BEAVERTON
SCHOOL DISTRICT

Educational Specifications: Volume I - Elementary Schools

Beaverton School District

by DOWA - IBI Group Architects, Inc. & WHPacific, Inc.

May 2014

BEAVERTON SCHOOL DISTRICT

WE EXPECT EXCELLENCE WE INNOVATE WE EMBRACE EQUITY WE COLLABORATE

May 2014

EDUCATIONAL SPECIFICATION FOR NEW SCHOOL BUILDING DESIGNS

Forward

The Beaverton School District has embraced the concept of "WE," meaning we will expect *excellence*, we will be *collaborative*, we will establish practices of *equity,* and we will be *innovative*. As we move forward with the implementation of our voter-approved construction bond program, we will commit to practices that support these four pillars. Toward that end, this educational specification, also referred to as the Ed Spec, has become an important process.

Never before in the history of the District has the focus on the educational program aspect been so broadly and purposefully considered at the beginning of a major construction program. For several months leading up to the bond, nearly 150 school and District staff, students, and design professionals collaborated to develop the standards that are included in this document.

While the Ed Spec will provide the equitable standard for physical characteristics in new and remodeled school construction designs, it will not remain a static document. Rather, improvements based on lessons learned will be incorporated as appropriate.

Thank you to everyone who has been involved in this important and exciting work.

Carl Mead, Ed.D.
Deputy Superintendent for
Teaching and Learning

Ron Porterfield
Deputy Superintendent for
Operations and Support Services

District Goal: All students will show continuous progress toward their personal learning goals, developed in collaboration with teachers and parents, and will be prepared for post-secondary education and career success.

I

Introduction

Introduction and Development Process

In 2013, Beaverton School District (BSD) embarked on a process of development of new Educational Specifications (Ed Specs) for the planning and design of future school projects. An Educational Specification is a document facility planners, architects and engineers use to develop, plan and design new schools or modernize existing ones. Ed Specs describe the facility vision, spaces, relationships between spaces and specific physical characteristics of each space in a new or modernized school.

The basis of the Ed Spec is the educational program. Educational programs require space which needs to be configured with certain physical attributes and characteristics. In essence, the shape and nature of place supports educational programs. Without a place to teach and careful consideration of a school's educational needs, learning is impacted.

Effective school facility planning is characterized by extensive input, research-based analysis of educational trends and conditions, and documentation of building user needs. The development of Beaverton School District's Educational Specifications required a multi-faceted 13-month process involving nearly 150 representatives from a wide variety of district programs and schools. A three-step methodology was utilized to assess BSD's current and future educational programs, develop planning and design characteristics for District schools, and translate building user needs into specific space requirements.

Step 1: Survey of Current and Future Educational Programs; Development of Key Characteristics of Best Practices for Teaching and Learning

Timeline: March - June 2013

Step 1 of the Ed Specs development process involved a review of the District's current and future educational programs, curriculum, and teaching/learning strategies. A Visioning Committee was formed to provide representation from a wide variety of district programs and schools. The Visioning Committee was presented an external scan of schools from around the world that examined different ways that the built environment can shape instructional delivery and learning activities. Over the course of three meetings, the Visioning Committee identified physical design features that support current and emerging educational needs. Step 1 concluded with the development of five Key Characteristics of Best Practices for Teaching and Learning in Beaverton School District. These characteristics are presented and discussed in Section II of these Educational Specifications.

Thanks to all of the individuals who contributed to this process.

Step 1 Visioning Committee

Wendy Bernard	VP/Student Supervisor
Rebecca Carney	Teaching & Learning TOSA
Cathy Hall	Admin Asst to Deputy Superintendent T&L
Kim Haskins	Elementary Principal
Susan Holveck	Science TOSA
Joann Hulquist	Elementary Principal
Leslie Imes	Project Manager, Facilities Development
Michael Johnson	Options Principal
Scott Johnson	Project Manager, Facilities Development
Jan Martin	Administrator for Curriculum, Instruction & Assessment
Claudia Ruf	Middle School Principal
Danielle Sheldrake	Administrator for Student Services (Special Education)
Sheri Stanley	Ed Spec Project Manager, Facilities Development

Step 1: Survey of Current and Future Educational Programs; Development of Key Characteristics of Best Practices for Teaching and Learning (continued)

Dick Steinbrugge	Executive Administrator for Facilities
John Weekes	Dull Olson Weekes-IBI Group Architects, Inc.
Steve Olson	Dull Olson Weekes-IBI Group Architects, Inc.

Step 2: Development of Key Planning and Design Characteristics

Timeline: July - September 2013

In Step 2 of the Ed Specs development process, the five Key Characteristics of Best Practices for Teaching and Learning provided a foundation for further exploration and discussion of design trends as well as educational strategies and research. An expanded Visioning Committee met three additional times during the summer of 2013 to create and refine a set of 15 Key Planning and Design Characteristics for Beaverton Schools. These characteristics were then applied to several existing Beaverton school facilities to assess the degree to which current buildings reflect the identified key planning and design features. The 15 Key Planning and Design Characteristics are presented and discussed in Section III of these Educational Specifications.

Thanks to all of the individuals who contributed to this process.

Step 2 Expanded Visioning Committee

Cheryl Ames	Elementary Principal
Janet Avery	Maintenance Services Supervisor
Wendy Bernard	VP/Student Supervisor
Rebecca Carney	Teaching & Learning TOSA
Len Case	Retired Principal
Todd Corsetti	High School Principal
Scott Drue	K8 Principal
David Etchart	Administrator for Facilities Development
Stacy Geale	Elementary Principal
Cathy Hall	Admin Asst to Deputy Superintendent T&L
Kim Haskins	Elementary Principal
Susan Holveck	Science TOSA
Joann Hulquist	Elementary Principal
Leslie Imes	Project Manager, Facilities Development
Michael Johnson	Options Principal
Scott Johnson	Project Manager, Facilities Development
Jan Martin	Administrator for Curriculum, Instruction & Assessment

Step 2: Development of Key Planning and Design Characteristics (continued)

Carl Mead	Deputy Superintendent for Teaching & Learning
Ann Pleau	Elementary Principal
Corin Richards	Administrator for Instructional Technology
Claudia Ruf	Middle School Principal
Danielle Sheldrake	Administrator for Student Services (Special Ed)
Sheri Stanley	Ed Spec Project Manager, Facilities Development
Dick Steinbrugge	Executive Administrator for Facilities
John Weekes	Dull Olson Weekes-IBI Group Architects, Inc.\
Steve Olson	Dull Olson Weekes-IBI Group Architects, Inc.
Marc Nordean	Dull Olson Weekes-IBI Group Architects, Inc.
Elisa Warner	WHPacific

Step 3: Educational Specifications Development

Timeline: October 2013 - April 2014

In Step 3, the District applied the Key Planning and Design Characteristics established by the Visioning Committee to the facilities needs of individual school programs and subject areas. Three Oversight Committees were established to oversee this effort: 1) Elementary Oversight Committee; 2) Middle School Oversight Committee; and 3) High School Oversight Committee. Oversight committee members consisted of current school principals with years of experience working in the designated school type. The Oversight Committees formed a "macro-micro" linkage between the Visioning Committee and a series of Focus Groups addressing the space needs of specific program areas (Figure 1).

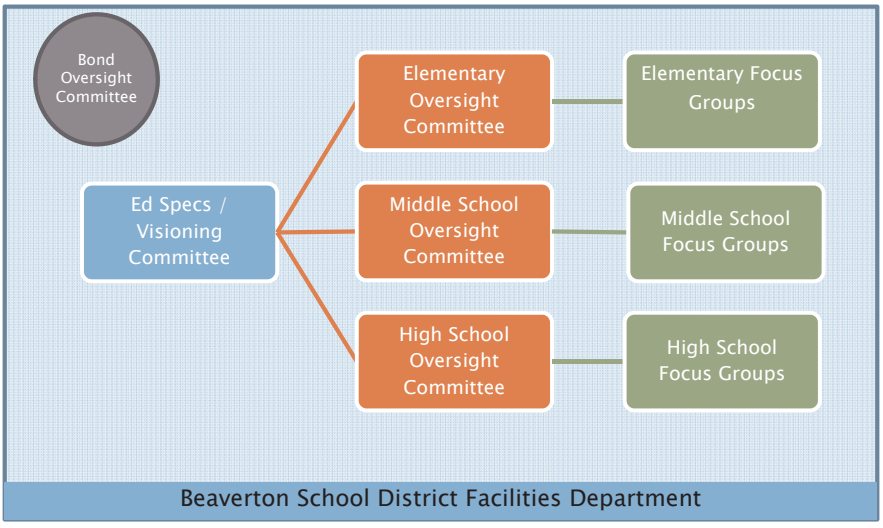
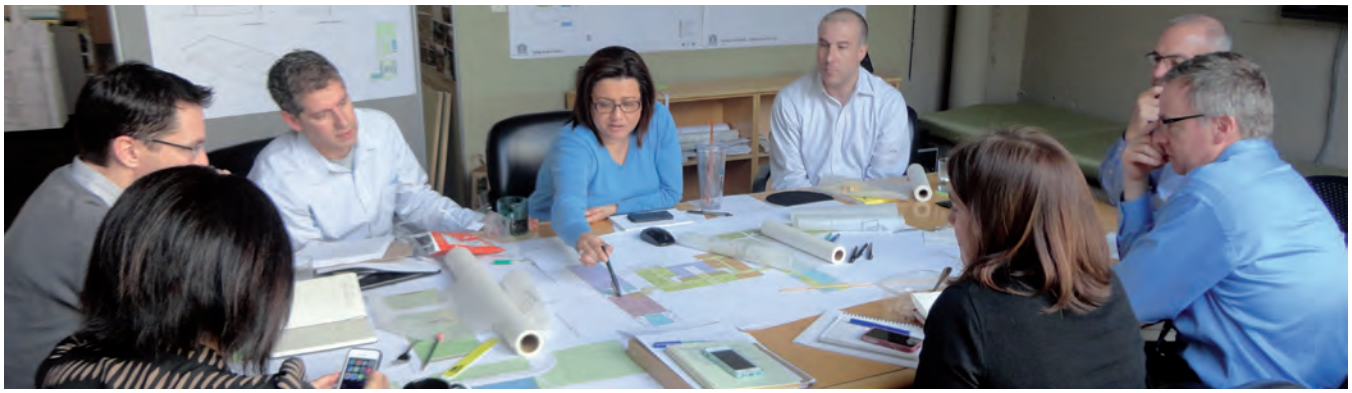


Figure 1: Committee Structure for Step 3 of the Ed Specs Process

The District organized approximately 24 focus group sessions, each representing a different program area within Beaverton schools. Schools or departments were contacted individually and asked to forward the names of interested participants. An introductory letter summarized the intent of the meetings and provided a list of questions for participants to consider in advance of the session. Participants were also encouraged to collect additional input from colleagues.



Each focus group met for a minimum of one hour. The focus groups included:

- Elementary General Education Teachers #1
- Elementary General Education Teachers #2
- Elementary Office / Admin
- Elementary P.E.
- Elementary Music
- Middle School Office / Admin
- Middle School General Education Teachers
- Middle School Science
- Middle School Art
- Middle School P.E.
- Middle School Music and Performing Arts
- High School Office / Admin
- High School General Education Teachers
- High School Science
- High School P.E.
- High School Music / Performing Arts
- Maintenance and Grounds
- Custodial
- Library / Media
- Information Technology (IT)
- Public Safety
- Special Education
- Nutrition Services
- Athletic Directors

Focus group members were provided with the opportunity to review the minutes from their session in order to ensure the completeness and accuracy of the document. Any comments were subsequently integrated. In several cases, participants also transmitted separate written summaries or documents with additional information on spatial needs.

The Oversight Committees managed the difficult task of evaluating the “wish lists” of building users against available resources. Following the

completion of the Focus Group sessions, preliminary drafts of area programs for each school type were prepared, along with narrative overviews summarizing the interior space needs of each school type. The Oversight Committees (including representation from Teaching and Learning) reviewed and refined the draft area programs based on the Planning and Design Characteristics established by the Visioning Committee and the input received from the Focus Groups. The final area programs provided in Section IV translate the documented spatial needs of Beaverton teachers, administrators, and students within the established budgetary parameters set by the proposed Bond. The Oversight Committees and participants included these individuals.

Elementary School Oversight Committee

Kayla Bell	Jared Cordon	Barbara Evans
Cheryl Hagseth	Erica Marson	

Middle School Oversight Committee

Matthew Casteel	Zan Hess	Claudia Ruf
Kenneth Struckmeier	Brenda Lewis	

High School Oversight Committee

Todd Corsetti	Brian Curl	Anne Erwin
John Huelskamp		

Focus Groups

Focus Group Participants included these individuals:

Kristene Allen	Colin Arnold	Janet Avery
Valerie Bako	Susan Barker	Rodney Barraclough
John Bell	Chris Bick	Mike Blok
Shirley Brock	Emily Carlson	Larry Coates
Amy Corris	Todd Corsetti	Jeffrey Crapper
Brian Curl	Sue Dowty	Paul Driscoll
Peter Edwards	Leslie Elliot	Anne Erwin
David Etchart	Andrew Evans	Dean Fassinidge
Lindsay Fleischman	Brian Foren	Shelley Frey

Janet George
Karl Granlund
Cathy Hall
Leah Harvey
Linda Heinrich
Scott Johnson
Regina Kawasaki
Amit Kobrowski
Gregory Leschinsky
Susan Long
Kalay McNamee
Lea Molczan
Chad Murray
Patriot Services
Andrea Pfau
Corin Richards
Greg Rouse
Henry Schaechterle
Rod Schuller
Jeanne Slater
Kirk Soule
Andrew Stenehjem
Jerry Tice
Rick Wolff
Jeremy Zander

Kyle Goodman
Eric Gronseth
Kat Hamann
Kim Haskins
Kristin Henshaw
Jocelyn Johnston
Debra Klatz
Kari Krenz-Downey
Sandy Libonati
Guadalupe Lopez
Joel Miller
Sarika Mosley
David Nieslanik
Hsiao-Pei Yang
Jon Ratazzi
Teresa Rieken
Lisa Rouse
Peggy Schmutzer
Danielle Sheldrake
Patrick Sliger
Melissa Sowers
Kevin Sutherland
Tiffany Tran-Parta
Jeff Wright

Jean Gorton
Kristen Gustafson
Kathryn Hammond
Bradley Heisel
John Huelskamp
Kevin Jones
Nancy Klepper
Kelly Kuntz
Jeffrey Loftus
Ronda McKenzie
Jennifer Mohr
Mandy Mullett
Monica Paas
Casey Petrie
Kevin Rebitzke
Crystall Risch-Ball
Claudia Ruf
Tammy Schrader
Sharon Skrydlak
Edgar Solares
Ken Spidal
Jenny Takeda
Hilda Washburn
Justin Wyatt

Students

David Boariu
Nima Rad

Alex Drews
Ishani Shrestha

Allison Ling

Consultant Staff

John Weekes
Peter Lo

Steve Olson
Elisa Warner

Keith Johnson

Best Practices for Teaching and Learning

II

A Best Practice is defined as a method or technique that has consistently shown results superior to those achieved with other means. Best Practices for teaching and learning would be those that consistently show superior results, especially in support of the District's stated strategic plan objectives and show the best results for learners served by District.

Beaverton School District Strategic Plan

Mission
To engage our students in rigorous and joyful learning experiences that meet their individual needs and help them reach their full potential.

District Goal
All students will show continual progress toward their personal learning goals, developed in collaboration with teachers and parents, and will be prepared for post secondary education and career success.

Goal
We want every student to graduate with many options and be prepared to:

- **THINK:** Creatively & Critically
- **KNOW:** Master Content
- **ACT:** Self Direct & Collaborate
- **GO:** Navigate Locally & Globally

Four Pillars of Learning

WE EXPECT EXCELLENCE

- The road to higher education begins in kindergarten.
- We have the best teachers. They are supported and accountable.
- Individual student growth is monitored and communicated.

WE INNOVATE

- Adults adjust and adapt to the learning needs of students and the evolving economy.
- Technology and the arts are fundamental and integrated.

WE EMBRACE EQUITY

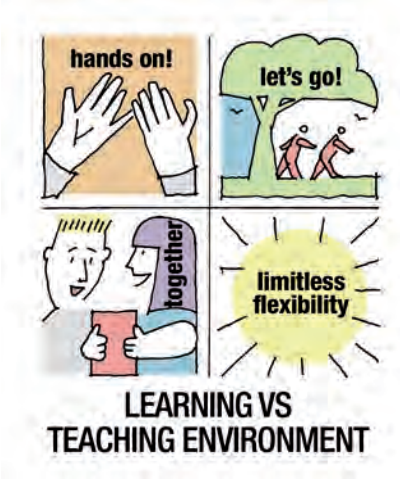
- Student success will not be predicated based on race, ethnicity, family economics, mobility, gender, sexual orientation, disabilities or initial proficiencies.
- Diversity and bilingualism are honored as assets.

WE COLLABORATE

- No one teaches or learns in isolation.
- Relationship and engagement with parents and community is inclusive, direct, and honest.

