drawings provided by the client for the renovation project titled “Repairs And Renovations To Nazzaro Community Center” dated May 17, 2004
- Observations by Cosentini during their site visit on August 8, 2017

HVAC Systems

Central HVAC Plant (Location - Basement)

The primary heating medium for the building is low pressure steam generated by a gas fired cast iron boiler. The boiler is Smith mode 28A-S/W-07 with 1310 MBH rated steam capacity. No design or as-built drawings have been provided for this installation. The boiler age information was not available but visually it appears to be in good condition and not near the end of its useful life.

Steam is distributed from the boiler to two hot water converters generating heating hot water which is circulated throughout the building by hot water pumps (one converter has two associated base mounted pumps, the second converter has one associated in-line pump). No design or as-built drawings have been provided for this installation. The pumps and converters age information was not available but visually they appear to be in poor condition and may require repair or replacement in the near future.

Steam condensate is collected and fed back to the boiler by a duplex condensate pump unit. No design or as-built drawings have been provided for this installation. The unit appears to be the same age as the boiler and is not near the end of its life expectancy. Building does not have a central cooling plant. Local cooling systems are described below.

First Floor HVAC

Lobby:
The entrance/reception area is heated by two hot water heaters which appear in need of repairs. No design or as-built drawings have been provided for this installation.

Senior Center:
The HVAC systems installed during the 2004 renovation project are:
- The space is served by a split system DX air conditioning unit with hot water heating coil. Unit is located in the ceiling of the spaces. The system condenser is located on the roof. The system is provided with outside ventilation air intake and relief. There is a return air fan associated with the unit. System included
supply and return air duct distribution.

- Bathrooms are ventilated by an in-line exhaust air fan and associated ductwork with air discharge to the outside.
- The above systems are in good condition and should not need any work in the near future.

Other HVAC systems in the space include:

- There is some perimeter hot water radiation in the space. The kitchen has a recirculating hood.
- There appears to be an exhaust duct from the kitchen but it is not connected to the hood.
- No design or as-built drawings have been provided for these systems but they appear to be in good condition.

There is an old non-functioning split system unit in the room with the condenser outside. This system should be removed.

Children’s Room:
The room appears to be served by a split system AC unit with a condenser on the roof. No design or as-built drawings have been provided for this installation. The system vintage is not known but it appears old and will likely need to be replaced in the near future.

Second Floor HVAC

Bathrooms are ventilated by an in-line exhaust air fan and associated ductwork with air discharge to the outside. The system was installed during the 2004 renovation project and should not need any work in the near future.

There is 100% outdoor air heating and ventilation (H&V) unit with filters and hot water coil located in the ceiling of the weight room. The unit provides heating and ventilation to the weight room, children’s room, circulation corridors, and offices. The Teen room is also provided with ceiling agitator fans. No design or as-built drawings have been provided for this installation. The system vintage is not known but it appears old and will likely need to be replaced in the near future.

There is a split cooling system unit in the weight room. There is reportedly a project underway to replace it and provide a multi-unit split system to cool the weight room and the children’s room.

Third Floor HVAC

The third floor is a gym. It is heated and ventilated by an exhaust fan, 4 propeller ceiling agitator fans and 4 hot water unit heaters. The system was upgraded during the 2004 renovation project and all its components are in good condition.

There is no air conditioning in the space. Some peeling of the ceiling paint was observed perhaps due to lack of AC and de-humidification. Consideration should be given to adding air conditioning to this space.

Roof

Condensing units and some fans associated with the systems described above are located on the roof.
HVAC Conclusion

If the building is to be renovated or expanded, the observations and recommendations above indicate the overall priorities and approach to HVAC upgrades. The top priorities for renovation are summarized by system as follows:

- **Heating**: The building heating medium is steam which is converted to hot water. Hot water is distributed throughout the building to the heating equipment. The steam generating boiler appears to be in good condition and not near the end of its life expectancy. Steam converters, hot water pumps and other auxiliary heating equipment appear to be beyond their useful life. The team recommends replacing the steam converters and hot water pumps.
- **Cooling**: There is no central cooling plant in the building. The areas that are provided with air conditioning (the Senior Center, Teen Room, and Weight Room) are served by individual split type AC systems of various vintages. The team recommends replacing the older systems (Teen Room, Weight Room) and providing new systems for non-conditioned areas such as the Children’s Room.
- **Ventilation systems**: Ventilation systems appear adequate except for the H&V unit serving areas on the second floor which is old and needs to be replaced.
- The Gym is currently heated and ventilated but not air conditioned and there are signs of some issues with high humidity. Consideration shall be given to providing AC to the Gym.
Plumbing Systems

The incoming gas service is located in the basement. Gas is distributed to the heating steam boiler and domestic hot water heater.

The incoming water service is located in the basement. Domestic cold water is distributed to the plumbing fixtures throughout the building, to the domestic water heater, and to the heating system make-up.

There is a gas fired domestic water heater in the basement with associated hot water distribution to the plumbing fixtures throughout the building. No design or as-built drawings have been provided for this installation. Though no design or as-built drawings have been provided for the heater the unit appears to be relatively new and should not require any work in the near future.

Most bathrooms were upgraded during the 2004 renovation project and appear to be in good condition.
Fire Protection Systems

The building is not provided with a Fire Protection System. Consideration should be given to providing the building with code compliant Fire Protection Systems.

Fire Alarm

The existing fire alarm system is a non-addressable, zoned system by FCI with a limited number of zones. Notification appliances (horn/strobes) are not adequate for the space. A new fire alarm system should be provided.

The system has one zone per floor and a duct type smoke detector for the air handler on the first floor. There are a limited number of audio/visual notification appliances (horn/strobes). Note that plans of the existing fire alarm system were not available for review.

Electrical

The utility company service appears to be a combination of a 400 amp 120/208-volt, 3-phase service and a 200 amp 120/240-volt, 1-phase service. The existing service switches and panelboards in the basement are severely corroded and a new electrical service should be provided if the building is to continue to be used.

Lighting and appliance circuit breaker type panelboards are located throughout the building. Most are flush mounted, with some surface mounted panelboards in non-public type spaces. Some panelboards appear to have been replaced and appear to be in good condition, but the condition of these panelboards varies and the older panelboards should be replaced. Lighting is generally fluorescent fixtures with acrylic lenses. Note that plans of the existing electrical system were not available for review.
2.4 Building Value and Disposition

Overview
What follows is a summary of the typical disposition process for City owned buildings and a real estate overview of the existing Nazzaro center. Both summaries are provided for informational purposes only. This study and report make no recommendations regarding the final outcome for the existing Nazzaro center property should the City build a new community center on a different site.
Property Disposition Process

If the City of Boston builds a new community center at a different site in the North End and Boston Center for Youth and Families (BCYF) decided that they no longer had any use for the Nazzaro center, BCYF would declare that they no longer needed the existing Nazzaro center after the completion of the new community center.

Property internally transferred from BCYF to DND surplus property - 6 month process

The Department of Neighborhood Development (DND) would present before the Public Facilities Commission (PFC) and request through a vote of the PFC that the existing Nazzaro center property be rerouted into DND's inventory of surplus property. If the PFC votes to approve the move the property to DND, DND will go before the City Council which will conduct a hearing on the request by DND to surplus the existing Nazzaro Center. As part of the vote, City Council will confirm that no other City departments need the property.

Community process - 6 month process

If the City Council approves moving the property to surplus, DND would then engage in a community process to allow community input on how the City should best dispose of the property. In the case of a significant public building such as the Nazzaro center, the community process would likely involve several community meetings. Throughout the community process, community members and City officials would take part in a lengthy conversation to determine which of several possible outcomes for the building would provide the most benefit to the community. The community would have an opportunity to focus the discussion on preservation, community based nonprofit use, affordable housing or other uses that might provide benefit.

RFP process – 3-4 month process

After the community process has reached a conclusion, DND would issue a public Request For Proposal (RFP) to solicit bids to lease or purchase the property. The requirements of the lease or purchase, as determined through the community process, would be written into the RFP. The winning proposal would be awarded based on the ability to meet the specific requirements of the community, as outlined in the RFP.

Transfer of property – 1-2 year process

It would likely take 1 – 2 years for DND and the new owner to close on the sale of property or finalize the terms of a lease. DND would ensure that all regulations have been met by the new owner and that all necessary funding and permits are in place prior to the transfer of property.

Total Property Disposition Schedule: 18-30 months
Real Estate Overview

This analysis by Colliers International considers the likely market value of the existing Nazarro Center building and site. It is based primarily on comparables and is not considered a property appraisal.

Existing building sales in the region are more relevant comparison for the Nazarro Center than permitted or unpermitted land sales due to the existing building infrastructure that could prove to be salvageable for reuse. The sales comparable research used the following criteria:

<table>
<thead>
<tr>
<th>Date</th>
<th>Address</th>
<th>District</th>
<th>Building SF</th>
<th># of Units</th>
<th>GSF/Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/29/2012</td>
<td>162 Prince Street</td>
<td>North End</td>
<td>3,400</td>
<td>5</td>
<td>680</td>
</tr>
<tr>
<td>6/15/2012</td>
<td>91 Prince Street</td>
<td>North End</td>
<td>27,710</td>
<td>27</td>
<td>1,026</td>
</tr>
<tr>
<td>10/10/2013</td>
<td>11 Board Alley</td>
<td>North End</td>
<td>11,405</td>
<td>19</td>
<td>600</td>
</tr>
<tr>
<td>10/10/2013</td>
<td>20 Cleveland Place</td>
<td>North End</td>
<td>3,030</td>
<td>5</td>
<td>606</td>
</tr>
<tr>
<td>2/28/2014</td>
<td>24 Battery Street</td>
<td>North End</td>
<td>3,230</td>
<td>5</td>
<td>646</td>
</tr>
<tr>
<td>3/31/2014</td>
<td>164 Endicott Street</td>
<td>North End</td>
<td>4,020</td>
<td>5</td>
<td>804</td>
</tr>
<tr>
<td>6/30/2014</td>
<td>4 Fountain Place</td>
<td>North End</td>
<td>12,049</td>
<td>10</td>
<td>1,205</td>
</tr>
<tr>
<td>9/3/2014</td>
<td>35 North Margin Street</td>
<td>North End</td>
<td>5,528</td>
<td>10</td>
<td>553</td>
</tr>
<tr>
<td>12/18/2014</td>
<td>20 Sheafe Street</td>
<td>North End</td>
<td>7,360</td>
<td>15</td>
<td>491</td>
</tr>
<tr>
<td>6/11/2015</td>
<td>18 Hull Street</td>
<td>North End</td>
<td>3,880</td>
<td>7</td>
<td>554</td>
</tr>
<tr>
<td>1/15/2016</td>
<td>351 North Street</td>
<td>North End</td>
<td>5,130</td>
<td>10</td>
<td>513</td>
</tr>
<tr>
<td>1/25/2016</td>
<td>3 North Hudson Street</td>
<td>North End</td>
<td>4,560</td>
<td>5</td>
<td>912</td>
</tr>
<tr>
<td>3/1/2016</td>
<td>176-178 North Street</td>
<td>North End</td>
<td>7,545</td>
<td>8</td>
<td>943</td>
</tr>
<tr>
<td>3/7/2016</td>
<td>278-284 North Street</td>
<td>North End</td>
<td>13,540</td>
<td>19</td>
<td>713</td>
</tr>
<tr>
<td>3/31/2016</td>
<td>37 Sheafe Street</td>
<td>North End</td>
<td>7,118</td>
<td>8</td>
<td>890</td>
</tr>
<tr>
<td>4/15/2016</td>
<td>15 Stillman Street</td>
<td>North End</td>
<td>3,520</td>
<td>5</td>
<td>704</td>
</tr>
<tr>
<td>5/13/2016</td>
<td>10 Harris Street</td>
<td>North End</td>
<td>5,445</td>
<td>5</td>
<td>1,089</td>
</tr>
<tr>
<td>6/29/2016</td>
<td>27 Charter Street</td>
<td>North End</td>
<td>4,416</td>
<td>5</td>
<td>883</td>
</tr>
<tr>
<td>6/30/2016</td>
<td>27-29 North Margin Street</td>
<td>North End</td>
<td>1,860</td>
<td>4</td>
<td>465</td>
</tr>
<tr>
<td>6/30/2016</td>
<td>400 Hanover Street</td>
<td>North End</td>
<td>7,028</td>
<td>8</td>
<td>879</td>
</tr>
<tr>
<td>8/29/2016</td>
<td>3-5 Quincy Court</td>
<td>North End</td>
<td>4,560</td>
<td>6</td>
<td>760</td>
</tr>
<tr>
<td>9/30/2016</td>
<td>20 Parmenter Street</td>
<td>North End</td>
<td>11,520</td>
<td>12</td>
<td>960</td>
</tr>
<tr>
<td>10/4/2016</td>
<td>16-20 Battery Street</td>
<td>North End</td>
<td>8,188</td>
<td>8</td>
<td>1,024</td>
</tr>
<tr>
<td>11/30/2016</td>
<td>155 Salem Street</td>
<td>North End</td>
<td>7,944</td>
<td>10</td>
<td>794</td>
</tr>
<tr>
<td>4/14/2017</td>
<td>149 Endicott Street</td>
<td>North End</td>
<td>2,704</td>
<td>4</td>
<td>676</td>
</tr>
<tr>
<td>6/16/2017</td>
<td>4 Michelangelo Street</td>
<td>North End</td>
<td>6,048</td>
<td>9</td>
<td>672</td>
</tr>
<tr>
<td>7/27/2017</td>
<td>36 North Bennet Street</td>
<td>North End</td>
<td>3,450</td>
<td>5</td>
<td>690</td>
</tr>
<tr>
<td>7/28/2017</td>
<td>10 Wige Street</td>
<td>North End</td>
<td>5,700</td>
<td>9</td>
<td>633</td>
</tr>
</tbody>
</table>
In speaking with internal resources and reviewing market trends, new apartment products are typically being rented or sold are between 800-900 GSF on average. For the purposes of the sensitivity analysis, 900 GSF was used to match the product offering to the market demands. A point worth noting is that downsizing the unit size to create additional density may adversely affect the price per unit. However, there may be an opportunity to create additional units by adding height to the Nazzaro Center and/or creating an interstitial floor in the gymnasium area; further guidance is necessary to better understand how many more units can be added. The value added would still be based on the price per unit factor.
3.1 BCYF Goals + Objectives

BCYF’s goals for this study are straightforward: to align the facility with the needs of the current programs, and to continue to make the center an important resource for the entire community. These goals emerged in early conversations with BCYF staff and leadership.

**More space**
- The current building is “bursting at the seams.”
- Provide adequate space, equipment, and support for popular activities

**More users**
- Provide a universally accessible facility
- Continue to welcome the core users while inviting in teens, childless adults, other demographics

3.2 Community Goals + Objectives

**COMMUNITY ADVISORY COMMITTEE (CAC Workshop #1) - Sept. 13, 2017**

BCYF offers an array of diverse programs at the Nazzaro Center, which receives visits from over 60,000 Boston residents each year. The lack of space in the current community center is the biggest issue at hand. The waiting list for programs offered at the center is significantly longer than the list of current attendees. Many of the adults working/volunteering at the Nazzaro Center were former Nazzaro program participants who have a strong desire to give back to their communities. They want to be able to make a difference in the lives of as many kids, teens, seniors, etc. as possible, and perceive the lack of space as being the main issue standing in their way. “If you live in the neighborhood, you should be able to join the program.” It was stated by many that the Nazzaro Center is the “heartbeat of the community.”

**Programs currently offered:**
- Arts & Crafts
- Afterschool Programs
- Band
- Cooking Class
- Visual & Performing Arts
- Digital Media
- Family Guidance & Support Workshops
- Teen Center
- Homework Assistance
- Academic Enrichment
- Job Skills & Readiness
- Leadership Development
- Community Service
- Basketball
- Rec Gym/Sports & Fitness
- Outdoor Adventure
- Elder Services
- New Mom Group
- Toddlers Program

**How The Building Is Used**

<table>
<thead>
<tr>
<th>Days</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday through Friday</td>
<td>6:30am - 10am Open Gym and Fitness</td>
</tr>
<tr>
<td></td>
<td>10am - 2pm Seniors, Toddlers</td>
</tr>
<tr>
<td></td>
<td>2pm - 5pm After School Programs</td>
</tr>
<tr>
<td></td>
<td>5pm - 9pm Teen Programs</td>
</tr>
<tr>
<td></td>
<td>Youth and Adult Sports Leagues</td>
</tr>
<tr>
<td></td>
<td>Open Gym</td>
</tr>
<tr>
<td></td>
<td>Community Meetings</td>
</tr>
<tr>
<td>Saturdays</td>
<td>Highest demand is from 2-9pm.</td>
</tr>
<tr>
<td></td>
<td>9am - 5pm Sports Instructional Programs</td>
</tr>
<tr>
<td></td>
<td>Youth and Adult Sports Leagues</td>
</tr>
<tr>
<td></td>
<td>Open Gym and Fitness</td>
</tr>
<tr>
<td>Sundays</td>
<td>Closed</td>
</tr>
</tbody>
</table>
PROGRAM REVIEW (CAC Workshop #2) - Dec. 13, 2017

Overview
The purpose of this meeting was to continue the conversation on programming for the community center. Sasaki presented an update of where the team is in the programming process, how we went about evaluating the space and program needs, and how we arrived at our recommendation. Specifics of site locations had not yet been discussed with the public.

The following comments are taken from the CAC discussion of the proposed program.

Support/Kitchen
The programs' adjacency to the kitchen is very important. It needs to be located in close proximity to the senior/adult room as well as the larger assembly space. A set up for catering would get used, but it should be able to accommodate the regular users first.

There is a need for the kitchen to be 'open', yet capable of being closed off/shut down. It needs to be its own entity as to not disturb the function/use of any particular space.

Sink needed in the room that is shared by arts and crafts (currently the adult room). If the program/selected site provided any ‘extra room’, community group felt it would be great to have a dedicated arts & crafts room.

Children’s Program Spaces
There is a need for storage or coats and bags in the kid's rooms. Currently kids throw their coats, etc ‘all over the place.’

Toddler program can be shared with other spaces since its schedule is primarily on weekday mornings. If toddler room is going to be shared with classrooms, then it needs to be able to accommodate the ratio and space needs of other age groups. Toddler room could also share space with studio fitness, if storage needs are met.

The program recommendations should assume that EEC licensing is pursued for programs serving ages 6-12. Under a EEC licensing scenario a higher ration of staff to students and classroom area to students is required. Therefore this scenario would not actually take any kids off of the wait list. This is a staffing issue just as much (if not more) as it is an architectural one.

Community group felt that more classrooms were needed.

EEC regulations do not apply to teen programs or toddler programs. Teen programs are considered ‘drop in’ programs. It is important for teens to have their own dedicated space.

Sports and Support Spaces
Basketball court: 2 tiers of seating could accommodate 112 people per side, as shown. We likely need half that (show seating on just one side). Adjustable height for hoops is desired. Add third egress in case assembly use is ever desired.

Include an area for nursing. Provide family/unisex bathrooms.

Don’t enclose the Mirabella pool! The outdoor pool is beloved by the neighborhood.
The initial survey described on the next pages ran from October 16, 2017 to January 5, 2018 and gained 123 individual responses. The survey was issued a second time from October 17, 2018 to November 8, 2018 and gained an additional 28 responses. Results are summarized as follows.

