

EVALUATION REPORT

PORTLAND PUBLIC SCHOOLS

BUILDINGS FOR OUR FUTURE



VOLUME 1 OF 2

Prepared For:

Mr. Douglas Ritter Sherwood, Facilities Coordinator
Portland School Department
Business Office
196 Allen Avenue
Portland, ME 04103

DRAFT

July 25, 2013

Prepared By:



OAK POINT
ASSOCIATES

architecture
engineering
planning

Table of Contents

VOLUME 1

| | |
|--------------------------|--------------|
| EXECUTIVE SUMMARY | TAB A |
|--------------------------|--------------|

| | |
|---------------------|--------------|
| INTRODUCTION | TAB B |
|---------------------|--------------|

Scope

Process

| | |
|------------------------|--------------|
| SCHOOL PROJECTS | TAB C |
|------------------------|--------------|

Longfellow Elementary School

Existing Conditions

Recommendations

Program Space

Budget and Timeline

Harrison Lyseth Elementary School

Existing Conditions

Recommendations

Program Space

Budget and Timeline

Presumpscot Elementary School

Existing Conditions

Recommendations

Program Space

Budget and Timeline

Reiche Community School

Existing Conditions

Recommendations

Program Space

Budget and Timeline

SCHOOL PROJECTS (continued)

Fred P. Hall Elementary School

Existing Conditions

Recommendations

Program Space

Budget and Timeline

Project Budget and Phasing

SCHOOL CAPACITY

TAB D

Introduction

Existing Capacity and Enrollment

Enrollment Projections

Analysis of Available Data

Long-Term Recommendations

Short-Term Recommendations

DISTRICT PROGRAMS

TAB E

VOLUME 2

APPENDICES

Appendix A - Project Scope

Appendix B - Existing and Proposed Site Plans, Floor Plans and Massing Plans

Appendix C - Interview Notes / Staff Questionnaires

Appendix D - Public Presentations

Appendix E - Enrollment Projections

Fred P. Hall Elementary School

Year Opened: 1956
Major Addition: 1967
Number of Stories: One
Building Area: 54,036 gsf
2012/2013 Student Enrollment: 420
Capacity: 447 (Based on 2012/2013 grade configurations and district class size maximums)
Full-Time-Equivalent Staff Members: 68
Site Area: 21.2 Acres
Zone: R-3 (Residential)
Setbacks: 25 feet (Front and Rear Yards)
..... 16 feet (Side Yard for 2-1/2 Story Structures)
..... 20 feet (Side Yards on Side Streets)
..... 5 feet (for accessory detached structures less than 144 ft²)

Additional Site Constraints

(See also Site Constraints Plan):.....

- On-site subsurface sand filter proposed as part of recently approved Capisic Brook Watershed Management Plan.
- Northern half of the site is in Capisic Brook watershed (Capisic Brook is classified as “Urban Impaired Stream” by the Maine DEP).
- Ravine/steep slopes along northern side of the site (adjacent to Capisic Brook).
- Unnamed stream on southern part of the site.
- Small wetland area located in the western part of the site and several other small wetland areas located at various locations on the site.
- Wooded area on southern half of site is desired to become part of City’s “Land Bank.”
- Portland Water District right-of-way runs north to south through the center of the site.
- A sewer main runs from the northwest side of the site (at the end of Purchas Street) northerly through the center of the site, adjacent to the Water District right-of way.

Total Available Parking Spaces

(approximate): 78 marked spaces (including three accessible spaces), but only 63 are regularly used (15 are located adjacent to the playground area and are barricaded to discourage vehicles from parking in them).

A summary table identifying current and proposed program spaces at Fred P. Hall Elementary School is contained at the end of this section of the report, along with a budget summary and timeline. Existing and proposed site plans, floor plans and massing plans can be found in Appendix B.

Existing Conditions

Building Features

Through multiple facility condition assessments over the past several years, Portland Public Schools has determined that Hall School is a candidate for new construction, rather than major renovation. Since the Buildings for Our Future project included working within the assumption that the existing school is slated for replacement, a description of the current building's features, configuration, mechanical and electrical systems and deficiencies is not included in this report.

General

Hall School is located on a 21.2-acre site within a residential neighborhood, just north of Brighton Avenue in the Nason's Corner neighborhood of Portland. The school is located on Orono Road, a short distance from Warwick Street. Capisic Brook runs along the northern part of the site (just north of the school building), within a wooded area. The southern half of the site is also wooded, with stream/wetland areas. The school facility is located at the center of the site.

Site Circulation and Parking

The site entrance is a one-way driveway from Warwick Street. On site, the entrance drive splits into a dedicated bus loop, a parent loop/parking bay, and a second parking bay. The site exit is at the end of Orono Road, a short (approximately 250 feet) two-way street that connects to Warwick Street just south of the site entrance. The site has 78 total marked parking spaces (including three accessible spaces) split into two parking areas: one staff/visitor lot on the east side of the school, near the main entrance and bus/parent loops (approximately 63 spaces, including three accessible spaces); and one on the south side of the school, adjacent to the playground (approximately 15 spaces) that is used as part of the playground and is barricaded to discourage vehicles from parking in it.

There are sidewalks leading to the site along Warwick Street and Orono Road, from the end of Godfrey Street, and on site. There are also walking paths onto the site from the end of Pinecrest Road and the wooded area on the southern half of the site.

The existing receiving area for the school is located on the south side of the gym and accessed from the entrance drive.

The pavement on the site is asphalt concrete. Curbing within the parking lots and parent loop is granite. All other curbing on the site is asphalt concrete.



Pavement and sidewalk

Oak Point Associates was present to observe traffic flow at the beginning and end of the school day in December, 2012 and January, 2013. It was observed that student drop-off and pick-up for children riding the bus occurred in the bus loop in front of the school. Five school buses were observed at morning drop-off (staff interviews suggest there may be five or six) and three buses in the afternoon. Morning parent drop-off occurred along the parent loop. In the afternoon, parents parked their vehicles and waited in the playground area for their children.

Morning drop-off was well organized. Parents dropped off children along the parent loop, where they were greeted by a staff member and escorted across the bus loop to the main entrance. This process took approximately 2-3 minutes. Parents did not generally park their car and escort their child into the school unless they arrived late. Some children walked to school from neighboring Sagamore Village (to the west) and the neighborhood to the north of the school.

Afternoon dismissal was staggered: children riding the bus were dismissed first (from the main entrance) followed by those being picked up in vehicles (into the playground from the southern entrance) and children walking home (from the main entrance and entrances on the north and south sides of the building).

Parents picking up their children parked their cars on site and waited for their children in the playground area. A lack of available parking spaces forced parents to park illegally along the entrance drive, the parent loop, and the exits out of the parking areas, the exit drive, and Orono Road (which is only 24 feet wide and signed “no parking”). This made it difficult for people parked legally to get out of their parking spaces, and in some instances they were forced to wait in their vehicles until the illegally parked cars were moved. City Transportation staff noted that on some occasions (particularly in the winter) parked cars constrict the site exit and Orono Road so much that buses are unable to fit and parents have to be notified to move their vehicles immediately.

Accessibility

The site has three standard width spaces marked as accessible with adjacent access aisles. Current *ADA Standards for Accessible Design* guidelines require a minimum of four accessible spaces, including one van-accessible space. Compliant spaces must be adjacent to an appropriately sized access aisle.

The majority of the site entrances are at grade, and there are accessible curb cuts located at the main entrance, gym entrance and the playground entrance.



Main Entrance



Playground Entrance

Outdoor Play and Learning Spaces

Outdoor play and learning spaces on site include the playground, a baseball field, and woodland trails. The playground area is to the south and west of the school building. Directly adjacent to the school on both sides are asphalt concrete hard court areas that are utilized for four square, hopscotch, basketball, and other games. The hard court to the south has parking spaces striped on one side, although access to this area is limited by jersey barriers and orange cones (vehicles were parked in this area during visits to the site). There



Existing playground



Woodland trail

are two swing sets, two composite playground structures and a couple of stand-alone climbers to the south of the paved area. The children are allowed to play in a large pine grove (to the southeast of the play equipment) during recess. There is also a garden (the "Kindergarten garden") near the south entrance to the school, where parents gather to meet children at dismissal. Stripes painted on tree trunks indicate the limit to

which they are allowed to go. To the west of the school, near the baseball field, is a series of wood-construction fitness stations, funded by a grant to try to reduce the incidence of childhood obesity.

The baseball field is utilized by little league and youth soccer. The quality of the field has been reported to be lacking.

A trail runs alongside Capisic Brook, between the school building and the brook. This trail offers the opportunity for outdoor learning, and many teachers report using the trail for classroom activities. This trail, and the trail to the south of the playground, are part of the Portland Trails network, and are a pedestrian link between Evergreen Cemetery and the Fore River Sanctuary.

A schoolyard garden is located to the right of the main school entrance, in a courtyard created by the gym wing. It includes a number of planter boxes, planting beds, and seating. The garden location is directly outside the location of the building fire that occurred in September 2012.

Utilities

Electrical and communications (telephone and cable) service runs overhead from Purchas Street to a utility pole on site just south of the baseball field. From there, communications runs overhead to the western side of the building and electrical service runs underground to a transformer located on the northwest side of the building.

Heating fuel for the boiler is provided by an exterior underground oil tank located just off the southern side of the mechanical room, on the west side of the building.