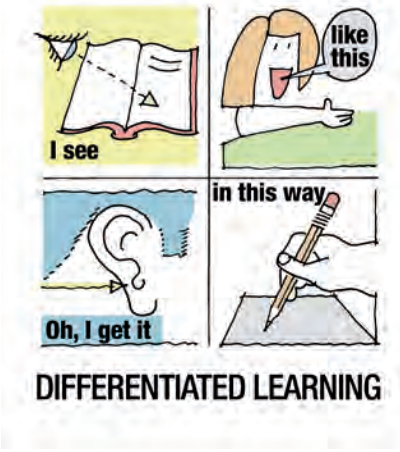
Key Characteristics of Best Practices for Teaching and Learning

In support of the District's Strategic Plan on the previous page, the Step I Visioning Committee identified the following five Key Characteristics of Best Practices for Teaching and Learning in Beaverton School District:



Learning vs. Teaching Environment

An environment that focuses on learning rather than teaching will have key attributes that will be different than traditional schools. Teaching environments focus around the needs of teachers. Twenty First Century Schools focus on the needs of learners. Learning happens in a variety of ways, individually, in small and large groups, in project based activities, hands on and in ways supported by limitless kinds of technology. Learning environments need to be flexible and can be arranged in multiple ways to support a variety of learner activities. So, modern learning environments need to be flexible, multipurpose, easily manipulated, accessible, student centered with easy access to the outdoors. The space needs to participate in the learning process. Learning is limitless and space should not limit learning.



Differentiate Learning

Educators recognize that students learn in different ways. A successful learning environment provides students with different ways to acquire content regardless of differences in ability or learning style. Differentiation in learning needs to be organized yet flexible to allow for adjustment in teaching and learning methods to best accommodate individual student needs. To that end, differentiated learning needs to:

- Provide student access to all materials
- Information can be accessed where students learn
- Freedom and trust between teacher and student needs to be established

Differentiated learning requires space that is adaptable for a variety of activities. Students may find themselves working individually or in different size groups. Use of technology is very important in supporting teacher's needs to provide varied lessons and opportunities for individualized learning plans.

Inclusive Learning Environment

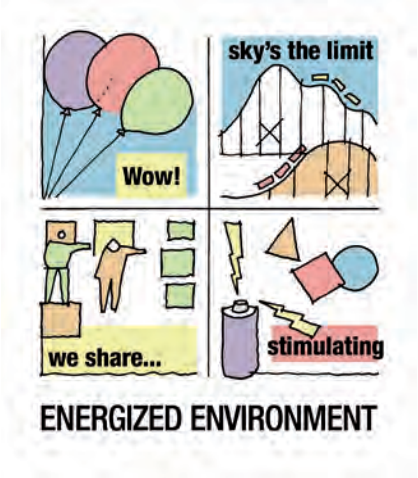
An inclusive learning environment is one where all are equal and all are included. Learning strategies are developed that encourage all to learn regardless of speed, style or ability. This requires learning activities to take place in different and varied types of physical environments. Pleasant, transparent, open and flexible space support inclusive learning environments. Learning spaces need to be able to adapt to provide for different needs of individuals and groups of learners.

Culturally Responsive

Today, more than ever, schools need to be part of the community and accessible to all. Schools need to provide a sense of home and place, and provide for safety and security. Schools need to recognize the importance of cultural diversity, celebrate it and provide programs and places that respond to the specific needs and uniqueness of its community. Programs that serve local neighborhood and community groups regardless of cultural diversity should be part of a school that is a center of its community. Schools need to be welcoming to families and responsive to the cultural needs of students and staff.

An Energized School

An energized school is a place where it is exciting to work and learn. It is welcoming and draws people in. It is joyful, exciting, colorful, fun, creative, playful, light, visible and stimulating. A place where all enjoy spending time. Its activities extend beyond normal school hours. Student work is displayed prominently and celebrated. Visitors recognize its vibrancy. Learning is celebrated and encouraged. Students excel and are excited about learning and want to overachieve. The design of the school reflects a child and learner centered ethos. It is truly a place where it is fun to learn and all want to engage.



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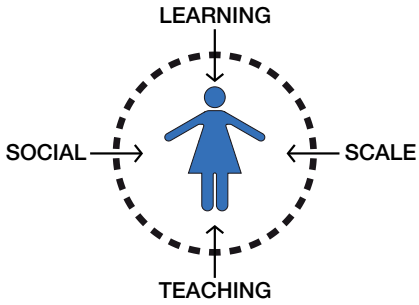
III

Key Planning and Design Characteristics

Key Planning and Design Characteristics

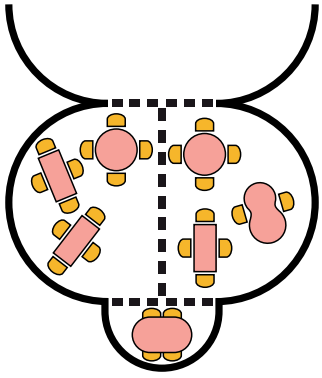


Student Centered

The overarching expectation in all BSD schools is they are Student Centered. It is an approach to education that is focused on the needs of students, encouraging student choice, independence and access. It has as much to do with a culture of collaboration as it does the physical environment. Student centered, teacher driven professional collaboration spaces and places should be provided.

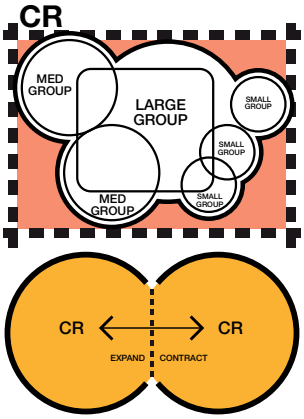
Collaboration

School design should model a school-wide emphasis on collaboration (teacher to teacher, teacher to student, student to student). Special attention and care should be taken to develop and design spaces and places that foster collaboration.



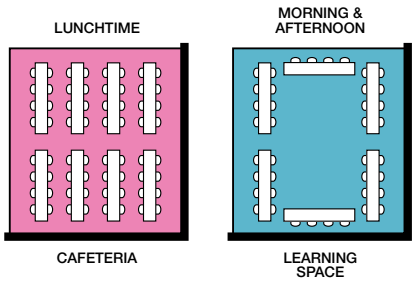
Varied Adaptable Spaces

Spatial variety is important. Learning today takes many forms and the ability to create different size and shaped learning environments contributes and supports the variety of learning strategies present today.



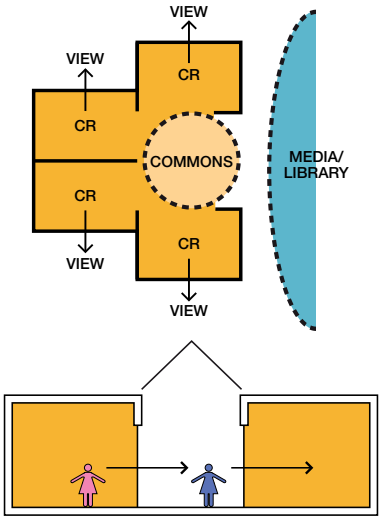
Flexible Agile Spaces

The school should be designed to accommodate future upgrades, system modifications, room realignments and functional use changes. Use construction system that supports easy physical modifications to facilities. Consider space size, location of fixed teaching tools (i.e. white boards), furniture and room shape. School should accommodate a variety of activities through pull out spaces, furniture that is easily manipulated and the ability to change size and shape of space. The ability to quickly rearrange rooms to accommodate different learning modalities is important. Include dispersed storage and display areas in addition to individual “Learning Space” storage needs.



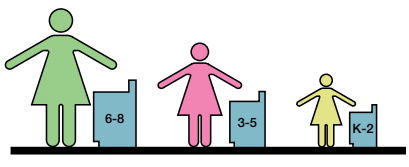
Multi-use Spaces

All spaces should have more than one use. On one level, spaces within the school should be able to accommodate a variety of functions. For example the Band Room or Choir Room are large spaces that could be reconfigured to accommodate large group meetings or presentations. This suggests that care should be taken not to make rooms too program specific. For example, installing permanent risers in the Choir Room limits its use for other activities or programs. On another level, the District might consider particular school sites to accommodate district-wide or community needs.



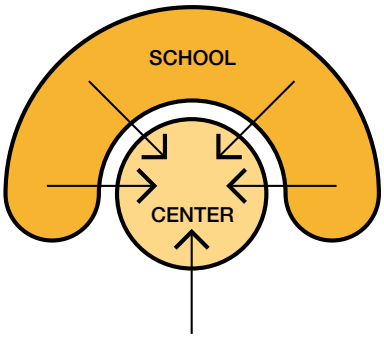
Organization / Viewability

A visually open school is desirable. The ability to see and be seen contributes to a more collaborative atmosphere and safer environment. Take care to balance this characteristic where safety is concerned.



Age Appropriate

Institutional practices, as a continuum through all grades, should be more like those of an elementary school. Even institutions of high learning are organizing their learning spaces to look like elementary schools with varieties of student grouping, furniture arrangements and organizational structure. However, special care and attention to student size and age suggests that room size and configuration should be age appropriate to support a delivery method that is based on process rather than product, hands on activities, inquiry based instruction and collaborative team based learning. Facilities should reflect students’ different learning styles.

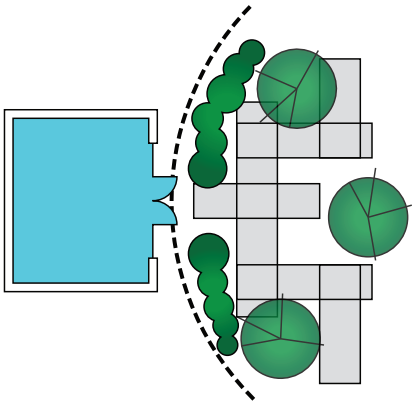


School Center

Symbolic Center is important. It can take many forms. A Symbolic Center Space can be a large or a well-configured series of small alcoves that represent the aspirations of the school. At existing schools, it is unlikely we will be able to reconfigure the building to create a larger "center." However, a well-designed Lobby/Entry that looks like an art gallery or presentation venue can be an effective Symbolic Center. It could highlight student work, important accomplishments, upcoming events and reinforce that values that make the school successful. It is important that the Center conveys the mission and values of the school, is engaging and a place students and visitors use. It should be prominent and if possible viewable when you enter the school.

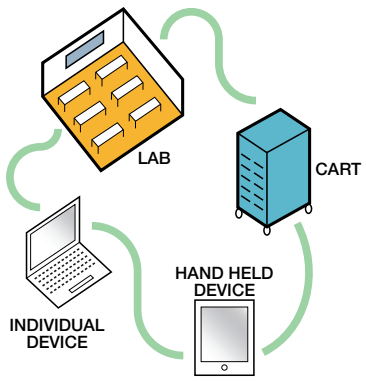
Welcoming

All schools should be welcoming. They should feel comfortable, reflect a student centered vision, set a welcoming tone as you enter, provide for appropriate student gathering areas and, while it should look like a school, it should not feel institutional.



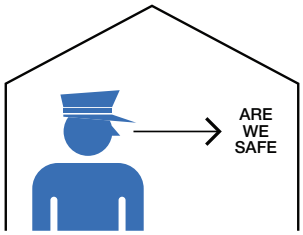
Exterior Access

The concept of "exterior access" applies to both physical and visual access to the outdoors. It includes "bring the inside in" and extending the "inside out". Views and appropriate access should be considered when designing a school. Exterior areas should be purposeful, sufficiently large and multipurpose. Even a simple covered area where students can stand, socialize and play outdoor (year round) is beneficial.



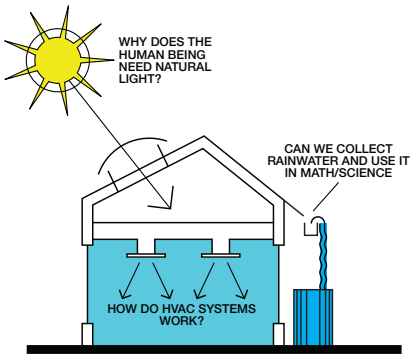
Seamless Technology

Technology will always be changing. The facility should be adaptable to rapidly changing technological needs.



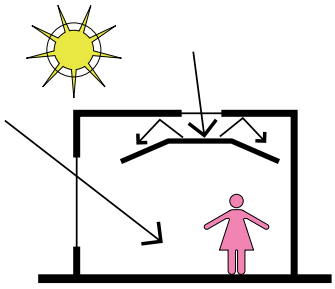
Safety / Security

Balance planning concepts with building security. Schools should not be designed as prisons; however, security concerns will remain a consideration throughout the future in planning discussions. Security should be integrated as unobtrusively as possible. Security should be pervasive and seamless. Care should be taken to avoid strategies that actually contribute to building users feeling more fearful.



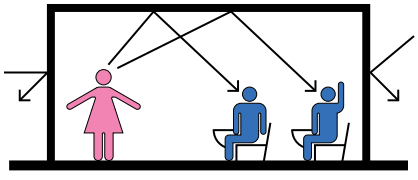
Building as a Learning Tool

The building and site can serve as “the second teacher”. Buildings designed as learning tools tap into student passions. Purposefully designed features that are intentionally integrated into the design are important. Design with intent. The features should not be too teacher dependent. Rather they should feel seamless, supported by signage, monitoring equipment, visual displays and interactive devices. Authentic learning spaces allow students to address real world problems or ideas like “green concepts”.



Natural Light

Natural lighting and views to the outdoors are important components of the learning environment, and should be provided throughout the facility. To accomplish this key planning and design characteristic, special attention during the design process should be paid to strategies that support this goal while considering school district lessons learned.



Acoustics

The acoustic qualities of school facilities are important to consider. Interior functions require active, semi quiet and quiet acoustical characteristics depending on their use. Instruction benefits from properly tuned spaces and student performance is positively affected by properly designed learning spaces. Special care and attention should be considered to accomplishing this important key planning and design characteristics.

a. Kindergarten Area Program

Beaverton School District New Elementary School

Area Program

Date: May, 2014

Academics Programs	# of Teaching Stations	QTY.	S.F. Room	S.F. Total
Kindergarten				
Kindergarten Classrooms	5	5	1,100	5,500
Kindergarten Commons / Flex Space		2	400	800
Kindergarten Restrooms		5	50	250
Total Net Area this Functional Group				**6,550**
See complete Building Program in Section V				

The Area Program above lists the rooms and spaces for this functional grouping within the building. The room narratives which follow provide detailed descriptions and requirements which are unique to each room, space, or area.

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a. Kindergarten Room Narratives

Kindergarten: Classrooms

Activities and Functions

Beaverton School District offers all-day kindergarten to district students. Kindergarten classrooms support the everyday instruction of 5-6 year old children. Classrooms should enhance curriculum instruction and activities related to subject-area learning targets for the kindergarten level. Teachers require the ability to create several distinct areas within a single classroom (e.g. carpet area, reading area, desk area, stations, play area, etc.). Flexible design features and furnishings are crucial to allowing teachers to create varied classroom configurations. Kindergarten classrooms are frequently used to conduct "messy" activities, such as artwork, in-room snack time, taking care of a class pet, etc. Classroom walls are used as dynamic, vibrant display areas that enhance learning through thematic displays and visual cues.

Size and Capacity

Five (5) kindergarten classrooms are planned for each elementary school facility. Classrooms will be sized to accommodate classes of up to 25 students. Kindergarten classrooms are typically larger than general elementary classrooms, as they must accommodate a wider range of activities. Kindergarten classrooms should be appropriately scaled for young elementary students. Creating learner-centered, inquiry based environments requires classrooms to be sized larger than their maximum student capacity. See program for square footage guidelines.

Location and Adjacencies

- Classrooms will be located near kindergarten commons areas
- Classrooms will be zoned for security (to restrict access during off-hours)
- Classrooms will be organized to minimize transitions between spaces
- Kindergarten classrooms will have an adjacent ADA accessible unisex restroom with children's ADA accessible height fixture placement[1]

Walls, Windows, Ceilings and Doors

- Self-closing door with view panel or side lights (with installed window coverings)
- Classroom doors should be lockable from both sides (inside and outside)
- Interior classroom window with view to kindergarten commons
- Window coverings providing the ability to darken room. Consider ability to reach blinds or provide motorized shades
- Ceiling height of 9'-11'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)
- Ample tackable wall space to display student work.
- Classroom display areas of various heights to allow visual learning aids to be displayed at children's eye-level
- Ensure that thermostats and other mounted switches or controls are placed at the edges of walls rather than in the center (where they interfere with displays).

Kindergarten: Classrooms (continued)

Environmental Conditions for Optimal Learning

- Ample natural daylighting to support learning
- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality
- Provide an acoustical environment that supports learning

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Shelving to accommodate in-class libraries (traditional bookcases as well as “front-facing” book storage so students can view covers, books in bins, etc.).
- Area of lower-level shelves that are accessible to students (open shelving).
- Tubs for materials associated with rotating units (may be placed higher, but not so high that a custodian is needed to access).
- Full-length, individually separated cubbies for coats and belongings. Coat hooks and/or cubbies should not block access to shelving.
- Storage area for intervention kits.
- Flat file type storage for charts and posters.
- Lockable teacher cabinet tall enough to hang coat, store personal belongings, etc.
- Secure file storage for teacher use

Furnishings, Fixtures, and Equipment

- Built-in counter area with sink (lower-height for kindergarten students)
- Upper and lower cabinets along sink and counter area (balance need for upper cabinets with providing adequate display areas)
- Two (2) 8’ magnetic white boards (or 16’ total) mounted lower, at elementary height
- Ample display areas via tackboards and/or tackable wall surfaces
- Small refrigerator and microwave desired
- All appliances to be Energy Star rated, unless not readily available
- Opt for mobile (rather than fixed) furnishings when possible to accommodate flexible uses of classroom spaces.
- Flexible classroom seating for 25 students. Furniture selection will be a site-based decision, in accordance with district standards. District teachers have voiced a preference for flexible table settings over individual student desks. Tables should seat a maximum of four (4) students per table.
- Carpeted area for “carpet time” activities
- Play furnishings may be provided

Kindergarten: Classrooms (continued)

- Reading area furnishings to create space that feels "set-aside" from the main classroom
- One (1) teacher desk and chair
- Multimedia cart supporting flexible technological and/or audio visual use
- Six (6) movable bookcases
- Two (2) 42' vertical file cabinets
- One (1) locking tall cabinet
- Water/sand table desired

Technology

Classrooms should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for classrooms. Basic requirements include:

- Room should be proactively wired to ensure flexible and adaptable use of technology
- Provide ability for a teacher to connect a laptop or mobile device to data projection and video streaming devices for classroom viewing
- Wireless Internet access point within range to provide adequate capacity for high-density use
- Provide multiple surfaces on which to project varied media
- Provide voice amplification capabilities (may be hardwired or portable - TBD during design)

Electricity

- 120/208 3-phase power
- Ability to provide mid-room power in a manner that does not require extending cords across the room, creating tripping hazards[2]
- Adequate number of electrical outlets and data drops distributed throughout room to support current and future technological needs[3]
- Electrical outlet(s) and data drop(s) in ceiling (see Informational Technology section for additional details)[4]
- Wired for technology, as noted above

Lighting

- Natural daylighting (as noted above)
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 35-50 foot-candles for classrooms.
- Flexible lighting (bi-level switching to provide high and low light levels)
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Kindergarten: Classrooms (continued)

Plumbing

- Sink with warm/cold water and drinking fountain (height of sink and counter should be appropriate to five-year-old students)
- Surface-mounted soap and paper towel dispensers (owner-provided)
- Adjacent kindergarten restroom with appropriately-sized and mounted fixtures, ADA accessible (one per kindergarten classroom)[5]

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.
- Regardless of main flooring type, there should be a carpeted area available for "carpet time" activities (may be provided by an area rug large enough to accommodate class, if classroom is not carpeted).
- Hard surfaced flooring needed at sink; however, limit size of hard surfaced area (as much as feasible) as it tends to restrict use of floor space for other purposes.