The surveys were publicized at the Nazzaro center reception desk, at community meetings, and via neighborhood e-mail and Facebook groups.

Day In the Life: various daily activities distributed across the neighborhood
Showing respondents aged 20-49
Day In the Life: various daily activities distributed across the neighborhood Monday-Friday
Day In the Life: various daily activities distributed across the neighborhood
Saturday and Sunday
Day In the Life: various daily activities distributed across the neighborhood
Showing respondents who “Rarely or never use the existing Nazzaro Center”
Day In the Life: various daily activities distributed across the neighborhood
Showing respondents aged 50+
Exercise and Recreational Activities
All respondents, all week
School and Childcare activities
All respondents, all week
Patterns of Transit
Monday-Friday
Patterns of Transit
Saturday and Sunday
1. Do you use the existing Nazzaro Center? How often?

Results shown are from original survey period (2017). Additional results from second survey period (2018) were as follows:

- 30% Rarely or never use
- 25% 2-3 Times per Week
- 10% Weekly
- 30% Monthly

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rarely or never</td>
<td>46</td>
</tr>
<tr>
<td>Weekly</td>
<td>24</td>
</tr>
<tr>
<td>Daily</td>
<td>20</td>
</tr>
<tr>
<td>Monthly</td>
<td>16</td>
</tr>
</tbody>
</table>

2. What do you do at the Nazzaro Center?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afterschool programs/summer camps</td>
<td>43</td>
</tr>
<tr>
<td>Teen Center</td>
<td>29</td>
</tr>
<tr>
<td>Senior Center</td>
<td>19</td>
</tr>
<tr>
<td>Kitchen</td>
<td>10</td>
</tr>
<tr>
<td>Gym/Fitness Center</td>
<td>4</td>
</tr>
<tr>
<td>Community Room</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>44</td>
</tr>
</tbody>
</table>

3. If you don’t use the existing Nazzaro Center, why not?

- I do not know about the programs offered at the Nazzaro Center
- Other
- Programs do not interest me
- Hours of Operation
- Location
- Fees

Quality of facility

- I didn’t know there was a fitness room, or yoga classes offered, etc. (2 similar responses)
- I wish I was more aware of volunteer opportunities for helping teens with homework, etc.
- My child has been on the waiting list for the afterschool program over 3 years
- My child is too young
- My schedule is hectic
- Used daily when child was young

Need more programs especially Senior Programs not just bingo - we need educational and physical programs (1 similar responses)

If there were classes like yoga or pilates, I might use it more often.

Needs lots of updating or a new building
4. What do you like best about the Nazzaro Center?

- Central location, availability (37 similar responses)
- The amazing staff; Carl and Laurie (16 similar responses)
- Community feel (13 similar responses)
- Youth programming / Camps / After school programs (7 similar responses)
- Sports leagues (5 similar responses)
- Lots of programs for kids and families, including after school, camps, trips, family events (Halloween, etc) (5 similar responses)
- Place the kids can come together and play sports and enjoy each other (4 similar responses)
- I love that they offer a toddler drop in 3 days per week! I wouldn’t survive the winters without it! (4 similar responses)
- Access to pool in summer (4 similar responses)
- Community meetings (4 similar responses)
- Weekend basketball / gym (3 similar responses)
- Golf lessons (3 similar responses)
- The historic feel of the building (2 similar responses)
- The people that utilize the facilities (2 similar responses)
- Willingness to open gym during some snow days. (1 similar responses)
- Price
- Stroller friendly
- The size of the space
- Everything- the after school program and summer camp are essential for our working family of 5. They gave my oldest her first job. My son uses it on weekends for basketball.
- EVERYTHING!! We spend so much time there. It is a way for my kids to be safe after school where they can burn off some steam and play with their friends. There are so many organized activities.
- I like that it is a true community center, it is very dated though and doesn’t have things such as an indoor pool, like many of the others have.
- Love that it provides a neighborhood meeting place. Our daughter has been there with school, as well, when they can’t have outdoor recess. We’d love more kids/childcare programming and family-friendly activities.
- Ski trips
- Its location and some offerings for kids I just wish there were more options for after school like a drop in program for drawing or legos- something that would add more community offerings like at the library
- The ability to socialize with friends in the senior center
- What I like best about the Nazzaro Center is its location; being a place that is centrally located in the North End and easily accessible, there always being someone there for every need, the incredibly helpful, supportive, and friendly staff, the programs offered that range from sports to summer camp, the ability to come as frequently as I like, and the teen room, where there is always help for anything, a place to be with your friends, a place to do homework, a place to relax, a place to socialize, and a place to come when you like and have access wonderful peers and staff.
- Location and its proximity to open outdoor space/ basketball courts.
- Open to everyone, particularly families (even though my children are grown and do not use it)
5. Where do you live?

6. How long have you lived there?

7. What is your age range?

Results shown include responses from both original survey period (2017) and second survey period (2018).

8. Do your children/grandchildren use the center?

N/A 37%
Yes 42%
No 21%
9. Are your children/grandchildren under 18?

Yes 96%

No 4%

10. Where do you work?

- I work outside the neighborhood: 67%
- I work in the neighborhood: 24%
- I'm retired: 18%
- Not applicable: 6%

11. Program prioritization

(Respondents had a “budget” of 30 votes to allocate to various program options)
3.3 Spatial Requirements

PROGRAM METHODOLOGY

The programming process began with a series of conversations with BCYF, PFD, and the Mayor’s Office of Neighborhood Services about needs of the community. BCYF staff repeatedly described the building as “bursting at the seams.” A major impetus for this study is simply the need to provide more and better-suited space to house the programs that BCYF already has. In addition, new programs are contemplated that will appeal to broader demographics, supporting BCYF’s overall goals for the center.

Program Categories

BCYF categorizes programs into “Arts,” “Civic Engagement,” “Education,” and “Sports,” abbreviated as “ACES.” Sasaki has followed that categorization, although overlap exists between many of the space uses.

Swimming Pool

The incorporation of a swimming pool and associated support spaces is considered in a separate category. Depending on site selection, a pool may be included in the program. For now, it is shown on a separate page. Whether a pool is included will also affect locker room and plumbing counts.

Existing Visit Analysis

Based on BCYF-provided data on visits to the community center and pool in Fiscal Year 2016, Sasaki reviewed trends and made observations about how the center is used. After controlling for the spike in visits during the summer that is associated with the swimming pool, the team observed that sports uses predominate, and that over half of the sports visits are for recreational gym - i.e. local schools using the gym for classes during the school day. The center’s programming serves mostly youth, with teens and seniors also represented. Few programs reach adults under 55. All of this led the team to recommend ample sports and educational space, and a few key additions to the program to appeal to adults. This analysis is described in Section 1.

“Wish List” and Sasaki Suggestions

BCYF provided Sasaki with an initial “wish list” of programs:
- Toddler room with stroller storage
- 6-8 Year old room
- 9-12 Year old room
- Teen room
- Senior room
- Computer lab
- Arts/crafts room with sink in room
- Drama/ black box theater
- Music/room/band for drums/guitars/ pianos
- Dance room
- Full court basketball gym
- Kitchen
- Community room
- Weight room

In addition to this list, Sasaki recommended the following to complement current programming:
- Cardio and other fitness equipment
- Studio fitness, i.e. yoga, Zumba
- A recording booth adjacent to the music room
- Enhanced family-friendly support spaces, such as family changing rooms
- Dedicated outdoor spaces for both adult and youth use
- Enhanced lobby

Some of these elements may be able to occupy the same spaces. Potential overlaps are indicated in the spreadsheet on the next page.

Occupancy Assumptions

Code-maximum occupancies in the program are based on the Massachusetts State Building Code (780 CMR) and IBC 2009 Table 1004.1.1, as well as state child care licensing requirements (606 CMR 7.00). Key factors (expressed in SF/occupant unless otherwise noted) include:

- Accessory Storage/mechanical 300 gross
- Assembly w/o fixed seats
  - concentrated - chairs only 7 net
  - standing space 5 net
- Unconcentrated (tables & chairs) 15 net
- Business 100 gross
- Day care 35 net
- Student-teacher ratio (school age) 1:1.3
- Student-teacher ratio (preschool) 1:1.2
- Classroom 20 net
- Exercise Rooms 50 gross
- Locker Rooms 50 gross
- Pool and Rink
  - Pool 50 gross

Actual occupancies are typically determined by room layout but must not exceed code occupancies. In the past, BCYF typically as not sought state (EEC) licensure for their childcare programs but would like to retain the option to do so.

Net to Gross Factor

The tabular program assumes 70% efficiency in the final floor plans. The actual ratio will vary based on site and building configuration.

Key Adjacencies

The team recommends the following adjacencies be considered:

- Restrooms should be distributed throughout the building. Child care spaces must have restroom access no more than one floor away.
- Locker rooms and showers should be as close as possible to the pool.
- Cardio and weight equipment areas should be adjacent.
- The kitchen is classified as a Civic Engagement space, but is also used by youth programs and should be near the classrooms.
- Sight lines are key for staff areas to be able to supervise as much of the center as possible.
## TABULAR PROGRAM

### North End Community Center Programming Study Draft Program

#### 4. Computer Lab
- **Room SF:** 1,254
- **Occupancy:** 63
- **Typical Occupancy:** 21
- **Minimum:** 1
- **Maximum:** 27
- **Comments:** Will be used for programs, testing, individual use.

#### 2. Reception Desk
- **Room SF:** 96
- **Occupancy:** 2
- **Typical Occupancy:** 2
- **Minimum:** 1
- **Maximum:** 480
- **Comments:** Recording booth and storage included.

#### 2. Weight and Cardio Fitness Room
- **Room SF:** 2,500
- **Occupancy:** 50
- **Typical Occupancy:** 50
- **Minimum:** 1
- **Maximum:** 2,500
- **Rule of thumb:** 50-75 sf per piece of equipment

#### E. Entry Lobby/Circulation

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>ROOM SF (EXISTING)</th>
<th>OCCUPANCY (Calculated Max)</th>
<th>QUANTITY</th>
<th>TOTAL SF</th>
<th>ROOM SF (Right-sized)</th>
<th>OCCUPANCY (Typical)</th>
<th>QUANTITY</th>
<th>TOTAL SF</th>
<th>ROOM SF (Minimum)</th>
<th>OCCUPANCY (Code Max)</th>
<th>OCCUPANCY (Typical)</th>
<th>QUANTITY</th>
<th>TOTAL SF</th>
<th>QUANTITY (DEAL)</th>
<th>TOTAL SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gymnasium</td>
<td>4,021</td>
<td>75</td>
<td>1</td>
<td>4,021</td>
<td>7,280</td>
<td>75</td>
<td>1</td>
<td>7,280</td>
<td>7,280</td>
<td>146</td>
<td>75</td>
<td>1</td>
<td>7,280</td>
<td>1</td>
<td>7,280</td>
</tr>
<tr>
<td>1a. Seating</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>208</td>
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<td>0</td>
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<td>208</td>
</tr>
<tr>
<td>2. Weight and Cardio Fitness Room</td>
<td>637</td>
<td>50</td>
<td>1</td>
<td>637</td>
<td>2,500</td>
<td>50</td>
<td>1</td>
<td>2,500</td>
<td>2,500</td>
<td>50</td>
<td>1</td>
<td>2,500</td>
<td>1</td>
<td>2,500</td>
<td></td>
</tr>
<tr>
<td>2a. Storage</td>
<td>42</td>
<td>50</td>
<td>1</td>
<td>42</td>
<td>50</td>
<td>50</td>
<td>1</td>
<td>50</td>
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<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>3. Fitness/Dance/Yoga Studio **</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,100</td>
<td>1,100</td>
<td>24</td>
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<td>0</td>
<td>0</td>
<td>1,100</td>
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<tr>
<td>3a. Storage</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>45</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>45</td>
<td>1</td>
</tr>
<tr>
<td>4. Restrooms (195 SF, 224 SF)</td>
<td>210</td>
<td>2</td>
<td>2</td>
<td>210</td>
<td>421</td>
<td>2</td>
<td>2</td>
<td>421</td>
<td>1</td>
<td>1</td>
<td>421</td>
<td>1</td>
<td>1</td>
<td>421</td>
<td>1</td>
</tr>
<tr>
<td>5. Locker/Shower Rooms (62 SF each)</td>
<td>62</td>
<td>20</td>
<td>1</td>
<td>62</td>
<td>400</td>
<td>20</td>
<td>1</td>
<td>400</td>
<td>400</td>
<td>20</td>
<td>1</td>
<td>400</td>
<td>1</td>
<td>400</td>
<td>1</td>
</tr>
<tr>
<td>6. Family Changing Rooms</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>84</td>
<td>0</td>
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<td>0</td>
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<tr>
<td><strong>SUBTOTAL NSF</strong></td>
<td>6,243</td>
<td>8,775</td>
<td>13,395</td>
<td>15,123</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### B. Civic Engagement

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>ROOM SF (EXISTING)</th>
<th>QUANTITY</th>
<th>TOTAL SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Senior/Adult Program Room</td>
<td>1,216</td>
<td>1,216</td>
<td>35</td>
</tr>
<tr>
<td>1a. Storage (83 SF, 18 SF, 18 SF)</td>
<td>119</td>
<td>352</td>
<td>0</td>
</tr>
<tr>
<td>2. Kitchen</td>
<td>142</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3. Multipurpose Assembly Space **</td>
<td>2,464</td>
<td>352</td>
<td>1</td>
</tr>
<tr>
<td>3a. Storage/Back-Of-House</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. Community Room (reservable)*</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>SUBTOTAL NSF</strong></td>
<td>5,243</td>
<td>6,618</td>
<td>9,743</td>
</tr>
</tbody>
</table>

#### 5. Mechanical Room
- **Room SF:** 3,000
- **Occupancy:** 10
- **Typical Occupancy:** 1,200
- **Minimum:** 1
- **Maximum:** 1,200
- **Comments:** Currently a rooftop unit + basement HVAC system.

#### 1a. Storage (83 SF, 18 SF, 18 SF)
- **Room SF:** 119
- **Occupancy:** 352
- **Typical Occupancy:** 0
- **Minimum:** 0
- **Maximum:** 0
- **Comments:** Not including furniture storage: see 3a.

#### 2.a Storage
- **Room SF:** 24
- **Occupancy:** 50
- **Typical Occupancy:** 50
- **Minimum:** 1
- **Maximum:** 0
- **Comments:** Not including furniture storage: see 3a.

#### 1. Arts & Crafts Room ‡
- **Room SF:** 750
- **Occupancy:** 32
- **Typical Occupancy:** 28
- **Minimum:** 0
- **Maximum:** 50
- **Comments:** Per 806 CMR 7.00, 35 sf/pp and 26 max class size. Note that existing space is calculated as Classroom (20-stip) rather than Day Care

#### 1.a. Seating
- **Room SF:** 2,400
- **Occupancy:** 24
- **Typical Occupancy:** 24
- **Minimum:** 0
- **Maximum:** 35
- **Comments:** 2 rows of seating

#### 3. Nursing Room
- **Room SF:** 60
- **Occupancy:** 221
- **Typical Occupancy:** 27
- **Minimum:** 6
- **Maximum:** 27
- **Comments:** Noncommercial: adjacent to children's & adult rooms

#### 6. Family Changing Rooms
- **Room SF:** 1 | 1 |
- **Occupancy:** 60 |
- **Typical Occupancy:** 44 |
- **Minimum:** 20 |
- **Maximum:** 40 |
- **Comments:** Will be used for programs, testing, individual use.

#### 7. Restrooms (45 SF, 32 SF, 60 SF)
- **Room SF:** 46 |
- **Occupancy:** 137 |
- **Typical Occupancy:** 360 |
- **Minimum:** 6 |
- **Maximum:** 360 |
- **Comments:** Quantity TBD; depends on total building occupancy

#### 4. Community Room (reservable)*
- **Room SF:** 300 |
- **Occupancy:** 600 |
- **Typical Occupancy:** 600 |
- **Minimum:** 1 |
- **Maximum:** 600 |
- **Comments:** Will be used for programs, testing, individual use.

#### D. Sports and Fitness Spaces

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>ROOM SF (EXISTING)</th>
<th>QUANTITY</th>
<th>TOTAL SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Children's Room †</td>
<td>1,248</td>
<td>1,248</td>
<td>1,000</td>
</tr>
<tr>
<td>1a. Storage (36 SF &amp; SF)</td>
<td>38</td>
<td>78</td>
<td>0</td>
</tr>
<tr>
<td>2. Toddler/Parent Program Room †</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2a. Storage</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2b. Restroom</td>
<td>200</td>
<td>200</td>
<td>1</td>
</tr>
<tr>
<td>2c. Carriage Storage</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3. Nursery Room</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. Teen Room</td>
<td>433</td>
<td>433</td>
<td>900</td>
</tr>
<tr>
<td>4a. Storage</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. Vending</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>SUBTOTAL NSF</strong></td>
<td>1,985</td>
<td>3,341</td>
<td>4,421</td>
</tr>
</tbody>
</table>

#### C. Education (Youth Spaces)

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>ROOM SF (EXISTING)</th>
<th>QUANTITY</th>
<th>TOTAL SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.a. Storage</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. Kitchen</td>
<td>142</td>
<td>142</td>
<td>275</td>
</tr>
<tr>
<td>3. Elevator</td>
<td>42</td>
<td>42</td>
<td>110</td>
</tr>
<tr>
<td><strong>SUBTOTAL NSF</strong></td>
<td>567</td>
<td>1,317</td>
<td>1,317</td>
</tr>
</tbody>
</table>

### Reference:
- Reference: 606 CMR 7.00
- per IRC 2015, 35 sf, 25 max class size. Note that existing space is calculated as Classroom (20-stip) rather than Day Care

**Continued on next page**
### TABULAR PROGRAM cont’d

#### 3. Parking
- **Currently 5 spaces**:  
  - **Provide code-required parking only**

#### 2. Outdoor Play Space
- **Currently**:  
  - **00000000**
  - **1,950**
  - **26**
  - **1**
  - **1,950**
  - **2**

#### 1. Garden (Exterior Space)
- **Rooftop O**

#### H. Potential Merge w/ Mirabella Pool
- **Currently a prefabricated shed**

#### 10. Outdoor Maintenance Equip. Storage
- **Currently**
  - **100**
  - **0**
  - **1**

#### 2. Toddler/Parent Program Room †
- **Not desired by BYC**

#### 2.c. Carriage Storage
- **Occupancy shown is strollers, not children**

#### 4. Corridor circulation (excluding stairs)
- **TBD**

#### 5. Mechanical Room
- **Currently**
  - **3,000**
  - **10**
  - **1,200**

#### 2. Storage (86 SF, 95 SF, 50 SF)
- **77**
- **12**
- **1,663**

#### 4. Corridor circulation (excluding stairs) **(EXISTING)**

#### 1. Gymnasium
- **Currently**
  - **4,021**
  - **81**
  - **1,000**

#### 9. Concessions
- **Now in lobby**

#### 3. Lobby
- **Currently**
  - **548**
  - **110**
  - **146**

#### 3.a. Storage
- **Currently**
  - **42**
  - **1**
  - **50**

### TABULAR PROGRAM: Pool

#### E. Entry Lobby/Circulation
- **Currently**
  - **38**
  - **1**
  - **2**

#### 2. Toddler/Parent Program Room †
- **9**
- **50**
- **4**
- **8**
- **2**

#### 1. Senior/Adult Program Room ‡
- **Max occupancy based on tables/chairs**

#### 1. Children’s Room †
- **1,248**
- **63**
- **1,000**

#### 6. Family Changing Rooms
- **Now in lobby**

#### 8. Trash/Recycling Room
- **Currently**
  - **1**
  - **101**

#### 3. Fitness/Dance/Yoga Studio **
- **Currently**
  - **1,200**
  - **24**
  - **20**

#### F. Staff Areas
- **Currently**
  - **1,274**
  - **255**
  - **1,274**

#### 3. Elevator
- **Currently**
  - **42**
  - **9**
  - **42**

#### 7. Restrooms
- **Currently**
  - **46**
  - **1**
  - **9**

#### 3. Multipurpose Assembly Space **
- **Currently**
  - **2,464**
  - **352**
  - **2,016**

#### D. Sports and Fitness Spaces
- **Currently**
  - **4,021**
  - **81**
  - **7,280**

#### 3. Vending
- **Currently**
  - **3**
  - **7**
  - **1**

#### 2. Restroom
- **Currently**
  - **200**
  - **1**
  - **200**

#### 1. Locker Rooms/Shower/Shower/Restrooms
- **a. deduct gym locker rooms from total**

#### 11. Parks & Recreation Dept. Storage
- **Currently**
  - **0**
  - **0**
  - **320**

#### 10. Outdoor Maintenance Equip. Storage
- **Currently**
  - **100**
  - **0**
  - **100**

#### 6. Tel/Data and Electrical
- **Currently**
  - **91**
  - **1**
  - **91**

#### 4. Corridor circulation (excluding stairs) **Right-sized**
- **SUBTOTAL NSF**

#### 4. Corridor circulation (excluding stairs) **EXISTING**
- **SUBTOTAL NSF**

#### 2. Locker Rooms/Shower/Shower/Restrooms
- **a. deduct gym locker rooms from total**

### Efficiency Factor
- **73%**

### GRAND TOTAL BUILDING NSF
- **3,082**
- **2,470**

### POOL BUILDING NSF
- **1,488**
- **1,317**

### POOL TOTAL NSF
- **3,900**
- **3,787**

### Potential to Include Indoor Pool
- **Currently**
  - **0**
  - **0**
  - **1,200**

### Outdoor Space
- **Currently**
  - **1,500**
  - **100**
  - **1**

### SUBTOTAL NSF
- **1,500**
- **2,950**
- **4,950**
## Arts & Crafts Room

**NET SF**: 766

**NOTES**: Possible overlap with other spaces: Senior/adult program room. Storage needs include supplies and finished/in progress artwork.