Water service for both potable water and the building's sprinkler system are run to the mechanical room on the west side of the building from a 20-inch diameter cast iron water main that runs through the center of the site, from the end of Pinecrest Road to the north to the end of Wessex Street to the south (installed circa 1914). The water line is run within a 50-foot-wide right-of-way belonging to the Portland Water District.

There is also a sewer right-of-way on the site containing a 30-inch diameter storm drain line and a 10-inch diameter sanitary sewer line that convey stormwater runoff and sanitary sewage from Sagamore Village. The right-of-way originates at the northern end of Purchas Street and continues north to the western side of the baseball field. From there, it heads easterly toward the school before continuing northerly alongside the Portland Water District water right-of-way. The sewer and storm drain lines in this right-of-way enter the site as separate lines running parallel to each other. On the north end of the site, the storm drain line flows through a diversion manhole where smaller drainage flows are diverted into a grit chamber before combining with the sanitary sewer line and exiting the site at the end of Pinecrest Street. Larger stormwater flows bypass the grit chamber and are discharged directly into Capisic Brook instead of being discharged into the sanitary sewer system.

Sanitary sewer lines run from the school to a sewer manhole located on the east side of the baseball field that is connected to the sanitary sewer main in the sewer right-of-way. Roof drain lines appear to be connected to the storm drain in the sewer right-of-way at a drain manhole near this sewer manhole.

Drainage and Grading

The developed portion of the site is very flat, with the southern half of the site draining to a stream/wetland located in the wooded area on the southern portion of the site. The northern half of the site drains to Capisic Brook which flows along the northern side of the site at the bottom of a deep ravine (as much as 20 feet in some places). The top of this ravine is generally located at the edge of the tree line on the northern side of the school, approximately 25-30 feet from the building face.

Runoff from the bus and parent loops- as well as the parking areas on the east side of the building- flows into a closed drainage system that discharges into Capisic Brook near the northeast corner of the site. There are also two storm drain outlets that appear to be foundation drain outlets in the slope off of the northeast corner of the building that discharge into Capisic Brook. Runoff from the playground area flows into a closed drainage system that is connected to the 30-inch storm drain line running on the west side of the school.

Areas of poor drainage have been noted on the developed portion of the site, particularly on the west side of the school. Small wetlands were observed both along the western edge of the site, near Kervin Street and near the end of Purchas Street. Poor drainage in the baseball field and the area near the northwest corner of the school was also reported by school staff.

Public Input

At the charrette held on January 17, 2013, several priorities were expressed by members of the public in attendance. Oak Point also received input from teachers and staff at Hall School. The priorities communicated included the following:

- Outdoor learning spaces with vegetable gardens and natural play areas
- Indoor and outdoor performance areas
- Maintain the wooded nature of the site
- Safe and secure building entrance
- Natural daylighting in classrooms
- State of the art technology
- Proper classroom acoustics
- A separate gym and cafeteria
- Small breakout areas and meeting spaces
- Incorporate the aquarium into the new building plan

Recommendations

Building/Site Layout Strategies

A number of factors influence the siting of a new school building and associated site amenities on the existing Hall School site, including:

- Keeping the existing school operational to the greatest extent possible during the construction period.
- Providing optimal solar orientation for the new building to maximize both visual comfort and energy efficiency.
- Minimizing clearing on the site, especially near the wooded area on the southern half of the site, which the City desires to add to its “Land Bank.”
- Minimizing the disruption to existing utility infrastructure (water, sewer, and storm drain lines) that run through the site.
- Limiting building construction near the existing ravine on the north side of the site (along Capisic Brook).
- Providing space for a subsurface stormwater treatment system for offsite stormwater runoff from Sagamore Village (recommended as part of the Capisic Brook Stormwater Management Plan submitted to the City in 2012 and approved for implementation).

To meet these parameters, it is recommended that the new school be constructed on the west side of the existing school, with its footprint only overlapping a small portion of the northwestern wing of the existing school. This would not interfere with the building’s utilities and, therefore, allow the majority of the school to remain operational during the construction period, as well as allow for possible construction access via Purchas Street or Pinecrest Road instead of from the main school vehicular entrance. The small number of classrooms in the portion of the building proposed to be removed could be placed in portable classrooms until the new school construction is completed, at which point the remainder of the existing wood-framed structure would be demolished.

Insufficient parking area and poor site circulation were noted as significant problems on site. Thus, it is important that adequate parking be provided for the full-time equivalent staff members (estimated to be between 72 and 75 based on projected enrollment), as well as visitors to the school and accessible parking. Adequate queuing space for parents and buses is also required.

Two different concepts were developed to address these concerns: “Option A” and “Option B.” These concepts maintain the same general elements on the site but have significantly different parking and circulation patterns.

As there is a significant population of students that walk to school, both options also maintain the existing pedestrian access points to the site (sidewalks along the site entrance at Warwick Street and the site exit at Orono Road, and walkways near Godfrey Street/Purchas Street and at the end of Pinecrest

Road) as well as the existing trails along Capisic Brook and through the wooded area on the southern half of the site.

Building Features

The proposed concept furnishes enough capacity for approximately 523 students, including the addition of a pre-kindergarten (pre-K) class. Four classrooms for each grade of students in kindergarten through fifth are proposed to support the increased capacity. Core spaces (library and separate gym and cafeteria) would also be furnished at a size that supports the proposed capacity. The gymnasium is recommended to have a middle-school-sized basketball court with bleacher seating for half of the student enrollment. A performance stage, office and storage rooms for the school and recreational department are also recommended. Music and Art programs are proposed to have appropriately sized classrooms with proper storage rooms and a separate room for the kiln. Administrative spaces, Special Education rooms, work rooms and a sufficient number of staff and student toilet rooms would be provided to support the educational program.

Interior Finishes

Proposed interior finishes are planned to be durable and sustainable and may include carpet, linoleum, tile, and SAT ceilings as well as natural materials.

Accessibility and Life Safety

The building entrance must be handicapped accessible and an accessible route needs to be provided throughout the entire school building. An elevator would be needed to provide access to the second floor. Access to the stage is proposed to be provided by a ramp. Door hardware throughout the building needs to include lever handles and required clearances will need to be provided at all doors. Signage that meets ADA requirements should be provided at rooms, stairs and exits. ADA toilet rooms are proposed for students and staff. Fixtures, accessories and clearances will also need to meet accessibility requirements. An accessible toilet room should be provided in the new nurse's office and should be equipped with an ADA-compliant shower.

A minimum of two means of egress must be provided from all areas of the building and a minimum of two exits must be provided from the second floor. An automatic sprinkler system compliant with the current NFPA 13 code is proposed to allow for the planned size of the building and to provide protection of the occupants and the structure.

A fire alarm system, emergency egress lighting, and exit signage should be provided to meet current NFPA code requirements.

Building Envelope

New construction should incorporate thermal resistance values consistent with ASHRAE requirements into the design of the entire building envelope. A brick veneer, exterior wall system with rigid insulation and an air/vapor barrier is proposed. Aluminum windows and storefronts are proposed, with insulated glazing. Sun shades and light shelves would improve natural daylighting on the south side of the building. Airlock vestibules are recommended at each major exit to reduce heat loss in these locations. A TPO membrane and rigid insulation roof system with skylights in strategic locations for introducing daylight into the building should also be included in the design of the new building.

Proposed Plans

Floor plans for Options A and B propose solutions to provide the established building program, accessibility, life safety and building envelope parameters. Both options group classrooms by grade levels (Pre-K/kindergarten, first/second grade and third/fourth grade) and integrate resource rooms with the appropriate grades. Special Education is proposed to be centrally located in a suite for sharing of resources and minimizing student transition time to and from specialists. Administrative and public use spaces should be easily accessible at the front of the building and classroom wings are proposed to be configured so that they can be secured during non-school hours. In both options, classrooms for third, fourth and fifth graders are located on the second floor while classrooms for younger students and all spaces used by those students are located on the first floor. The options show opportunities for variation in location of core spaces to work with the two proposed site layouts.

Mechanical/Plumbing Systems

A high efficiency heating and ventilating system should be provided. The new heating system is proposed to consist of three high-efficiency, natural gas condensing boilers, which can operate at ultra high efficiencies when coupled with terminal devices, such as radiant panels, fan coil units or radiant floor heating, located in each space that are designed to operate using low-temperature heating water (in the range of 90°F to 120°F). Boiler efficiencies exceeding 95% can be achieved with a system such as this. The distribution piping will be well insulated to minimize stand-by losses associated with heating water distribution piping.

Energy Recovery Ventilators (ERVs) are recommended to provide ventilation to all the spaces in compliance with ASHRAE ventilation standards. ERVs pre-condition the incoming fresh outside air by extracting heat from the exhaust through the use of an air-to-air heat exchanger that prevents the outside and exhaust air streams from mixing. Fans located in the ERVs would distribute fresh air to each of the spaces and remove exhaust air through an above-ceiling ductwork system.

Air conditioning should be provided in selected spaces (offices, etc.) through the use of high-efficiency, environmentally friendly, refrigerant based systems, such as a variable flow refrigerant system or an air-to-air heat pump system. Outdoor condensing units should be located on the roof or at grade along the side of the building.

Additional sustainability features (in addition to the ERVs and high efficiency cooling systems) that are under consideration to be incorporated into the design are a solar domestic water heating system and a building energy management system. The solar heating system would consist of evacuated solar tube arrays located on the roof that would produce hot domestic water for use in the lavatories and sinks. Highly insulated tanks would be installed in the boiler room to store the heated water for use after the sun goes down. The energy management system would consist of a Direct Digital Control (DDC) system that would control all of the HVAC equipment in the building. Real-time energy usage would be monitored by the system and adjustments would automatically be made to the mechanical systems operations, without affecting occupant comfort, in order to maximize energy efficiency.