Security

- Coded or keyed entry - door lockable from both sides (including from inside classroom for lockdowns)
- Interior window (with installed window coverings) to provide visual supervision of extended learning area
- Classroom configuration and/or window coverings to allow students to assemble out-of-sight of all windows in lockout situation

Communications

- Wired for Voice Over IP
- Intercom
- 12" GPS satellite clock
- Bell system
- PA system speakers
- May be equipped with radio handset

Kindergarten: Classrooms (continued)

[1 & 5] Dedicated, adjacent restroom for each kindergarten classroom is preferred; however, group kindergarten restrooms located in the kinder-wing may be substituted during design (site-based decision).

[2] Floor outlets are undesirable from a maintenance standpoint; however, they have been requested by teachers. Teachers often need to power devices mid-room without creating tripping hazards via cords. This topic should be addressed during the design process of a new facility.

[3] Currently, most kindergarten and elementary classrooms within the district include up to six (6) desktop computer workstations for student use. It is anticipated that this need will be met through mobile devices (e.g. laptops, tablets) in the very near future. IT feels that desktop computers are no longer a wise investment of District funds. Designers must ensure that classrooms are appropriately equipped with adequate power and data (wired and/or wireless) to support flexible, high-density technology use within each and every classroom. Please see the Informational Technology section of this document for additional information.

[4] May serve wireless access point or other purpose. Ceiling-mounted data projectors are not anticipated, as use of this equipment is expected to shift to new, emerging technologies. Flexibility is preferred over fixed equipment when planning for technology, as it is continuously changing. See section on Information Technology for additional information.

Kindergarten: Commons / Flex Space

Activities and Functions

The kindergarten "flex commons" area is an open and flexible alcove-type space that serves as an extension of the classroom environment. The space is designed to support individual and small group activities, projects and discussions in an area that is physically separate from, yet visibly adjacent to, the general classrooms.

Additionally, kindergarten classroom commons shall be designed with hard-surfaced flooring, durable surfaces, and multiple sinks to allow the areas to serve a "wet lab" function - a shared, multiuse instructional space for art, science or other "messy" activities. The area will allow students to engage in hands-on, project-based activities in an area that is easily supervised by teachers in adjacent classrooms.

Size and Capacity

- Typical school for 750 students will include a minimum of two (2) classroom commons areas serving kindergarten classrooms
- Approximately 2-3 kindergarten classrooms will share one (1) classroom commons
- See program for square footage guidelines

Location and Adjacencies

- Centrally located shared spaces in near kindergarten classrooms
- Positioned so that students in the commons are within sight and sound of surrounding kindergarten classrooms
- Near student restrooms, if centralized kindergarten restroom(s) are provided (as opposed to single unisex restrooms attached to each kindergarten classroom)
- Zoned to restrict access during after-hours community use

Walls, Windows, Ceilings and Doors

- Open design[1]
- Interior windows along classroom walls, providing visibility to/from adjacent classrooms
- Window coverings providing the ability to darken room; consider ability to reach blinds or provide motorized shades.
- Ceiling height of 9'-11'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)
- Acoustical wall treatments to dampen noise
- Tackable wall surface coverings and/or mounted tack boards
- Ensure that thermostats and other mounted switches or controls are placed at the edges of walls rather than in the center (where they interfere with displays).

Kindergarten: Commons / Flex Space (continued)

Environmental Conditions for Optimal Learning

- Ample natural daylighting to support learning
- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Accessible, flexible storage options (mobile cabinets, bins, and shelving). Some storage should be low enough to be easily accessed by kindergarten-aged students.
- Storage under cabinets at sink

Furnishings, Fixtures, and Equipment

- Flexible fixtures and equipment, according to site-based needs
- Built-in stainless steel counters/one (1) heavy-duty sink at lower height for kindergarten students
- One (1) tall locking cabinet
- All appliances to be Energy Star rated, unless not readily available
- Durable, easily cleaned work surfaces
- Kindergarten-sized tables and chairs to accommodate a minimum of 15 students
- Seating must be very moveable/flexible, allowing the teachers to reconfigure the space based on the type of activity.
- Furnishings should support both group and individual work.
- Flexible shelving for supplies and materials

Technology

- Ample outlets and data drops to ensure flexible use of technology[2]
- Wireless Internet access point within range to provide adequate capacity for high-density use

Electricity

- 120/208 3-phase power
- Adequate number of electrical outlets and data drops distributed throughout area to support current and future technological needs
- Electrical outlet(s) and data drop(s) in ceiling (see Informational Technology section for additional details)[3]
- Wired for technology, as noted above

Kindergarten: Commons / Flex Space (continued)

Lighting

- Natural daylighting (as noted above)
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- One (1) heavy gauge stainless steel sink for student use (kindergarten height), with warm/cold water. Consider equipping sink with clay trap.
- Surface-mounted soap and paper towel dispensers (owner-provided)
- Floor drain

Flooring

- Hard surface flooring needed for easy clean-up following messy activities with varied art or science materials (e.g. paint, clay, etc.). Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Interior windows to allow visual supervision from classrooms.

Communications

- Wired for Voice Over IP
- Intercom
- 12" GPS satellite clock
- Bell system
- PA system speakers

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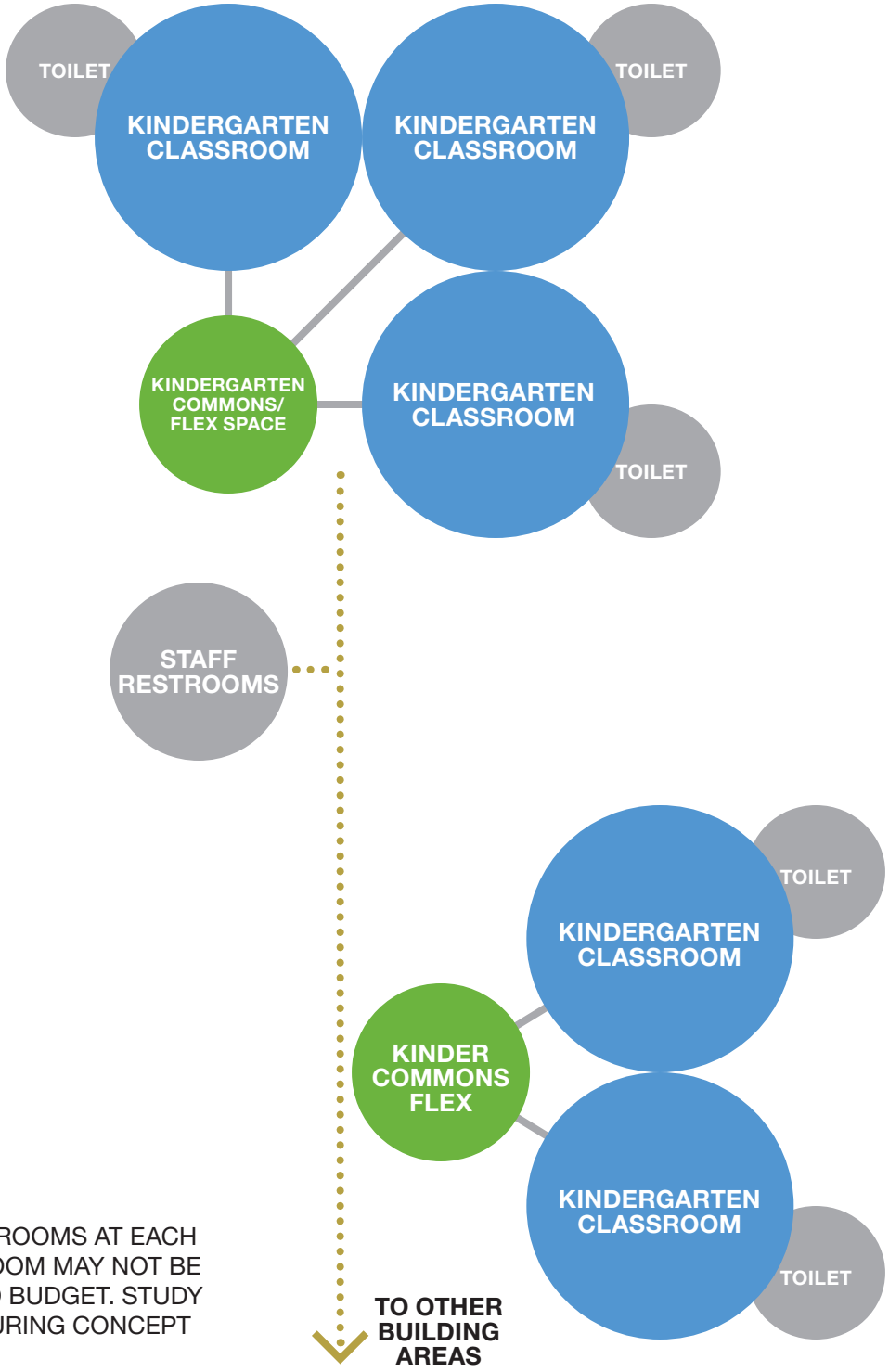
[1] Commons areas receive greater use when they are designed as open vs. enclosed. Elementary students must be "within sight and sound" of a teacher (not a parent or volunteer) at all times. Commons must remain open to allow teachers to send students out of the classroom to work independently or in small groups. If spaces are designed as enclosed, students will not be permitted to use the spaces without direct teacher supervision.

[2] Technology use in this area will be primarily on mobile devices. Desktop workstations are not anticipated.

[3] May serve wireless access point or other purpose. Ceiling-mounted data projectors are not anticipated, as use of this technology is not anticipated long-term. Flexibility is preferred over fixed equipment when planning for technology, as it is continuously changing. See section on Information Technology for additional information.

a. Kindergarten Adjacency Diagram



NOTES:

INDIVIDUAL RESTROOMS AT EACH KINDER CLASSROOM MAY NOT BE FEASIBLE DUE TO BUDGET. STUDY AND CONFIRM DURING CONCEPT DESIGN.

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b. Classrooms Grade 1-5 Area Program

Beaverton School District New Elementary School

Area Program

Date: May, 2014

Academics Programs	# of Teaching Stations	QTY.	S.F. Room	S.F. Total
Grade 1-5 Classrooms				
General Classrooms	25	25	950	23,750
Flex Commons - Multiuse Area / Alcoves		5	500	2,500
Flex Teacher Planning & Conference Rooms		5	150	750
Neighborhood Workroom		1	250	250
ELL Classroom		1	950	950
Computer Lab (Locate near Classrooms)		1	1,000	1,000
Total Net Area this Functional Group				**29,200**
See complete Building Program in Section V				

The Area Program above lists the rooms and spaces for this functional grouping within the building. The room narratives which follow provide detailed descriptions and requirements which are unique to each room, space, or area.

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b. Classrooms Grade 1-5 Room Narratives

Classrooms Grade 1-5: General Classrooms

Activities and Functions

General classrooms support the everyday instruction of students in grades 1-5. They are the primary venues for instruction covering multiple curriculum areas, including reading, math, science, social studies, and art. General classrooms should be designed as flexible and adaptable spaces, capable of supporting short and long-term instructional needs. Adequate space and flexible furnishings are used to support a variety of student groupings, including individual, one-on-one, small group and large group work. Classrooms must be designed as learner-centered environments, appropriately scaled for elementary use.

Size and Capacity

Approximately 25 general classrooms are planned for each elementary school facility. Classrooms will be sized to accommodate classes of up to 25 students. Classrooms should be sufficiently large to provide an instructor with space to create varied room configurations based on changing needs. Creating learner-centered, inquiry based environments requires classrooms to be sized larger than their maximum student capacity. See program for square footage guidelines.

Location and Adjacencies

- Classrooms will be located near classroom commons alcove areas
- Classrooms will be zoned for security (to restrict access during off-hours)
- Classrooms will be situated near restrooms

Walls, Windows, Ceilings and Doors

- Self-closing door with view panel or side lights (with installed window coverings)
- Classroom doors should be lockable from both sides (inside and outside)
- Interior classroom window with view to student commons area
- Ample natural lighting
- Window coverings providing the ability to darken room; consider ability to reach blinds or provide motorized shades.
- Ceiling height of 9’-11’
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)
- Ample tackable wall space to display student work in classrooms, alcoves, and corridors.
- Classroom display areas of various heights to allow visual learning aids to be displayed at children’s eye-level.
- Ensure that thermostats and other mounted switches or controls are placed at the edges of walls rather than in the center (where they interfere with displays).

Classrooms Grade 1-5: General Classrooms (continued)

Environmental Conditions for Optimal Learning

- Ample natural daylighting to support learning
- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality
- Provide an acoustical environment that supports learning

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Shelving to accommodate in-class libraries (traditional bookshelves as well as “front-facing” book storage so students can view covers, books in bins, etc.).
- Area of lower-level shelves that are accessible to students (open shelving).
- Tubs for materials associated with rotating units (may be placed higher, but not so high that a custodian is needed to access).
- Full-length, individually separated cubbies for coats and belongings. Coat hooks and/or cubbies should not block access to shelving.
- Storage area for intervention kits.
- Flat file type storage for charts and posters.
- Lockable teacher cabinet tall enough to hang coat, store personal belongings, etc.
- Lockable file cabinets for teacher use.
- Only moderate use of overhead cabinet storage in order to maximize display spaces.

Furnishings, Fixtures, and Equipment

- Built-in counter area with sink
- Upper and lower cabinets along sink and counter area (balance need for upper cabinets with providing adequate display areas)
- Two (2) 8’ magnetic white boards (or 16’ total) mounted lower, at elementary height
- Ample display areas via tackboards and/or tackable wall surfaces
- Opt for mobile (rather than fixed) furnishings when possible to accommodate flexible uses of classroom spaces.
- Flexible classroom seating for 25 students. Furniture selection will be a site-based decision, in accordance with district standards. District teachers have voiced a preference for flexible table settings over individual student desks. Tables should seat a maximum of four (4) students per table.
- Carpeted area for “carpet time” activities (all grades)
- Reading area furnishings to create space that feels “set-aside” from the main classroom
-

Classrooms Grade 1-5: General Classrooms (continued)

- One (1) teacher desk and chair
- Multimedia cart supporting technological and/or audio visual use
- Six (6) movable bookcases
- Two (2) 42' vertical file cabinets
- One (1) locking tall cabinet

Technology

- Classrooms should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for classrooms. Basic requirements include:
- Room should be proactively wired to ensure flexible and adaptable use of technology
- Provide ability for a teacher to connect a laptop or mobile device to data projection and video streaming devices for classroom viewing
- Wireless Internet access point within range to provide adequate capacity for high-density use
- Provide multiple surfaces on which to project varied media
- Provide voice amplification capabilities (may be hardwired or portable - TBD during design)

Electricity

- 120/208 3-phase power
- Ability to provide mid-room power in a manner that does not require extending cords across the room, creating tripping hazards[1]
- Adequate number of electrical outlets and data drops distributed throughout room to support current and future technological needs
- Electrical outlet(s) and data drop(s) in ceiling (see Informational Technology section for additional details)[2]
- Wired for technology, as noted above
- Provide voice amplification capabilities (may be hardwired or portable - TBD during design

Lighting

- Natural daylighting (as noted above)
- When placing windows and/or skylights, consider thermal conditions, security and ability to darken room for screen viewing.
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 35-50 foot-candles for classrooms.
- Flexible lighting (bi-level switching to provide high and low light levels)
- Vacancy sensors set to turn off at 10 minutes

Classrooms Grade 1-5: General Classrooms (continued)

- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- Sink with warm/cold water and drinking fountain
- Surface mounted soap and paper towel dispensers (owner-provided)

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.
- Regardless of main flooring type, there should be a carpeted area available for "carpet time" activities (may be provided by area rug large enough to accommodate class, if classroom is not carpeted).
- Hard surfaced flooring area needed at sink; however, limit size of area (as much as feasible) as it tends to restrict use floor space for other purposes.

Security

- Coded or keyed entry - door lockable from both sides (including from inside classroom for lockdowns)
- Interior window (with installed window coverings) to provide visual supervision of classroom commons
- Classroom configuration and/or window coverings to allow students to assemble out-of-sight of all windows in lockout situation

Communications

- Wired for Voice Over IP
- Intercom
- 12" GPS satellite clock
- Bell system
- PA system speakers
- May be equipped with radio handset

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[1] Floor outlets are undesirable from a maintenance standpoint; however, they have been requested by teachers. Teachers often need to power devices mid-room without creating tripping hazards via cords. This topic should be addressed during the design process of a new facility.