**OCCUPANTS**: 28

**HOURS OF OPERATION**: Day & night

**FUNCTION**: Kids during the day/after school. Adults at night (adult paint night, jewelry making, knitting, etc).

**SPECIAL FEATURES**: Close to youth/teen rooms. Adjacent to storage closet.

**ADJACENCIES/RELATIONSHIPS**: Storage closet (shown at 27 sf) and open storage (cabinets, counters @ 2 full walls of the room). Tackboards or marker boards.

**FINISHES/STORAGE**: Resilient floor.

**EQUIPMENT**: Counters, cabinets, open shelving. Sink. Magnetic whiteboards or tackboards.

**MOVABLE**: Tables & chairs, teacher station, wall-mounted drying racks.
Music Room

**SPACE**

- **NET SF**: 540

**NOTES**

- Space for drums, guitars, piano. Some computers for recording. Sasaki recommends separate recording studio within the room.

- Storage needs include instruments, microphones, other recording equipment.

**OCCUPANTS**: 15

**HOURS OF OPERATION**: Day & night

**FUNCTION**

- Instrument storage, instruction, practice
- Recording and mixing

**SPECIAL FEATURES**

- Recording booth within the room square footage
- It is assumed that this is a practice and recording space, not a performance space. Acoustics are geared toward absorption.

**ADJACENCIES/RELATIONSHIPS**

- Close to teen room, multipurpose assembly space

**FINISHES/STORAGE**

- Resilient floor, acoustic panels on walls and ceiling. Area rugs may be required. Consider acoustic flooring such as sound-absorbing linoleum.
- storage closet (included in the room)
- mirrors
- internal soundproof window between room and recording studio

**EQUIPMENT:**

- **FIXED**: storage racks and shelving
- recording/mixing board
- lockable storage closet

- **MOVABLE**: music stands, instrument stands
- microphones, etc.
- chairs and soft seating
**Senior/Adult Program Room**

**NET SF**

1,020

**NOTES**

Preference is for each age group to have their own designated rooms. Seniors want their own space. Seniors use the space 2x a week. Possible overlap with Arts & Crafts

Storage needs include bingo equipment, costumes, seasonal decorations. Consider separate storage for tables/chairs elsewhere in the building - possibly in Multipurpose Room storage.

**OCCUPANTS**

26

**HOURS OF OPERATION**

Seniors: morning, early afternoon, tend to leave by 3pm

Other adult-oriented programming post-3pm

**FUNCTION**

Lounging, socializing, community, bingo

AA meetings, new moms groups, support groups, etc.

**SPECIAL FEATURES**

Adjacent to exterior garden space as they have currently

Adjacent to kitchen

Proximity to ADA restrooms

Proximity to furniture storage

Storage closets and cubbies

Resilient or carpeted floor, acoustic ceiling

If combined with Arts & Crafts functions, will require a sink.

Soft furniture, movable card/craft tables, dining chairs

(no low chairs)

Computers and tables
Kitchen

NET SF 275

NOTES
Not a commercial kitchen; a residential-style kitchen with ample space for groups. Youth cook as a group activity, bringing in family recipes. Adult users do not currently use the kitchen intensively, although they use coffee/tea. Storage needs include pots and pans, dry goods, and coffee supplies. Should be able to double as a catering kitchen for special events

OCCUPANTS 14

HOURS OF OPERATION Day and night

FUNCTION Demonstration and group cooking, adults and youth Catering support for community events and performances

SPECIAL FEATURES Large counter top/island for demonstrations and groups Adjustable lighting Catering-level sinks, power supply Ability to close off kitchen and/or to use it independently of other spaces

ADJACENCIES/RELATIONSHIPS Adjacent to and open to youth classroom or adult program space Proximity to large community room for events

FINISHES/STORAGE Resilient, tile, or other hard, slip-resistant floor Cleanable walls and backsplashes Solid surface cabinetry and countertops Hard ceiling Storage cabinets

EQUIPMENT: FIXED Stove top, oven, sink, dishwasher, microwave

EQUIPMENT: MOVABLE Refrigerator, coffee maker, hot water maker, toaster

KITCHEN

Floor Plan Diagram scale 1/8" = 1'-0"
Multipurpose Assembly Space

NET SF: 2,016

NOTES:
Flexible assembly space with movable seating, lighting, theatrical lighting truss, sound system, appropriate acoustics for performances and for large community events.
Will also be used for dance, rehearsal, drama club, etc. during the day.
Possible overlap with studio fitness, depending on flooring and furniture.
Storage needs may include stage sets/props but is primarily intended to store AV racks and tables and chairs when not in use.
North End Music & Performing Arts Center (NEMPAC) has expressed interest in sharing this space.
Subdividable.

OCCUPANTS:
up to 288 with all movable chairs; typically 50-150

HOURS OF OPERATION:
Day & night

FUNCTION:
Drama and music performance, community meetings, fitness classes.

SPECIAL FEATURES:
movable seating, lighting truss, high ceiling adjustable lighting, AV Controls at ground level (no catwalks/booths)

ADJACENCIES/RELATIONSHIPS:
Adjacent to back-of-house/storage
Proximity to lobby or major circulation space

FINISHES/STORAGE:
Hard floor and walls, acoustic panels, exposed ceiling
1-2 walls of mirrors
No storage in the space; storage in an adjacent room

EQUIPMENT:
-lighting/pipe grid
AV system: speakers, projector, screen, etc.
Curtains to cover mirror walls when not in use
Projector screen and projector
Retractable partition to subdivide room

- FIXED

- MOBILE:
Theatrical lighting and sound equipment
Tables and chairs
Movable platform, +/- 18” tall
Community Room

**NET SF**: 220

**NOTES**: Flexible conference/meeting room that can be reserved by community groups for meetings or events

No storage required.

**OCCUPANTS**: 15 (conference style); 20 (just chairs)

**HOURS OF OPERATION**: Primarily evenings

**FUNCTION**: AA meetings, new moms groups, support groups, etc.

Staff meetings

**SPECIAL FEATURES**: Glazed interior windows and/or sidelites for visibility (frosted?)

**ADJACENCIES/RELATIONSHIPS**: Ideally it will be possible to reach the space without accessing other parts of the community center

**FINISHES/STORAGE**: Resilient floor, acoustic ceiling

AV credenza/cabinet in room

**EQUIPMENT**: AV equipment: plug-and-play monitor, telephone

Whiteboard / markerboard

**Tables and chairs**

---

**Floor Plan Diagram**

scale 1/8" = 1'-0"
6-8 Year Old Room

NET SF 1,020 each; 2 shown with retractable partition

NOTES Preference is for each age group to have their own designated rooms, and not share with the 9-12, teens, etc. While BCYF child care programs are not typically state-licensed, the rooms shown here follow the spatial and class size requirements for licensure in order to preserve future flexibility for BCYF.
Storage needs include books, games, toys, and craft supplies.

OCCUPANTS up to 26 students & 2 teachers (13:1 student-teacher ratio)

HOURS OF OPERATION day (afternoon during the school year; all day during summer camps)

FUNCTION after school programs, summer camp, educational & recreational

SPECIAL FEATURES Room must be dedicated to this use (cannot be shared by adult programs at other times of day)

ADJACENCIES/RELATIONSHIPS Proximity to arts & crafts room, music room, gym, kitchen, restrooms

FINISHES/STORAGE resilient floor, acoustic ceiling
storage closets and open storage

tackboards or marker boards

EQUIPMENT: FIXED storage cubbies

EQUIPMENT: MOVABLE tables & chairs, book cases, soft furniture

Floor Plan Diagram (2 rooms shown) scale: 1/8" = 1'-0"
9-12 Year Old Room

NET SF: 1,020 each; 2 shown with retractable partition

NOTES: Preference is for each age group to have their own designated rooms, and not share with the 6-8, teens, etc. While BCYF child care programs are not typically state-licensed, the rooms shown here follow the spatial and class size requirements for licensure in order to preserve future flexibility for BCYF. Storage needs include books, games, toys, and craft supplies.

OCCUPANTS: up to 26 students & 2 teachers (13:1 student-teacher ratio)

HOURS OF OPERATION: day (afternoon during the school year; all day during summer camps)

FUNCTION: after school programs, summer camp, educational & recreational

SPECIAL FEATURES: Room must be dedicated to this use (cannot be shared by adult programs at other times of day)

ADJACENCIES/RELATIONSHIPS: Proximity to arts & crafts room, music room, gym, kitchen, restrooms

FINISHES/STORAGE: resilient floor, acoustic ceiling, storage closets and open storage, tackboards or marker boards

EQUIPMENT: storage cubbies

...FIXED: tables & chairs, book cases, soft furniture
<table>
<thead>
<tr>
<th>SPACE</th>
<th>Toddler/Parent Program Room</th>
<th>NOT INCLUDED IN ALL PROGRAM OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NET SF</td>
<td>970, plus adjacent carriage room, storage, and bathroom</td>
<td></td>
</tr>
<tr>
<td>NOTES</td>
<td>There is currently no toddler/preschool room at the Nazzaro Center. This room is envisioned as a cozy and age-appropriate space for parent-child programming during the day. It is not intended for use as a daycare classroom. Storage needs include books, games, and toys. Stroller storage in a separate room.</td>
<td></td>
</tr>
<tr>
<td>OCCUPANTS</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>HOURS OF OPERATION</td>
<td>day</td>
<td></td>
</tr>
<tr>
<td>FUNCTION</td>
<td>toddler programming with parent supervision</td>
<td></td>
</tr>
<tr>
<td>SPECIAL FEATURES</td>
<td>May be combined with studio fitness or one of the school-age classrooms, assuming storage needs are met</td>
<td></td>
</tr>
<tr>
<td>ADJACENCIES/RELATIONSHIPS</td>
<td>Adjacent to toddler-specific restroom facilities</td>
<td>Adjacent to carriage storage room</td>
</tr>
<tr>
<td></td>
<td>Proximity to gym and to outdoor play space</td>
<td></td>
</tr>
<tr>
<td>FINISHES/STORAGE</td>
<td>resilient floor, carpeted area, acoustic ceiling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>storage closets and open storage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>tackboards or marker boards</td>
<td></td>
</tr>
<tr>
<td>EQUIPMENT:</td>
<td>storage cubbies</td>
<td></td>
</tr>
<tr>
<td>... FIXED</td>
<td>sink and counter in bathroom for diapering</td>
<td></td>
</tr>
<tr>
<td>... MOVABLE</td>
<td>tables &amp; chairs, book cases, rug, soft furniture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Refrigerator</td>
<td></td>
</tr>
</tbody>
</table>

**Floor Plan Diagram**

scale: 1/8" = 1'-0"
<table>
<thead>
<tr>
<th>SPACE</th>
<th>Teen Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>NET SF</td>
<td>920</td>
</tr>
<tr>
<td>NOTES</td>
<td>Space for programmed and drop-in activities dedicated to teens</td>
</tr>
<tr>
<td></td>
<td>Storage needs include books, video games, and craft supplies.</td>
</tr>
<tr>
<td>OCCUPANTS</td>
<td>25</td>
</tr>
<tr>
<td>HOURS OF</td>
<td>After school, evening</td>
</tr>
<tr>
<td>OPERATION</td>
<td>After school programs, place for lounging, socializing, studying/homework</td>
</tr>
<tr>
<td>FUNCTION</td>
<td>(designated quiet space for homework is required)</td>
</tr>
<tr>
<td>SPECIAL</td>
<td>Should feel like a living room and give the opportunity for teens to</td>
</tr>
<tr>
<td>FEATURES</td>
<td>make it their own and rearrange</td>
</tr>
<tr>
<td>ADJACENCIES/R</td>
<td>Proximity to arts &amp; crafts room, music room, gym</td>
</tr>
<tr>
<td>ELATIONSHIPS</td>
<td></td>
</tr>
<tr>
<td>FINISHES/STORAGE</td>
<td>resilient floor, acoustic ceiling</td>
</tr>
<tr>
<td></td>
<td>storage closets and open storage</td>
</tr>
<tr>
<td></td>
<td>tackboards or marker boards; chalkboard wall</td>
</tr>
<tr>
<td>EQUIPMENT:</td>
<td>storage cubbies</td>
</tr>
<tr>
<td>FIXED</td>
<td>tables &amp; chairs, book cases, soft furniture</td>
</tr>
<tr>
<td>MOVABLE</td>
<td>Monitor/TV screen for movies, games</td>
</tr>
</tbody>
</table>

Floor Plan Diagram
scale 1/8" = 1'-0"
### Computer Lab

<table>
<thead>
<tr>
<th>SPACE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NET SF</td>
<td>900</td>
</tr>
<tr>
<td>NOTES</td>
<td>Separate room with dedicated computers. Youth using computers for homework can use this space (it's distracting to have the youth computers in the youth room). The space will also be used for educational programs and testing.</td>
</tr>
<tr>
<td>OCCUPANTS</td>
<td>21</td>
</tr>
<tr>
<td>HOURS OF OPERATION</td>
<td>After school, evening</td>
</tr>
<tr>
<td>FUNCTION</td>
<td>Instruction, testing, individual use</td>
</tr>
<tr>
<td>SPECIAL FEATURES</td>
<td></td>
</tr>
<tr>
<td>ADJACENCIES/RELATIONSHIPS</td>
<td>Proximity to youth classrooms</td>
</tr>
<tr>
<td>FINISHES/STORAGE</td>
<td>resilient floor, acoustic ceiling marker board</td>
</tr>
<tr>
<td>EQUIPMENT: FIXED</td>
<td>floor power or raceways; data connections storage cubbies/shelving</td>
</tr>
<tr>
<td>EQUIPMENT: MOVABLE</td>
<td>tables with power/data management task chairs instructor station printer</td>
</tr>
</tbody>
</table>
Gymnasium

NET SF: 7,280 plus seating area (optional)

NOTES:
Given the heavy utilization of the basketball courts (for games, youth programs, and gym class to local schools), it may be preferable to have 2 courts. Desire for flexible bleacher seating for spectators. Potential for this large space with seating to be utilized for other large community events/gatherings that cannot fit in the multipurpose room. Recreational/high school regulation size. (current court is too small and lacks overrun area)

OCCUPANTS: 146 when used for exercise, plus up to 224 spectators; up to 1,040 for assembly use. Assembly use at this density will require additional egress capacity and will significantly affect the overall floor plans and test fits.