Low flow plumbing fixtures are recommended, to conserve water. A high-efficiency domestic water heater should be provided and integrated with solar water heating system described above.

Electrical/Security /Communications Systems

Electrical service equipment should be provided and designed sized to meet loads for the proposed building. Electrical equipment should be installed in dedicated electrical spaces. Electrical distribution should include power for general classroom use and computer loads throughout the building.

Classroom lighting is recommended to include controls for daylight harvesting and enhanced for utilization of educational AV systems. Pendant-mounted direct/indirect, energy-efficient fluorescent fixtures are recommended for high quality of light and flexibility for classroom AV systems.

Exterior lighting should include energy efficient LED and low glare type fixtures for parking and pedestrian areas. Lighting levels should be designed to meet current Illuminating Engineering Society of North America (IESNA) recommendations.

The location of the building entrance should be such that it allows for direct visual monitoring from the main office, and a controlled access point at the entry vestibule should be provided.

Security systems should include access controls (card key system), CCTV cameras and intrusion detection coverage for the building. These systems are recommended to be integrated with the district-wide systems for uniform monitoring and system administration.

Building telecom design should include dedicated climate-controlled space for data/telephone systems and telecom entrance room. Classrooms are recommended to include wired and wireless network access, VoIP phone, intercom, interactive AV, and classroom sound enhancement systems.

Parking and Site Circulation - Option A

Option A eliminates the site entrance on Warwick Street and utilizes Orono Road as both a site entrance and exit. A dedicated bus loop separates on site bus traffic from parent and staff traffic. A large parking lot on the south side of the school would be utilized for staff/visitor parking and a long pull-off lane along the east and north sides of the parking lot be used for parent drop-off and pick-up.

This separation of bus traffic from parent traffic helps to eliminate transportation department concerns with parked cars blocking bus traffic. However, improvements may be required on Orono Road to ensure that it would be able to accommodate the increase in two-way traffic. Additionally, the small radius of the bus turn around would make it more difficult to maneuver the buses around the loop, particularly when parked buses are present.

Parking and Site Circulation - Option B

Option B maintains the existing site entrance and exit (thus potentially reducing the amount of improvements necessary on Orono Road). Circulation for parents and staff are generally similar to the existing site, but the parking lot has been expanded to allow for an adequate number of parking spaces. Additionally, a longer pull-off lane has been added for parent pick-up and drop-off and adequate drive aisle width has been provided to prevent cars parked in the pull-off lane from interfering with vehicle circulation in the parking lot.

The bus loop is separated from parent and staff traffic, but students, parents, and teachers must cross it to get to the parking area (a crosswalk would be included across the bus loop in line with the main entrance). Additionally, the linear nature of the bus loop would allow the buses to queue up closer to the main entrance than in Option A.

Outdoor Play and Learning Spaces

In both options, the proposed building location would displace the baseball field, and it should be relocated on site. The playground should be sited to take advantage of natural play opportunities near existing trail networks and appropriate natural features (such as the pine grove). The playground should provide an adequate quantity of play features to serve the population that uses it, should accommodate after-school programming needs, and incorporate natural play and learning into the design. The playground should be designed to foster all types of physical development, as well as imaginative play.

Utilities and Grading

The recommended building location in both options is directly on top of the existing sewer/storm drainage lines that run from the end of Purchas Street northerly across the site. These lines would need to be relocated westerly so that they flow behind the proposed school before connecting to the existing line in the vicinity of the existing grit chamber (south of the Capisic Brook crossing). Additionally, the proposed subsurface treatment system (indicated to be 10,000 ft² in the Capisic Brook Management Plan) could be located near the end of Purchas Street.

It is recommended that new water service (both potable and fire protection) for the school be connected to the existing water main beneath Purchas Street.

Conversations with the Portland Water District have indicated that the existing 20-inch diameter water main and corresponding 50-foot wide easement running through the site from Wessex Street to Pinecrest Street can be discontinued and the portion of the water main beneath the proposed disturbance can be removed as required. The portions of the pipe located in areas that would not be disturbed can be capped and abandoned in place. However, to maintain redundancy in their water distribution system the Water District would require that if the existing 20-inch line is discontinued, a new line must be constructed from the intersection of Godfrey Street and Purchas Street to the intersection of Orono Road and Warwick Street. A 50-foot wide right-of-way would also need to be established for the line. Additionally, services connected to the existing line in Orono Road (which would also be required to be removed) would need to be connected to the new line. As part of abandoning the 20-inch main, the water district would also require that all existing services on Wessex Street (approximately 6 services) be connected to a new main that would extend south to the main beneath Brighton Avenue.

New electrical and communications (telephone and cable) services are recommended to be provided from the existing utility pole at the end of Purchas Street, with a new transformer provided. Also, at the request of Portland Public Schools, a pad and conduit has been scoped for a future generator (the exact size of the pad will need to be coordinated with the generator model PPS anticipates using).

Natural gas service is recommended to be run to the proposed school from either the existing natural gas main located beneath Purchas Street or the existing main beneath Warwick Street (the final point of connection would need to be determined by Unitil, the current natural gas supplier for the City).

The site would be graded as required to provide code-compliant parking and pedestrian routes, playfields and playgrounds and positive drainage away from the building entrances.

Stormwater treatment should be provided on the site as required by both City and State requirements (current City of Portland requirements are more stringent than state requirements as they relate to triggers for stormwater treatment systems being required) as well as minimizing the amount of runoff from the site that drains directly into Capisic Brook should also be minimized. These stormwater treatment systems could include Low Impact Development measures, such as a vegetated roof on a portion of the building addition and bioretention areas to collect runoff from the parking area and hard court on the east side of the building. Conversations with Stormwater Management representatives from the City of Portland have indicated that there is a high degree of likelihood that the City will be implementing a stormwater fee system for impervious surfaces on a site. Any stormwater treatment provided on the site will likely offset a portion of this fee.

Site Elements and Fire Department Access

Dumpsters are recommended to be placed in an enclosure near the receiving area (the location of the receiving area varies between the two options). A storage shed should also be provided that could be used to house exterior and gasoline-powered equipment, such as snow blowers and small lawn mowers.

Fire Department access will be required on the rear (west) side of the building. To accomplish this, the pedestrian walkway from Godfrey and Purchas Street could be widened to accommodate a fire truck and a drive leading onto the site added at the end of Purchas Street. Both of these locations should be secured at the property line with lockable gates to prevent unauthorized vehicles from using them. Conversations with the Portland Fire Department have indicated having a fire department access road that exits the site and re-enters it in another area is acceptable.

Receiving Area and Fire Department Access - Option A

In Option A, the receiving area would be located on the northeast corner of the building and would be accessed via the bus loop. It is anticipated that deliveries and trash removal would not occur when buses are present in the bus loop.

On site, the pedestrian walkway from Godfrey and Purchas Street would double as a fire department access road and be connected to the southern side of the parking area.

Receiving Area and Fire Department Access - Option B

In Option B, the receiving area would be located on the southwest side of the building. It would be accessed via an extension of Purchas Street that would also provide the Fire Department access to the rear (west) side of the building.

On site, the pedestrian walkway from Godfrey and Purchas Street would double as a fire department access road and be extended to connect to the site exit.