[2] May serve wireless access point or other purpose. Ceiling-mounted data projectors are not anticipated, as use of this equipment is expected to shift to new, emerging technologies. Flexibility is preferred over fixed equipment when planning for technology, as it is continuously changing. See section on Information Technology for additional information.

Classrooms Grade 1-5: Flex Commons - Multi-use Area / Alcoves

Activities and Functions

The “flex commons” area is an open and flexible alcove-type space that serves as an extension of the classroom environment. The space is designed to support individual and small group activities, projects and discussions in an area that is physically separate from, yet visibly adjacent to, the general classrooms.

Additionally, classroom commons shall be designed with hard-surfaced flooring, durable surfaces, and multiple sinks to allow the areas to serve a “wet lab” function - a shared, multiuse instructional space for art, science or other “messy” activities. The area will allow students to engage in hands-on, project-based activities in an area that is easily supervised by teachers in adjacent classrooms.

Size and Capacity

- Typical school for 750 students will include a minimum of two (2) classroom commons areas serving kindergarten classrooms, and five (5) classroom commons areas serving general classrooms (grades 1-5)
- Approximately five (5) general classrooms will share one (1) classroom commons
- Approximately two (2) kindergarten classrooms will share one (1) classroom commons
- See program for square footage guidelines

Location and Adjacencies

- Centrally located shared spaces
- Positioned so that students in the commons are within sight and sound of surrounding classrooms
- Near student restrooms
- Zoned to restrict access during after-hours community use

Walls, Windows, Ceilings and Doors

- Open design[1]
- Interior windows along classroom walls, providing visibility to/from adjacent classrooms; consider ability to reach blinds or provide motorized shades.
- Ceiling height of 9’-11’
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)
- Acoustical wall treatments to dampen noise
- Tackable wall surface coverings and/or mounted tack boards
- Ensure that thermostats and other mounted switches or controls are placed at the edges of walls rather than in the center (where they interfere with displays).

Classrooms Grade 1-5: Flex Commons (Multi-use) Area / Alcoves (continued)

Environmental Conditions for Optimal Learning

- Ample natural daylighting to support learning
- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Accessible, flexible storage options (mobile cabinets, bins, and shelving)
- Storage under cabinets at sinks

Furnishings, Fixtures, and Equipment

- Flexible fixtures and equipment, according to site-based needs
- Built-in stainless steel counters/one (1) heavy-duty sink
- One (1) tall locking cabinet
- Durable, easily cleaned work surfaces
- Tables and chairs to accommodate a minimum of 15 students
- Seating must be very moveable/flexible, allowing the teachers to reconfigure the space based on the type of activity.
- Furnishings should support both group and individual work.
- Flexible shelving for supplies and materials

Technology

- Ample outlets and data drops to ensure flexible use of technology[2]
- Wireless Internet access point within range to provide adequate capacity for high-density use

Electricity

- 120/208 3-phase power
- Adequate number of electrical outlets and data drops distributed throughout area to support current and future technological needs
- Electrical outlet(s) and data drop(s) in ceiling (see Informational Technology section for additional details)[3]
- Wired for technology, as noted above
-

Classrooms Grade 1-5: Flex Commons (Multi-use) Area / Alcoves (continued)

Lighting

- Natural daylighting (as noted above)
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- One (1) heavy gauge stainless steel sink for student use, with warm/cold water. Consider equipping sink with clay trap.
- Surface-mounted soap and paper towel dispensers (owner-provided)
- Floor drain

Flooring

- Hard surface flooring needed for easy clean-up following messy activities with varied art or science materials (e.g. paint, clay, etc.). Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Interior windows to allow visual supervision from classrooms.

Communications

- Wired for Voice Over IP
- Intercom
- 12" GPS satellite clock
- Bell system
- PA system speakers

---

[1] Commons areas receive greater use when they are designed as open vs. enclosed. Elementary students must be "within sight and sound" of a teacher (not a parent or volunteer) at all times. Commons must remain open to allow teachers to send students out of the classroom to work independently or in small groups. If spaces are designed as enclosed, students will not be permitted to use the spaces without direct teacher supervision.

[2] Technology use in this area will be primarily on mobile devices. Desktop workstations are not anticipated.

[3] May serve wireless access point or other purpose. Ceiling-mounted data projectors are not anticipated, as use of this technology is not anticipated long-term. Flexibility is preferred over fixed equipment when planning for technology, as it is continuously changing. See section on Information Technology for additional information.

Classrooms Grade 1-5: Flex Teacher Planning and Conference Rooms

Activities and Functions

The flex teacher planning and conference rooms provide collaborative work and meeting space for faculty. These rooms will be designed as a flexible, enclosed spaces that can accommodate smaller meetings between staff, student, family members and other groups (e.g. IEP, counselor meetings, team-teaching). The rooms will offer privacy for sensitive discussions, and allow for the temporary display of confidential materials. These rooms are NOT intended as offices - they are multiuse spaces that are open to all staff.

Size and Capacity

A total of five (5) flex teacher planning/conference rooms will be provided at each elementary school. One (1) room shall be provided for every six (6) classrooms (general and kindergarten). The rooms should be sized to accommodate meetings of 6-8 people comfortably. See program for square footage guidelines

Location and Adjacencies

- The flex planning and conference rooms will be located near classrooms and classroom commons areas.
- Teacher planning rooms will be located near staff restrooms, when possible.

Walls, Windows, Ceilings and Doors

- Self-closing door, lockable from both sides
- High interior window or exterior window to provide daylight while maintaining privacy; consider ability to reach blinds or provide motorized shades.
- Ceiling height of 9’-10’
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)
- Tackable wall surface or mounted tack boards

Environmental Conditions for Optimal Learning

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Shelving for reference materials

Furnishings, Fixtures, and Equipment

- One 6’ white board
- Tackable wall surface or mounted tack boards
- All appliances to be Energy Star rated, unless not readily available

Classrooms Grade 1-5: Flex Teacher Planning and Conference Rooms (continued)

- One (1) 8-person conference table with chairs
- One (1) mobile bookcase
- Consider use of systems furnishings

Technology

Conference rooms should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for conference rooms. Basic requirements include:

- Room should be proactively wired to ensure flexible and adaptable use of technology
- Provide ability to connect a laptop to data projection and video streaming devices for viewing by room participants
- Wireless Internet access point within range to provide adequate capacity for high-density use

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) data drops per wall
- Electrical outlet(s) and data drop(s) in ceiling (see Informational Technology section for additional details)[1]
- Wired for technology, as noted above

Lighting

- Natural daylighting (as noted above)
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards
- Flexible lighting (bi-level switching to provide high and low light levels)
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Classrooms Grade 1-5: Flex Teacher Planning and Conference Rooms (continued)

Security

- Coded or keyed entry - door lockable from both sides
- Interior window (with installed window coverings) to offer option of visibility or privacy, depending upon use

Communications

- Wired for Voice Over IP
- Intercom
- 8” GPS satellite clock
- Bell system
- PA system speakers

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[1] May serve wireless access point or other purpose. Ceiling-mounted data projectors are not anticipated, as use of this equipment is expected to shift to new, emerging technologies. Flexibility is preferred over fixed equipment when planning for technology, as it is continuously changing. See section on Information Technology for additional information.

Classrooms Grade 1-5: Neighborhood Workroom

Activities and Functions

The neighborhood workroom will serve as a mini-production area, equipped with a printer, copier (budget-permitting), meeting/production table and chairs. This area may also include a small kitchenette, budget-permitting (to be determined during design).

Size and Capacity

One (1) neighborhood workroom shall be provided for each elementary school. See program for square footage guidelines.

Location and Adjacencies

- The neighborhood workroom will be located near classrooms in the instructional area of the facility.
- Centrally located for convenient access by teachers
- If multistory building, position near stairs to optimize access
- Located at a distance from main office, as this will serve as an alternative to the administrative workroom

Walls, Windows, Ceilings and Doors

- Self-closing door with view panel
- High interior window or exterior window to provide daylight while maintaining privacy; consider ability to reach blinds or provide motorized shades.
- Ceiling height of 9'-10'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)
- Tackable wall surface or mounted tack boards

Environmental Conditions for Optimal Learning

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Storage for learning materials, paper, and project resources
- Secure file storage
- Shelving for reference materials
- Counter space for office equipment and kitchen appliances
- Cabinet for general kitchen supplies

Classrooms Grade 1-5: Neighborhood Workroom (continued)

Furnishings, Fixtures, and Equipment

- One 6’ white board
- Coffee maker, microwave, small refrigerator desired; this will be a design-based decision.
- All appliances to be Energy Star rated, unless not readily available
- Counter with room for paper cutter and office equipment
- Cabinet for materials storage
- Upper and lower cabinets and counter at sink
- Tackable wall surface or mounted tack boards
- Two (2) tall, upright movable bookcases
- Storage for different types of paper (e.g. copy paper, colored paper, construction paper - 8”x12” to 16”x12” in size)
- Two (2) 42” lateral files
- One (1) production worktable

Technology

- Ample outlets and data drops to ensure flexible use of technology
- One (1) printer - copier may be provided, budget permitting
- Wireless Internet access supporting high-density use

Electricity

- 120/208 3-phase power
- Power/data for printer (and option of copier, budget-permitting)
- Minimum of two (2) electrical outlets and two (2) data drops per wall (meet with staff during design to clarify electrical/data needs for this area)
- Wired for technology, as noted above
- Dedicated outlets for small fridge and microwave (if providing kitchenette)

Lighting

- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Classrooms Grade 1-5: Neighborhood Workroom (continued)

Plumbing

- One (1) sink
- Soap dispenser and paper towel surface mount (provided by owner)
- Counter/sink/small kitchenette desired (budget-permitting, design-based decision)

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry - door lockable from both sides
- Interior window (with installed window coverings) may be provided to provide visual supervision of corridor (design-based decision)
- Secure file storage

Communications

- Wired for Voice Over IP
- Intercom
- 8" GPS satellite clock
- Bell system
- PA system speakers

Classrooms Grade 1-5: ELL Classroom

Activities and Functions

Classroom supports instruction of students in the District's English Language Learner (ELL) program. ELL classrooms should be designed to:

- Optimize flexibility by providing the space and resources to support multiple classroom configurations.
- Provide adequate space and flexible furnishings to support a variety of student groupings, including individual, one-on-one, small group and large group work.
- Create a learner-centered environment that is appropriately scaled for elementary use.
- Enrich the educational environment with ample display areas for reference tools and student work
- Support activities such as cultural singing and dancing

Size and Capacity

Classroom will be sized to accommodate classes of up to 25 students. See program for square footage guidelines.

Location and Adjacencies

- Location of ELL classroom will need to be a site-based decision, based on the chosen philosophy on the preferred manner of delivering services to students
- Classroom shall be located near general classrooms
- Classroom will be positioned to minimize transitions for students
- Classroom will be zoned for security (to restrict access during off-hours)
- Classroom will be situated near restrooms

Walls, Windows, Ceilings and Doors

- Self-closing door with view panel or side lights (with installed window coverings)
- Classroom doors should be lockable from both sides (inside and outside)
- Interior window to commons area
- Ample natural lighting
- Window coverings providing the ability to darken room; consider ability to reach blinds or provide motorized shades.
- Ceiling height of 9'-11'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)
- Ample tackable wall space to display student work
- Classroom display areas of various heights to allow visual learning aids to be displayed at children's eye-level

Classrooms Grade 1-5: ELL Classroom (continued)

- Ensure that thermostats and other mounted switches or controls are placed at the edges of walls rather than in the center (where they interfere with displays).

Environmental Conditions for Optimal Learning

- Ample natural daylighting to support learning
- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality
- Provide an acoustical environment that supports learning

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Ample shelving to accommodate in-class libraries (traditional bookshelves as well as “front-facing” book storage so students can view covers, books in bins, etc.). ELL programs have expansive in-class libraries that include a large number of donated books.
- Area of lower-level shelves that are accessible to students (open shelving).
- Tubs for materials associated with rotating units (may be placed higher, but not so high that a custodian is needed to access).
- Coat hooks and/or cubbies should not block access to shelving.
- Lockable teacher cabinet tall enough to hang coat, store personal belongings, etc.
- Lockable file cabinet for teacher use.
- Only moderate use of overhead cabinet storage in order to maximize display spaces.

Furnishings, Fixtures, and Equipment

- Built-in counter area with sink
- Upper and lower cabinets along sink and counter area (balance need for upper cabinets with providing adequate display areas)
- Two (2) 8’ magnetic white boards (or 16’ total) mounted lower, at elementary height
- Ample display areas via tackboards and/or tackable wall surfaces
- Opt for mobile (rather than fixed) furnishings when possible to accommodate flexible uses of classroom spaces.
- Flexible classroom seating for 25 students. Furniture selection will be a site-based decision, in accordance with district standards. District teachers have voiced a preference for flexible table settings over individual student desks. Tables should seat a maximum of four (4) students per table.
- Carpeted area for “carpet time” activities
- Reading area furnishings to create space that feels “set-aside” from the main classroom

Classrooms Grade 1-5: ELL Classroom (continued)

- One (1) teacher desk and chair
- Multimedia cart supporting technological and/or audio visual use
- Six (6) movable bookcases
- Vertical file cabinets with adequate secure file storage for number of ELL students and teachers
- One (1) locking tall cabinet

Technology

Classrooms should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27.* Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for classrooms. Basic requirements include:

- Room should be proactively wired to ensure flexible and adaptable use of technology
- Provide ability for a teacher to connect a laptop or mobile device to data projection and video streaming devices for classroom viewing
- Wireless Internet access point within range to provide adequate capacity for high-density use
- Provide for multiple surfaces on which to project varied media
- Provide voice amplification capabilities (may be hardwired or portable - TBD during design)

Electricity

- 120/208 3-phase power
- Ability to provide mid-room power in a manner that does not require extending cords across the room, creating tripping hazards[1]
- Adequate number of electrical outlets and data drops distributed throughout room to support current and future technological needs
- Electrical outlet(s) and data drop(s) in ceiling (see Informational Technology section for additional details)[2]
- Wired for technology, as noted above

Lighting

- Natural daylighting (as noted above)
- When placing windows and/or skylights, consider thermal conditions, security and ability to darken room for screen viewing.
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 35-50 foot-candles for classrooms.
- Flexible lighting (bi-level switching to provide high and low light levels)
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Classrooms Grade 1-5: ELL Classroom (continued)

Plumbing

- Sink with warm/cold water and drinking fountain
- Surface-mounted soap and paper towel dispensers (owner-provided)

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.
- Regardless of main flooring type, there should be a carpeted area available for "carpet time" activities (may be provided by area rug large enough to accommodate class, if classroom is not carpeted).
- Tiled area needed at sink; however, limit size of tiled area (as much as feasible) as it tends to restrict use floor space for other purposes.

Security

- Coded or keyed entry - door lockable from both sides (including from inside classroom for lockdowns)
- Interior window (with installed window coverings) to provide visual supervision of pull out area
- Classroom configuration and/or window coverings to allow students to assemble out-of-sight of all windows in lockout situation

Communications

- Wired for Voice Over IP
- Intercom
- 12" GPS satellite clock
- Bell system
- PA system speakers
- May be equipped with radio handset

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[1] Floor outlets are undesirable from a maintenance standpoint; however, they have been requested by teachers. Teachers often need to power devices mid-room without creating tripping hazards via cords. This topic should be addressed during the design process of a new facility.

[2] May serve wireless access point or other purpose. Ceiling-mounted data projectors are not anticipated, as use of this equipment is expected to shift to new, emerging technologies. Flexibility is preferred over fixed equipment when planning for technology, as it is continuously changing. See section on Information Technology for additional information.

Classrooms Grade 1-5: Computer Lab

Activities and Functions

Computer labs provide a bank of laptop computers (and sufficient work area) for class-based computer instruction, group projects or research. Computer labs are currently used for state assessment testing.

It is anticipated the need for formal computer labs will diminish as technology becomes increasingly mobile. Teachers, Teaching and Learning, and IT staff foresee even assessment testing moving to mobile devices in the near future. Although computer labs have traditionally been equipped with desktop computers, new labs should be designed with the expectation that all devices will be soon be mobile.

Computer labs may eventually be adapted to become general classrooms or other areas, as mobile technologies make dedicated computer labs obsolete.

Size and Capacity

A minimum of two (2) computer labs should be provided in every new elementary school. Each lab must be designed to accommodate approximately 40 student workstations, and one (1) teacher presentation workstation.[1]

Location and Adjacencies

- One (1) computer lab shall be placed adjoining the library/media center (with window-wall)
- A second computer lab may be positioned among the general classrooms, or centralized (design-based decision). Lab placement should maximize the use of the lab as an instructional resource, as well as facilitate its transition to a general classroom once technology is primarily wireless and/or classroom based.

Walls, Windows, Ceilings and Doors

- Self-closing doors with view panels or side lights, lockable from both sides
- For library computer lab, provide “window wall” between computer lab and library
- For computer labs near classrooms, provide interior window with view to/from corridor or extended learning area
- Ceiling height of 9’-11’
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)
- While indirect daylighting is desirable, designers must weigh the educational benefits of daylighting with potential glare and heat regulation issues.
- Consider high (operable) windows, as appropriate (clerestories preferred over skylights, for security reasons). Also, consider security implications of exterior windows, with the goal of minimizing access to prevent break-ins and theft of expensive equipment. Consider ability to reach blinds or provide motorized shades.
- Window coverings on all windows (interior and exterior) providing the ability to darken room, as well as enabling students to be secured in room out-of-sight in the event of a lockout.
- Tackable wall surface or mounted tack boards

Classrooms Grade 1-5: Computer Lab (continued)

- Ensure that thermostats and other mounted switches or controls are placed at the edges of walls rather than in the center (where they interfere with displays).