HOURS OF OPERATION: Day and evening

FUNCTION: Play, educational (school gym class), fitness/exercise Assembly uses

SPECIAL FEATURES:
- Court should be suitable for MIAA (Massachusetts Interscholastic Athletic Association) tournament play. While MIAA does not specify dimensions, high school games are typically played on a 84' x 50' court, which is assumed here.
- Clear ceiling height minimum 20', max 25'
- Adequate egress for potential assembly use (for programming flexibility)

ADJACENCIES/RELATIONSHIPS:
- Proximity to restrooms, locker rooms, and storage

FINISHES/STORAGE:
- Hardwood sport floor

EQUIPMENT:
- Six basketball hoops @10' for additional flexibility (adjustable at cross-court locations)
- Volleyball stanchion sleeves in floor
- AV sound system
- Shot clock system and score board
- Divider curtain and track
### Weight and Cardio Fitness Room

<table>
<thead>
<tr>
<th>SPACE</th>
<th>Weight and Cardio Fitness Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>NET SF</td>
<td>2,550</td>
</tr>
<tr>
<td>NOTES</td>
<td>Current weight room is approx. 800 SF. Desire for a much larger space that includes cardio machines. Room should be zoned by activity. Equipment vendors can provide layouts specifically tailored to the types of equipment purchased. The layout shown is to illustrate approximate occupancy only. Storage needs include exercise balls, free weights, mats, etc.</td>
</tr>
<tr>
<td>OCCUPANTS</td>
<td>50 people; approximately 50 pieces of equipment, including free weights</td>
</tr>
<tr>
<td>HOURS OF OPERATION</td>
<td>Day and evening</td>
</tr>
<tr>
<td>FUNCTION</td>
<td>Fitness</td>
</tr>
<tr>
<td>SPECIAL FEATURES</td>
<td>Suspended televisions, stereo/speakers for music Separate HVAC controls</td>
</tr>
<tr>
<td>ADJACENCIES/RELATIONSHIPS</td>
<td>Proximity to restrooms, locker rooms, and storage</td>
</tr>
<tr>
<td>FINISHES/STORAGE</td>
<td>Rubber sport floor Storage in room and adjacent closet Wall-mounted mirrors</td>
</tr>
<tr>
<td>EQUIPMENT: FIXED</td>
<td>AV sound system</td>
</tr>
<tr>
<td>EQUIPMENT: MOVABLE</td>
<td>Exercise equipment and mats Storage racks</td>
</tr>
</tbody>
</table>

**Floor Plan Diagram**  
scale: 1/8" = 1'-0"
SPACE

Weight and Cardio Fitness Room

SPACE

Fitness/Dance/Yoga Studio
<table>
<thead>
<tr>
<th>SPACE</th>
<th>Fitness/Dance/Yoga Studio</th>
</tr>
</thead>
<tbody>
<tr>
<td>NET SF</td>
<td>1,230 (2 rooms shown with removable partition between them)</td>
</tr>
<tr>
<td>NOTES</td>
<td>Current community center does not have a room like this, intended for yoga, Zumba, dance, cardio classes, Pilates, etc.</td>
</tr>
<tr>
<td></td>
<td>Possible overlap with Toddler/Parent Program Room</td>
</tr>
<tr>
<td></td>
<td>Consider 2 identical rooms connected by a removable partition (shown)</td>
</tr>
<tr>
<td></td>
<td>Storage needs include mats, yoga blocks, Pilates accessories, etc.</td>
</tr>
<tr>
<td>OCCUPANTS</td>
<td>20-24</td>
</tr>
<tr>
<td>HOURS OF OPERATION</td>
<td>Day and evening</td>
</tr>
<tr>
<td>FUNCTION</td>
<td>Fitness classes, stretching</td>
</tr>
<tr>
<td>SPECIAL FEATURES</td>
<td>Suspended televisions, stereo/speakers for music</td>
</tr>
<tr>
<td></td>
<td>Separate HVAC controls</td>
</tr>
<tr>
<td>ADJACENCIES/RELATIONSHIPS</td>
<td>Proximity to restrooms, locker rooms, and storage</td>
</tr>
<tr>
<td>FINISHES/STORAGE</td>
<td>Wood sport/dance floor</td>
</tr>
<tr>
<td></td>
<td>At least one wall of mirrors, ideally 2 perpendicular to each other</td>
</tr>
<tr>
<td></td>
<td>Storage in room and adjacent closet</td>
</tr>
<tr>
<td>EQUIPMENT:</td>
<td>AV sound system</td>
</tr>
<tr>
<td>FIXED</td>
<td>Mirrors</td>
</tr>
<tr>
<td>MOBILE</td>
<td>Storage racks</td>
</tr>
</tbody>
</table>
**Restrooms and Locker Rooms**

<table>
<thead>
<tr>
<th>SPACE</th>
<th>Net SF</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>NET SF</td>
<td>Varies (fixture calculations will be based on total building size)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NOTES</th>
<th>Size and requirements will be determined by plumbing code calculation. Restrooms should be distributed throughout the building. Family changing rooms are intended for several people to use at once (e.g. parent and children, disabled adult and caregiver). If pool is incorporated into the building, then locker rooms will need to replace existing pool bathhouse.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>OCCUPANTS</th>
<th>Varies</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>HOURS OF OPERATION</th>
<th>Day and evening</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>Restrooms, showering, changing</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>SPECIAL FEATURES</th>
<th>1/2-height and smaller lockers</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>SPECIAL FEATURES</th>
<th>Special ventilation requirements</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>SPECIAL FEATURES</th>
<th>Meet all ADA clearance and fixture count requirements</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>ADJACENCIES/RELATIONSHIPS</th>
<th>Proximity to sports and pool spaces</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>FINISHES/STORAGE</th>
<th>Tile walls, non-slip tile or epoxy flooring, moisture-resistant hard ceiling</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>FINISHES/STORAGE</th>
<th>No storage</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>EQUIPMENT: FIXED</th>
<th>Toilets, lavatories, showers, changing benches, bathroom accessories</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>EQUIPMENT: MOVABLE</th>
<th>Benches, hooks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPACE</td>
<td>Nursing Room</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>NET SF</td>
<td>64</td>
</tr>
<tr>
<td>NOTES</td>
<td></td>
</tr>
<tr>
<td>OCCUPANTS</td>
<td>2</td>
</tr>
<tr>
<td>HOURS OF OPERATION</td>
<td>Day and evening</td>
</tr>
<tr>
<td>FUNCTION</td>
<td>Nursing, pumping</td>
</tr>
<tr>
<td>SPECIAL FEATURES</td>
<td>Lockable, with “occupied” sign</td>
</tr>
<tr>
<td>ADJACENCIES/RELATIONSHIPS</td>
<td></td>
</tr>
<tr>
<td>FINISHES/STORAGE</td>
<td>Carpet, drywall</td>
</tr>
<tr>
<td>STORAGE</td>
<td>No storage</td>
</tr>
<tr>
<td>EQUIPMENT:</td>
<td></td>
</tr>
<tr>
<td>...FIXED</td>
<td>Sink, hand dryer</td>
</tr>
<tr>
<td>...MOVABLE</td>
<td>Seating, table</td>
</tr>
</tbody>
</table>

Floor Plan Diagram
scale: $\frac{1}{8'} = 1'-0''$
Lobby, Vestibule, Vending, and Reception Desk
Optional - Coat Room

NET SF
600, 80, 37, and 96 sf, respectively
Coat room - 80 sf

NOTES
Visible, inviting, welcoming. Sight lines and location for supervision/control are important. Adequately sized for large public events.
Reception desk is staffed whenever the center is open. Neighborhood may use the lobby as a place to rest and get out of the heat/cold.
Coat room should be nearby.

OCCUPANTS
up to 120 in lobby

HOURS OF OPERATION
Day and evening

FUNCTION
Greeting visitors, gathering before/after events

SPECIAL FEATURES

ADJACENCIES/RELATIONSHIPS
At front entrance.
Adjacent to coat closet.

FINISHES/STORAGE
Hard, durable flooring and surfaces.
Recessed, removable walk-off mat in vestibule

EQUIPMENT:
FIXED
Reception desk (accommodates one staff member; both seated and standing transaction positions outside of desk)
Chairs, benches

MOVABLE
Vending machines
<table>
<thead>
<tr>
<th>SPACE</th>
<th>Staff Office - Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>NET SF</td>
<td>125</td>
</tr>
<tr>
<td>NOTES</td>
<td>Single-user office with space for visitors, desk, computer, and storage furniture</td>
</tr>
</tbody>
</table>

| OCCUPANTS | 2 |
| HOURS OF OPERATION | Day and evening |
| FUNCTION | Staff offices |
| SPECIAL FEATURES | Glazed interior windows and/or sidelites for visibility |

| ADJACENCIES/RELATIONSHIPS | Proximity to storage closet |
| FINISHES/STORAGE | Resilient floor, acoustic ceiling |
| Storage in separate closet |

### Equipment:

**FIXED**
- Desk, task chair, guest chairs, shelving, file cabinets

**MOVABLE**
- Staff Office - Individual
**Staff Office - Group**

- **NET SF**: 300
- **NOTES**: Group office with space for visitors, desks, computers, and storage furniture
- **OCCUPANTS**: up to 8
- **HOURS OF OPERATION**: Day
- **FUNCTION**: Staff office space for staff whose primary job is outside the office; a place to meet and to check e-mail and do occasional computer work
- **SPECIAL FEATURES**: Glazed interior windows and/or sidelites for visibility
- **ADJACENCIES/RELATIONSHIPS**: Proximity to storage closet
- **FINISHES/STORAGE**: Resilient floor, acoustic ceiling
- **EQUIPMENT**: Desks with power/data management, task chairs, guest chairs, shelving
Janitor's Closet

NET SF: 40 each (2 recommended minimum)

NOTES

OCCUPANTS

HOURS OF OPERATION

FUNCTION

SPECIAL FEATURES

ADJACENCIES/RELATIONSHIPS

FINISHES/STORAGE: Tile/FRP
Mop and supply storage racks

EQUIPMENT:
- FIXED: mop sink
- MOVABLE: shelving

Floor Plan Diagram
scale: 1/8" = 1'-0"
<table>
<thead>
<tr>
<th>SPACE</th>
<th>Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>NET SF</td>
<td>100 sf per room; 1-2 rooms provided</td>
</tr>
<tr>
<td>NOTES</td>
<td>Total above does not include closets within individual spaces such as classrooms.</td>
</tr>
</tbody>
</table>

| OCCUPANTS | 1 |
| HOURS OF OPERATION | |
| FUNCTION | |

| SPECIAL FEATURES | |

| ADJACENCIES/RELATIONSHIPS | |
| FINISHES/STORAGE | Resilient flooring |
| EQUIPMENT: | Shelving |
| _FIXED_ | |
| _MOVABLE_ | |
### Elevator

**NET SF**
100

**NOTES**
Area includes machine room
Elevator size to accommodate stretcher. (min 3500 lb capacity)

**OCCUPANTS**
10

**HOURS OF OPERATION**

**FUNCTION**

**SPECIAL FEATURES**

**ADJACENCIES/RELATIONSHIPS**

**FINISHES/STORAGE**

**EQUIPMENT:**

- **FIXED**
- **MOVABLE**

---

**Floor Plan Diagram**

Scale: 1/8" = 1'-0"
Splash Pad

NOT INCLUDED IN ALL PROGRAM OPTIONS

NET SF: 6,000

NOTES: If required, replacement of existing splash pad

OCCUPANTS: 400

HOURS OF OPERATION: Day / Summer

FUNCTION: Recreation, Play

SPECIAL FEATURES:

ADJACENCIES/RELATIONSHIPS: Adjacent to other exterior pools and near locker rooms

Ability to access this space without entering the pool area proper

FINISHES/STORAGE: Bonded rubbersurfacing

EQUIPMENT:

 FIXED: Fountains and play equipment

ASSume non-recirculating

 MOBILE

Floor Plan Diagram
scale: 1/16" = 1'-0"
**Mechanical Room**

**NET SF**
1200 SF

**NOTES**
Currently a rooftop unit + basement
Estimated size includes assumption of gas boiler, air handler, main electrical room, main tel/data closet, fire protection service entrance. Room may be subdivided. It is assumed that a fire pump is not required.

Does not include distributed electrical and tel/data spaces listed elsewhere.

BAS management does not occur locally; no workstation required.

**OCCUPANTS**
4

**HOURS OF OPERATION**
continuous

**FUNCTION**
mechanical space

**SPECIAL FEATURES**

**ADJACENCIES/RELATIONSHIPS**

**FINISHES/STORAGE**
sealed concrete floor

**EQUIPMENT:**
mechanical, electrical, plumbing, and fire protection equipment

---

**Floor Plan Diagram**

scale: $\frac{1}{8}'' = 1'-0''$
<table>
<thead>
<tr>
<th>SPACE</th>
<th>Tel/Data &amp; Electrical Closet</th>
</tr>
</thead>
<tbody>
<tr>
<td>NET SF</td>
<td>80 SF each (4 recommended min)</td>
</tr>
<tr>
<td>NOTES</td>
<td></td>
</tr>
</tbody>
</table>

| OCCUPANTS | 1 |
| HOURS OF OPERATION | |
| FUNCTION | |
| SPECIAL FEATURES | |

| ADJACENCIES/RELATIONSHIPS | |
| FINISHES/STORAGE | |
| EQUIPMENT:            | |
| ..FIXED              | |
| ..MOVABLE            | |

Floor Plan Diagram
scale: 1/8" = 1' - 0"
Trash/Recycling Room and Service Entrance

NET SF: 100

NOTES: “Toters” are currently used for trash and recycling (curbside pickup). 64-gallon size is assumed here.

Boston has single-stream recycling and trash pickup. Composting is currently practiced at the pool concession stand; will not be relevant if replaced by vending.

Easy access should be provided for loading and unloading deliveries and trash from this space into the building's main circulation area and vice versa.

OCCUPANTS: 1

HOURS OF OPERATION: Day

FUNCTION: Deliveries, trash and recycling sorting and storage

SPECIAL FEATURES: Double doors

ADJACENCIES/RELATIONSHIPS: Proximity to elevator, driveway

FINISHES/STORAGE: Resilient floor, rubber base

Storage shelving etc. should not be included, to discourage storage in this space.

EQUIPMENT:
- FIXED: Trash receptacles
- MOVABLE: Trash receptacles
SPACE

Outdoor Maintenance Equipment Storage

NET SF
100

NOTES
Lockable space accessed from the outdoors. Interior access not required.

OCCUPANTS
0

HOURS OF OPERATION
Day

FUNCTION
Storage for landscaping equipment, snow blowers, and outdoor equipment and supplies.

SPECIAL FEATURES
Double doors; 2-hour rated partitions (including ceiling) if gasoline-powered equipment is to be stored in the space

ADJACENCIES/RELATIONSHIPS
Adjacent to outdoor space

FINISHES/STORAGE
Sealed concrete floor
Storage shelving and racks

EQUIPMENT:
...FIXED
...MOVABLE
Outdoor Long Pool  

**NOT INCLUDED IN ALL PROGRAM OPTIONS**

**SPACE**

**Net SF** 6250

**NOTES**

Shown is the existing long pool footprint at the Mirabella site with the approximate deck area associated.

**OCCUPANTS** 125

**HOURS OF OPERATION** Day [Seasonal - mid-June through Labor Day]

**FUNCTION** Recreational

**SPECIAL FEATURES**

**ADJACENCIES/RELATIONSHIPS** Adjacent to other pools, locker rooms

**FINISHES/STORAGE** Concrete and tile

**EQUIPMENT:**

- **FIXED** Pool equipment
- **MOVABLE**

---

**Floor Plan Diagram**

Scale: 1/32" = 1'-0"
<table>
<thead>
<tr>
<th>SPACE</th>
<th>Pool MEP/Garage</th>
<th><strong>NOT INCLUDED IN ALL PROGRAM OPTIONS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>NET SF</td>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>NOTES</td>
<td>Support space for pool, including pumps, chemicals, filters, etc.</td>
<td></td>
</tr>
</tbody>
</table>

**OCCUPANTS**: 4

**HOURS OF OPERATION**: Day

**FUNCTION**: vehicular access with loading bay and double doors. Size of doors to be confirmed against pool equipment.

**ADJACENCIES/RELATIONSHIPS**: adjacencies to pools, exterior space

**FINISHES/STORAGE**: 

**EQUIPMENT**:  

- FIXED

- MOVABLE
<table>
<thead>
<tr>
<th>SPACE</th>
<th>Parks and Recreation Department Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>NET SF</td>
<td>320</td>
</tr>
<tr>
<td>NOTES</td>
<td>Only required at Mirabella site.</td>
</tr>
<tr>
<td>OCCUPANTS</td>
<td>0</td>
</tr>
<tr>
<td>HOURS OF OPERATION</td>
<td>Independent exterior access is required as the fields have different hours of operation than the community center.</td>
</tr>
<tr>
<td>FUNCTION</td>
<td>Support space and equipment storage for athletic programming at the existing Langone facility.</td>
</tr>
<tr>
<td>SPECIAL FEATURES</td>
<td>Separate access Based on an existing 20'x8' storage container @qty: 2 Double doors; 2-hour rated partitions (including ceiling) if gasoline-powered equipment is to be stored in the space</td>
</tr>
<tr>
<td>ADJACENCIES/RELATIONSHIPS</td>
<td>Exterior space</td>
</tr>
<tr>
<td>FINISHES/STORAGE</td>
<td>Sealed concrete floor Storage shelving and racks</td>
</tr>
<tr>
<td>EQUIPMENT:</td>
<td>...FIXED ...MOVABLE</td>
</tr>
</tbody>
</table>

Floor Plan Diagram
scale: 1/16" = 1'-0"
<table>
<thead>
<tr>
<th>SPACES</th>
<th>Staff Meeting Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>NET SF</td>
<td>220</td>
</tr>
<tr>
<td>NOTES</td>
<td>Replacement of existing space</td>
</tr>
<tr>
<td></td>
<td>Suggested overlap with community room</td>
</tr>
<tr>
<td>OCCUPANTS</td>
<td>15</td>
</tr>
<tr>
<td>HOURS OF OPERATION</td>
<td>Day</td>
</tr>
<tr>
<td>FUNCTION</td>
<td>Support Space</td>
</tr>
<tr>
<td>SPECIAL FEATURES</td>
<td>Glazed interior windows and/or sidelites for visibility</td>
</tr>
</tbody>
</table>

**ADJACENCIES/RELATIONSHIPS**

**FINISHES/STORAGE**

**EQUIPMENT:**
- FIXED
- MOVABLE tables and chairs

---

**Floor Plan Diagram**

Scale: 1/16" = 1'-0"
3.4 Program Recommendations

“RIGHT-SIZED” EXISTING
33,000 GSF

This diagram represents the major recommended program spaces organized by zone and recommended adjacency. Minor spaces (closets, etc.) have been simplified. This program forms the basis for the initial test fits of various sites on the following pages.
3.4 Program Recommendations

MINIMUM RECOMMENDED SIZE
41,000 GSF

This diagram represents the major recommended program spaces organized by zone and recommended adjacency. Minor spaces (closets, etc.) have been simplified. This program forms the basis for the initial test fits of various sites on the following pages.
3.4 Program Recommendations

**IDEAL SIZE**

50,000 GSF

This diagram represents the major recommended program spaces organized by zone and recommended adjacency. Minor spaces (closets, etc.) have been simplified. This program forms the basis for the initial test fits of various sites on the following pages.
Section 4

Site Selection
4.1 Sites Considered

0 Existing Nazzaro Center Site
Conclusion: Siting option finalist but not the final recommended site.

1 Mirabella Site
Conclusion: Final recommended option for new community center.

2 Fulton Street Site
Conclusion: Not recommended for community center program.

3 Cooper Street Site
Conclusion: Not recommended for community center program. This site is privately owned.

4 DeFilippo Playground Site
Conclusion: Not recommended for community center program.

5 Sargent’s Wharf Site
Conclusion: Siting option finalist for new community center and mixed-use development but not the final recommended site.
4.2 Sites In Detail

0 NAZZARO CENTER SITE

For the purposes of the siting study, the adjacent Polcari Playground, which is operated by the Boston Parks and Recreation Department, is considered part of the Nazzaro Center site. Land from the playground would need to be used to expand existing community center to accommodate a full size basketball court.

The Nazzaro Center site consists of two parcels—the existing building and Polcari Playground—owned by the City of Boston. The mid-block site is bounded by North Bennett and Prince Streets.

The playground is zoned Open Space, while the existing building is zoned North End Multifamily Residential. Adjacent zones have FAR of 3.0, and height of 55 feet. The Polcari Playground portion of the site is subject to Article 97 of the Massachusetts State Constitution governing parkland.

Three options were considered including two renovation options and one replacement option. Although the Nazzaro Center site was one of the options selected for pricing, none of the layouts associated with this site can provide close to the amount of program area required by BCYF. For that reason this site was not recommended as the preferred site by the Study Team.

See next pages for detail.
NAZZARO CENTER SITE

Site area (Nazzaro parcel): 7,658 sf
Site area (Polcari parcel): 12,191 sf

Advantages:
Centrally located in neighborhood
Building has historic character
Contiguous with playground

Site is not located in the FEMA flood hazard area (FHA) nor in the BPDA Sea-Level Rise Flood Hazard Area (SLR-FHA).

Disadvantages:
Playground portion of site is part of a park; subject to Article 97 requirements, meaning that any expansion to the east will require legislative approval. Nazzaro site and building are too small to fit a recreational basketball court.