Fred P. Hall Elementary School

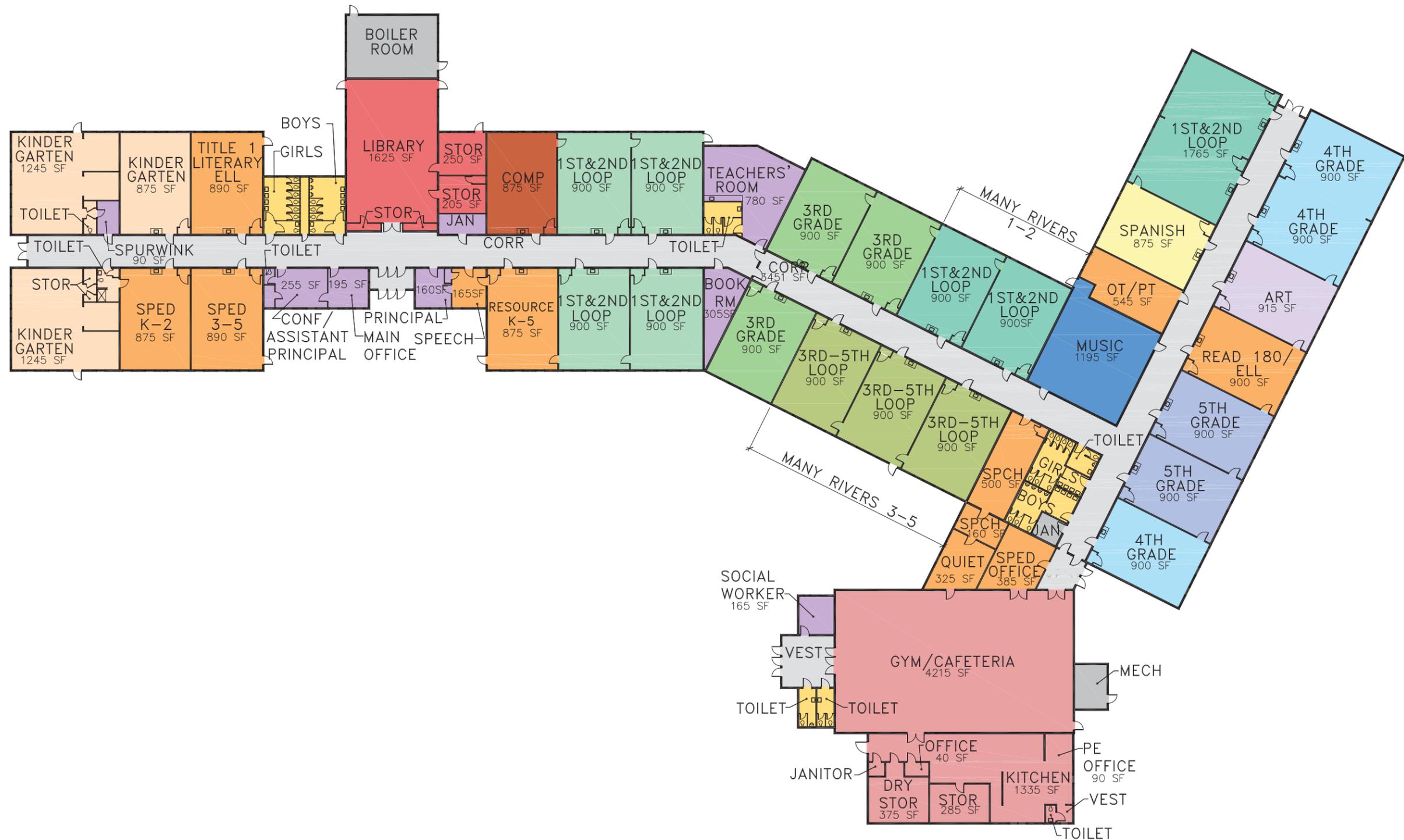
| PROGRAM SPACE - EXISTING FACILITY | | | | | | | | PROGRAM SPACE - PROPOSED FACILITY OPTION A | | | | | | | | | |
|-----------------------------------|------------|---|-----------|----|---|-----------|------------------------|--|---------------------|------------|---|-----------|----|---|-----------|------------------------|----------|
| Subject | # of Rooms | @ | Room Size | sf | = | Area (sf) | # of Students per Room | Capacity | Subject | # of Rooms | @ | Room Size | sf | = | Area (sf) | # of Students per Room | Capacity |
| Art | 1 | | 915 | | | 915 | | | Art | 1 | | 1310 | | | 1310 | | |
| Music | 1 | | 1195 | | | 1195 | | | Music | 1 | | 1315 | | | 1315 | | |
| Spanish | 1 | | 875 | | | 875 | | | Spanish | 1 | | 750 | | | 750 | | |
| Computer | 1 | | 875 | | | 875 | | | | | | | | | | | |
| Library | 1 | | 1625 | | | 1625 | | | Library | 1 | | 2465 | | | 2465 | | |
| | 1 | | 250 | | | 250 | | | Project Room | 1 | | 385 | | | 385 | | |
| | 1 | | 205 | | | 205 | | | | | | | | | | | |
| | 2 | | 30 | | | 60 | | | | | | | | | | | |
| | | | | | | | | | Gym | 1 | | 5715 | | | 5715 | | |
| Cafeteria/Gym | 1 | | 4215 | | | 4215 | | | Locker Rooms | 2 | | 400 | | | 800 | | |
| Kitchen | 1 | | 1335 | | | 1335 | | | PE Office | 1 | | 125 | | | 125 | | |
| | 1 | | 285 | | | 285 | | | PE Storage | 1 | | 210 | | | 210 | | |
| | 1 | | 375 | | | 375 | | | Rec Office/Storage | 1 | | 370 | | | 370 | | |
| | 1 | | 40 | | | 40 | | | Cafeteria | 1 | | 2620 | | | 2620 | | |
| PE Office | 1 | | 90 | | | 90 | | | Kitchen | 1 | | 1180 | | | 1180 | | |
| | | | | | | | | | Stage | 1 | | 970 | | | 970 | | |
| | | | | | | | | | Community Room | 1 | | 265 | | | 265 | | |
| | | | | | | | | | | | | | | | | | |
| Main Office | 1 | | 195 | | | 195 | | | Main Office | 1 | | 850 | | | 850 | | |
| Principal | 1 | | 160 | | | 160 | | | Principal | 1 | | 200 | | | 200 | | |
| Assistant Principal/Conference | 1 | | 255 | | | 255 | | | Assistant Principal | 1 | | 180 | | | 180 | | |
| | | | | | | | | | Conference | 1 | | 390 | | | 390 | | |
| | | | | | | | | | Workroom | 1 | | 225 | | | 225 | | |
| | | | | | | | | | Files | 1 | | 270 | | | 270 | | |
| Teachers' Room | 1 | | 780 | | | 780 | | | | | | | | | | | |
| | | | | | | | | | Workroom | 1 | | 580 | | | 580 | | |
| | | | | | | | | | Workroom | 1 | | 380 | | | 380 | | |
| Book Room | 1 | | 305 | | | 305 | | | Book Room | 1 | | 280 | | | 280 | | |
| | | | | | | | | | Book Room | 1 | | 200 | | | 200 | | |

Fred P. Hall Elementary School

| PROGRAM SPACE - EXISTING FACILITY | | | | | | | | PROGRAM SPACE - PROPOSED FACILITY OPTION A | | | | | | | | | |
|---|------------|---|-----------|----|---|-----------|------------------------|--|---|------------|---|-----------|----|---|-----------|------------------------|----------|
| Subject | # of Rooms | @ | Room Size | sf | = | Area (sf) | # of Students per Room | Capacity | Subject | # of Rooms | @ | Room Size | sf | = | Area (sf) | # of Students per Room | Capacity |
| Social Worker | 1 | | 165 | | | 165 | | | Social Worker | 1 | | 260 | | | 260 | | |
| Spurwink | 1 | | 90 | | | 90 | | | Spurwink | 1 | | 90 | | | 90 | | |
| | | | | | | | | | Nurse | 1 | | 450 | | | 450 | | |
| | | | | | | | | | Volunteer Room | 1 | | 190 | | | 190 | | |
| | | | | | | | | | | | | | | | | | |
| CAPACITY | 447 | | | | | | | | CAPACITY | 523 | | | | | | | |
| TOTAL NET AREA (SF) | 40845 | | | | | | | | TOTAL NET AREA (SF) | 53540 | | | | | | | |
| Structure/Circulation/Mech/Utility | 13191 | | | | | | | | Structure/Circulation/Mech/Utility | 26460 | | | | | | | |
| TOTAL GROSS AREA (SF) | 54036 | | | | | | | | TOTAL GROSS AREA (SF) | 80000 | | | | | | | |
| GROSS SF PER STUDENT | 121 | | | | | | | | GROSS SF PER STUDENT | 153 | | | | | | | |

Fred P. Hall Elementary School

| PROGRAM SPACE - EXISTING FACILITY | | | | | | | | PROGRAM SPACE - PROPOSED FACILITY OPTION B | | | | | | | | | |
|-----------------------------------|------------|---|-----------|----|---|-----------|------------------------|--|---------------------|------------|---|-----------|----|---|-----------|------------------------|----------|
| Subject | # of Rooms | @ | Room Size | sf | = | Area (sf) | # of Students per Room | Capacity | Subject | # of Rooms | @ | Room Size | sf | = | Area (sf) | # of Students per Room | Capacity |
| Art | 1 | | 915 | | | 915 | | | Art | 1 | | 1420 | | | 1420 | | |
| Music | 1 | | 1195 | | | 1195 | | | Music | 1 | | 1170 | | | 1170 | | |
| Spanish | 1 | | 875 | | | 875 | | | Spanish | 1 | | 750 | | | 750 | | |
| Computer | 1 | | 875 | | | 875 | | | | | | | | | | | |
| Library | 1 | | 1625 | | | 1625 | | | Library | 1 | | 2450 | | | 2450 | | |
| | 1 | | 250 | | | 250 | | | Project Room | 1 | | 390 | | | 390 | | |
| | 1 | | 205 | | | 205 | | | | | | | | | | | |
| | 2 | | 30 | | | 60 | | | | | | | | | | | |
| | | | | | | | | | Gym | 1 | | 5850 | | | 5850 | | |
| Cafeteria/Gym | 1 | | 4215 | | | 4215 | | | Locker Rooms | 2 | | 480 | | | 960 | | |
| Kitchen | 1 | | 1335 | | | 1335 | | | PE Office | 1 | | 150 | | | 150 | | |
| | 1 | | 285 | | | 285 | | | PE Storage | 1 | | 275 | | | 275 | | |
| | 1 | | 375 | | | 375 | | | Rec Office/Storage | 1 | | 340 | | | 340 | | |
| | 1 | | 40 | | | 40 | | | Cafeteria | 1 | | 2680 | | | 2680 | | |
| PE Office | 1 | | 90 | | | 90 | | | Kitchen | 1 | | 1090 | | | 1090 | | |
| | | | | | | | | | Stage | 1 | | 1030 | | | 1030 | | |
| | | | | | | | | | | | | | | | | | |
| Main Office | 1 | | 195 | | | 195 | | | Main Office | 1 | | 740 | | | 740 | | |
| Principal | 1 | | 160 | | | 160 | | | Principal | 1 | | 185 | | | 185 | | |
| Assistant Principal/Conference | 1 | | 255 | | | 255 | | | Assistant Principal | 1 | | 185 | | | 185 | | |
| | | | | | | | | | Conference | 1 | | 350 | | | 350 | | |
| | | | | | | | | | Workroom | 1 | | 250 | | | 250 | | |
| | | | | | | | | | Files | 1 | | 330 | | | 330 | | |
| Teachers' Room | 1 | | 780 | | | 780 | | | Teachers' Room | 1 | | 755 | | | 755 | | |
| | | | | | | | | | Workroom | 1 | | 500 | | | 500 | | |
| | | | | | | | | | Workroom | 1 | | 350 | | | 350 | | |
| Book Room | 1 | | 305 | | | 305 | | | Book Room | 1 | | 200 | | | 200 | | |