Environmental Conditions for Optimal Learning

- Daylighting to support learning, as feasible; must avoid glare and heat issues potentially associated with windows
- Adequate ventilation for indoor air quality
- Ability to maintain temperature and humidity levels for proper functioning of technological equipment

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Cabinets and open shelving for supplies

Furnishings, Fixtures, and Equipment

- Two (2) 8' magnetic white boards (or 16' total)
- All appliances to be Energy Star rated, unless not readily available
- Flexible tables to support 40 student workstations (furniture selection and organization will be a site-based decision, in accordance with district standards)
- Multimedia cart
- One (1) teacher workstation and chair

Technology

Computer labs should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for computer labs. Basic requirements include:

- Room should be proactively wired to ensure flexible and adaptable use of technology
- Provide ability for a teacher to connect a laptop or mobile device to data projection and video streaming devices for classroom viewing
- Ability to project data and video content onto multiple surfaces
- Wireless Internet access point within range to provide adequate capacity for high-density use
- Provide voice amplification capabilities (may be hardwired or portable - TBD during design)
- 40 student computer workstations (laptops)
- One (1) teacher computer workstation
- Multiple printers

Classrooms Grade 1-5: Computer Lab (continued)

Electricity

- 120/208 3-phase power
- Overhead utilities raceways
- Electrical outlet(s) and data drop(s) in ceiling (see Informational Technology section for additional details)[2]
- Ample wall outlets and data drops to support 40 student workstations, teacher workstation and AV equipment. Consider alternatives to floor outlets to distribute power and data to computers and printers.[3]
- Data outlets in lab may contain up to six (6) jacks to support the high density of computer workstations.
- Wired for technology, as noted above

Lighting

- Natural daylighting (as noted above)
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards
- Flexible lighting (bi-level switching to provide high and low light levels)
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry - door lockable from both sides (including from inside classroom for lockdowns)
- Interior window (with installed window coverings)
- Classroom configuration and/or window coverings to allow students to assemble out-of-sight of all windows in lockout situation
- Ability to securely store mobile equipment
- Separate alarm system may be provided, due to the use and storage of expensive equipment
- Consider ways to minimize direct access (including via exterior windows) to reduce likelihood of break-ins or theft.

Classrooms Grade 1-5: Computer Lab (continued)

Communications

- Wired for Voice Over IP
- Intercom
- 12” GPS satellite clock
- Bell system
- PA system speakers
- Equipped with alarm system
- May have use of radio handset

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[1] Capacity for computer lab was set based on *BSD Technical Standard, Div 27: Communications and Technology*

[2] May serve wireless access point or other purpose. Ceiling-mounted data projectors are not anticipated, as use of this equipment is expected to shift to new, emerging technologies. Flexibility is preferred over fixed equipment when planning for technology, as it is continuously changing. See section on Information Technology for additional information.

[3] Floor outlets are undesirable from a maintenance standpoint; however, computer labs need to power devices mid-room without creating tripping hazards via cords. This topic should be addressed during the design process of a new facility.

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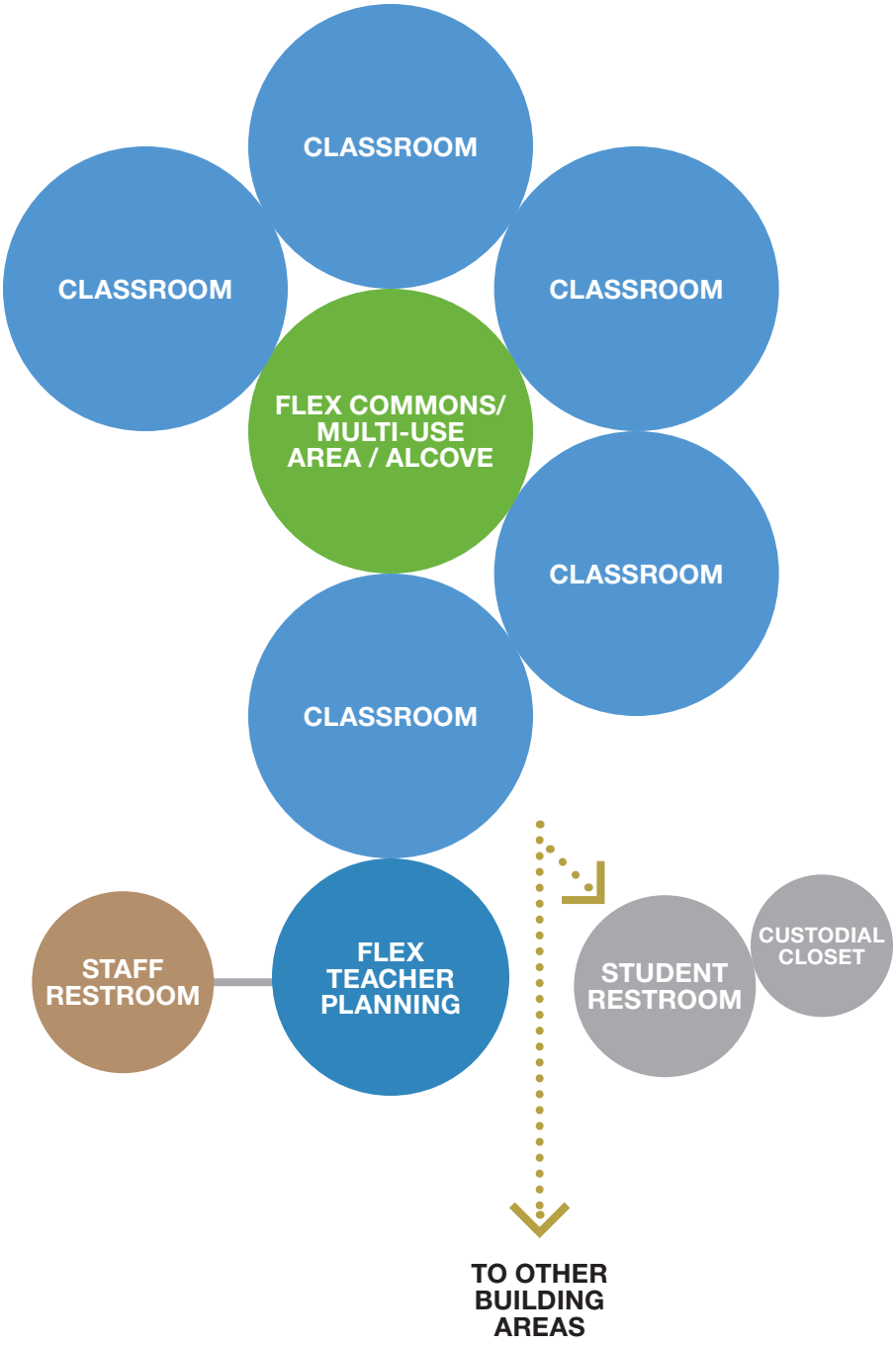
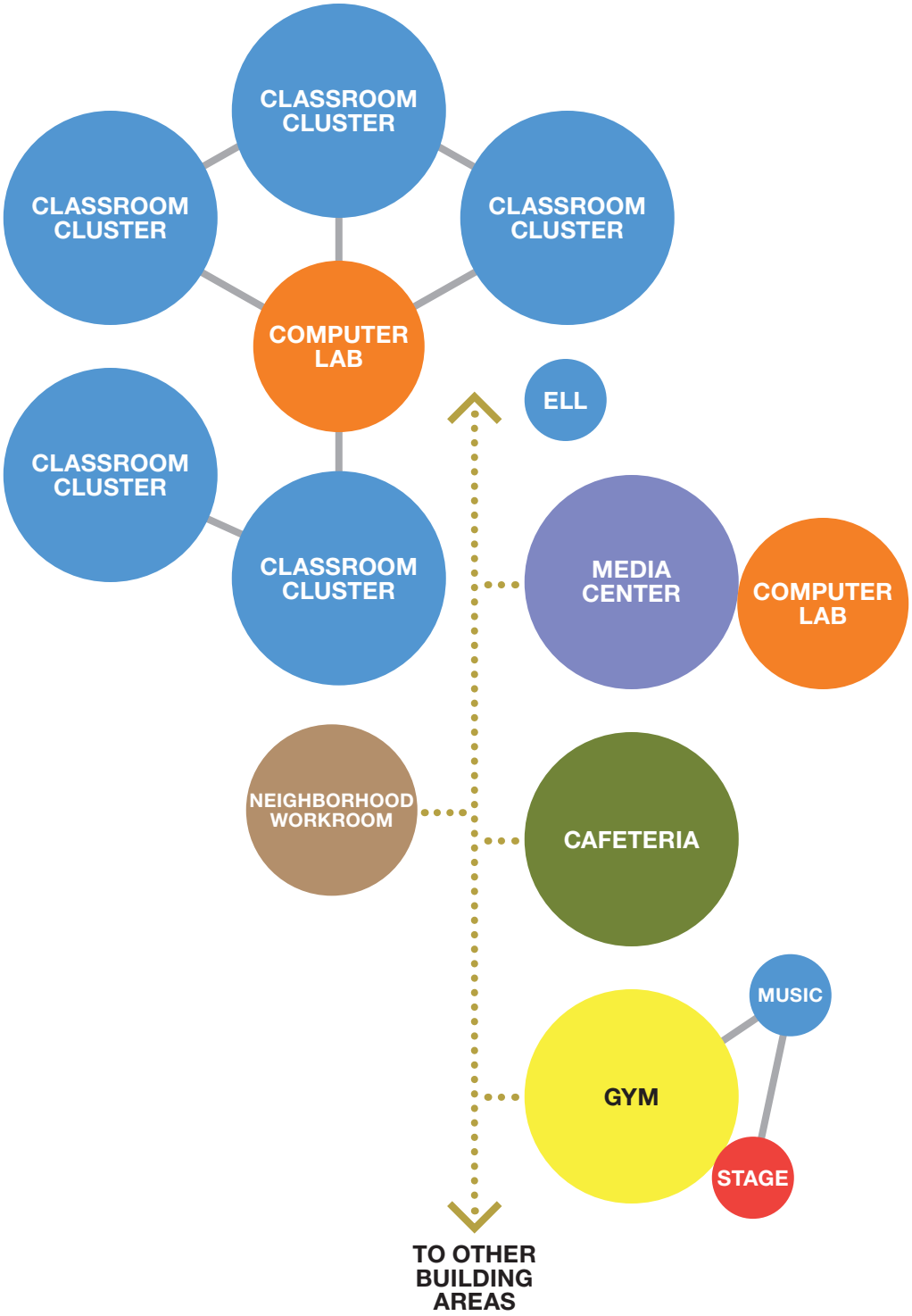
b. Classrooms Grade 1-5 Cluster Adjacency Diagram



b. Classrooms Grade 1-5 Academics & Support Adjacency Diagram



c. Media Center Area Program

Beaverton School District New Elementary School

Area Program

Date: May, 2014

Academics Programs	# of Teaching Stations	QTY.	S.F. Room	S.F. Total
Media Center				
Library / Media Center		1	3,000	3,000
Library / Media Center Workroom		1	200	200
Library / Media Office		1	100	300
Computer Lab		1	1,000	1,000
Total Net Area this Functional Group				**4,500**
See complete Building Program in Section V				

The Area Program above lists the rooms and spaces for this functional grouping within the building. The room narratives which follow provide detailed descriptions and requirements which are unique to each room, space, or area.

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c. Media Center Room Narratives

Media Center: Library / Media Center

Activities and Functions[1]

The library media center serves as the "center" of the elementary school facility. The library should be accessible and welcoming to students, staff and community members. Functions include:

- Space for whole class instruction or activities (e.g. story time, table work, readers' theater)
- Small group work (e.g. book clubs, math groups, tutoring, reading buddies)
- Independent work (e.g. iPad search stations, study carrels, silent reading areas)
- Repository for books for student checkout
- Staff meetings, staff development activities
- Meeting space for PTO, community groups, extracurricular groups (e.g. Chess Club, Mathletes, Scout groups), parenting classes
- Computer lab work (receiving student and community use)
- Book storage

Size and Capacity

The library/media center is a large space that includes:

- Library stacks
- Seating to accommodate a minimum of 40 students
- Large open (carpeted) area or story steps for floor seating (read aloud activities)
- Comfortable reading areas
- Areas to support individual, small and large group work
- Circulation desk
- Workroom/storage
- Library/media office

Library collections at the elementary level average 21,000 books/novels. See program for square footage guidelines.

Location and Adjacencies

- The library/media center should be positioned in the "public" area of the school facility, in a centrally-located and easily identified area. Students should walk by or through the library frequently during the course of their day.
- The library should be positioned near a windowed computer lab. The lab should be within visual proximity, yet provide sound isolation to minimize distractions during test-taking

Media Center: Library / Media Center (continued)

Walls, Windows, Ceilings and Doors

- During the design process, carefully consider the pros and cons of an open vs. closed library configuration. Open libraries provide a nice atmosphere and sense of welcome, yet are persistently noisy. Also, an open library is problematic during lock-ins, as there is not a way to contain students. Enclosed libraries are generally more secure and provide a quieter learning environment - yet, they are not as welcoming.
- Interior window between library assistant's office and main library area
- Ample windows with views to the outdoors and natural daylighting, particularly near reading area
- Ceiling height of 10'-15' or higher. Library ceilings may be open to structure or higher to add interest to space.
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)
- Window coverings providing the ability to darken room; consider ability to reach blinds or provide motorized shades.
- Tackable wall surface coverings
- Although the concept of reading alcoves is beneficial, ensure these areas are easily supervised
- Attractive directional signage/labeling of areas within the library is important, as it allows students to locate different materials and resources independently. Signage should be "classic" and professional.
- Good display areas for books and themes
- Wall space for displays, bulletin boards etc.
- Ensure that thermostats and other mounted switches or controls are placed at the edges of walls rather than in the center (where they interfere with displays).

Environmental Conditions for Optimal Learning

- Provide large windows to create a bright and welcoming environment. Vaulted ceilings help make a space inviting, unique and allow for dynamic displays. Windows should be equipped with easily-operated window coverings to ensure that a/v projections are visible.
- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

Library staff need the ability to shelve and organize books in different ways (particularly at the elementary level). The manner in which libraries store and display books can influence what students ultimately read. For example, elementary libraries must contain adequate shelving space to display the covers of select picture books (as opposed to the spines), as young children often select a book based on its cover. Displaying the cover of a book is also a helpful directional tool to lead students to discover similar book types on the adjacent stacks.

The library shall provide:

Media Center: Library / Media Center (continued)

- Adequate stacks for storing and displaying a minimum of 21,000 books and novels
- Flexible, movable library shelving
- Secure cabinet storage in workroom for supplies and book repair materials
- Shelving and file storage in librarian office
- Interim storage for textbooks, if needed[2]
- Area to securely store and charge iPads or other handheld devices

Furnishings, Fixtures, and Equipment

- Circulation desk should be central, and situated so students are within line-of-sight
- Visual proximity to entry point(s), particularly if book security system is not provided.
- The circulation desk should not be designed as a long counter that the library staff member has to walk all the way around when entering the library floor area. Consider placing more counter space behind the library staff member. The main circulation counter should have periodic “pass through” breaks.
- The circulation desk shall include a book drop, code scanner, and workstation.
- Ergonomically designed circulation desk of appropriate height near main entry/exit, with option of standing or sitting stations
- Transaction counter accessible to elementary students (scaled appropriately)
- External book drop and cart positioned near computer, but away from check-out area
- Built-in comfortable reading niche and/or “story steps”
- Storage for at least 21,000 books and novels with space at top of the shelves for displays.
- Low shelves in the middle of the library to enhance supervision.
- Vertical storage cabinet, as well as base cabinets and upper shelves in workroom
- Built-in display areas
- Circulation furnishings should be ergonomically designed.
- Flexible seating to accommodate 40 students (furniture selection will be a site-based decision, in accordance with district standards)
- Height of bookshelves must be appropriate for height of elementary students. Place lower bookshelves in middle of floor to allow staff to supervise entire room from circulation desk.
- Adjustable-height workstations are desirable (from sitting to standing).
- Flexible tables that can be moved for a variety of activities (e.g. hexagonal tables that can be arranged/rearranged)
- Bookshelves on wheels allow for flexibility during events such as bookfairs, literacy nights, etc.
- Varied, flexible furnishings are needed, such as easily moved tables and chairs, comfortable seating areas and study corners.

Media Center: Library / Media Center (continued)

- Storytime area, such as “story steps” or a carpet
- Ensure that library shelving is not too wide, or books will cause shelves to sag in the middle
- Consider varying ergonomic needs of elementary students (e.g. different ages, developmental stages and body sizes for kindergarteners vs. 5th graders)
- Tables and chairs to support adequate number of look-up stations
- Two (2) adjustable height chairs behind circulation counter
- Ample display areas are needed for books (cover visible), along with display cases and bulletin boards and wall space for book posters.
- Flexible areas for thematic displays, displays of student work would be beneficial. In the future, librarians envision spaces where students can engage in self-directed research.
- Special display shelving and metal carts on wheels for loosely shelved paperback picture books.
- Attractive and comfortable couches and chairs in the central seating area. This can make a nice presentation area for adults during meetings and activities and a good area for students to sit and read individually or together.

Technology

The library should be technologically wired, organized and equipped according to *BSD’s Technical Standards, Division 27*. The following recommendations are offered as guidelines based on the projected use of the space. Please refer to the Informational Technology section of this document for additional information.