Expansion into the playground would cut off mid-block access between North Bennett and Prince Streets, and reduce the already limited amount of open space in one of the densest parts of the neighborhood.
NAZZARO CENTER SITE OPTION 1: RENOVATE EXISTING BUILDING

Renovate second floor, reconfigure gym level to use space more efficiently

Proposed building area: Approximately 20,500 sf renovated

Advantages:
- Retain use and character of existing building without significant changes to the exterior
- More space for fitness
- Small additional space for youth or music

Disadvantages:
- Basketball court remains too small;
- New teen room is no larger than existing
- Only one additional program space added to building; no computer lab, assembly space, studio fitness, etc.
- Not as much classroom space provided vs. what is recommended
- Office space, locker room space reduced
NAZZARO CENTER SITE OPTION 2: EXPAND BUILDING VERTICALLY

Replace roof, extend cores, and add a fourth story to accommodate additional youth program space; reconfigure second floor for efficiency

Proposed building area: Approximately 20,500 sf renovated and 5,000 sf new

Advantages:
Retain use of existing building; retain existing façades

Disadvantages:
Basketball court remains too small; New teen room is no larger than existing Multipurpose assembly space not provided Cost of renovation may not be commensurate with space gained Feasibility depends on existing building’s structural capacity

Recommended educational spaces are provided

Revised at: 2019-02-22
NAZZARO CENTER SITE OPTION 3: EXPAND BUILDING INTO PARK

Extend footprint of building into the Polcari Playground parcel to increase its size. In order to provide a right-sized gym, this is a replacement of the existing building, not a renovation.

Proposed Community Center building

GSF: 35,145 sf over 4 stories
Proposed Community Center building

NSF: 24,566 sf (~70% efficiency)

Advantages:
Retain use of existing site
Recommended civic, educational and arts spaces are provided; right-sized gym and fitness facilities provided

Disadvantages:
Existing building and facade are destroyed
Proximity to other buildings means that openings and daylighting may be limited
Not enough space for reservable community room, second studio fitness room
No outdoor space; parking/loading reduced
The Mirabella site consists of two parcels owned by the City of Boston. The site is bounded by Boston Harbor to the north and Commercial Street to the south. To the west are the playgrounds of Langone Park, and to the east is the US Coast Guard base. The site is currently inhabited by athletic courts and fields, as well as the Mirabella pools and poolhouse. The site interrupts the Harborwalk, which picks up again at Battery Wharf.

The site is in the North End Playground Recreational Open Space subdistrict, in which public use on publicly-owned land is not subject to zoning. Adjacent zones have FAR of 3.0, and height of 55 feet. The site is subject to Chapter 91, in which a community center will be allowed as it qualifies as a facility of public accommodation. The site may also be governed by Article 97 of the Mass State Constitution governing parkland.

The test fit proposes using the sliver of land occupied by splash pad, existing Mirabella Pool bathhouse, and part of the Harborwalk for a long, narrow community center building. Replace splash pad and Harborwalk segment as part of the project. This site suggests an optional reconstruction/replacement of the Mirabella Pool but is not dependent on it.

Due to the advantages listed below, the Study team recommends the Mirabella site as the preferred site.
1  MIRABELLA SITE

**Site area:** 291,500 sf (combined parcels, including water)

**Site area** (portion identified for community center): 25,000 sf

**Proposed Community Center GSF:** 54,375 sf

**Proposed Community Center NSF:** 36,283 sf (~67% efficiency)

**Proposed Height:** 55’ / 4 stories + roof-level enclosure

**Advantages:**
Contiguous with Langone and Puopolo Parks, MDC rink, new BPS school and related programs
Synergies with current redesign of park
Prominent waterfront site with great views
Community enthusiasm for site
Vehicular and pedestrian accessibility
Meets recommended program
Proximity to Mirabella Pool; ability to shared locker room space and lockable storage space for the park

**Disadvantages:**
Park site is subject to Article 97 requirements (building requires legislative approval)
Demolition of existing bath house required
In flood hazard area and FEMA flood plain

See next pages for site-specific processes
1  MIRABELLA SITE
Site-Specific Processes

**Article 37**
LEED checklist; minimum LEED Silver
Timeline: design phase

**Article 97: Building in Park**
Requires State Legislature approval
Note: Article 97 was intended to be a legislative ‘check’ to ensure that lands acquired for conservation purposes were not converted to other inconsistent uses. In this case, the Parks Department is in favor of the programmatic synergies of this project, which will support the Article 97 approval process.
Timeline: TBD

**Article 80 and MEPA review**
Large Project review
Interagency Green Building Committee
Timeline: 6-9 months

**FEMA and BPDA Flood Hazard Areas (FHAs)**
Requirement that critical infrastructure and facilities min. 24” above Base Flood Elevation; all other elements min 12” above
Timeline: design phase

**Waterfront Development**
Ch. 91 requires facilities of public accommodation in a waterfront development. Ch. 91 requirements include a 100’ shoreline setback and review by the Conservation Commission.
Timeline: design phase

The Boston 2030 Plan calls for three major criteria in future waterfront development:
- **A Waterfront for All Bostonians** calls for prioritizing signature parks and a network of connected open spaces along the water, with a diverse set of experiences and connections back to the neighborhoods. The program synergy of the community center with the park on this site supports this goal.
- **A Climate-Resilient Waterfront** will anticipate the effects of climate change including extreme precipitation, extreme high tide and stormwater retention. The design of a building on this site must respond to these issues and must be flood resilient. Flood resilience is the use of products and practices that are aimed at making the building resilient to the effects of floodwater that has entered the building.
- **A Waterfront with Strong Stewardship** relates to the entitlement process for waterfront projects. The support of multiple agencies for this site suggest that it could be a model for thoughtful waterfront development. The BPDA sees this project as an opportunity for the city to implement an example of building excellence on the waterfront.
Timeline: planning and design phases
1 MIRABELLA SITE
Site-Specific Processes cont’d

Program located at the flood elevation will need to be designed to flood regularly with minimal long-term impact to the building.
1 MIRABELLA SITE

As of summer 2018, Boston Parks & Recreation was in the process of developing a plan to renovate and enhance the park adjacent to the Mirabella site. With minor changes, this plan complements the proposed community center on this site.
1 MIRABELLA SITE

The study recommends that further coordination with the Park design take place to extend the continuity of the Harborwalk. The community center building bookends the recreational and community uses of the overall waterfront park.
1 MIRABELLA SITE
Landscape Vision

Although further coordination is needed with the new field at the renovated Langone Park, the vision is to connect the Harborwalk and provide room for a front door and front porch for the community center. Fourteen feet of grade change between the main entry level of the community center, and the locker rooms at the lower level are handled gracefully with ramps, landscaped slopes, and graphic wall. An overlook at the main entry provides generous views over the park and the harbor.

FOR FURTHER COORDINATION
Final location and grading of field
Location of Harborwalk connection
Location of baseball dugout
Puopolo Family memorial sign
Sports netting and lighting in relation to building
Location of and access to batting cages
Size and scope of splash pad
Existing pool, pool deck, and perimeter fence
Geotechnical and subsurface conditions
Final design flood elevation
Configuration of street drop-off and pedestrian crossing
1 MIRABELLA SITE
Building Section & Level 1 Plan
1 MIRABELLA SITE
Levels 2, 3 & Roof Plan
1 MIRABELLA SITE
Program Stacking Diagrams

LEVEL 4

LEVEL 3

LEVEL 2

LEVEL 1

LEVEL 0

ARTS
CIVIC/COMMUNITY
EDUCATION
SUPPORT, OFFICES, ETC.
SPORTS
PUBLIC CIRCULATION
1 MIRABELLA SITE
Shadow Studies

Existing
The shadow study shows that the existing coast guard building impacts sun exposure in the Winter Season from 9 am - 12 pm.

Proposed
The proposed building shadows are not significantly increased during most of the time throughout the year. The swimming pool area is still fully exposed to the sun anytime of the year after 12 pm.
The Fulton Street site (currently known as the Cross Street Parking Lot) consists of two parcels owned by the City of Boston. The site is bounded by the hospital to the north, Fulton Street to the East, Cross Street to the south, and the Callahan Tunnel easement to the west.

The majority of the site is located in the North End Multi-Family Residential zoning district, with a height limit of 55’ and an F.A.R. of 3. The southern portion of the site (spanning both parcels) lies in the Central Artery District and has a height limit of 55’ and an F.A.R. of 4.

This site will need to retain revenue-generating potential and is recommended for mixed-use development. See Section 4.3 for more information.

Although the Fulton Street site does have some advantages, it has significant drawbacks as well. After careful analysis and comparison to the other sites it was not chosen as the preferred site by the study team.
2 FULTON STREET SITE

Site area: 34,000 sf  
North portion at F.A.R. = 3: 18,000 sf  
South portion at F.A.R. = 4: 16,000 sf

Advantages:  
Mixed-Use potential for public-private development  
Vehicular and pedestrian accessibility  
Relatively flat site  
Proximity to Greenway open space

Disadvantages:  
Not centrally located to North End neighborhood; separated by tunnel entrance from parts of the neighborhood  
Open space would be shaded by the building  
Mixed-use options come with architectural constraints  
Located in BPDA SLR-FHA (although not in FEMA FHA)  
Surrounded by high volume of vehicular traffic on Cross Street, JFK Expressway and the entrance to the Callahan Tunnel.
2 Fulton Street Site

The team has identified three approaches. Options 1 and 3 are developed in more detail on the next spread:

**Option 1: Split by F.A.R.**
Proposed Community Center building area: 54,000 sf over 4 stories
Proposed Public-Private Development building area: 64,000 sf

**Option 2: East-West** (Not recommended)
Proposed Community Center building area: up to 65,000 sf over 4 stories
Proposed Public-Private Development building area: 51,600 sf

**Option 3: Mixed-use**
Proposed Mixed-Use Building Area: up to 118,000 sf over 5 stories; single-story gym is proposed in the center; 1-2 story community center podium with residential above.
2  Fulton Street Site:  
Program Test Fit Option 1

Note: additional height is desirable for program. Recommend exceeding 55' height limit.
**North End Community Center Study**

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Level 5</td>
<td>910'</td>
</tr>
<tr>
<td>Level 4</td>
<td>810'</td>
</tr>
<tr>
<td>Level 3</td>
<td>810'</td>
</tr>
<tr>
<td>Level 2</td>
<td>810'</td>
</tr>
<tr>
<td>Level 1</td>
<td>815'</td>
</tr>
<tr>
<td>Basement</td>
<td>Mechanical Space</td>
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</tbody>
</table>

**Concept Section**

- **Level 1**
  - Arts
  - Civic/Community
  - Education
  - Support, Offices, ETC.
  - Public Circulation

- **Level 2**
  - Residential Floor
  - Breakout
  - Gym
  - Garden, Playground, Open Space on Roof of Gym

- **Level 3**
  - Breakout
  - Storage, Restrooms, Support

- **Level 4**
  - Breakout
  - Storage, Restrooms, Support

- **Level 5**
  - Residential Floors Above

**Scale:** 1/32" = 1'-0"
3  COOPER STREET SITE

The Cooper Street site is a privately-owned parking lot located in the North End Multi-Family Residential zoning district, with a height limit of 55’ and an F.A.R. of 3.

In order to make the city purchase of this site viable, the project would likely be developed as a mixed-use public-private partnership. However, with 42,600 sf available in total for development, the site does not appear to be large enough to contain a mixed-use building with a community center and private program. Due to the disadvantages below, this site is not recommended for further study.

Site area: 14,200 sf
Proposed Community Center building area: 42,000 sf over 4 stories

Advantages:
Relatively flat site

Disadvantages:
Privately owned / high acquisition costs.
Insufficient area for mixed-use option
4 DEFILIPPO PLAYGROUND SITE

This city-owned park occupies an area with 30' of grade difference and is bounded to the north by a parking garage. Due to the disadvantages listed below, this site is not recommended for further study.

**Site area:** 48,700 sf  
**Proposed Community Center building area:** 40,000 sf over 3 stories

**Advantages:**  
City-owned land  
Connection to park

**Disadvantages:**  
Topography will require extensive below-grade construction and earth retention  
Building will occupy part of newly renovated park, reducing usable area  
Awkward layout will be difficult to accommodate recommended program
The existing BPDA parking lot at Sargent’s Wharf was suggested by the CAC members as a potential site. The site should retain some income-generating potential for BPDA and is imagined as a mixed-use project including structured parking, private development, a community center, and a reconstructed Harborwalk.

The site is bounded by Commercial Street to the west, the 2 Atlantic Avenue/Pilot House property and Eastern Avenue to the south, and Boston Harbor on the north and east sides. This site is considered for mixed-use development with a 4-story community center adjacent to a hotel or residential building. See Section 4.3 for more information.

The Sargent’s Wharf Site was an option for pricing and its advantages were carefully considered. It as not selected as the recommended site by the study team however.

**Advantages:**
- Prominent waterfront site with great views
- Mixed-use funding opportunity
- Vehicular and pedestrian accessibility

**Disadvantages:**
- Loss of current parking lot
- In flood hazard area
- Across Commercial Street from the neighborhood proper
5  SARGENT’S WHarf SITE

The site is located in the North End Waterfront Subdistrict district, with a height limit of 55’ and an F.A.R. of 2. Setbacks shown at left are determined by the subdistrict and by the Wharf designation of the site.

Note that different height and FAR standards apply for the Sargent’s Wharf site if designated as Urban Renewal Areas. If a certain affordable housing threshold is met, private development on the site is eligible for a significant height increase. The developer’s pro forma would test this option.

The mixed-use analysis by Colliers International recommends that side-by-side development

**Site area:** 98,000 sf; 64,000 sf buildable area

**Proposed Community Center GSF:**
50,496 sf (includes lobby at street level)

**Proposed Community Center NSF:**
35,427 sf (~70% efficiency)

**Proposed development GSF:**
~60,000 sf (assuming 55’ height limit)

**Proposed Height:**
3 stories above podium
5 SARGENT’S WHARF SITE
Site-Specific Processes

- Article 37
  LEED checklist
  Timeline: design phase

- Article 80 and MEPA review
  Large Project review
  Interagency Green Building Committee
  Timeline: 6-9 months

- FEMA and BPDA Flood Hazard Areas (FHAs)
  Critical infrastructure and facilities min. 24” above Base Flood Elevation; all other elements min 12” above
  Timeline: design phase

Waterfront Development
Ch. 91 requires facilities of public accommodation in a waterfront development, as well as a 100’ shoreline setback and review by the Conservation Commission.
Timeline: design phase

See Site 1 for a discussion of the Boston 2030 Plan relative to waterfront development.
SARGENT'S WHARF SITE - PARKING LEVEL

~100 SPACES

LEVEL 0

ENTRY

STAIR & ELEVATOR

DEVELOPMENT LOBBY

ENTRANCE

TOTAL PARCEL AREA = 98,000 SF (INCLUDES WATER)
5 SARGENT’S WHARF SITE - PODIUM LEVEL

- Multi-Purpose Assembly Space
- Building Operations +/- 3000 SF
- Storage, Restrooms, & Support
- Staff Offices
- Stair & Elevator
- KITCHEN
- OPEN TO BELOW
- Stair

HARBORWALK
ELEVATED PLAZA
BUILDABLE SITE AREA FOR MIXED USE = 15,000 SF

TOTAL PARCEL AREA = 98,000 SF (INCLUDES WATER)

LEVEL 1

Scale: 1/32" = 1'-0"
5 SARGENT’S WHARF SITE
Upper-level plans

LEVEL 2

CLASSROOM 1000 SF
CLASSROOM 1000 SF
CLASSROOM 1000 SF
STAIR & ELEVATOR
OPEN TO BELOW
LOCKERS, RESTROOMS, & SUPPORT
STAIR
STAIR

LEVEL 3

CLASSROOM 1000 SF
CLASSROOM 1000 SF
CLASSROOM 1000 SF
STAIR & ELEVATOR
OPEN TO BELOW
STUDIO FITNESS
STUDIO FITNESS
STORAGE, RESTROOMS & SUPPORT
STAIR
CARDDIO WEIGHTS
STAIR

SCALE: 1/32" = 1'-0"
SCALE: 1/32" = 1'-0"

CONCEPT SECTION B
DEVELOPMENT SITE
TYPICAL FLOORS @ 10'
MAY BE POSSIBLE TO INCREASE
HEIGHT UP TO 75'
LEVEL 3 @13'
LEVEL 2 @13'
LEVEL 1 @13'
LEVEL 0 @26'
PARKING @13'

SCALE: 1/32" = 1'-0"

CONCEPT SECTION A
DEVELOPMENT SITE
TYPICAL FLOORS @ 10'
MAY BE POSSIBLE TO INCREASE
HEIGHT UP TO 75'
LEVEL 3 @13'
LEVEL 2 @13'
LEVEL 1 @13'
LEVEL 0 @26'
PARKING @13'

SCALE: 1/32" = 1'-0"

ARTS
CIVIC/COMMUNITY
EDUCATION
SUPPORT, OFFICES, ETC.
PUBLIC CIRCULATION

SCALE: 1/32" = 1'-0"
5 SARGENT’S WHarf SITE

LEVEL 3

LEVEL 1

LEVEL 2

LEVEL 0

- ARTS
- CIVIC/COMMUNITY
- EDUCATION
- SUPPORT, OFFICES, ETC.
- SPORTS
- PUBLIC CIRCULATION
4.3 Housing with Public Assets: Mixed-Use Process

As described in Section 4.2, two of the sites under consideration are controlled by BPDA and were studied along with the Housing Innovation Lab as potential sites for mixed-use, revenue-generating development that could include workforce housing and the community center project.

As part of the site selection process the study team coordinated with The Mayor’s Housing Innovation Lab to identify potential sites and opportunities to develop workforce housing along with a new or renovated community center. This coordination is part of a larger project within the Housing Innovation Lab called Housing With Public Assets which looks at ways to develop housing along with new or renovated municipal facilities and is part of the Mayor’s effort to increase housing opportunities with the City of Boston.

In terms of process, BPDA would typically hold planning and public hearings about disposing of the land, which would inform design guidelines, allowed uses (if different than zoning) and things like affordability and potential for community uses. The BPDA would then draft a RFP. Revenue generation is a consideration and the BPDA would analyze that and weigh it against expected future revenues from the new development to the extent it exceeds any money the city would need for the construction of the new community center.

There are, broadly, two possible approaches to the mixed-use project: “stacked” (private development over community center) and “side by side.” For the stacked scheme, the BPDA would issue the RFP with the requirement that the new development include a community center with requirements and specifications well-defined in the RFP. This would influence the revenue calculations.

For side by side, the BPDA would have to subdivide the parcels in a way that supports the design and test fit. They would then direct-designate the Community Center Parcel and put out a RFP for the development parcel. For both processes: developers would respond, one will be picked. This would take about 6 months.

Once a developer is picked, they would be granted Tentative Designation by the BPDA. It’s likely that option rent payments will be made during this time. During this period (potentially 270 days, but extendable by showing progress), the developer would be expected to design and permit the development. The Ground Lease would also get negotiated during the Tentative Designation. Once the developer is about to receive a building permit, the BPDA will grant Final Designation and execute the Ground Lease for the Parcel.

In the side-by-side scenario, the BPDA would likely transfer the community center parcel outright to the city. The city can then proceed on its pace to build the community center. For logistical reasons as well as maximizing potential revenue from the development site, the study team recommends that if a mixed-use development site were selected as the preferred site, the side-by-side scenario is generally preferable.
Section 5

Concept Narratives + Cost Estimates
5.1 Concept Options for Pricing

**0 NAZZARO CENTER SITE OPT 3**

Extend footprint of existing Nazzaro Center into the Polcari Playground parcel to increase its size. In order to provide a rightsized gym, this option is a replacement of the existing building, not a renovation.