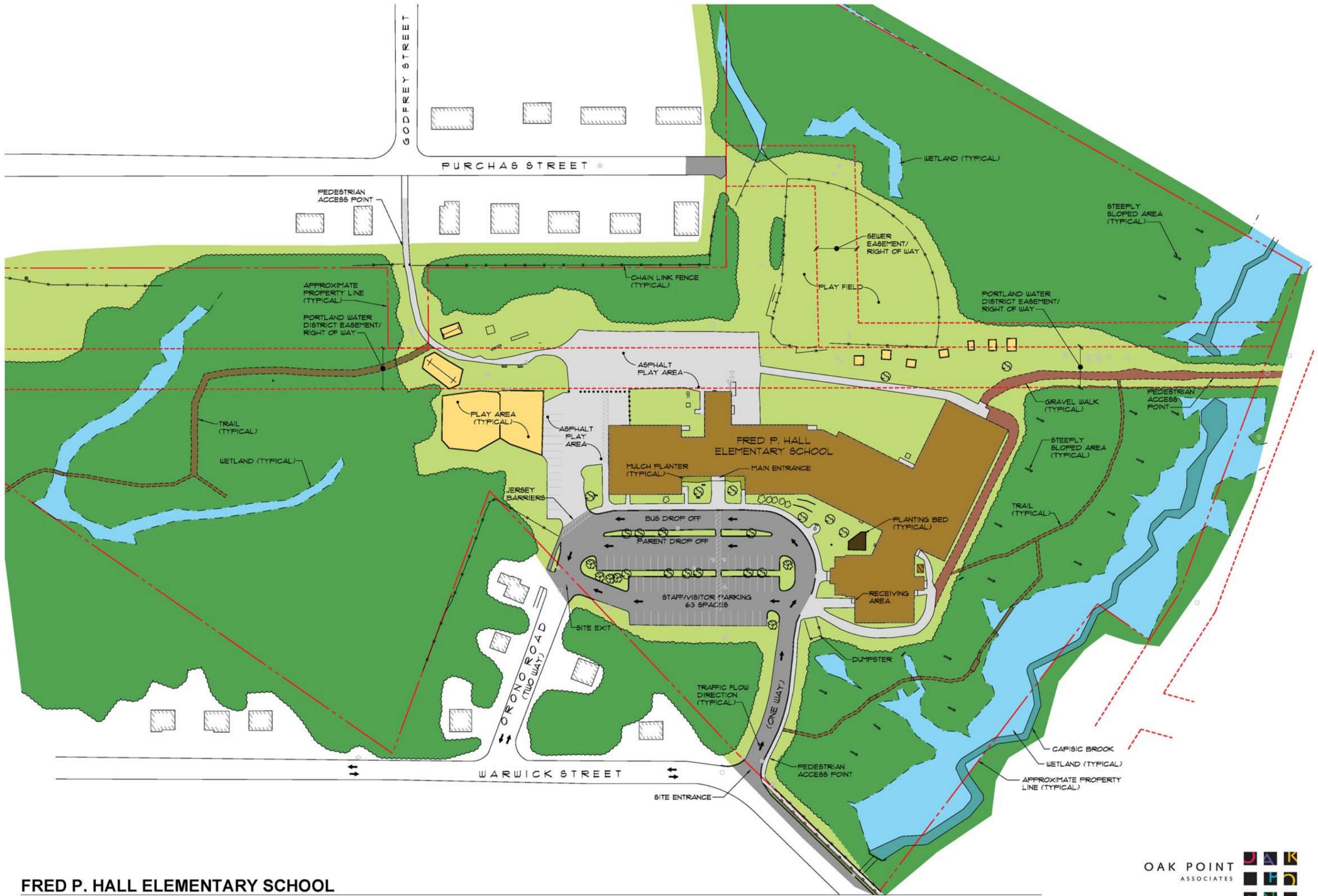


- | | | |
|---|--|--|
| KINDERGARTEN | SPECIAL ED | ENGLISH LANGUAGE LEARNERS |
| 1ST & 2ND LOOP | ADMINISTRATION | SPANISH |
| 3RD GRADE | LIBRARY | MECH/STORAGE/JANITOR |
| 3RD - 5TH LOOP | CAFETERIA/KITCHEN/GYM | TOILETS |
| 4TH GRADE | ART | CIRCULATION |
| 5TH GRADE | MUSIC | COMPUTER LAB |



FRED P. HALL ELEMENTARY SCHOOL
EXISTING FLOOR PLAN





FRED P. HALL ELEMENTARY SCHOOL
EXISTING CONDITIONS SITE PLAN



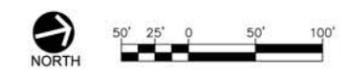
ARCHITECTURE ■ ENGINEERING ■ PLANNING



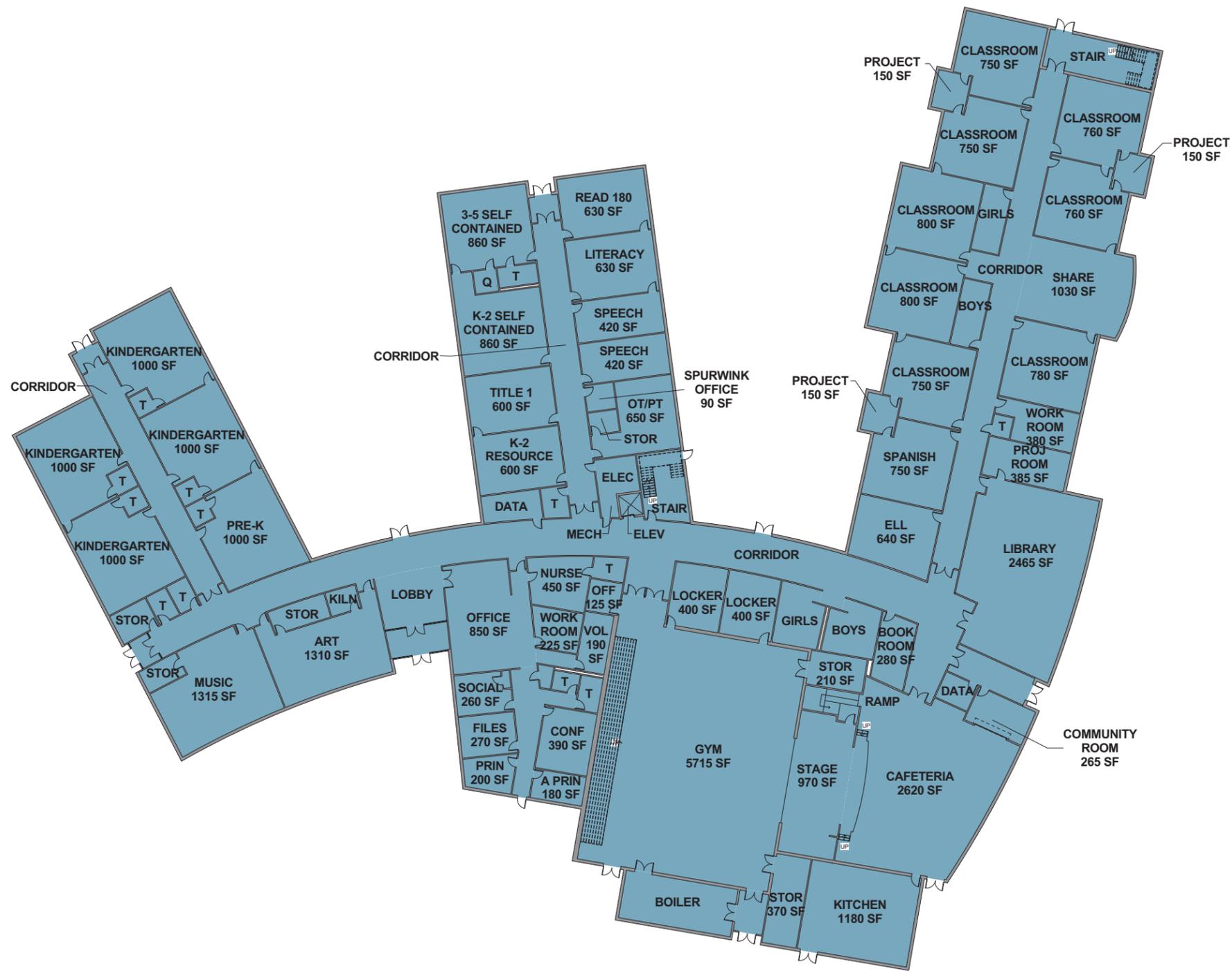
©\V\W\21222-001-011-011-011.dwg 10/17/2013 10:01:20 AM ED