- A computer lab is needed near the library to provide a controlled and secure environment for testing. The lab should be fully visible (via a window wall), yet enclosed and acoustically separate.
- Equipment shall be provided to allow projection of digital and streaming video content. The library should be wired and equipped for Apple TV. Library staff increasingly project book trailers to generate interest in featured books. Apple TV has proven to be a very beneficial resource.
- Ability to darken the room without screen glare
- Projection capabilities in table and storytime areas
- Ability to provide mid-room power/data needed to accommodate flexible placement of printers, computers, and other equipment throughout library. Students frequently need to access printers for research or project work. Power and data outlets are needed more importantly for computers, projectors, laptops, and other devices (charging stations). Furthermore, it is likely that self-checkout stations will be provided in the future.
- Two (2) 8’ white boards (one may be portable)
- Provide for multiple surfaces on which to project varied media
- Provide voice amplification capabilities (may be hardwired or portable - TBD during design)
- Integrated speaker system
- All desktop computer stations should be placed so that the screens face the circulation desk.
- Stations where tablet devices can be tethered, allowing students to use devices at a station (e.g. the Nook stations at Barnes and Noble).

Media Center: Library / Media Center (continued)

- Ample outlets and data drops to ensure flexible use of technology
- Adequate computers in main library for "look-up" stations, research stations
- One (1) computer workstation in library/media office
- Wired for two (2) computer workstations at circulation desk (although only one may be needed initially)
- Wireless Internet access point within range to provide adequate capacity for high-density use

Electricity

- 120/208 3-phase power
- Ample outlets and data drops to accommodate look-up stations, up to two (2) circulation desk computers, and a variety of AV and office equipment[3]
- Electrical outlet(s) and data drop(s) in ceiling (see Informational Technology section for additional details)[4]
- Wired for technology, as noted above
- During design, consider future electrical needs associated with charging and constant use of tablets and mobile devices at research tools in the library.
- Wired for technology, as noted above

Lighting

- Natural daylighting (as noted above)
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards.
- Flexible lighting (bi-level switching to provide high and low light levels)
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- No plumbing needs in this space; however, a sink shall be provided in the work room.

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards. Regardless of flooring type in the main library, ensure that storytelling area is carpeted.

Media Center: Library / Media Center (continued)

Security

- The library must be designed for optimal supervision and line of sight. With reduced staffing, it is more important than ever that the library be designed as a space that is easily supervised. Library assistants do not have classroom management training (unlike librarians), yet they are now the sole person supervising classes within the library.
- The configuration needs to take into account that one person will be managing 25+ students while working the circulation desk. The circulation desk should have a view of the entire library, allowing one staff member to easily monitor all areas. It should be placed so that library staff members seldom have their back to the room.
- Design the library to have controlled access points
- Ensure that library is designed with a plan for lock-in/lock-out procedures (especially if an open design is selected)
- There are pros and cons to a book security system, particularly at the elementary level. This should be a site-based decision. If a book security system is not provided, ensure that circulation desk has optimal visual proximity to entry/exit points.
- Secure storage for large number of handheld computer devices (with charging capabilities)

Communications

- Wired for Voice Over IP
- Intercom
- 12” or 16” GPS satellite clock
- Bell system
- PA system speakers
- May have radio handset

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[1] It is important to note that the District’s library program has been significantly curtailed due to budget cuts. There are currently only two (2) full-time licensed librarians serving the entire district. Most elementary schools are served by one (1) library assistant only. Library assistants can lead certain activities, but may not teach or provide new instructional content to students. The change in library staffing has significant facilities implications. At the time of this report, BSD is not anticipating a future increase in library staffing. Consequently, the Ed Specs reflect the assumption that a single library assistant will continue to oversee library collections and activities in each elementary school in the future. Future changes to the District’s library program will require a reexamination of the Ed Specs document.

[2] Presently, most libraries are used to store textbooks; however, it is anticipated that this need will gradually decrease as the district moves to e-books. While a large, formal textbook storage room is not required, adequate flexible storage space for textbooks will be needed in the interim period until the district moves to e-books.

[3] Floor outlets are undesirable from a maintenance standpoint; however, library staff need to power devices mid-room without creating tripping hazards via cords. This topic should be addressed during the design process of a new facility.

[4] May serve wireless access point or other purpose. Ceiling-mounted data projectors are not anticipated, as use of this equipment is expected to shift to new, emerging technologies. Flexibility is preferred over fixed equipment when planning for technology, as it is continuously changing. See section on Information Technology for additional information.

Media Center: Library / Media Center Workroom

Activities and Functions

The workroom should be sized for a variety of printing, assembly, and book repair activities. The workroom also includes general storage space for the library/media center. See program for square footage guidelines.

Size and Capacity

The library workroom should be located adjacent to the library circulation desk and the library assistant's office.

Location and Adjacencies

- Adjacent to library circulation desk.

Walls, Windows, Ceilings and Doors

- Interior window to circulation desk and library
- Ceiling height of 9'-10'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)

Environmental Conditions

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

Multiple shelving carts (approximately seven) must be accommodated at the elementary level. One large cart will be in almost continuous use as a holding/storage area. Four (4) small carts will be used for shelving, book delivery to classrooms, and as movable display shelves. Provide lockable cabinet for supplies.

Furnishings, Fixtures, and Equipment

Library staff perform a fair amount of book maintenance and repair onsite. A work area is needed for tape mending work, as well as storage for spine labels, book tape, cutters. Other equipment needed includes a laminating machine (along with storage for laminating materials), paper cutter, dye cutter, and copier/printer. This would include built-in counter areas, with upper and lower storage cabinets. Include lockable cabinet, as mentioned under "storage."

- Large worktable in workroom
- Open shelving for supplies

Technology

- Photocopier/printer

Media Center: Library / Media Center Workroom (continued)

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) data drops per wall
- Wired for technology, as noted above

Lighting

- Natural daylighting
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- Surface-mounted soap and paper towel dispensers (owner-provided)
- A sink shall be provided in the work room with warm/cold water and drinking fountain.[1]

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry
- Interior window to allow supervision of library circulation desk and floor (with installed window coverings)

Communications

- Wired for Voice Over IP
- Intercom
- 8" GPS satellite clock
- Within hearing range of central bell and PA speakers

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[1] A sink in the library work room is needed at the elementary level, as students sometimes complete art projects in the library. Also, some schools have a "library pet" in a cage or aquarium - this is a proven way to draw students to the library. All libraries deal with glue for book repair, another reason to need a sink.

Media Center : Library / Media Office

Activities and Functions

The library/media office will provide workspace for one (1) staff member. Currently, elementary libraries are only staffed by one (1) library assistant. As workstations are also provided at the circulation desk, the library/media office may alternately be used by a technology specialist or other support personnel.

Size and Capacity

The office will accommodate one (1) staff member. See program for square footage guidelines.

Location and Adjacencies

The office should be located adjacent to the library and workroom, with full visibility of the circulation desk and library floor.

Walls, Windows, Ceilings and Doors

- Interior window to circulation desk and library
- Ceiling height of 9'-10'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)

Environmental Conditions

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

Typical office storage needs only - separate workroom will be sized to include space for library storage

Furnishings, Fixtures, and Equipment

- One (1) 4'-6' white board
- One (1) desk with chair
- Three (3) movable bookcases
- Two (2) 42" lateral file cabinets

Media Center : Library / Media Office (continued)

Technology

Offices should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for offices. Basic requirements include:

- Room should be proactively wired to ensure flexible and adaptable use of technology
- Wireless Internet access point within range
- Provide power and data to support workstation

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) data drops per wall
- Wired for technology, as noted above

Lighting

- Natural daylighting desirable
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing: N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry
- Interior window to provide view to circulation desk and library (with installed window coverings)

Communications

- Wired for Voice Over IP
- Intercom
- 8" GPS satellite clock
- Within hearing range of central bell and PA speakers

Media Center: Computer Lab

Activities and Functions

Computer labs provide a bank of laptop computers (and sufficient work area) for class-based computer instruction, group projects or research. Computer labs are currently used for state assessment testing.

It is anticipated the need for formal computer labs will diminish as technology becomes increasingly mobile. Teachers, Teaching and Learning, and IT staff foresee even assessment testing moving to mobile devices in the near future. Although computer labs have traditionally been equipped with desktop computers, new labs should be designed with the expectation that all devices will be soon be mobile.

Computer labs may eventually be adapted to become general classrooms or other areas, as mobile technologies make dedicated computer labs obsolete.

Size and Capacity

A minimum of two (2) computer labs should be provided in every new elementary school. Each lab must be designed to accommodate approximately 40 student workstations, and one (1) teacher presentation workstation.[1]

Location and Adjacencies

- One (1) computer lab shall be placed adjoining the library/media center (with window-wall)
- A second computer lab may be positioned among the general classrooms, or centralized (design-based decision). Lab placement should maximize the use of the lab as an instructional resource, as well as facilitate its transition to a general classroom once technology is primarily wireless and/or classroom based.

Walls, Windows, Ceilings and Doors

- Self-closing doors with view panels or side lights, lockable from both sides
- For library computer lab, provide “window wall” between computer lab and library
- For computer labs near classrooms, provide interior window with view to/from corridor or extended learning area
- Ceiling height of 9’-11’
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)
- While indirect daylighting is desirable, designers must weigh the educational benefits of daylighting with potential glare and heat regulation issues.
- Consider high (operable) windows, as appropriate (clerestories preferred over skylights, for security reasons). Also, consider security implications of exterior windows, with the goal of minimizing access to prevent break-ins and theft of expensive equipment. Consider ability to reach blinds or provide motorized shades.
- Window coverings on all windows (interior and exterior) providing the ability to darken room, as well as enabling students to be secured in room out-of-sight in the event of a lockout.
- Tackable wall surface or mounted tack boards

Media Center: Computer Lab (continued)

- Ensure that thermostats and other mounted switches or controls are placed at the edges of walls rather than in the center (where they interfere with displays).

Environmental Conditions

- Daylighting to support learning, as feasible; must avoid glare and heat issues potentially associated with windows
- Adequate ventilation for indoor air quality
- Ability to maintain temperature and humidity levels for proper functioning of technological equipment

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Cabinets and open shelving for supplies

Furnishings, Fixtures, and Equipment

- Two (2) 8' magnetic white boards (or 16' total)
- Flexible tables to support 40 student workstations (furniture selection and organization will be a site-based decision, in accordance with district standards)
- Multimedia cart
- One (1) teacher workstation and chair
- All appliances to be Energy Star rates, unless not readily available.

Technology

Computer labs should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for computer labs. Basic requirements include:

- Room should be proactively wired to ensure flexible and adaptable use of technology
- Provide ability for a teacher to connect a laptop or mobile device to data projection and video streaming devices for classroom viewing
- Ability to project data and video content onto multiple surfaces
- Wireless Internet access point within range to provide adequate capacity for high-density use
- Provide voice amplification capabilities (may be hardwired or portable - TBD during design)
- 40 student computer workstations (laptops)
- One (1) teacher computer workstation
- Multiple printers

Media Center: Computer Lab (continued)

Electricity

- 120/208 3-phase power
- Overhead utilities raceways
- Electrical outlet(s) and data drop(s) in ceiling (see Informational Technology section for additional details)[2]
- Ample wall outlets and data drops to support 40 student workstations, teacher workstation and AV equipment. Consider alternatives to floor outlets to distribute power and data to computers and printers.[3]
- Data outlets in lab may contain up to six (6) jacks to support the high density of computer workstations.
- Wired for technology, as noted above

Lighting

- Natural daylighting (as noted above)
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards
- Flexible lighting (bi-level switching to provide high and low light levels)
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry - door lockable from both sides (including from inside classroom for lockdowns)
- Interior window (with installed window coverings)
- Classroom configuration and/or window coverings to allow students to assemble out-of-sight of all windows in lockout situation
- Ability to securely store mobile equipment
- Separate alarm system may be provided, due to the use and storage of expensive equipment
- Consider ways to minimize direct access (including via exterior windows) to reduce likelihood of break-ins or theft.

Media Center: Computer Lab (continued)

Communications

- Wired for Voice Over IP
- Intercom
- 12” GPS satellite clock
- Bell system
- PA system speakers
- Equipped with alarm system
- May have use of radio handset

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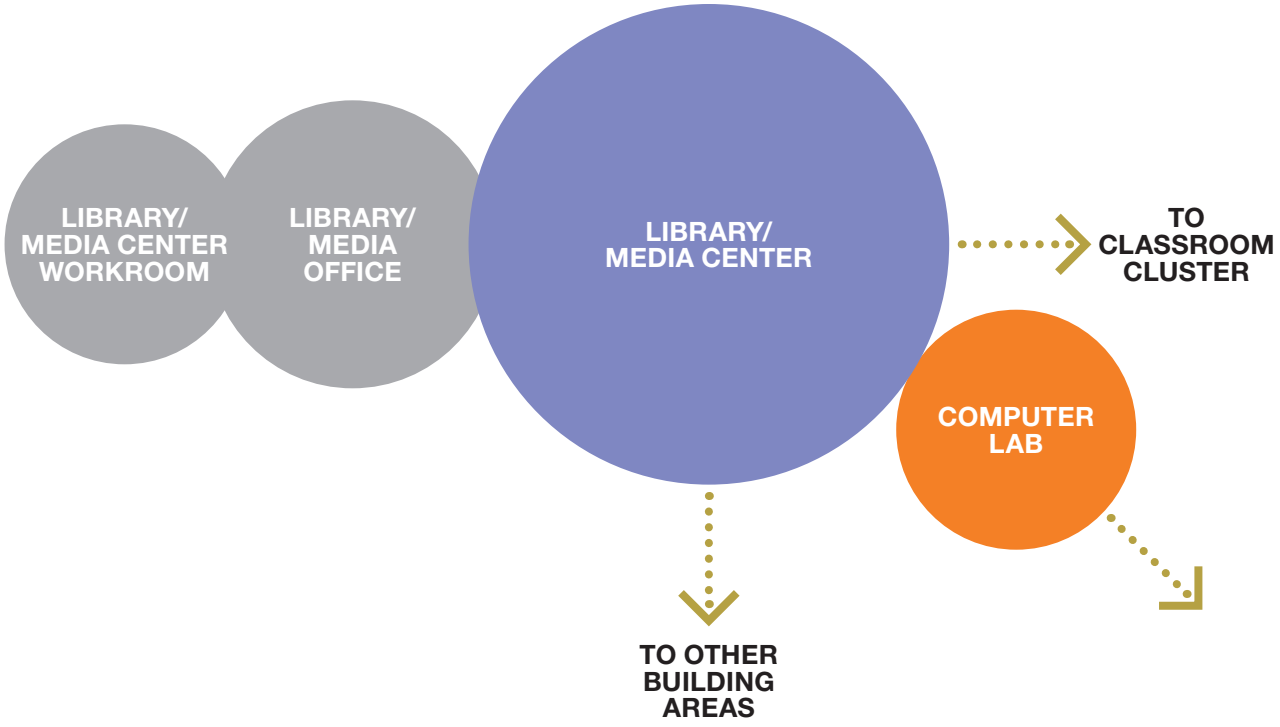
[1] Capacity for computer lab was set based on BSD Technical Standard, Div 27: Communications and Technology

[2] May serve wireless access point or other purpose. Ceiling-mounted data projectors are not anticipated, as use of this equipment is expected to shift to new, emerging technologies. Flexibility is preferred over fixed equipment when planning for technology, as it is continuously changing. See section on Information Technology for additional information.

[3] Floor outlets are undesirable from a maintenance standpoint; however, computer labs need to power devices mid-room without creating tripping hazards via cords. This topic should be addressed during the design process of a new facility.

c. Media Center Adjacency Diagrams



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d. Music Area Program

Beaverton School District New Elementary School

Area Program

Date: May, 2014

Academics Programs	# of Teaching Stations	QTY.	S.F. Room	S.F. Total
Music				
Music Room		1	1,200	1,200
Music Storage Room		1	250	250
Total Net Area this Functional Group				**1,450**
See complete Building Program in Section V				

The Area Program above lists the rooms and spaces for this functional grouping within the building. The room narratives which follow provide detailed descriptions and requirements which are unique to each room, space, or area.

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d. Music Program Room Narratives

Music Program: Music Room

Note: Designing music facilities requires complex acoustical considerations. It is recommended that the District work closely with a specialist when designing the music room, stage and related facilities. The guidelines presented in this document are general in nature, and do not capture the complexities of room shape, cubic volume, specific acoustical treatment recommendations, etc. Acoustical consultant / vendor(s) should provide suggestions on room configuration, storage, equipment options.

Activities and Functions

Elementary music classes offer “musical food groups” that expose students to a variety of different musical experiences, including six-week units on brass, woodwind and string instruments. Dance, movement, singing activities are also used in music instruction. Elementary music rooms should be set up for quick transitions. Flexible space is needed to accommodate a range of activities, including use of bulky equipment and student movement. Activities may include:

- Large and small group activities
- Instrument use (brass, woodwind, strings, percussion)
- Student movement exercises, such as dancing and marching
- Singing
- Lecture, demonstration and discussion activities
- Rehearsals and small performances

Refer to Opportunity-to-Learn Standards for Music Instruction for Grades PreK-12, published by the Music Educators National Conference (updated edition due in 2014)

Size and Capacity

The music room should be spacious enough to accommodate the use and storage of instruments, while still allowing student movement.

- The music room includes classroom, office and storage space. See program for square footage guidelines.
- An elementary school music classroom should be sized to accommodate both instrument use and movement activities.
- The room will accommodate 25 students, depending on the activities and use.
- Typical school for 750 students will include one (1) music room.[1]

Location and Adjacencies

- Music rooms should have adjacencies with gymnasium and stage (for dance activities and/or performances).
- Avoid placing music room in the center of the school - a degree of separation from administrative areas and the main entry is preferred by instructors.