- **Site area (Nazzaro parcel):** 7,658 sf
- **Site area (Polcari parcel):** 12,191 sf
- **Total:** 19,849 sf

- **Proposed Community Center GSF:** 35,145 sf
- **Proposed Community Center NSF:** 24,566 sf (~70% efficiency)
- **Proposed Height:** 55’ / 4 stories + partial basement

**1 MIRABELLA SITE**

Use sliver of land occupied by splash pad, existing Mirabella Pool bathhouse, and part of the Harborwalk for a long, narrow community center building. Replace splash pad and Harborwalk segment as part of the project. This site suggests an optional reconstruction/replacement of the Mirabella Pool but is not dependent on it.

- **Site area:** 291,500 sf (combined parcels, including water)
- **Site area (portion identified for community center):** 25,000 sf

- **Proposed Community Center GSF:** 54,375 sf
- **Proposed Community Center NSF:** 36,283 sf (~67% efficiency)
- **Proposed Height:** 55’ / 4 stories + roof-level enclosure

**5 SARGENT’S WHARF SITE**

Existing BPDA parking lot at Sargent’s Wharf suggested by the CAC as a potential site. Site could ideally retain some income-generating potential for BPDA and is imagined as a mixed-use project including structured parking, private development, a community center, and a reconstructed Harborwalk.

- **Site area:** 98,000 sf; 64,000 sf buildable area
- **Proposed Community Center GSF:** 50,496 sf (includes lobby at street level)
- **Proposed Community Center NSF:** 35,427 sf (~70% efficiency)
- **Proposed development GSF:** ~60,000 sf (assuming 55’ height limit)
- **Proposed Height:** 3 stories above podium

Refer to Section 4.2 for more detailed information about each site and its corresponding test fit. Refer to Sections 5.2 and 5.3 for more detail on systems.
5.2 Systems Narratives

ARCHITECTURAL + SITE NARRATIVE

PROJECT DESCRIPTION
The project consists of a community center containing a basketball gym, classrooms, a multipurpose assembly space, and other program and support spaces as outlined in the program. Depending on the site option, the gross square footage of the project ranges from 45,000 to 55,000 excluding the Option 5 parking podium.

Options for Pricing
- Option 0 – New building on the site of the existing Nazzaro Center
- Option 1 – New building on the site of the existing Mirabella Pool
- Option 5 – New building and parking podium paired with potential private development on the site of the existing Sargent’s Wharf
- Within the MEP and structural narratives, alternates are outlined for comparative pricing. Refer to the preceding test fits for more information.

PROJECT DELIVERY
The delivery method is assumed to be via the public construction alternative delivery methods outlined in Massachusetts General Laws Chapter 149A.

The following items are considered “by owner” and excluded from the construction cost:
- Site procurement, survey, geotechnical services
- Furniture, fixtures, and equipment, including movable athletic equipment
- Movables site furnishings such as seating
- Tel/data equipment outside the wall, e.g. wireless access devices
- Audiovisual equipment outside the wall, e.g. speakers
- Theatrical equipment, e.g. theatrical lighting, movables stage

PROJECT REFERENCES
The list of standards below is provided for reference only. The project will comply with all applicable codes, laws, and standards.
- 780 CMR Ninth Edition of the MA State Building Code based on modified versions of 2015 ICC codes
- 527 CMR 1.00 Massachusetts Comprehensive Fire Safety Code based on the 2015 edition of NFPA 1
- Americans with Disabilities Act 2010 Design Standards
- ASHRAE 90.1-2010
- Article 37 Green Building and Climate Resiliency Guidelines, equivalent to LEED certification under the LEED-NC v4 system (see attached draft LEED checklist for more information)

Refer to the test fits for site-specific requirements pertaining to zoning, proximity to waterfront, flood hazard areas, etc.

A SUBSTRUCTURE

A10 FOUNDATIONS
Refer to structural and geotechnical narratives for each site option.

A20 SUBGRADE ENCLOSURES
Refer to structural and geotechnical narratives for each site option. Walls of all subgrade enclosures will include the following assembly:
- Foundation wall (see structural)
- Waterproofing system such as Bituthene 3000 by GCP Applied Technologies
- Drainage composite such as Hydroduct 220 by GCP Applied Technologies
- XPS rigid insulation R-20 minimum
- 24” gravel course with embedded perimeter drain, encapsulated in filter fabric

Coordinate penetration details with selected system. Provide waterstop at slab-to-wall transition.

A40 SLABS-ON-GRADE
Refer to structural and geotechnical narratives for each site option.
For Option 0, slab-on-grade assemblies will consist of
- Slab (see structural)
- Membrane vapor barrier
- XPS rigid insulation R-20 minimum, high compressive strength, continuous throughout slab area, with shiplap joints and spray foam around penetrations
- 12” gravel course

For Options 1 and 5, all slab-on-grade assemblies will include a waterproofing system such as:
- Slab (see structural)
- Waterproofing system such as Bituthene 3000 by GCP Applied Technologies
- XPS rigid insulation R-20 minimum, high compressive strength, continuous throughout slab area, with shiplap joints and spray foam around penetrations
- 12” gravel course with embedded below-slab drainage, encapsulated in filter fabric

B SHELL

B10 SUPERSTRUCTURE
Refer to structural narrative. All primary structural steel members shall be protected with applied fireproofing as required to achieve code-mandated ratings. Assume that 10% of all steel is exposed and treated with intumescent mastic fire-resistant coating; the remainder is treated with spray fireproofing.

B20 EXTERIOR VERTICAL ENCLOSURES
Assumptions:
- 35% of vertical enclosure is exterior glazing
- 50% of vertical enclosure is masonry
- 15% of vertical enclosure is metal rainscreen panel

B2010 Exterior Walls
Masonry assembly
- Thermal performance criteria: R-25 or better
- Face brick: Endicott Medium Ironspot #46, 50% smooth and 50% artisan textured, full depth, standard size with 10% of brick laid in special decorative pattern
- Brick ties: stainless steel H&B “BL213-HS” or equivalent
B3010 Exterior Roofs

- Thermal performance criteria: R-35 or better
- Rated to resist uplift as required; refer to structural narrative
- Flashing and trim a combination of formed zinc brake metal and membrane-bonded brake metal
- Walking pads, guard rails, and tieoff davits as required

Low-slope membrane roof assembly

- Complete system by Sarnafil or equal
- Fully-adhered 60-mil membrane
- Mechanically fastened fiberglass cover board
- Mechanically fastened, tapered polyisocyanurate insulation
- Vapor retarder
- Internally drained

Low-slope green roof assembly

- 4.25” deep tray system by LiveRoof or equal, combined in a single assembly warranty with Sarnafil IRMA system or equal
- Drainage and root barrier layers as required
- Mechanically fastened, extruded polystyrene insulation
- Fully-adhered 80-mil peel-and-stick membrane
- Mechanically fastened fiberglass cover board
- Internally drained

Pitched metal roof assembly

- Complete system by VMZinc or equal
- Inverted standing seam assembly
- Subframing and underlayment as required
- Mechanically fastened fiberglass cover board
- Mechanically fastened polyisocyanurate insulation
- Vapor retarder
- Externally drained with snow guards, electric snow melt

B3020 Exterior Soffits

- Materials: stainless steel

C INTERIORS

C10 Interior Construction

C1010 Gypsum Wall Board Partitions

- Gypsum Board: ASTM C1386
  - Type: 0.625-inch board for tape and joint compound finish
  - Regular, moisture-resistant, abuse-resistant, and fire-rated types as required
  - Fully-height to underside of deck, typically; Provide acoustic sealant between gypsum board and slats/deck at all full-height partitions
- Cementitious Backer Unit
Circulation spaces, lobby, etc.
- Floor: epoxy terrazzo
- Base: epoxy terrazzo
- Walls: Gypsum Wallboard, Level 5 finish, abuse resistant to 6'-8"
- Display: (2) 10'x20' tackboards per floor level
- Ceiling: 50% gypsum board, 50% 2x8 ACT plank such as Armstrong Calla or equal

Adult room, Community Room, Classrooms, Computer Lab, Teen Center, Staff Offices
- Floor: bio-based resilient tile, sheet rubber, or linoleum
- Base: rubber
- Walls: Gypsum Wallboard, Level 5 finish
- Display: (2) 4'x8' tackboards and (1) 4'x8' whiteboard per room
- Casework: solid wood or wood-veneer open storage cubbies; solid surface countertop with single-bowl sink in classrooms and adult room
- Ceiling: 25% gypsum board, 75% 2x2 ACT such as Armstrong Calla or equal; suspended acoustic barrier ceiling at spaces directly below gymnasium, cardio/weights, or studio fitness

Kitchen
- Floor: quarry tile
- Base: ceramic tile
- Walls: Gypsum Wallboard, Level 4 finish
- Display: (2) 4'x8' tackboards and (1) 4'x8' whiteboard per room
- Casework: p. lam cabinetry with solid surface countertop, single-bowl sink
- Ceiling: gypsum board

Music Room
- Floor: carpet tile
- Base: rubber
- Walls: Gypsum Wallboard, Level 5 finish
- Internal window with acoustically separated, double glazed lite. Gasketed, acoustically-rated solid-core internal doors.
- Display: (1) 4'x8' whiteboard per room
- Paneling: 2" absorptive fabric-wrapped acoustic panel
- Casework: solid-surface countertop in booth; lockable phenolic storage cabinets; wall-hung shelving
- Ceiling: x2 ACT such as Armstrong Calla or equal

Multipurpose assembly space
- Floor: polished concrete
- Base: solid wood, painted
- Walls: 50% ground face and 50% polished face CMU
- Retractable full-height acoustic partition with fabric panels for subdividing room
- Display: oil-rubbed steel AV/lighting grid overhead, slotted metal channel framing and curtain track around perimeter; single wall of mirrors to 8'
- Ceiling: suspended gypsum acoustic barrier ceiling with surface-mounted perforated acoustic panels

Concrete masonry non-bearing partitions (mechanical areas, stair enclosures and elevator shafts):
- Concrete Masonry Units: ASTM C 90, Normal weight, 1500 lb/ft^3 compressive strength, Face Dimension: 8”x16” nominal
- Mortar and Grout for CMU: Mortar Mix: ASTM C270, Type S, for reinforced masonry, masonry below grade and masonry in contact with earth
  - ASTM C270, Type N, for above-grade load-bearing and non-load-bearing walls and parapet walls and for interior load-bearing and non-load-bearing partitions
- Portland Cement: ASTM C150, Type I or II
- Reinforcing Steel: ASTM A615, Grade 60, deformed, #5 size

Interior Doors
- Hollow Metal throughout mechanical and back-of-house areas
- Hollow metal with sidelight at demising walls between corridors and program spaces
- Gasketed solid-core flush wood acoustic doors at multipurpose assembly space, music room
- Access doors/panels: As required by MEP systems

Hardware and access control
- Hardwired card access control at building entrances and elevator
- Keyed locksets at all interior spaces
- Privacy sets at restrooms, locker rooms, and nursing room
- "Panic Button" at front desk

Signage
- Code-required signage at each room, stair, and elevator. See Section 101400.

Refer to room data sheets for additional information.
Gymnasium
- Floor: T&G maple athletic floor with sprung subfloor appropriate for basketball and dance
- Base: solid wood, painted
- Walls: ground face CMU to 15" AFF with impact-resistant wallboard above; divider curtain and track; impact-resistant Tectum or equivalent acoustic panels along top 15" of walls
- Ceiling: painted exposed structure

Weights and cardio fitness
- Floor: ¾" Mondo or equivalent sport floor
- Base: solid wood, painted
- Walls: Impact-resistant gypsum wallboard above; one wall of mirrors to 8'; impact-resistant Tectum or equivalent acoustic panels along top 4' of walls
- Ceiling: painted exposed structure, K-13 acoustic spray

Studio fitness
- Floor: T&G maple athletic floor with sprung subfloor appropriate for cardio and dance
- Base: solid wood, painted
- Walls: Impact-resistant gypsum wallboard above; two walls of mirrors to 8'; impact-resistant Tectum or equivalent acoustic panels along top 4' of walls
- Retractable half-height acoustic partition with fabric panels for subdividing room
- Ceiling: painted exposed structure, K-13 acoustic spray

Locker rooms, restrooms
- Floor: porcelain tile
- Base: ceramic tile
- Walls: ceramic tile over moisture-resistant Gypsum Wallboard; blocking in all grab bar locations
- Partitions, lockers: 100% recycled HDPE
- Ceiling: moisture-resistant gypsum board

Nursing Room
- Floor: bio-based resilient tile, sheet rubber, or linoleum
- Base: rubber
- Walls: Gypsum Wallboard, Level 5 finish
- Casework: solid surface countertop with single-bowl sink
- Ceiling: 2x2 ACT such as Armstrong Calla or equal

Mechanical, storage, tel/data, custodial, trash/recycling, etc.
- Floor: sealed concrete
- Base: rubber
- Walls: Gypsum Wallboard, FRP at floor sinks and trash room; fire-rated plywood at electrical rooms
- Casework: built-in shelving as required
- Ceiling: painted exposed structure

Stairs
- Painted metal with concrete-filled pans, painted metal handrails and guardrails

D SERVICES

D10 CONVEYING SYSTEMS
Machine-room-less traction elevator, Otis Gen2 3000# or equivalent, with high-durability cab finishes. Refer to test fit plans for number of stops (varies by option).

D20-70 PLUMBING, HVAC, FIRE PROTECTION, ELECTRICAL, COMMUNICATIONS
Refer to systems narrative.

E FITTINGS & EQUIPMENT

E10 EQUIPMENT

E1010 Fall Protection Equipment
- Horizontal Lifeline System with Anchor Post and Base Plate, manufactured by Pro-Bel Enterprises Ltd. Materials: Stainless steel, type 304

E1020 Appliances
Residential-quality ADA-compliant appliances; basis of design = Whirlpool; finish = stainless steel
- Electric range top
- Vented stove hood
- Wall oven
- Refrigerator
- Dishwasher
- Microwave Oven

E1030 Toilet partitions and accessories
- Partitions: floor-supported, overhead-braced with stainless steel hardware and brackets; 100% recycled HDPE
- Accessories: Basis of design by Bobrick or equal

E1040 Audiovisual equipment
Excluded

E1050 Roller shades
- Mechanically operated with timeclock and manual override at 50% of glazed envelope areas

E20 FURNITURE
Excluded

F SPECIAL CONSTRUCTION AND DEMOLITION

F10 SPECIAL CONSTRUCTION
F1010 Swimming pool, splash pool
- For pricing purposes, assume replacement of existing facilities
F30 DEMOLITION
- Remove all structures and surface improvements. Stockpile topsoil, if any.
- Removed material should be sorted and recycled if possible per LEED requirements.
- At Option 0, protect adjacent structures and provide temporary shoring/underpinning if required.

G SITE WORK
G10 SITE PREPARATION
Structurally unsuitable material may need to be removed. Refer to geotechnical narrative for each site for more information.

G20 SITE IMPROVEMENTS
G2010 Roads and parking lots (applicable only to Option 5)
- Vehicular lanes should be 10'-0" wide, minimum.
- Provide 6" granite curb and gutter for all roadways.

G2020 Pedestrian Walkways
- Cast iron detectable warning plates at signalized crossing locations and at all curb ramps.

G2030 Site Paving & Structures
- Standard Vehicular Pavement – Pavement subject to standard traffic loads shall be 2" bituminous binder course underlying 1 ½" bituminous surface course. A 1 ½" thick layer of 1 ½" minus well-graded Sand Gravel Fill will be provided as a gravel base material.
- Curbing shall be granite.
- Heavy-Duty Concrete Pavement (Applicable to Option 1 at Harborwalk) – Concrete pavement subject to vehicular traffic shall be 5" thick, 4,000psi concrete reinforced with rebar. Expansion joints will be spaced at 20' maximum on center and reinforced with 2' long #6 stainless steel dowels spaced along the joint 2'-0" on center. Stainless steel for dowels shall be Type 316.
- Concrete Sidewalks – Pedestrian concrete sidewalks shall be 6" thick, 4,000 psi concrete reinforced with welded wire fabric. Expansion joints will be spaced at 20' maximum on center and reinforced with 2' long #6 stainless steel dowels spaced along the joint 2'-0" on center. Stainless steel for dowels shall be Type 316. Control joints to be spaced every 5' on center.
- Unit Pavers – Pavers shall be precast concrete unit pavers 4" x 8" manufactured by Hanover for plazas at all options and top of parking plinth at Option 5.
- Stain – Stairs shall be solid granite with a 15" tread and 6" riser set on a concrete foundation.
- Handrails – All handrails to be 1 ½" stainless steel tube railing with 1 ½" x ½" solid stainless steel posts. Stainless to be type 316, brushed finish. Handrails to be on both sides of stairs.
- Guardrails – guardrails to be stainless steel tension cable with 42" x 1 ½" x ½" solid stainless steel posts. Stainless to be type 316, brushed finish. Guardrails to be provided at all site walls over 30' high.
- Site Retaining Walls – Retaining walls shall be architectural grade cast-in-place concrete.
- Screen walls – Screen walls shall be a steel frame with wooden slats infilled. Steel frame to be min. 6"x6" posts with 2x4" Ipe wood slats infill.

G2040 Site Furnishings
- Trash receptacles: Landscape Forms, “Chase Park” trash receptacle, silver metallic finish (quantity: 4)
- Recycling Receptacles: Landscape Forms, “Chase Park” recycling receptacle, silver metallic finish (quantity: 4)
- Power: Landscape Forms, “Power Pedestal”, 6"x8"x34", silver metallic finish (quantity: 5)
- Bicycle Racks: Landscape Forms, “Bola” bike rack, embedded mounting, stainless steel satin finish (quantity: 20)
- Plaques/Monuments: relocate existing monuments as required, and coordinate with Owner
- Playground equipment and wood chip ground treatment
- Include allowance for misc. benches, other fixed site elements (quantity: 10)

G2050 Plantings
- Provide street trees spaced 20' o.c. along public street edge and quantity of 15 canopy trees within plazas and courtyards.
- Minimum caliper size for canopy trees within plazas and courtyards: 3 to 3-1/2" cal.
- Groundcovers, perennials, and lawns shall have a 6" minimum planting soil depth. Shrubs shall have an 18" minimum planting soil depth.
- Green Roofs: Refer to architectural narrative.

G30 SITE UTILITIES
G3010 Stormwater Management
- Stormwater will be collected in area drains and catch basins.
- Catch basins will be precast with bicycle friendly cast iron frames and grates.
- Area drains will be plastic with ADA compliant cast iron grates.
- Subsurface detention and infiltration systems will be constructed. These systems are proposed to be prefabricated plastic chambers backfilled with crushed stone and surrounded with filter fabric for soil separation.
- Prior to infiltration, the stormwater will be treated by hydrodynamic separators.
- Subsurface fiberglass cisterns will be provided to collect runoff from building roofs for reuse. Pretreatment filter systems will be included at the inlets to the cisterns. The tanks will include submersible pumps to feed water into buildings.
- The overflow from the detention systems will be directed to existing drainage systems.

G3020 Sewer
- Sewage from the buildings will be discharged by gravity to existing sanitary sewage systems.
- It is assumed that no grease trap or pump stations will be required.
- Sewer manholes will be precast concrete with brick invert and cast iron frames and covers.