FRED P. HALL ELEMENTARY SCHOOL
 EXISTING SITE CONSTRAINTS



ARCHITECTURE ■ ENGINEERING ■ PLANNING



HALL ELEMENTARY SCHOOL
CONCEPT FIRST FLOOR PLAN - OPTION A

LEGEND

■ NEW CONSTRUCTION

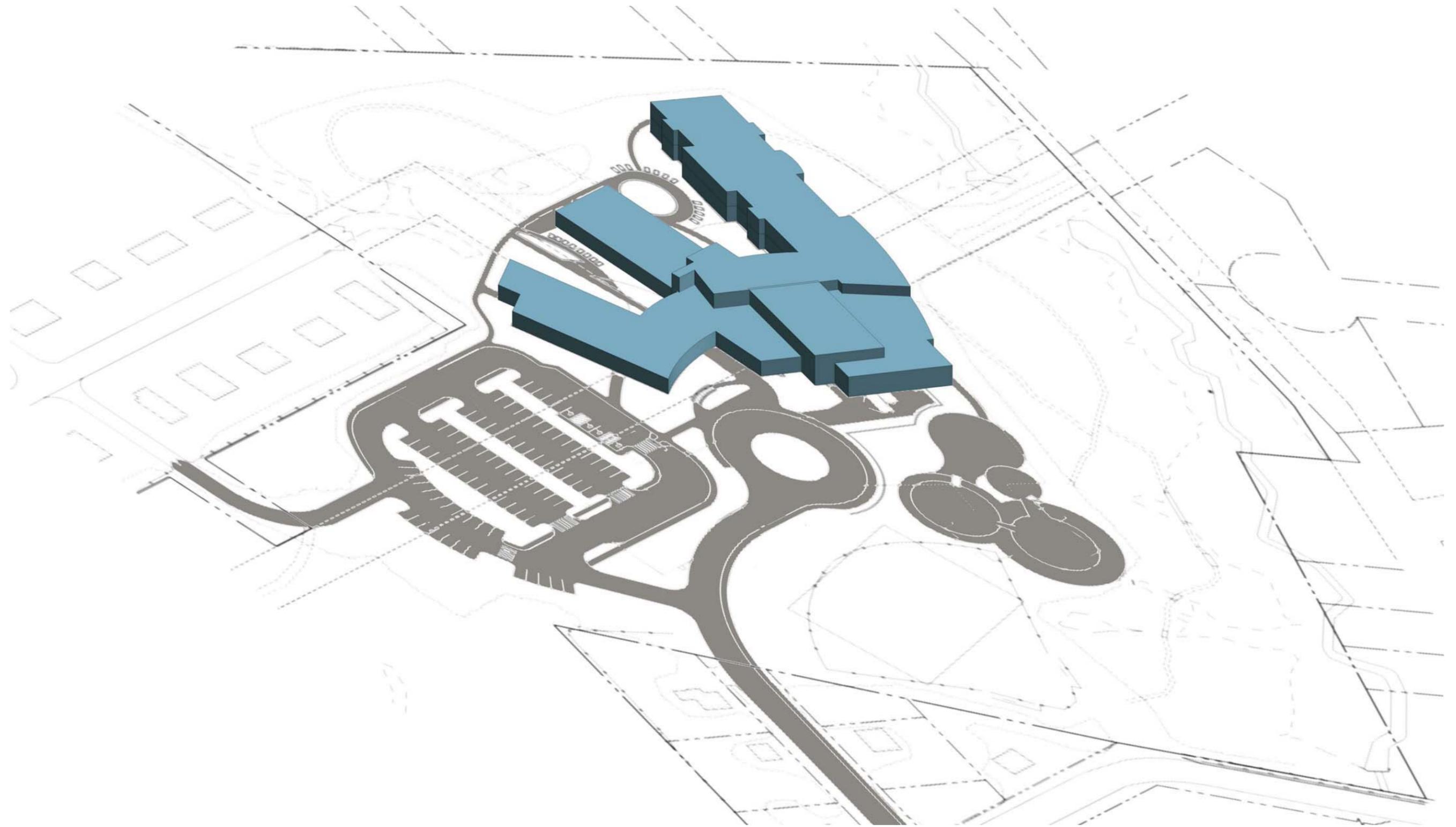




HALL ELEMENTARY SCHOOL
CONCEPT SECOND FLOOR - OPTION A

LEGEND
 ■ NEW CONSTRUCTION





HALL ELEMENTARY SCHOOL
CONCEPT MASSING PLAN - OPTION A



LEGEND

- | | | | |
|--|-------------------|--|----------------|
| | BUILDING | | ATHLETIC FIELD |
| | OUTBUILDING | | TURFGRASS |
| | PAVEMENT/SIDEWALK | | PLANTING BED |
| | HARD COURT | | TRAIL |
| | PLAYGROUND | | TREE |