Music Program: Music Room (continued)

Walls, Windows, Ceilings and Doors

- Ceiling height of 18'-20'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition).
- Sound rated acoustical doors (with acoustical glazing)
- Soundproof walls with acoustical treatments to reflect best practices in elementary music room design.
- Double doors with view panels or side lights at main entry to the music room to accommodate traffic flow of students with instruments
- Double door entry to storage room
- Tackable wall surface and/or tackboards to provide ample display areas for posters, schedules, music notes, class rules, word wall, song lyrics, etc.
- Ensure that thermostats and other mounted switches or controls are placed at the edges of walls rather than in the center (where they interfere with displays).
- Window coverings on windows (interior to corridor and exterior) providing the ability to darken room, as well as enabling students to be secured in room out-of-sight in the event of a lockout.

Environmental Conditions for Optimal Learning

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality
- Windows and exposure to natural light are beneficial; however, avoid designing the room as completely visible to passersby (distracting). Blinds or shades can be used by the teacher to control visibility.
- Acoustical consultation during design process on ways to optimize acoustics via room cubic volume and shape, acoustical treatments, etc.
- Mechanical engineer must ensure 100% sound isolation from all rooftop or adjacent equipment. Distribution center shall be designed such that the ductwork is fully insulated and with baffles/offsets to prevent sound from migrating through the ductwork.

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Lockable dedicated storage room
- Lockable tall vertical built-in storage cabinets
- Dedicated storage area for music stands where they are not visible from music room.
- Storage area for portable risers
- Storage for 25 xylophones on stands, as well as built-in tubes for mallets
- Shelving for hand drums
- Cubbies for song books, periodicals, sheet music, octavos

Music Program: Music Room (continued)

- Storage for 30 keyboards
- Interim storage for rotating instrument carts (up to six at one time). Teachers share six (6) carts of violins (30 each); four (4) carts of clarinets (30 each); and four (4) carts of trumpets (30 each). Students also have the opportunity to work with guitars or ukuleles, recorders and keyboards. These instruments are not present all the time, but on a rotating basis.
- Area for chart stands

Furnishings, Fixtures, and Equipment

- Base cabinets with open shelving above sink with countertop
- Assignment bookshelves with counter
- Sliding 16' white boards, including one (1) music-lined white board
- One (1) piano
- Consider possibility of adding a small portable stage to the music room
- Provide flexible furnishings. Chairs should be flat (not bucket seats) to encourage proper posture. Heavy-duty stackable stools are also acceptable. Seating should be light enough that students of all ages can move their own chair or stool safely.
- Portable choral risers (with sufficient storage when not in use)
- One (1) teacher desk and chair
- Two (2) 42" file cabinets
- Two (2) movable bookcases

Technology

Music classrooms should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for music classrooms. Basic requirements include:

- Room should be proactively wired to ensure flexible and adaptable use of technology
- Provide ability for a teacher to connect a laptop or mobile device to data projection and video streaming devices for classroom viewing
- Wireless Internet access point within range to provide adequate capacity for high-density use
- Integrated sound system / sound amplification/soundboard (may be tied into sound system for gym or cafeteria and controlled remotely, if properly coordinated during design)
- Provide for multiple surfaces on which to project varied media
- Provide voice amplification capabilities (may be hardwired or portable - TBD during design)

Music Program: Music Room (continued)

Electricity

- 120/208 3-phase power
- Minimum of three (3) duplex outlets and two (2) data drops per wall (in addition to outlets for keyboards, noted below)
- Ability to provide mid-room power in a manner that does not require extending cords across the room, creating tripping hazards.[2] Mid-room power is needed to support keyboard instruction using up to 30 units at one time.
- Electrical outlet(s) and data drop(s) in ceiling (see Informational Technology section for additional details)[3]
- Wired for technology, as noted above

Lighting

- Natural daylighting, but ability to control visibility from passersby
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards.
- Flexible lighting (bi-level switching to provide high and low light levels)
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- Oversized (deep) sink with hot/cold water for instrument cleaning
- Surface-mounted soap and paper towel dispensers (owner-provided)
- One (1) drinking fountain with water bottle filler

Flooring

- Flat flooring
- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards. However, carpet is preferred by teachers, both for its acoustical properties and comfort (students frequently sit on the floor for activities).

Security

- Coded or keyed entry - door lockable from both sides (including from inside classroom for lockdowns)
- Classroom configuration and/or window coverings to allow students to assemble out-of-sight of all windows in lockout situation

Music Program: Music Room (continued)

Communications

- Wired for Voice Over IP
- Intercom
- 12” GPS satellite clock
- Bell system
- PA system speakers
- Consider providing back-up communication methods, such as bullhorn or portable radio, to allow emergency communications in high-noise area.

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[1] At the time of this report, a music task force was in the process of developing recommendations to expand the district’s music program, including the reintroduction of certain formerly cut programs (such as 5th grade band and 4th - 12th grade orchestra). Expanding the District’s music program would have major facilities and staffing impacts at all district schools. If these recommendations are adopted by the District, the Ed Specs for music spaces will need to be reexamined and updated accordingly.

[2] Floor outlets are undesirable from a maintenance standpoint; however, they have been requested by teachers. Teachers often need to power devices mid-room without creating tripping hazards via cords. This topic should be addressed during the design process of a new facility.

[3] May serve wireless access point or other purpose Ceiling-mounted data projectors are not anticipated, as use of this equipment is expected to shift to new, emerging technologies. Flexibility is preferred over fixed equipment when planning for technology, as it is continuously changing. See section on Information Technology for additional information.

Music Program: Music Storage Room

Activities and Functions

The music storage room provides a dedicated, enclosed area for the storage of music supplies, instruments, and instructional items in support of the elementary music curriculum.

Size and Capacity

Storage areas shall be sized appropriately to the types of equipment and/or items stored. See area program for square footage guidelines.

Location and Adjacencies

The music storage room will be connected to the music room.

Walls, Windows, Ceilings and Doors

- Lockable double doors to accommodate bulky or wide items

Environmental Conditions for Optimal Learning

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Dedicated storage area for music stands where they are not visible from music room.
- Storage area for portable risers and/or flip forms
- Storage for 20 xylophones on stands, as well as built-in tubes for mallets
- Shelving for hand drums
- Storage for 30 keyboards
- Interim storage for rotating instrument carts (up to six at one time). Teachers share six (6) carts of violins (30 each); four (4) carts of clarinets (30 each); and four (4) carts of trumpets (30 each). Students also have the opportunity to work with guitars or ukuleles, recorders and keyboards. These instruments are not present all the time, but on a rotating basis.
- Area for chart stands
- Storage for various other types of handheld instruments, such as recorders, rhythm sticks, finger cymbals, triangles, jingle bells, etc.
- Assorted instruments and materials to represent a variety of cultures

Music Program: Music Storage Room (continued)

Furnishings, Fixtures, and Equipment

- Combination of portable shelving and bins for flexible storage options, to meet the needs stated above
- Sufficient floor space for storage of risers and music stands
- Cubbies for song books, periodicals, sheet music, octavos
- Music sorting rack

Technology

Power/data (to provide option of repurposing spaces in future years, if necessary)

Electricity

- 120/208 3-phase power
- Power/data outlets on each wall

Lighting

- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Durable, hard surface flooring. Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry

Communications N/A

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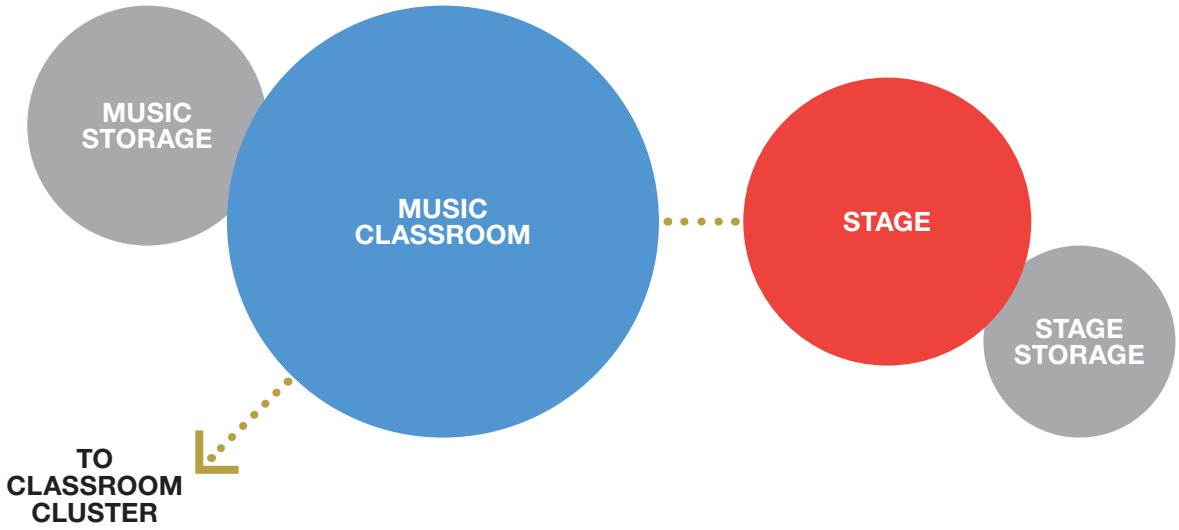
d. Music Program Adjacency Diagrams



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e. Specialized Programs Area Program

Beaverton School District New Elementary School

Area Program

Date: May, 2014

Academics Programs	# of Teaching Stations	QTY.	S.F. Room	S.F. Total
Specialized Programs				
Resource Classroom		1	950	950
Specialized Program Classroom		2	1,200	2,400
Multi-Use Room		2	250	500
Shared SPED Office		1	250	250
Flex Conference Room		1	200	200
Psychologist Office		1	120	120
Speech Office		1	120	120
ADA Accessible Restroom with Shower		1	100	100
Seclusion Room		1	67	67
Total Net Area this Functional Group				**4,707**
See complete Building Program in Section V				

The Area Program above lists the rooms and spaces for this functional grouping within the building. The room narratives which follow provide detailed descriptions and requirements which are unique to each room, space, or area.

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e. Specialized Programs Room Narratives

Specialized Programs: Resource Classroom

Activities and Functions

Most new elementary schools will include one (1) SPED resource classroom and two (2) specialized program classrooms. As it is difficult to predict the long-term special education needs of a particular school, resource classrooms should be designed to be flexible and adaptable enough to meet a wide variety of student needs and abilities.

The Resource Program provides instruction in general education curriculum through pull-out services in small group special education settings, instruction in general education class settings, and/or collaborative teaching with general education teachers. Students typically receive the majority of their instruction in the general education setting. The program is designed to provide as much, or as little, as the student needs in the way of special education services in order for them to successfully access educational opportunities. Instruction is focused on Individual Education Plan (IEP) goals which support progress toward competence in grade level learning targets.

Resource classrooms are supplemented by several other areas or rooms, forming a core set of support spaces for SPED students. Typical SPED rooms in an elementary school include:

1. One (1) resource classroom
2. Two (2) specialized program classrooms
3. Seclusion Room (if provided - see Seclusion Room narrative for additional information)
4. ADA Accessible restroom with shower and changing table
5. Shared resource office
6. Flex conference room
7. Multi-use room with partition
8. Specialist offices (Speech, Psychologist)

Size and Capacity

- Resource rooms may vary in number of students served and number of staff depending on the need of each particular school facility
- SPED instructional spaces typically greater square footage per student than general classrooms, as they must accommodate multiple activities
- Typical school for 750 students will include one (1) SPED resource classroom
- The SPED resource classroom will be sized identically to a general classroom. See program for square footage guidelines

Location and Adjacencies

- SPED program classrooms should be located with appropriate functional adjacencies to multiuse spaces such as the school cafeteria, to minimize transitions.
- Ideally SPED program areas should be located on the ground or main floor level of a multi-level school.

Specialized Programs: Resource Classroom (continued)

- Provide physical separation from sound-sensitive rooms or areas.
- Position away from kindergarten classrooms.
- Ensure room is not too distant from administrative offices.
- Special education classrooms should be located near the bus lane to minimize travel distances. Separate bus drop-off areas are preferred.
- Special education classrooms will be positioned in private/secure area of the facility (i.e. may be secured from public use during non-school hours).
- Special education classrooms should be positioned to promote a sense of inclusion.

Walls, Windows, Ceilings and Doors

- Provide motorized exterior door operators at the main building entrance (at minimum) and at other critical doors that lead to SPED-related program areas.
- If the classroom is equipped with an exterior door, appropriate hardware is needed to provide the option of keeping doors locked except when activated by the school's emergency alarm systems.
- Self-closing doors with view panel or side lights
- Ceiling height of 9'-11'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)
- Window coverings providing the ability to darken room; consider ability to reach blinds or provide motorized shades
- Tackable wall surface coverings
- Ensure that thermostats and other mounted switches or controls are placed at the edges of walls rather than in the center (where they interfere with displays).

Environmental Conditions for Optimal Learning

- Acoustic isolation of SPED classrooms and support spaces is critical
- Daylighting via high windows to provide natural light while minimizing distracting views
- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality
- Position air handlers and rooftop mechanical equipment away from classrooms to minimize noise in the instructional environment

Specialized Programs: Resource Classroom (continued)

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Storage for larger equipment (within classroom and/or SPED office). Provide distinct storage areas for different programs, as SPED teachers often purchase their own materials and are territorial about sharing supplies.
- Ample secure storage for student records (digital and printed)
- Student cubicles with sliders
- Secure medication storage

Furnishings, Fixtures, and Equipment

Classroom equipment needs should be confirmed by Special Education staff during the design process, in reference to applicable local, state and federal standards. General equipment needs include (but are not limited to):

- Cubical units with sliders for 13-15 students
- Two (2) 8’ or one 16’ magnetic white board
- Built-in flexibilities, such as weighted partitions that cannot be knocked over
- Ability to create “break area” where students can self-manage themselves while being supervised.

Furnishings can help define sub-spaces within a classroom for multiple teaching stations. Consider the use of modular furniture to create versatile classroom spaces to meet the needs of students with different disabilities.

- Mobile furnishings with locking wheel castors
- Heavy-duty table tops for durability
- Mobile shelving clipped together in sections to prevent them from being tipped over
- Flexible and varied seating options
- Multiple low, movable bookcases
- Secure, four-drawer vertical file cabinets

Technology

Classrooms should be technologically wired, organized and equipped according to BSD’s Technical Standards: Division 27. The following recommendations are offered as guidelines based on the projected use of the space. Please refer to the Informational Technology section of this document for additional information.

- Ample outlets and data drops to ensure flexible use of technology
- Wireless Internet access to support high-density use
- Equipment to allow projection of streaming digital and video content (e.g. Apple TV)
- Dedicated area for storing and charging laptop computers, tablets, and other mobile devices used in everyday instruction

Specialized Programs: Resource Classroom (continued)

- Provide for multiple surfaces on which to project varied media
- Provide voice amplification capabilities (may be hardwired or portable - TBD during design)

Electricity

- 120/208 3-phase power
- Wired for technology, as noted above
- Electrical outlet(s) and data drop(s) in ceiling (see Informational Technology section for additional details)[1]
- Ample power outlets and data drops to provide flexible use of fixed or mobile technologies for students and teachers

Lighting

- Natural daylighting via high windows with motorized blinds
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 35-50 foot-candles for classrooms.
- Flexible lighting (bi-level switching to provide high and low light levels)
- Avoid florescent lighting, as it can trigger seizures. Work with SPED staff to explore alternatives to florescent lighting for SPED classrooms and seclusion room.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- Access to shared ADA accessible restroom, shower, changing table
- Classroom sink with warm/cold water and drinking fountain/bubbler
- Soap and paper towel dispensers (wall mounted, provided by owner)

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry - door lockable from both sides (including from inside classroom for lockdowns)
- Interior window (with installed window coverings)
- Classroom configuration and/or window coverings to allow students to assemble out-of-sight of all windows in lockout situation

Specialized Programs: Resource Classroom (continued)

Communications

- Plan building communication systems to allow for the unique requirements of specialists
- Wired for Voice Over IP
- Intercom
- 12” GPS satellite clock
- Bell system
- PA system speakers

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[1] May serve wireless access point or other purpose. Ceiling-mounted data projectors are not anticipated, as use of this equipment is expected to shift to new, emerging technologies. Flexibility is preferred over fixed equipment when planning for technology, as it is continuously changing. See section on Information Technology for additional information. Ed Specs for music spaces will need to be reexamined and updated accordingly.

Specialized Programs: Specialized Program Classroom

Activities and Functions

Most new elementary schools will two (2) specialized program classrooms. As it is difficult to predict the long-term special education needs of a particular school, classrooms should be designed to be flexible and adaptable enough to host a variety of SPED programs.

Size and Capacity

- The specialized program classroom may vary in number of students served and number of staff depending on the need of each particular school facility. This variation can impact the square footage needed in this program.
- SPED instructional spaces typically need to be larger in size than general classrooms, as they must accommodate multiple activities (similar size to a kindergarten classroom).
- Typical school for 750 students will include two (2) specialized program classrooms
- See program for square footage guidelines

Location and Adjacencies

- SPED program classrooms should be located with appropriate functional adjacencies to multiuse spaces such as the school cafeteria, to minimize transitions.
- Ideally SPED program areas should be located on the ground or main floor level of a multi-level school.
- Provide physical separation from sound-sensitive rooms or areas.
- Positioned away from kindergarten classrooms
- Self-contained special education classrooms should be located near the bus lane to minimize travel distances. Separate bus drop-off areas are preferred.
- Self-contained special education classrooms will be positioned in private/secure area of the facility (i.e. may be secured from public use during non-school hours).
- Self-contained special education classrooms should be positioned to promote a sense of inclusion.