G3030 Water
- Potable water and fire protection water will be provided from municipal water system.
- The water main will connect from the existing water main in adjacent public way.
G3040 Electrical + telecommunications
- See building systems descriptions for description of proposed electric service to the project.
- Site lighting to match surrounding context, conforming to City of Boston Street lighting Division requirements. Provide lighted bollards at plazas, Harborwalk, and elevated parking plinth.
- Site power at exterior playground area and building entrance
- Site power/data at entrance to parking plinth (Option 5)

G3050 Gas
- Extend natural gas service from the existing utility lines in the right-of-way.

All water mains will be ductile iron.
- Gate valves will be provided at each junction at 500’ intervals to allow for isolation of water mains.
- Hydrants will be provided as required by the local fire department.
- Exterior drinking fountains, hose bibs at playground areas

North End Community Center
Boston Public Facilities Dept. - Project #7111
July 26, 2018

STRUCTURAL NARRATIVE

1.0 Existing Nazzaro Center Site

1.1 FOUNDATIONS
It is understood that the existing structure is supported on shallow foundations, therefore new foundations for this building will consist of concrete spread footings and reinforced concrete foundation walls on reinforced concrete strip footings. There will be a basement under the portion of the building that is located on the footprint of the existing structure.

1.2 SUPERSTRUCTURE
The existing Nazzaro building will be demolished, and a new 4 story building has been proposed. It is believed that there is a party wall between the existing structure and the adjacent building, this will need to be taken into account during the construction of the new building. A seismic joint will be required between the two structures. It is presumed that the basement level slab will be a 5” slab on grade. The above ground floors will be steel framed with structural steel columns and beams, supporting a 3⅛” lightweight concrete slab on 3” composite metal deck for the floors. The roof over the classroom and office spaces can be steel beams with metal roof deck. The roof structure over the basketball court can be framed with open web steel joists or steel trusses to achieve the required clear span. Resistance of wind and seismic forces will be provided by steel moment or braced frames. For pricing purposes an allowance of 14 lbs/sf can be assumed for the steel framing. This location is not in a flood zone.

2.0 Mirabella Site

2.1 FOUNDATIONS
It is expected that deep foundations, such as piles, will be required at this site due to the type of soils present. The ground level slab will be a reinforced concrete structural slab supported by piles and pile caps. This site is in a FEMA Flood Hazard Area so the foundations and ground level slab will need to be designed to meet the requirements of ASCE 24, including considerations of soil erosion and scour.

2.2 SUPERSTRUCTURE
A 4 story structure has been proposed with the third and fourth floors cantilevering over the second floor by approximately 12’ at the north end of the building. The superstructure will be steel framed with structural steel columns and beams, supporting a 3⅛” lightweight concrete slab on 3” composite metal deck for the floors. The roof over
the classroom and office spaces can be steel beams with metal roof deck. The roof structure over the basketball court can be framed with open web steel joists or steel trusses to achieve the required clear span. Resistance of wind and seismic forces will be provided by steel moment or braced frames. For pricing purposes an allowance of 14 lb/sf can be assumed for the steel framing.

This site is in a FEMA Flood Hazard Area and will need to be designed following the requirements of ASCE 24. One of these requirements is that all critical infrastructure and facilities must be a minimum of 2'-0” above the base flood elevation, including the elevator machine room. Also the lowest horizontal structural member, in this case the bottom of steel of the first floor, is required to be above this level. The steel columns that extend from the first floor down to ground level should be encased in concrete for added protection. All exterior and partition walls from the ground level to the first floor should be concrete masonry units with flood relief vents to provide for the free flow of water during a flood event.

3.0 Sargent’s Wharf Site

3.1 FOUNDATIONS
It is expected deep foundations, such as piles, will be required at this site due to the type of soils present. This site is in a FEMA Flood Hazard Area so the foundations and ground level slab will need to be designed to meet the requirements of ASCE 24, including considerations of soil erosion and scour.

3.2 SUPERSTRUCTURE
A 3 story structure has been proposed above the existing parking lot. The first floor of the building will be elevated to preserve the existing parking. There will be an entry space, stair and elevator cores that will extend to the ground level. These elements will require a reinforced concrete structural slab. The elevated first floor and upper floors will be steel framed with structural steel columns and beams, supporting a 3½” lightweight concrete slab on 3” composite metal deck for the floors. The roof over the classroom and office spaces can be steel beams with metal roof deck. The roof structure over the basketball court can be framed with open web steel joists or steel trusses to achieve the required clear span. Resistance of wind and seismic forces will be provided by steel moment or braced frames. For pricing purposes an allowance of 14 lb/sf can be assumed for the steel framing. Along with the structure to house the community center another structure is proposed for a portion of this site to be built at a later time by others. The foundations and elevated first floor of this structure would be built at the same time as the community center. The foundations and first floor will be designed for the proposed loads of the future building provided by others.

This site is in a FEMA Flood Hazard Area and will need to be designed following the requirements of ASCE 24. One of these requirements is that all critical infrastructure and facilities must be a minimum of 2'-0” above the base flood elevation, including the elevator machine room. Also the lowest horizontal structural member, in this case the bottom of steel of the first floor, is required to be above this level. The steel columns that extend from the first floor down to ground level should be encased in concrete for added protection. All exterior and partition walls from the ground level to the first floor should be concrete masonry units with flood relief vents to provide for the free flow of water during a flood event.
Proposed Development

The proposed development is planned to consist of demolition of the existing Nazzaro Center structure and construction of a new 4-story structure. The footprint of the new structure will occupy the existing building footprint and will also expand into the adjacent park. One level of below-grade space is planned to be constructed within the footprint of the existing basement. The top floor of the new structure is planned to contain a basketball court.

Anticipated Subsurface Conditions

The subsurface conditions underlying the site are anticipated to consist of a shallow layer of miscellaneous granular fill, estimated to be approximately 5 to 10 feet thick. Underlying the fill layer, a marine clay deposit is anticipated to be present. Based on our experience and knowledge of the marine clay deposit it is anticipated that the clay deposit contains a very stiff to hard “crust” and becomes increasingly soft with depth. Groundwater at the site is anticipated to be approximately 5 to 10 feet below the existing ground surface.

Preliminary Foundation Design Recommendations

Based on our understanding of the proposed development and the anticipated subsurface conditions summarized above, it is anticipated that the proposed building can be supported by a foundation system consisting of footings deriving their support directly on the marine clay deposit. For preliminary design, it is recommended that the footings be proportioned utilizing a net allowable design bearing pressure of 2 tons per square-foot (tsf).

Due to the proximity of the adjacent building and party-wall, it is anticipated that underpinning and/or stabilization of the adjacent existing foundation wall will be needed.

The lowest level slab can likely be designed as a conventional slab-on-grade which is directly underlain by a polyethylene vapor barrier spread over a minimum 9-inch thickness of 3/4-inch crushed stone. The crushed stone should be underlain by a thickness of filter fabric such as Mirafi 140N placed directly over the excavation subgrade.

Based on the anticipated depth to groundwater and the lowest level slab elevation, both perimeter and underslab foundation drainage systems are anticipated to be required to protect the below-grade level against groundwater intrusion.

For the purposes of determining parameters for structural seismic design, it is anticipated that the Nazzaro Center site will be considered as Site Class D as defined in Chapter 20 of American Society of Civil Engineers (ASCE) Standard 7-10 “Minimum Design Loads for Buildings and Other Structures”.

1. Existing Nazzaro Center Site

Existing Conditions

The existing Nazzaro Center site is located at 30 North Bennet Street in the center of the North End, and fronts onto a park identified as the Polcari Playground to the east, North Bennet Street to the north, open space and a property identified as 61 Prince Street to the south, and a five-story building identified as 34 North Bennet Street to the west. The park to the east is currently occupied by a paved area at the northern end, consisting of parking spaces, wide walking areas and park benches, and by a basketball court at the southern end. Grades across the park and surrounding the existing Nazzaro Center site are generally flat, with the exception of North Bennet Street which drops in elevation from east to west.

The Nazzaro Center building is a 3-story historic structure with a single level of below-grade space, which is at grade on North Bennet Street where the grade is lower and does not occupy the entire footprint of the building. The existing structure also shares a party-wall with the adjacent 34 North Bennet Street. It is anticipated that the existing structure foundations consist of spread footings bearing on the natural soil deposits underlying the site. It has also been noted that the existing basement has groundwater intrusion problems and often contains standing water.

Reference: North End Community Center; Boston, Massachusetts
Preliminary Foundation Design Study

Ladies and Gentlemen:

This letter summarizes the results of our preliminary foundation design study for the proposed North End Community Center to be located in the North End section of Boston, Massachusetts. Specifically, this letter discusses the anticipated subsurface conditions and preliminary foundation design recommendations for three (3) potential sites for a new or renovated community center. This letter was prepared in accordance with our proposal dated April 3, 2017 and the subsequent authorization of Ms. Carla Ceruzzi.

The following presents the results of our preliminary foundation design study for 1. Existing Nazzaro Center Site, 2. Mirabella Site, and 3. Sargent’s Wharf Site.
2. Mirabella Site

Existing Conditions

The Mirabella Site is located at 475 Commercial Street in the northern-most part of the North End. The site is accessible from Commercial Street to the south and is surrounded by the Boston Harbor to the north, the Coast Guard Station to the east and Langone Park to the west. The Mirabella site itself encompasses the existing Andrew P. Puopolo Junior Athletic Fields, bocce courts, playground area, basketball court, and the Mirabella Pool, splash pool and pool house. Surrounding and throughout the site are harbor walks. Also, abutting the Boston Harbor, the site is surrounded by a large granite block seawall to the north.

Proposed Development

The proposed development is planned to consist of construction of a new 4-story steel-framed structure located at the western edge of the site, approximately in the location of the existing pool house. There are currently two options of development, both including renovation of the park and some relocation of the athletic fields, courts, and pools. The proposed Community Center structure is understood to contain no below-grade space, and the top floor of the new structure is planned to contain a basketball court.

Anticipated Subsurface Conditions

The subsurface conditions underlying the site are anticipated to consist of miscellaneous granular fill and a soft dredge fill from when the old Boston waterfront and piers were filled in to expand the Boston peninsula. Underlying the fill layers, which are anticipated to be a combined approximate 20-foot thickness, a natural glacial outwash deposit is anticipated to be present and vary from approximately 5 feet to 20 feet in thickness. Below the glacial outwash deposit, it is anticipated that a relatively thin marine clay deposit is present, overlaying a dense glacial till deposit which is anticipated at a depth of about 50 to 60 feet below ground surface. Bedrock is anticipated to be present approximately 70 feet below ground surface.

Groundwater at the site is anticipated to be present relatively shallow at about 5 feet due to the proximity of the Harbor. The groundwater level is also likely to be susceptible to tidal fluctuations. Further, it is understood that the Mirabella Site is located within a FEMA Flood Hazard Area.

It is also anticipated that the subsurface soil layers may contain remnants from piers and seawalls which historically occupied the site.
For preliminary pricing purposes it is recommended that the allowable design load for each drilled mini-pile be 200 tons per unit in compression. However, it is noted that the design capacity of the drilled mini-piles can be increased or decreased by adjusting the length of the bond zone. Also for preliminary pricing, it can be assumed that the drilled mini-piles will extend 80 feet below the ground surface, gaining their capacity in the glacial till and/or bedrock.

Prior to commencement of production pile installation, one drilled mini-pile will likely need to be load tested in accordance with the requirements of the Code to confirm the foundation design assumptions.

3. Sargents Wharf Site

Existing Conditions

The Sargents Wharf Site is located at 269 Commercial Street along the eastern side of the North End. The site is accessible from Commercial Street to the west and is surrounded by the Boston Harbor to the north and east, and 2 Atlantic Avenue to the south. In addition, a harbor walk is located on the northern and eastern sides of the side, adjacent to an existing seawall, and Eastern Avenue separates the subject site from the 2 Atlantic Avenue building. Currently, the generally flat site is occupied by approximately 246 parking spaces. Also, abutting the Boston Harbor, the site is surrounded by a large granite block seawall to the north and east.

Proposed Development

The proposed development is planned to consist of construction of a new 4-story steel-framed structure, with the first level being podium style containing an open-air parking garage accessible from Commercial Street. The three overlying levels will serve as the new Community Center, occupying 49,000 square feet, with the exception of a separate 15,000 square-foot area which will be a buildable area for a future developer. Due to the podium-style parking garage the new structure is anticipated to have relatively large spans between columns and further, the top floor of the new structure is planned to contain a basketball court.

Anticipated Subsurface Conditions

The subsurface conditions underlying the site are anticipated to consist of miscellaneous granular fill and a soft dredge fill from when the old Boston waterfront and piers were filled in to expand the Boston peninsula. Underlying the fill layers, which are anticipated to extend to a depth between 30 and 35 feet, a discontinuous, natural glacial outwash deposit is anticipated to be present, interbedded into a marine clay deposit. Underlying the glacial outwash deposit(s) and marine clay deposit, a glacial till deposit is anticipated to be present, approximately 60 feet below the ground surface. The thickness of the glacial till deposit is anticipated to be approximately 30 feet, and the glacial till deposit is anticipated to be overlying bedrock at a depth of about 90 feet.

Groundwater at the site is anticipated to be present relatively shallow at about 5 feet due to the proximity of the Harbor. The groundwater level is also likely to be susceptible to tidal fluctuations. Further, it is noted that the Mirabella Site is located within a FEMA Flood Hazard Area.

It is also anticipated that the subsurface soil layers may contain remnants from piers and seawalls which historically occupied the site.

Preliminary Foundation Design Recommendations

It is anticipated that the proposed building will require a pile foundation system which transfers the building loads through the compressible fill layers and into the underlying natural soil deposits.

Two potential options for the pile foundations are considered pertinent for preliminary foundation design: driven prestressed precast concrete piles (PPCP) and drilled mini-piles. Due to the site being located within a FEMA Flood Hazard Area, a soil erosion and scour analysis is anticipated to be needed.

Prior to commencement of production pile installation, it is recommended that one pile be load tested in accordance with the requirements of the Code to confirm the foundation design assumptions.

In consideration of the presence of the miscellaneous fill and compressible dredge fill soils underlying the site, it is likely that the lowest level floor slab be needed to be designed as a structurally supported or framed slab. Also, it is anticipated that flexible utility connections and oversized sleeves will be required at the grade beams and building perimeter to accommodate differential settlement between the pile-supported building and the soil-supported utilities. Furthermore, underslab utilities will likely need to be hung from the structurally supported floor slab.

For the purposes of determining parameters for structural seismic design, and for preliminary pricing purposes, it is recommended that the Sargent’s Wharf Site will be considered as Site Class E as defined in Chapter 20 of American Society of Civil Engineers (ASCE) Standard 7-10 “Minimum Design Loads for Buildings and Other Structures”. However, it is noted that the Site may be considered a Site Class D upon obtaining site specific subsurface information.

Prestressed Precast Concrete Piles (PPCP)

For preliminary pricing purposes, end-bearing piles including 14-inch square prestressed precast concrete piles (PPCP) having a design capacity of 130 tons in compression, or a 16-inch square PPCP having a design capacity of 180 tons in compression are both considered.
appropriate foundation types for the proposed structure because they can support relatively high column loads with a reasonable number of foundation elements driven to end bearing on glacial till and/or bedrock.

It is anticipated that each PPCP location will require predrilling to a depth of about 50 feet below the working ground surface to identify potential obstructions to pile installation, such as the old seawalls and piers. Obstructions encountered within the fill material during the predrilling should be excavated and removed by the earthwork contractor, as feasible. Predrilling the pile locations will also remove a substantial portion of the volume of soil which would otherwise be displaced by the foundation piles and, therefore, the lateral soil displacement and ground heave attributable to pile installation will be reduced. Additionally, pile predrilling will also reduce the transmission of vibrations due to pile driving.

For preliminary pricing, a pile length of 90 feet is recommended, and if the piles are not able to be driven in one section, utilization of at least one pile splice will be necessary. Each splice should be designed in accordance with Section 1810.3.6 of the Code and be capable of developing the full pile capacity in all modes of stress occurring during driving and for design load combinations.

**Drilled Mini-Piles**

Similar to the Mirabella Site, due to the likelihood of obstructions being present within the fill layers due to the historical presence of old seawalls and piers, drilled mini-pile foundations could also be considered for preliminary foundation design. For specific preliminary recommends for drilled mini-piles, refer to the Mirabella Site Drilled Mini-Piles section of this letter. For preliminary pricing for the Sargent’s Wharf Site, it is recommended that the allowable design load for each drilled mini-pile be 200 tons per unit in compression with an assumed length of 90 feet below the ground surface, gaining their capacity in the glacial till and/or bedrock.

**Closing Remarks**

In summary, the results of our preliminary foundation design study are provided herein for the three potential sites for a new North End Community Center, including 1. Existing Nazzaro Center Site, 2. Mirabella Site, and 3. Sargents Wharf Site. For each site, the anticipated subsurface soil conditions are discussed and preliminary foundation design recommendations are provided.

It is recommended that a final foundation design study be completed once the proposed site is selected. As part of the final foundation design study, we recommend that borings be completed at the site to determine the actual site specific subsurface soil conditions within the proposed building footprint.
NORTH END COMMUNITY CENTER STUDY

HVAC, PLUMBING, FIRE PROTECTION AND ELECTRICAL SYSTEMS

A. General

The following narrative includes MEP/FP system recommendations for the proposed New North End Community Center which will house Educational, Civic / Community, and Sports programs. System sizing is based on the “ideal size” program.

B. HVAC Systems

1. General

The following system description includes three alternates for heating, ventilating, and air conditioning of the building with options within each alternate:

   a. Alternate #1: “All-Air” Systems
   b. Alternate #2: Fan Coil Unit (FCU) Systems
   c. Alternate #3: VRF Systems

2. Alternate #1A: “All-Air” VAV Systems with Outdoor Roof Top Units and Hot Water Boiler Plant

   a. Package rooftop air handling units with gas fired heating furnace, electric air cooled condenser section and DX cooling coil, hot gas reheat, supply and return air fans with VFD’s, MERV13 filtration, controls:
      - Gymnasium RTU – approximately 12,000 CFM (single zone VAV type)
      - Fitness, Weights, Cardio, and Locker rooms RTU - approximately 10,000 CFM (multiple zones VAV type)
      - Classrooms, Lobby, Community spaces RTU- approximately 15,000 CFM (multiple zones VAV type)
      - Multipurpose Assembly Space RTU - approximately 6,000 CFM (single zone VAV type)
   b. Medium pressure supply air duct distribution from the RTU to VAV terminals (multizone systems); single duct VAV boxes for interior spaces and fan powered VAV boxes for perimeter spaces (multizone systems); low pressure duct distribution from VAV terminals (multizone systems) and RTU’s (single -zone systems) to space air distribution devices.
   c. Ceiling cavity utilize as return air plenum, low pressure return air ductwork from all areas (except detainee are) back to RTU
   d. Bathrooms and locker rooms exhaust air system with exhaust fan on the roof.
   e. High efficiency condensing type gas fired hot water boiler plant including (2) 1500 MBH boilers and (2) 150 GPM pumps (100% redundancy). Hot water distribution from the boiler plant to the heating coils at Air Handling Units, VAV terminals and to miscellaneous heating equipment.