FRED P. HALL ELEMENTARY SCHOOL
CONCEPT SITE PLAN - OPTION A





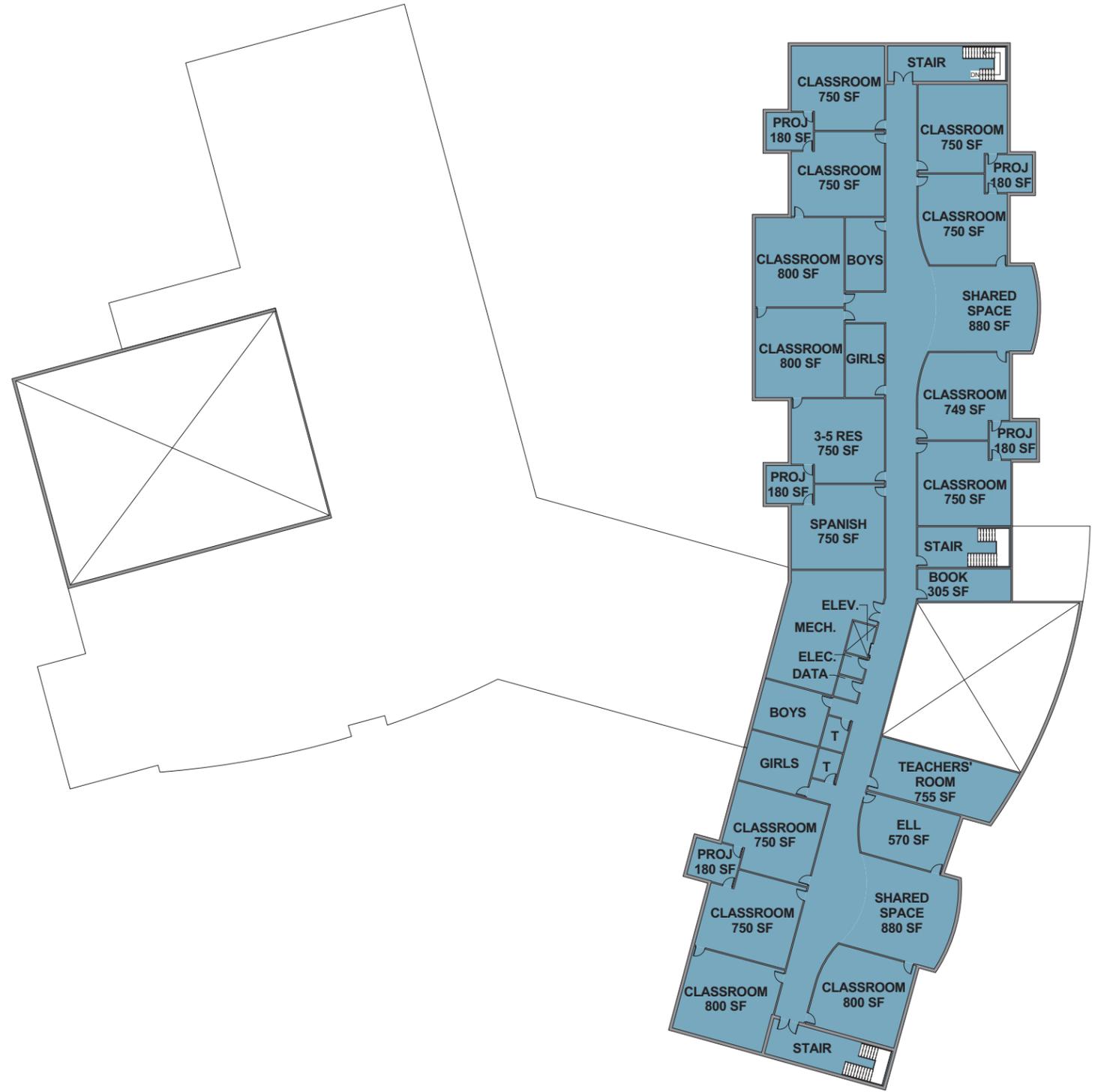
NORTH
ARROW

HALL ELEMENTARY SCHOOL
CONCEPT FIRST FLOOR - OPTION B

LEGEND

■ NEW CONSTRUCTION





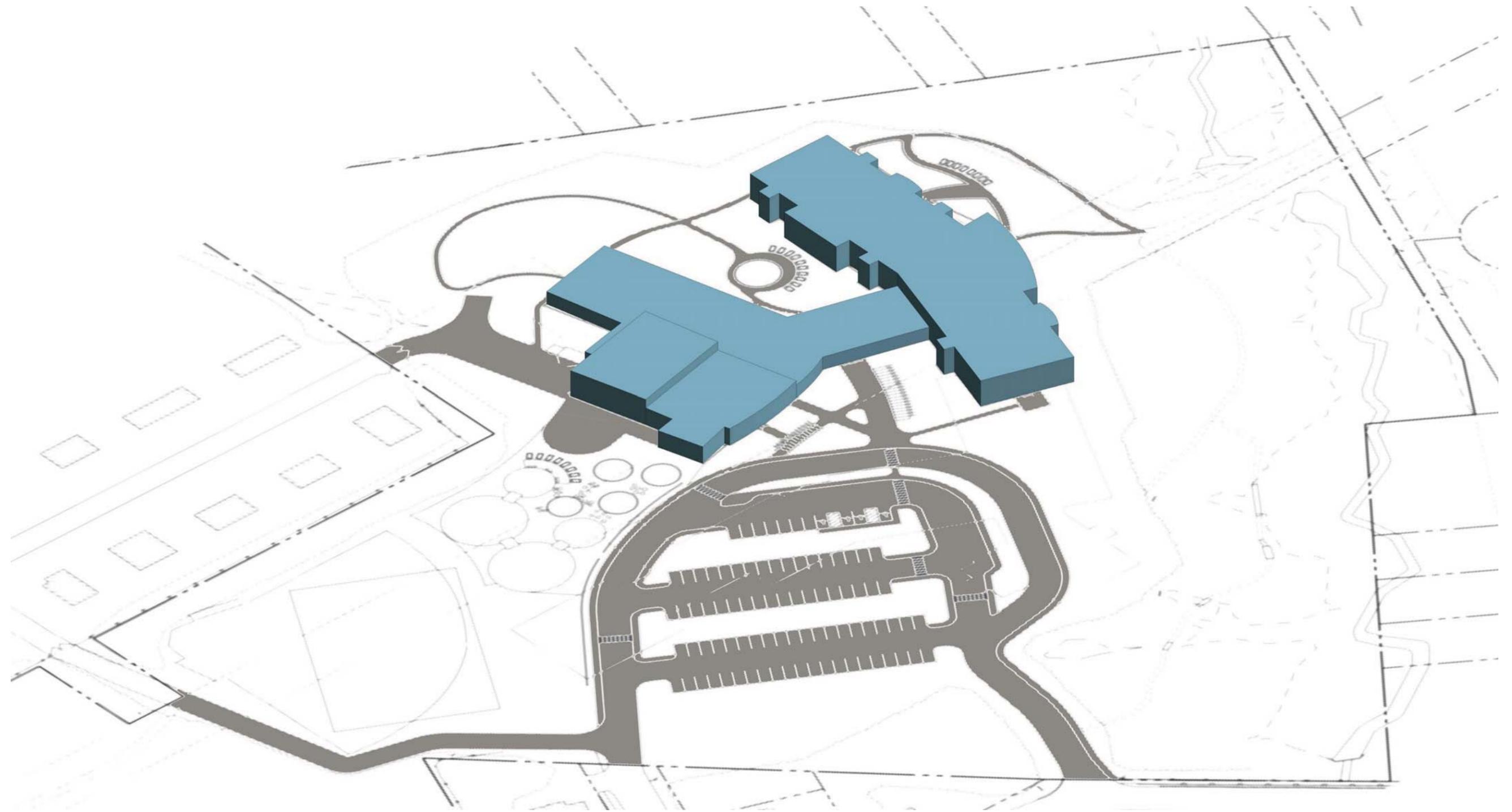
NORTH
ARROW

HALL ELEMENTARY SCHOOL
CONCEPT SECOND FLOOR - OPTION B

LEGEND

■ NEW CONSTRUCTION





HALL ELEMENTARY SCHOOL
CONCEPT MASSING PLAN - OPTION B





LEGEND

- | | | | |
|--|-------------------|--|----------------|
| | BUILDING | | ATHLETIC FIELD |
| | OUTBUILDING | | TURFGRASS |
| | PAVEMENT/SIDEWALK | | PLANTING BED |
| | HARD COURT | | TRAIL |
| | PLAYGROUND | | TREE |



FRED P. HALL ELEMENTARY SCHOOL
CONCEPT SITE PLAN - OPTION B



Hall School – December 14, 2012

420 students

PE: Lloyd

Safety important

Make sure there is enough storage

Easy access to sound system

Screen

Adjustable hoops

Size ranges hugely of children

Safe flooring

Need good acoustics. Amplification

Library: Librarian - Chris Ricki / Ed Tech - Laura

Way too small, very small

Lyseth and Presumpscot

Like soft seating

Like high ceiling

Want to accommodate 2 classes at a time

Need projection area. This space becomes staff meeting area

Moveable, low height shelving in center of room, need to be deep

Would like to open library in summer with outside access and toilet

Visibility is important - can have up to 25 kids

Need short check-out counter and tall one

Sink in office-need office

Art: Sherman Kendall

No display space

Want four sinks

Traditional classroom-not large enough

1 small sink, counter space, drying racks

Have kiln but not in separate room. 30 years old

Uses cafeteria tables for furniture

Music: Jane

Storage is a huge need

Wants to be able to partition off classroom

They have steel drums that need to stay in place but want to be able to block off.

Keyboards same thing

Distracting to kids to see all instruments out in the open

Would like a window

All:

Performance space

Community outreach

Specials- 1x week

Technology: Peter Blackstone, Ms. Ferald

Smart boards (better than ENO)-need training

Surround sound and amplification

Mini computer lab in classroom (5 computers)

Want computer lab next to library

Mounted LCD projection with wireless connection

Document camera

Access to computer log in is very difficult now. Needs to be updated. Upgrade software. Like ability to purchase books for iPads, iWrite, etc.

Spanish: Sarah Gimeno

½ time here- ½ time Ocean Ave

Students:

Community center with pool

Smart boards

Separate gym and cafeteria

Want a second floor because it would be better for older kids upstairs

Want bigger classrooms for art

Want lockers

Project room off of library with washable floor

Want to keep aquarium in hallway with bench (Mrs. Vassar's room)

Outdoor classroom with gardens

Ceiling projectors

Wooden floor in gym and a larger gym

New computers

Want project rooms off of regular classrooms

Basketball court outside

Track and tennis court

Better soccer field-gets muddy now

Nicer kickball field

Telephones and cameras for security

Central printer areas for each couple of grades

Doors between classrooms

Want teacher to stay after for homework help

Toilet in every classroom (only 2 K rooms have it now; they do have sinks)

Want an auditorium

Need larger art room- need to be a hard surface not a rug

Bleachers in gym

Way to prevent graffiti from getting on school building

New white boards and tack boards

Solar panels and a generator

Better technology and surround sound in music room and better headphones

Better soccer nets

Vegetable garden

End post for football in field

K-2 reps: Ms. Cassidy-K, Sue Healey 1st

K- what she loves- she has an art program. Does an art program after school.

Loves cubby area and toilet in room

Have 19 students

Likes wide hallway

Meeting room for parents

Greenhouse

Aquarium

More outlets

1st and 2nd would prefer to be in same area. Like operable partitions between classes for teaming

Nice to keep bathroom separate for K-2 and 3-5

Want performance space indoors and out

Real cafeteria

Bring nature into building and better natural light

Does not want univents

Need lots of storage with accessible storage for kids

Appropriate sized book shelves

Low partitions to be able to create centers

Like sink area with hard surface and carpet for rest of classroom

Love amplification systems

Phones in classroom

Display area

Common meeting room for staff

Remote storage room for teachers - central for all

PTA storage space

Book room

Project rooms for classrooms

3-5: Becky 5th / Maryann Healy 3-5 / Rebecca Walsh 3rd:

Likes:

Size of classroom is great

Want close proximity to rest rooms

Likes hallway model and not pods

Teachers' room is nice and large

Like location of school with proximity to woods and trails and play areas

Need:

Outlets

Natural light

Need technology

Project room with finishes where you can be messy

Greenhouse windows in building as well as outside

Outdoor classroom by gym or further from window of indoor classrooms

Student bathroom with better proximity to classes

Like to have connecting doors

Group grades together

Better air quality

Food Service and Recreation: Pat

Wants separate cafeteria and storage

Kitchen is currently used for storage

No kitchen equipment

Lunch- 2 lunches serve approximately 220 kids

Want:

Brighter space- natural light

New tables

3 lunches may allow for more eating time

Currently compost and recycle- works really well

Need area for rinsing dishes before returning to central kitchen

Rec side would love to see a community center with storage

Community room, gym, storage would suit needs of center mostly used at nighttime and weekends

Keep large prof. kitchen equipment away from community use and have separate stove and kitchen for community

Rec has three cabinets in the quiet room for storage of supplies and games. Also a ball cage.

Special Education:

Need additional staff toilets

Need handicap toilet for children with changing table and shower

K-2 and 3-5 SpEd is a city wide program

Need quiet space between K-2 and 3-5 sped with toilet and quiet room. Need time out program

Have all sped together but in center of school

Speech needs room large enough for 3 kids and 2 adults

2 offices –both full-time

ELL younger students in the morning; afternoon 15-18 older kids

Need space for 6 computers each at own table. Also need a smart board and projector

Phone system

OT/PT swing

Mat table

Room can have up to 6 kids

2 teachers

Sink

Closet

Staff desk

Can share bathroom in main SpEd area

2nd ELL person works with grades 1-5 but only 3 kids at a time- smaller office

Resource max 7 kids per teacher on each side

If 2 floors 3-5 sped on second floor

ELL and Read 180 central on first floor side by side

Community room would be nice with kitchen area but open to room for student use too

Room 5 has tons of boxes of books and kits etc.