3. Alternate #1B: “All-Air” VAV Systems with Indoor Modular Air Handling Units, Chiller Plant and Hot Water Boiler Plant

   a. Modular indoor air handling units with hot water heating coils (with freeze protection), chilled water cooling coils, supply and return air fans with VFD’s, MERV13 filtration, controls:
      - Gymnasium AHU – approximately 12,000 CFM (single zone VAV type)
      - Fitness, Weights, Cardio, and Locker rooms AHU - approximately 10,000 CFM (multiple zones VAV type)
      - Classrooms, Lobby, Community spaces AHU - approximately 15,000 CFM (multiple zones VAV type)
      - Multipurpose Assembly Space AHU- approximately 6,000 CFM (single zone VAV type)
   b. Medium pressure supply air duct distribution from the RTU to VAV terminals (multizone systems); single duct VAV boxes for interior spaces and fan powered VAV boxes for perimeter spaces (multizone systems); low pressure duct distribution from VAV terminals (multizone systems) and RTU’s (single -zone systems) to space air distribution devices.
   c. Ceiling cavity utilize as return air plenum, low pressure return air ductwork from all areas (except detainee are) back to RTU
   d. Bathrooms and locker rooms exhaust air system with exhaust fan on the roof.
   e. High efficiency condensing type gas fired hot water boiler plant including (2) 1500 MBH boilers and (2) 150 GPM pumps (100% redundancy). Hot water distribution from the boiler plant to the heating coils at Air Handling Units, VAV terminals and to miscellaneous heating equipment.

4. Alternate #1C: “All-Air” VAV Systems with Indoor Modular Air Handling Units, Chiller Plant and Hot Water Boiler Plant

   a. Modular indoor air handling units with hot water heating coils (with freeze protection), chilled water cooling coils, supply and return air fans with VFD’s, MERV13 filtration, controls:
      - Gymnasium AHU – approximately 12,000 CFM (single zone VAV type)
      - Fitness, Weights, Cardio, and Locker rooms AHU - approximately 10,000 CFM (multiple zones VAV type)
      - Classrooms, Lobby, Community spaces AHU - approximately 15,000 CFM (multiple zones VAV type)
      - Multipurpose Assembly Space AHU- approximately 6,000 CFM (single zone VAV type)
   b. Medium pressure supply air duct distribution from the RTU to VAV terminals (multizone systems); single duct VAV boxes for interior spaces and fan powered VAV boxes for perimeter spaces (multizone systems); low pressure duct distribution from VAV terminals (multizone systems) and RTU’s (single -zone systems) to space air distribution devices.
   c. Ceiling cavity utilize as return air plenum, low pressure return air ductwork from all areas (except detainee are) back to RTU
   d. Bathrooms and locker rooms exhaust air system with exhaust fan on the roof.
   e. High efficiency condensing type gas fired hot water boiler plant including (2) 1500 MBH boilers and (2) 150 GPM pumps (100% redundancy). Hot water distribution from the boiler plant to the heating coils at Air Handling Units, VAV terminals and to miscellaneous heating equipment.

5. Alternate #2A: Combination of Single Zone RTU’s and Fan Coil Unit System with Chiller Plant and Hot Water Boiler Plant

   a. Modular indoor air handling units with hot water heating coils (with freeze protection), DX cooling coils with remote air-cooled condenser (outside), supply and return air fans with VFD’s, MERV13 filtration, controls:
a. Package rooftop air handling units with gas fired heating furnace, electric air-cooled condenser section and DX cooling coil, hot gas reheat, supply and return air fans with VFD’s, MERV15 filtration, controls:
   - Gymnasium RTU – approximately 12,000 CFM (single zone VAV type)
   - Multipurpose Assembly Space RTU - approximately 5,000 CFM (single zone VAV type)

b. Ventilation energy recovery unit (ERU) providing ventilation to all other spaces: Package rooftop unit with gas fired heating furnace, electric air cooled condenser section and DX cooling coil, enthalpy type energy recovery wheel, supply and exhaust air fans with VFD’s MERV13 supply air filtration, MERV6 exhaust air filtration, controls – approximately 5000 CFM

c. Low pressure supply and return air distribution from RTU’s to spaces served
d. Low pressure ventilation supply air duct distribution from ERU to all spaces other than those served by RTU’s
e. Low pressure exhaust air ductwork from locker rooms, fitness rooms, and public bathrooms back to ERU
f. Four-pipe (chilled water /hot water) fan coil units (FCU) in all spaces (other than those served by RTU’s) with associated ductwork and air distribution devices
g. Outdoor Air-Cooled Chiller (100 tons) with two (2) associated pumps (200 GPM each- full redundancy), chilled water piping distribution to chilled water coils at FCU’s. System charged with 40% glycol solution.
h. High efficiency condensing type gas fired hot water boiler plant including (2) 750 MBH boilers and (2) 75 GPM pumps (100% redundancy).
i. Chilled water and hot water distribution piping to cooling and heating coils at FCU’s, and to miscellaneous heating equipment.

6. Alternate #2B: Combination of Single Zone AHU’s and Fan Coil Unit System with Chiller Plant and Hot Water Boiler Plant

a. Modular indoor air handling units with hot water heating coils (with freeze protection), chilled water cooling coils, supply and return air fans with VFD’s, MERV15 filtration, controls:
   - Gymnasium AHU – approximately 12,000 CFM (single zone VAV type)
   - Multipurpose Assembly Space AHU- approximately 5,000 CFM (single zone VAV type)

b. Ventilation energy recovery unit (ERU) providing ventilation to all other spaces: Modular indoor air handling units with hot water heating coil (with freeze protection), chilled water cooling coil, enthalpy type energy recovery wheel, supply and exhaust air fans with VFD’s MERV13 supply air filtration, MERV6 exhaust air filtration, controls – approximately 5000 CFM

c. Low pressure supply and return air distribution from AHU’s to spaces served
d. Low pressure ventilation supply air duct distribution from ERU to all spaces other than those served by AHU’s
e. Low pressure exhaust air ductwork from locker rooms, fitness rooms, and public bathrooms back to ERU
f. Four-pipe (chilled water /hot water) fan coil units (FCU) in all spaces (other than those served by AHU’s) with associated ductwork and air distribution devices
g. Outdoor Air-Cooled Chiller (200 tons) with two (2) associated pumps (400 GPM each- full redundancy), chilled water piping distribution to chilled water coils at FCU’s. System charged with 40% glycol solution.
h. High efficiency condensing type gas fired hot water boiler plant including (2) 1550MBH boilers and (2) 150 GPM pumps (100% redundancy).

7. Alternate #3: Combination of Single Zone RTU’s and VRF System

a. Package rooftop air handling units with gas fired heating furnace, electric air-cooled condenser section and DX cooling coil, hot gas reheat, supply and return air fans with VFD’s, MERV15 filtration, controls:
   - Gymnasium RTU – approximately 12,000 CFM (single zone VAV type)
   - Multipurpose Assembly Space RTU - approximately 5,000 CFM (single zone VAV type)

b. Ventilation energy recovery unit (ERU) providing ventilation to all other spaces: Package rooftop unit with gas fired heating furnace, electric air cooled condenser section and DX cooling coil, enthalpy type energy recovery wheel, supply and exhaust air fans with VFD’s MERV13 supply air filtration, MERV6 exhaust air filtration, controls – approximately 5000 CFM

c. Low pressure supply and return air distribution from RTU’s to spaces served
d. Low pressure ventilation supply air duct distribution from ERU to all spaces other than those served by RTU’s
e. Low pressure exhaust air ductwork from locker rooms, fitness rooms, and public bathrooms back to ERU
f. Variable Refrigerant Flow (VRF) indoor terminal units in all spaces (other than those served by AHU’s) with associated ductwork and air distribution devices for heating and cooling.
g. Outdoor air-cooled heat recovery type VRF condensing units – (5) 16 ton units with low ambient option (Mitsubishi Hyperheat or similar) for low temperature heating operation.
h. Refrigerant piping between condensing units, control units, and terminal units

8. Other HVAC Systems (similar for all alternates)

a. Split AC systems for cooling of the T/D rooms, electronic equipment rooms, elevator machine rooms with condensing units outdoors on grade or on the roof
b. Heating and ventilation of the electrical and mechanical rooms
c. Entrance cabinet unit heaters
d. Elevator hoistway venting
e. Building management control system (BMS) of DDC type.

C. Electrical Systems

1. Electrical Service

a. Power will be received from a Utility Company pad mounted transformer at 480/277-volts, 3-phase, 4-wire. Power will be utilized at 480/277 volts where possible and stepped down to 120/208 volts by dry type transformers as required.
b. A utility company meter will measure consumption.
c. Power will be distributed to panels located in electric closets within each section of the building.

2. Lighting

a. Lighting will be by means of high efficiency lighting fixtures with appearances and light sources (LED, HID, fluorescent, etc.) appropriate to the function of the space and to the architecture.
5. Telephone, Data, and CATV Distribution System

- b. Lighting control systems will be provided to include photocells and timer controls for exterior lighting and vacancy/occupancy sensors for interior lighting as required by energy codes and to lower the energy consumption of the building.
- c. Daylight dimming will be provided where required by energy codes.
- d. Occupancy sensors will be provided in stairs to reduce the light level when unoccupied to the code minimum.
- e. Emergency lighting for means of egress and exit signs will be provided.
  1. Provide local battery unit type emergency lighting throughout the public spaces, corridors and other paths of egress.
  2. Provide battery units located in mechanical rooms and in electric closets.
  3. Provide remote lighting heads in public spaces, corridors and other paths of egress.
  4. Provide exit signs with integral battery packs.

3. Wiring Devices

- a. In addition to the receptacle outlets required as part of the electrical power distribution system for specific items of power consuming equipment, a full complement of general convenience receptacles and light switches are to be located throughout the project and will include outlets, plates, etc.
- b. Wiring devices will be specification grade, white in color. Wiring devices will be provided with matching plates.

4. Fire Alarm System

- a. Addressable type fire alarm system which will monitor actuating devices including smoke detectors, manual stations, heat detectors, and sprinkler waterflow devices.
- b. The system will include smoke and heat detectors where required by applicable building and fire codes.
- c. Combination audible/visual (strobe) units will alert occupants and will be located in conformance with NFPA 72, MAAB, ADA, and applicable building and fire codes. The system will be capable of voice messaging from a microphone at the system panel and at the remote annunciator panel.
- d. The fire alarm system will be connected to the municipal fire department via a "master box".
- e. A remote annunciator will be provided at the main entrance of the building.

5. Telephone, Data, and CATV Distribution System

- a. The building will be provided with an empty conduit system to allow the introduction of Telephone, Data, and CATV distribution system which will provide telephone service, data service, and Cable TV.
- b. The empty conduit system will connect the building with the telephone and Cable TV distribution duct system in the street.

6. Lightning Protection System

- a. The building will be equipped with a lightning protection system for which an Underwriters Laboratories Master Label will be obtained at completion of the work.
- b. The system will be provided in accordance with the requirements of UL 96A and NFPA 780.
- c. The lightning protection system will incorporate all elements necessary to assure that no damage to the project occurs in the event of a lightning strike, and also to assure that no metallic parts in the project acquire any hazardous static electricity voltage in the event of a lightning strike.

7. Fire Fighter’s Communication System

- a. The building will be provided with a Bi-Directional Radio Amplification system for fire fighter’s communication. The system will provide coverage throughout the building. The system will comply with the requirements of the building code and the fire department.

8. Elevator Landing Communication System

- a. The building will be provided with an Elevator Landing Communication system, with a device located in every elevator landing on floors other than the level of exit discharge. The system will provide two-way voice communication with a constantly attended master station, with a timed automatic dial-out to a remote central station. The system will provide both audible and visual signals for calls placed and acknowledged. The system will comply with the requirements of the building code.

D. Plumbing Systems

1. Water

- a. The building will require a new 4” water service including a new water meter.
- b. The water service will provide cold water to every plumbing fixture requiring cold water.
- c. Cold water will supply a direct vented gas fired water heater (located in the mechanical room) which will provide hot water to each plumbing fixture requiring hot water.
- d. All hot and cold water distribution will be insulated.

2. Sanitary

- a. A new cast iron sanitary and vent system will collect the waste from and all vents for all plumbing fixture and discharge to the sewer main located in the street.

3. Storm

- a. New cast iron storm drainage system will collect rain water from all roof drains and/or Terrace drains and discharge to the storm sewer located in the street.

4. Gas

- a. A new gas service including gas regulators and gas meter as required by the utility company will be provided from the street. Gas distribution system will be provided to deliver gas to the boilers and domestic water heater.

Fire Protection System

1. The building will be provided with a 6” Fire water service including a 6” double check valve.
2. The sprinkler system will be piped to sprinklers in every room.
3. The sprinkler main will have a Fire Department connection.
4. Sprinklers in finished areas will be white concealed type. Sprinklers in the unfinished areas will be bronze.

5. Sprinklers in the areas with complicated ceiling/roof shapes will be piped utilizing Flexhead flexible fire sprinkler connections.

6. Fire pump may be required based on the flow test results and hydraulic calculations.
### 5.3 Sustainability Review

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<thead>
<tr>
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<tbody>
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<td>Sensitive Land Protection</td>
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<td>High Priority Site</td>
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<td>Surrounding Density and Diverse Uses</td>
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<td>Credit Site Development - Protect or Restore Habitat</td>
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<td>Credit Building-Level Water Metering</td>
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### LEED v4 for BD+C: New Construction and Major Renovation

#### Project Checklist

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#### Materials and Resources

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#### Indoor Environmental Quality

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#### Innovation

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<td>Credit Innovation - Green Building Education</td>
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<td>Credit Innovation - Green Cleaning Program</td>
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#### Regional Priority

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### Totals

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<td>Possible Points:</td>
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5.4 Community Review

An additional survey issued from October 17, 2018 to November 8, 2018 asked respondents to react to the top options. The surveys were publicized at the Nazzaro center reception desk, at community meetings, and via neighborhood e-mail and Facebook groups. Response was as follows:

- 103 people logged in
- 74 people voted for a favorite site
- 30 did not comment
- 146 comments total

A selection of the comments is shown here.

- There was strong support for the existing Nazzaro site, although it is not clear whether respondents understood that the existing building could not accommodate the proposed program. A number of commenters proposed renovating the Nazzaro center AND building a new center to accommodate larger programs.
- Some mentioned the Fulton Street Site.
- A significant number of people mentioned the dangers of building on the waterfront relative to sea-level rise.
- There were many mentions of the traffic on Commercial Street as a barrier between the neighborhood and the waterfront sites.
- The Sargent’s Wharf parking lot is seen as a significant neighborhood amenity.
- Affection for the existing building as well as the Mirabella Pool, splash pool, and park is evident in the comments.

A terrible option! Parking issues are already making north end unlivable.

Not ideal with flooding and traffic issues.

Ideal if existing building could be converted and flooding issues could be addressed.

Comments on the Mirabella Site

I’m not opposed, but I’m very concerned with the amount of traffic this will generate building it, as well as after with completion. However if this location would be big enough for what we need, then maybe this is a viable option. My concern is I would not want any of the field or grass space taken away for building at this location. We have very little grass or green space here within the North End, and loosing any of it would be awful.

Comments on the Sargent’s Wharf site

This option seems like it could potentially work. I like the idea of turning part of the parking lot into a park. It is the biggest footprint, which could provide multi-use options and meet the neighborhood’s needs. One of my concerns is still the fact that it is in a flood zone. Also, it is more central than the Mirabella location but still not in the core of the neighborhood.

A terrible option! Parking issues are already making north end unlivable.

Not ideal with flooding and traffic issues.

Ideal if existing building could be converted and flooding issues could be addressed.

no leave the pool area alone

Best of 3 sites

The absolute worst option. Commercial street is difficult for seniors and children to cross - actually it is difficult for anyone to cross. Open space would be eaten up by this monstrosity. Flood zone - on top of it all. I do not like this site as it takes the center out of the neighborhood. Traffic is already congested there, particularly with the new bike paths.

Not convenient and blocks water views for residents. Takes away green space.

It would create major conflicts between Commercial St auto and bike traffic and pedestrians.

Location not ideal but more space
## 5.5 Cost Summary

The summary at right includes concept costs for the top three site options. Please refer to the full cost estimate in the Appendix for detail.

<table>
<thead>
<tr>
<th>Direct Trade Costs</th>
<th>0. Nazzaro 39,645 GSF</th>
<th>1. Mirabella 54,375 GSF</th>
<th>5. Sargent's Wharf 50,496 GSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Trade Cost Details</td>
<td>$16,649,416</td>
<td>$30,143,863</td>
<td>$36,031,024</td>
</tr>
<tr>
<td>Design and Pricing Contingency</td>
<td>$2,498,000</td>
<td>$4,522,000</td>
<td>$5,405,000</td>
</tr>
<tr>
<td>Construction Contingency</td>
<td>$958,000</td>
<td>$1,734,000</td>
<td>$2,072,000</td>
</tr>
<tr>
<td>Direct Trade Cost SubTotal</td>
<td>$20,105,416</td>
<td>$36,399,863</td>
<td>$43,508,024</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Burdens and Fees</th>
<th>0. Nazzaro 39,645 GSF</th>
<th>1. Mirabella 54,375 GSF</th>
<th>5. Sargent's Wharf 50,496 GSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Conditions and Overheads</td>
<td>$1,010,000</td>
<td>$2,370,000</td>
<td>$2,830,000</td>
</tr>
<tr>
<td>01 00 00 Project Requirements</td>
<td>$610,000</td>
<td>$1,100,000</td>
<td>$1,310,000</td>
</tr>
<tr>
<td>General Liability Insurance</td>
<td>$272,000</td>
<td>$499,000</td>
<td>$596,000</td>
</tr>
<tr>
<td>SubContractor Bond</td>
<td>$282,000</td>
<td>$510,000</td>
<td>$610,000</td>
</tr>
<tr>
<td>Fee/Profit</td>
<td>$66,000</td>
<td>$135,000</td>
<td>$161,000</td>
</tr>
<tr>
<td>Burdens SubTotal</td>
<td>$2,240,000</td>
<td>$4,614,000</td>
<td>$5,507,000</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Estimated Construction Cost Total</th>
<th>0. Nazzaro 39,645 GSF</th>
<th>1. Mirabella 54,375 GSF</th>
<th>5. Sargent's Wharf 50,496 GSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Construction Cost Total</td>
<td>$22,345,416</td>
<td>$41,013,863</td>
<td>$49,015,024</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Escalation Allowances</th>
<th>0. Nazzaro 39,645 GSF</th>
<th>1. Mirabella 54,375 GSF</th>
<th>5. Sargent's Wharf 50,496 GSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escalation to start of construction; Spring 2021</td>
<td>$2,548,000</td>
<td>$4,676,000</td>
<td>$5,588,000</td>
</tr>
<tr>
<td>Escalation during construction; incl. in Unit Rates</td>
<td>$2,548,000</td>
<td>$4,676,000</td>
<td>$5,588,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Option: VRF system in lieu of fan coil unit system</td>
<td>($2,604,000)</td>
<td>($1,007,000)</td>
<td>($372,000)</td>
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<tr>
<td>Contract Option: General Contractor in lieu of CM at Risk</td>
<td>$23,649,000</td>
<td>$43,406,000</td>
<td>$51,873,000</td>
</tr>
</tbody>
</table>
Appendix

A.1 Community Advisory Committee & Public Meeting minutes
A.2 Massachusetts Historic Commission Inventory Listing
A.3 Cost Estimates