Provide shelving and storage

Would want entire room carpeted

ELL side by side with shared storage

Title 1 literacy side by side with shared storage

Admin and Main Office:

Do not have buzzer system

Principal likes seeing out into the hallway

Aquarium space with seating in very important

Diamond murals on exterior of building are important to keep. Can be located inside or out.

This location is ideal in the city

Teacher workroom with copier, paper cutter, etc. with storage for teachers and cabinets

Want typical office layout with nurse, area for kids to wait

Parent volunteer room

Need testing room for psych evaluator, etc.

Social worker in office area

Need time out space

Grade level areas/meeting spaces with storage

Area in main office for conference space in offices

Stage and performance area

Space for professional development for 70 max - most times 30-40

K-2 students have to meet parents for walker dismissal

3 afternoon busses and 1 van; 5 or 6 morning busses

40% population walks

Need the main office desk areas to have visual computer privacy

Storage room for rec.

Nurses room has a clothes room and needs washer/dryer

Day Custodian: Mark Madison

Need spaces to store large orders of paper towels, supplies, etc.

Storage for cleaning equipment

Need satellite janitor closet

Separate gym and cafeteria

Need phone, computer

Floor drains

Likes paper towels over hand dryer

Hall School

1. What components of the existing outdoor play and learning space (both person-made and natural) do you feel are most valuable in contributing to the health, fitness, and academic well-being of the students?

- "Students use the ballfield a lot, as well as the new obstacle course equipment. The playground equipment is used by younger students as well as the neighborhood children." (music teacher)
- "Ball field, playground, Portland Trails" (gym teacher)
- "A large playground and a combination of tar and playing fields give a variety of settings and activities for recess and for teachers to take kids outside for learning activities. We have a small school garden area and outdoor seating. We also have Portland Trails paths." (teacher, grades 3-5)
- "Playground, ball field, boulder garden, garden area, basketball hoops, Portland Trails" (K teacher)
- "Portland Trails access, ball field, playground (hill, Boulder Garden, 1 small picnic table-playground area), garden area (raised beds, picnic tables, natural seating), other (bike racks)" (K teacher)
- "Path, field, gardens, equipment, picnic tables, hoops" (K teacher)
- "Playground, Astroturf(!), garden area with seats, ball field, natural 'wooded' area that is cleared, path around the school for writing on campus, trees, Portland Trails." (grade 1 and 2 looping teachers)
- "We have a LOT of outdoor space that is poorly organized/planned." (teacher, grade 1)
- "Safe playground equipment, older children love using ball field" (grade 1 teacher)
- "Gardens, trail, new fitness trail." (grade 1 teacher)
- "Playground." (grade 1/2 teacher)
- "The playground equipment is a must for younger students. My students (grade 5) generally use the more open/field areas (softball/kickball areas)." (grade 5 teacher)
- "The woods + playground, trails." (grade 5 teacher)
- "Fitness trail, soccer field" (3/4/5 Many Rivers teacher)
- "Playground, ball field, nature trails" (K-2 SpEd teacher)
- "Playground, added wooden structures, hoops, football field" (ELL/Literacy teacher)
- "Play structures, field, woody area are all well used" (Literacy teacher)

2. Are there outdoor elements that you feel are either unsafe or lacking sufficient value that could be replaced by higher value components?

- "The pavement is terrible and drainage is very poor" (music teacher)
- "Our jogging/walking programs circle the building, needing multiple adult supervision" (gym teacher)
- "I would love to see a larger integrated garden (farm) area for large numbers of students to work and study in." (teacher, grades 3-5)
- "Playground equipment! We need better and more equipment. More swings and more natural play areas that allow for building and exploration." (K teacher)
- "Playground equipment!! Need more natural play areas and areas for alternative choices (i.e. to draw, explore, build)" (K teacher)
- "Everything" (K teacher)

- "Swings- need more and safer, too much blacktop, fields are mud most of the year, sidewalks are all puddles in spring, can't use- MUD!" (grades 1 and 2 looping teachers)
- "We don't have safe/clear boundaries of where school grounds end." (teacher, grade 1)
- "More swings, various heights of basketball hoops, *our parking lot/bus/pickup area is dangerous! Needs to be larger with clear one-way signs." (teacher, grade 1)
- "The grounds- fields, playground, paved areas, are all in bad shape, not well laid out, maintained. Everything is very spread out so we need lots of people to supervise." (Grade 1 teacher)
- "Yes! Better equipment, and soccer goals- better defined areas for various sports (i.e. currently the kickball diamond and soccer field are adjacent with no separation- this gets messy at recess time." (grade 5 teacher)
- "Playground elements could be more interesting for all ages. Two separate playing fields would accommodate separate games." (grade 5 teacher)
- "The sand area is very unsanitary—would be better to have more climbing or game playing area" (K-2 SpEd teacher)
- "We need more swings! Separate soccer/baseball fields." (3-5 SpEd teacher)
- "The large expanse of tar behind the building connecting the two play areas. Would love not to have a path from housing project going through the playground." (Literacy teacher)

3. How do you use the agricultural elements (raised beds, etc.) in your curriculum?

- "I helped run a garden club last year in which we planted crops to be used in the school lunch program. We go out in writing to observe nature." (teacher, grades 3-5)
- "We use the raised beds as part of our 'Plants' unit in Science" (K teacher)
- "Part of science curriculum, connection to literacy" (K teacher)
- "Spring planting / growing" (K teacher)
- "I do not." (grade 1 teacher)
- "Unit on planting, bird watching, Greenhouse would be used!" (teacher, grade 1)
- "Plant seeds, make + use compost." (teacher, grade 1)
- "Observation of trees/plants." (grades 1/2 teacher)
- "Not much because there aren't enough beds for all of us and the area is a bit cramped." (grade 5 teacher)
- "Would love to have them. Currently, they are underutilized." (grade 5 teacher)
- "Beds all-but ruined by construction" (3/4/5 Many Rivers teacher)
- "There is a garden area, which there is concern that it was contaminated by the fire scene. There was a sitting area where I have done story- but that seems to be on hold due to the reconstruction of the damaged rooms in that area." (K-2 SpEd teacher)

4. Are there ideas you have for outdoor learning and/or play that are currently not possible within the existing outdoor environment? If so, what?

- "A large ¼ mile jogging track with visibility. Exercise stations along the way." (gym teacher)
- "A small amphitheater for students to sit and read or learn. An area of tables for students to write." (teacher, grades 3-5)
- "YES! Outdoor amphitheater. Balancing and obstacle courses, walkways and designs as part of the pavement, a place for sitting and drawing, an area outside for instruction" (K teacher)
- "I have LOTS of ideas/dreams for this! Circular courses, short + shrub mazes, walkway, 'Dinosaur Garden' (like Michigan 4-H children's garden) maze, shaded area for gathering" (K teacher)
- "Outdoor sunken amphitheater, stepping stones, nature path" (K teacher)

- "Sliding in winter months with supervision, games in fall/spring- can't do because of mud." (grades 1 and 2 looping teachers)
- "Outdoor track would be great + easier to supervise. Right now (in springtime) children run around the building only twice a week and parent volunteers are needed." (grade 1 teacher)
- "Gardening, trails." (grades 1/2 teacher)
- "A running track; an 'outdoor classroom' with enough seating and far enough from the building that classes wouldn't be disturbed by it; a greenhouse; enough beds for all classes to garden." (grade 5 teacher)
- "Would like to have a greenhouse or even an atrium that is central to the school where you can sit, work and eat outdoors while still being surrounded by walls or windows (like atrium at Riverton School- complete with fish pond)." (grade 5 teacher)
- "Would like natural playscape feature, pathways, hills, boulder garden" (3/4/5 Many Rivers teacher)
- "A learning outdoor amphitheater would be nice." (K-2 SpEd teacher)
- "Greenhouse" (K-5 Speech/language)

5. How do your students use the outdoor environment in the winter months (please cite specific areas if applicable)?

- "Snowshoes on the trails" (gym teacher)
- "We try to go on nature walks a few times a week on our wonderful Portland Trails path. Students as play areas deck (?)" (teacher, grades 3-5)
- "The children 'love' the snow mounds to slide on and to build with the snow" (K teacher)
- "Sliding- hill on playground, snow piles created by plowing, snowshoeing (ball fields, Portland Trails), playground (equipment + build snow structures)" (K teacher)
- "Limited w/snow piles. They slide." (K teacher)
- "Snowshoes, nature walk on trail." (grades 1 and 2 looping teachers)
- "They play outside." (grade 1 teacher)
- "Snowshoes" (grade 1 teacher)
- "Sometimes go snowshoeing on trail – fields." (grade 1 teacher)
- "Playground area for recess, walks on small trail area." (grades 1/2 teacher)
- "They are allowed to play in the snow only if they're wearing boots and snowpants. There isn't much to do for those students who don't have those items." (grade 5 teacher)
- "Snowshoeing, winter walks to ID plants + animal tracks, poetry- the senses." (grade 5 teacher)
- "Playground equipment and snow piles" (K-2 SpEd teacher)
- "They love to slide down the hills created by the plows- it is between the two big pieces of equipment." (3-5 SpEd teacher)

6. Other comments

- "Richard Louv is a great authority re: Nature + Kids...his book Last Child in the Woods is a must read- I have several copies and would be happy to lend out to anyone involved in this planning process." (K teacher)