Walls, Windows, Ceilings and Doors

- Provide motorized exterior door operators at the main building entrance (at minimum) and at other critical doors that lead to SPED-related program areas.
- Consider inclusion of an exterior door for medically fragile students that may need assistance with building access and emergency egress.
- If the classroom is equipped with an exterior door, appropriate hardware is needed to provide the option of keeping doors locked except when activated by the school's emergency alarm systems.
- Self-closing doors with view panel or side lights
- Ceiling height of 9'-11'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)

Specialized Programs: Specialized Program Classroom (continued)

- Acoustical wall treatments in seclusion room to provide soundproof environment
- Window coverings providing the ability to darken room; consider ability to reach blinds or provide motorized shades
- Tackable wall surface coverings
- Ensure that thermostats and other mounted switches or controls are placed at the edges of walls rather than in the center (where they interfere with displays).

Environmental Conditions for Optimal Learning

- Acoustic isolation of SPED classrooms and support spaces is critical
- Daylighting via high windows to provide natural light while minimizing distracting views
- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality
- Position air handlers and rooftop mechanical equipment away from classrooms to minimize noise in the instructional environment

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Storage for larger equipment needs to be included and needs to be secured. Provide distinct storage areas for different programs, as SPED teachers often purchase their own materials and are territorial about sharing supplies.
- Ample secure storage for student records (digital and printed)
- Student cubicles with sliders
- Secure medication storage

Furnishings, Fixtures, and Equipment

Classroom equipment needs should be confirmed by Special Education staff during the design process, in reference to applicable local, state and federal standards. General equipment needs include (but are not limited to):

- Cubical units with sliders for 13-15 students
- Two (2) 8’ or one 16’ magnetic white board
- Built-in flexibilities, such as weighted partitions that cannot be knocked over
- Ability to create “break area” where students can self-manage themselves while being supervised.

Furnishings can help define sub-spaces within a classroom for multiple teaching stations. Consider the use of modular furniture to create versatile classroom spaces to meet the needs of students with different disabilities.

- Mobile furnishings with locking wheel castors

Specialized Programs: Specialized Program Classroom (continued)

- Heavy-duty table tops for durability
- Mobile shelving clipped together in sections to prevent them from being tipped over
- Flexible and varied seating options
- Multiple low, movable bookcases
- Secure, four-drawer vertical file cabinets

Technology

Classrooms should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27.* The following recommendations are offered as guidelines based on the projected use of the space. Please refer to the Informational Technology section of this document for additional information.

- Ample outlets and data drops to ensure flexible use of technology
- Wireless Internet access to support high-density use
- Equipment to allow projection of streaming digital and video content (e.g. Apple TV)
- Dedicated area for storing and charging laptop computers, tablets, and other mobile devices used in everyday instruction
- Provide for multiple surfaces on which to project varied media
- Provide voice amplification capabilities (may be hardwired or portable - TBD during design)

Electricity

- 120/208 3-phase power
- Wired for technology, as noted above
- Electrical outlet(s) and data drop(s) in ceiling (see Informational Technology section for additional details)[1]
- Ample power outlets and data drops to provide flexible use of fixed or mobile technologies for students and teachers

Lighting

- Natural daylighting via high windows with motorized blinds
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 35-50 foot-candles for classrooms.
- Flexible lighting (bi-level switching to provide high and low light levels)
- Avoid florescent lighting, as it can trigger seizures. Work with SPED staff to explore alternatives to florescent lighting for SPED classrooms and seclusion room.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Specialized Programs: Specialized Program Classroom (continued)

Plumbing

- Access to shared ADA accessible restroom, shower, changing table
- Classroom sink with warm/cold water and drinking fountain/bubbler
- Soap and paper towel dispensers (wall mounted, provided by owner)

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry - door lockable from both sides (including from inside classroom for lockdowns)
- Interior window (with installed window coverings)
- Classroom configuration and/or window coverings to allow students to assemble out-of-sight of all windows in lockout situation

Communications

- Plan building communication systems to allow for the unique requirements of specialists
- Wired for Voice Over IP/Intercom
- 12" GPS satellite clock
- Bell system
- PA system speakers

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[1] May serve wireless access point or other purpose. Ceiling-mounted data projectors are not anticipated, as use of this technology is not anticipated long-term. Flexibility is preferred over fixed equipment when planning for technology, as it is continuously changing. See section on Information Technology for additional information.

Specialized Programs: Multi-use Room

Activities and Functions

The SPED multi-use room is a flexible meeting or small group activity area with an operable partition divider to permit a variety of functions. This area may be used by speech therapists, psychologists, teachers, itinerant staff and other SPED professionals to conduct one-on-one or small group activities, assessments, etc. This room may also serve as an “overflow” area for pull-out activities.

Size and Capacity

Two (2) multi-use rooms shall be provided for each elementary SPED program. Each room shall be dividable via an operable partition, creating the potential of one (1) 250 sf area, or two (2) 125 sf areas. Please refer to the program for square footage guidelines

Location and Adjacencies

The multi-use rooms shall be located near the special education classrooms.

Walls, Windows, Ceilings and Doors

- Two (2) self-closing doors with view panel (one on each side of partition)
- Interior window with view to corridor, special education classroom or commons
- Ceiling height of 9’-11’
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)

Environmental Conditions for Optimal Learning

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Secure storage for student files
- Shelving for reference materials

Furnishings, Fixtures, and Equipment

- Two (2) 6’ white boards (one on each side of partition
- Flexible tables/chairs to provide varied seating configurations using entire or divided room options

Specialized Programs: Multi-use Room (continued)

Technology

The multi-use rooms should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for multi-use rooms (which will have similar needs). Basic requirements include:

- Rooms should be proactively wired to ensure flexible and adaptable use of technology
- Provide ability to connect a laptop to data projection and video streaming devices for viewing by room participants
- Wireless Internet access point within range to provide adequate capacity for high-density use
- Consider use of partition when planning for technological, data, and power requirements, ensuring that both sides of rooms are equally equipped.

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) data drops per wall
- Electrical outlet(s) and data drop(s) in ceiling (see Informational Technology section for additional details)[1]
- Wired for technology, as noted above

Lighting

- Natural daylighting preferred
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, maintained at (horizontal) 30 foot-candles.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry - doors lockable from both sides
- Interior window (with installed window coverings)

Specialized Programs: Multi-use Room (Continued)

Communications

- Wired for Voice Over IP
- Intercom
- 8” GPS satellite clock

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[1] May serve wireless access point or other purpose. Ceiling-mounted data projectors are not anticipated, as use of this equipment is expected to shift to new, emerging technologies. Flexibility is preferred over fixed equipment when planning for technology, as it is continuously changing. See section on Information Technology for additional information.

Specialized Programs: Shared SPED Office

Activities and Functions

Each SPED office provides three (3) workstations for SPED instructors. Privacy is an important consideration for this space, as instructors frequently engage in meetings and/or telephone calls with confidential or sensitive information. The SPED offices should be situated to provide visual oversight of SPED classrooms.

Size and Capacity

The office must be large enough to accommodate small meetings, in addition to the required work stations. See program for square footage guidelines.

Location and Adjacencies

The SPED office shall be located adjoining, with access directly into, the subdividable special education multi-use classrooms.

Walls, Windows, Ceilings and Doors

- Self-closing door with view panel or side lights
- Interior window with view to corridor, special education classroom or pull-out space
- Ceiling height of 9'-10'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)
- Acoustical wall treatments

Environmental Conditions for Optimal Learning

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Secure storage for student files
- Shelving for reference materials

Furnishings, Fixtures, and Equipment

- Three (3) 4' white boards
- Three (3) office desks with chairs
- Three (3) movable bookcases
- Guest chairs (in addition to office chairs)
- Two (2) 42" lateral secure file cabinets for each instructor

Specialized Programs: Shared SPED Office (continued)

Technology

Offices should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for offices. Basic requirements include:

- Room should be proactively wired to ensure flexible and adaptable use of technology
- Wireless Internet access point within range
- Provide power and data to support workstations
- Printer required (for printing of sensitive material)

Electricity

- 120/208 3-phase power
- Two (2) electrical outlets and two (2) data drops per wall
- Wired for technology, as noted above

Lighting

- Natural daylighting preferred
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 30 foot-candles for offices.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry
- Secure file storage

Communications

- Wired for Voice Over IP
- Intercom
- 8" GPS satellite clock
- Within hearing range of central bell and PA speakers

Specialized Programs: Flex Conference Room

Activities and Functions

The SPED small meeting room would host both scheduled and/or impromptu meetings between SPED teachers, interim professionals, students and family members.

Size and Capacity

The room must be large enough to accommodate meetings of 6-8 people. Please refer to the program for square footage guidelines.

Location and Adjacencies

The flex conference room shall be located near the special education classrooms.

Walls, Windows, Ceilings and Doors

- Self-closing door with view panel or side lights
- Interior window to corridor, special education classroom or pull-out space
- Ceiling height of 9'-10'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)

Environmental Conditions for Optimal Learning

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Shelving for reference materials

Furnishings, Fixtures, and Equipment

- One (1) 6' white board
- Small conference table and chairs to accommodate 6-8 people

Technology

Conference rooms should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for conference rooms. Basic requirements include:

- Room should be proactively wired to ensure flexible and adaptable use of technology

Specialized Programs: Flex Conference Room (continued)

- Provide ability to connect a laptop to data projection and video streaming devices for viewing by room participants
- Wireless Internet access point within range to provide adequate capacity for high-density use

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) data drops per wall
- Electrical outlet(s) and data drop(s) in ceiling (see Informational Technology section for additional details)[1]
- Wired for technology, as noted above

Lighting

- Natural daylighting preferred
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, maintained at (horizontal) 30 foot-candles.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry - door lockable from both sides
- Interior window (with installed window coverings)

Communications

- Wired for Voice Over IP
- Intercom
- 8" GPS satellite clock
- Within hearing range of central bell system and PA speakers

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[1] May serve wireless access point or other purpose. Ceiling-mounted data projectors are not anticipated, as use of this equipment is expected to shift to new, emerging technologies. Flexibility is preferred over fixed equipment when planning for technology, as it is continuously changing. See section on Information Technology for additional information.

Specialized Programs: Psychologist Office

Activities and Functions

Office for school psychologist. Provides professional working space, as well as private space to meet with students and/or family members.

Size and Capacity

See program for square footage guidelines.

Location and Adjacencies

Located near special education resource classroom

Walls, Windows, Ceilings and Doors

- Self-closing door with view panel or side lights
- Ceiling height of 9'-10'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)

Environmental Conditions for Optimal Learning

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Secure file storage for confidential records
- Shelving for reference materials

Furnishings, Fixtures, and Equipment

- One (1) 4' white board
- One (1) desk with chair
- One (1) movable bookcase
- Three (3) guest chairs
- Two (2) 42" lateral file cabinets

Specialized Programs: Psychologist Office (continued)

Technology

Offices should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for offices. Basic requirements include:

- Room should be proactively wired to ensure flexible and adaptable use of technology
- Wireless Internet access point within range
- Provide power and data to support workstations
- Printer required (for printing sensitive material)

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) data drops per wall
- Wired for technology, as noted above

Lighting

- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 30 foot-candles for offices.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry
- Secure file storage

Communications

- Wired for Voice Over IP
- Intercom
- 8" GPS satellite clock
- Within hearing range of central bell and PA speakers

Specialized Programs: Speech Office

Activities and Functions

This room provides work space for the speech-language pathologist, as well as room for guest seating. Activities typical of a speech therapist may include:

- Speech-language screenings
- Intervention services
- Treatment plan development
- Skill development
- Observations
- Speech recording and playback
- Data collection and tallying
- Instructional support to students
- Use of cues and prompts with students
- Behavioral reinforcement
- Confidential storage of student data

As the speech therapist's office in the area program is only slightly larger than a typical office, it is anticipated that only some of the above activities may be able to be accommodated in this room; other activities will need to occur in the SPED multiuse room, flex conference room, or other areas.

Size and Capacity

The speech office is sized to be slightly larger than a typical office, to accommodate guest seating and small meetings. See program for square footage guidelines.

Location and Adjacencies

Located near special education classrooms and support areas

Walls, Windows, Ceilings and Doors

- Self-closing door with view panel or side lights
- Ceiling height of 9'-10'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)

Environmental Conditions for Optimal Learning

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Specialized Programs: Speech Office (continued)

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Secure file storage for confidential records
- Shelving for reference materials

Furnishings, Fixtures, and Equipment

- One (1) 4' white board
- One (1) desk with chair
- One (1) movable bookcase
- Two (2) guest chairs
- Two (2) 42" lateral file cabinets

Technology

- Offices should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for offices. Basic requirements include:
- Room should be proactively wired to ensure flexible and adaptable use of technology
- Wireless Internet access point within range
- Provide power and data to support workstations
- Printer required

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) drops per wall
- Wired for technology, as noted above

Lighting

- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 30 foot-candles for offices.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Specialized Programs: Speech Office (continued)

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry
- Secure file storage

Communications

- Wired for Voice Over IP
- Intercom
- 8" GPS satellite clock
- Within hearing range of central bell and PA speakers

Specialized Programs: ADA Accessible Restroom with Shower

Activities and Functions

- One ADA accessible restroom shall be shared by SPED classrooms. The restroom shall be well-designed using attractive, high-quality materials.

Size and Capacity

- One (1) unisex, ADA accessible restroom will be provided. The restroom must be large enough to accommodate an ADA accessible toilet, sink, changing table, and shower. Sufficient space to store and maneuver a Hoyer Lift is required. See program for square footage guidelines.

Location and Adjacencies

- The special needs restroom shall be easily accessible from the SPED resource classroom and specialized program classrooms
- The special needs restroom shall provide corridor access to allow the (potential) option of shared use of this resource by general student population.

Walls, Windows, Ceilings and Doors

- Two (2) self-closing doors with privacy lock function (including one door leading to SPED area, and a second door leading to a hallway / corridor)
- Non-porous surfaces wherever possible
- Washable paint on walls
- Protected wall surfaces - durable wainscot to extend a minimum of 6’ up restroom walls
- Sound insulation

Environmental Conditions for Optimal Learning

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality
- Exhaust fan vented to outside

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Storage lockers or secured cubbies for personal items (e.g. extra clothing, diapers, sanitary supplies, etc.)

Furnishings, Fixtures, and Equipment

- Individual shatterproof mirror mounted above sink

Specialized Programs: ADA Accessible Restroom with Shower (continued)

- Single-fold paper towel/soap dispensers in restroom (surface mounted, provided by owner)
- One (1) toilet paper roll dispenser per restroom
- One (1) ADA accessible lavatory
- One (1) ADA accessible shower
- One (1) pneumatic, adjustable height changing table (24”x72”)
- Hoyer lift
- Storage lockers or secured cubbies for personal items (e.g. extra clothing, diapers, sanitary supplies, etc.)
- Trash receptacle

Technology N/A

Electricity

- 120/208 3-phase power
- One(1) duplex outlet above sink/counter area; additional duplex outlet on wall with door

Lighting

- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards - 20-30 foot-candles for restrooms.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- One (1) hand washing sink per restroom with hot/cold water
- One (1) ADA accessible toilet
- One (1) ADA accessible shower
- Floor drain

Flooring

- Custodial staff prefers stained concrete over traditional tiled flooring in restrooms. This will be a site-based decision.

Security N/A

Communications N/A

Specialized Programs: Seclusion Room

Activities and Functions

The seclusion room provides a contained and protected area for a child to diffuse explosive behavior. The State of Oregon has finalized and adopted standards for seclusion rooms; the new standards will apply as of the 2014-15 school year

Size and Capacity

The seclusion room should be sized a minimum of 64 square feet; adjacent walls must be a minimum of seven (7) feet across. The room must be large enough to accommodate three adults to move freely, including one laying on the floor. Seclusion Rooms shall comply with OAR Standards 581-021-0568.

Location and Adjacencies

- Integrated within SPED area, not isolated from staff
- Adjacent to resource room

Walls, Windows, Ceilings and Doors

- Interior window with view to corridor, special education classroom or pull-out space
- Ceiling height of 9'-12'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)
- Smooth walls without rough, jagged or protected areas that might injure an out-of-control child or allow a child to climb the wall.
- Walls must be permanent - partitions or cells are not permitted for this type of space
- No lock on door, unless immediate-release locking mechanism is provided
- Door must open outward
- Door must include pane of shatterproof glass allowing room to remain visible from outside the room
- Windows must be equipped with shatterproof glass or plastic and designed to prevent a child from potentially climbing the wall/window
- Sound dampening features are needed - the echoing noise is not only disruptive to other building users, but also tends to escalate the out of control behavior of the student.

Environmental Conditions for Optimal Learning

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality
- Heating/cooling vents out of reach

Specialized Programs: Seclusion Room (continued)

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)
N/A

Furnishings, Fixtures, and Equipment

- No furnishings are permitted in this room

Technology N/A

Electricity

- 120/208 3-phase power
- Outlets must be covered and protected from tampering, according to OAR 581-021-0568 Standards for Seclusion Rooms.

Lighting

- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards.
- Flexible lighting (with dimmer switch)
- Avoid florescent lighting, as it can trigger seizures. Work with SPED staff to explore alternatives to florescent lighting for SPED classrooms and seclusion room.
- Vacancy sensors set to turn off at 10 minutes
- Recessed or appropriated covered (e.g. safety glass or wired cage) overhead lights
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- Sprinklers or smoke/heat detectors must be recessed and/or caged. See State Fire Marshall Standards for requirements specific to this space.
- Floor drains with tamper-proof locking screws for ease of cleaning floor.

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards. Generally, carpeting provides better acoustic buffering, and makes for a softer surface for a child that is physically out of-control; however, carpet less desirable in terms of maintenance. The District should reference OAR 581-021-0568 to ensure that the proposed flooring type is aligned with state standards for seclusion rooms.

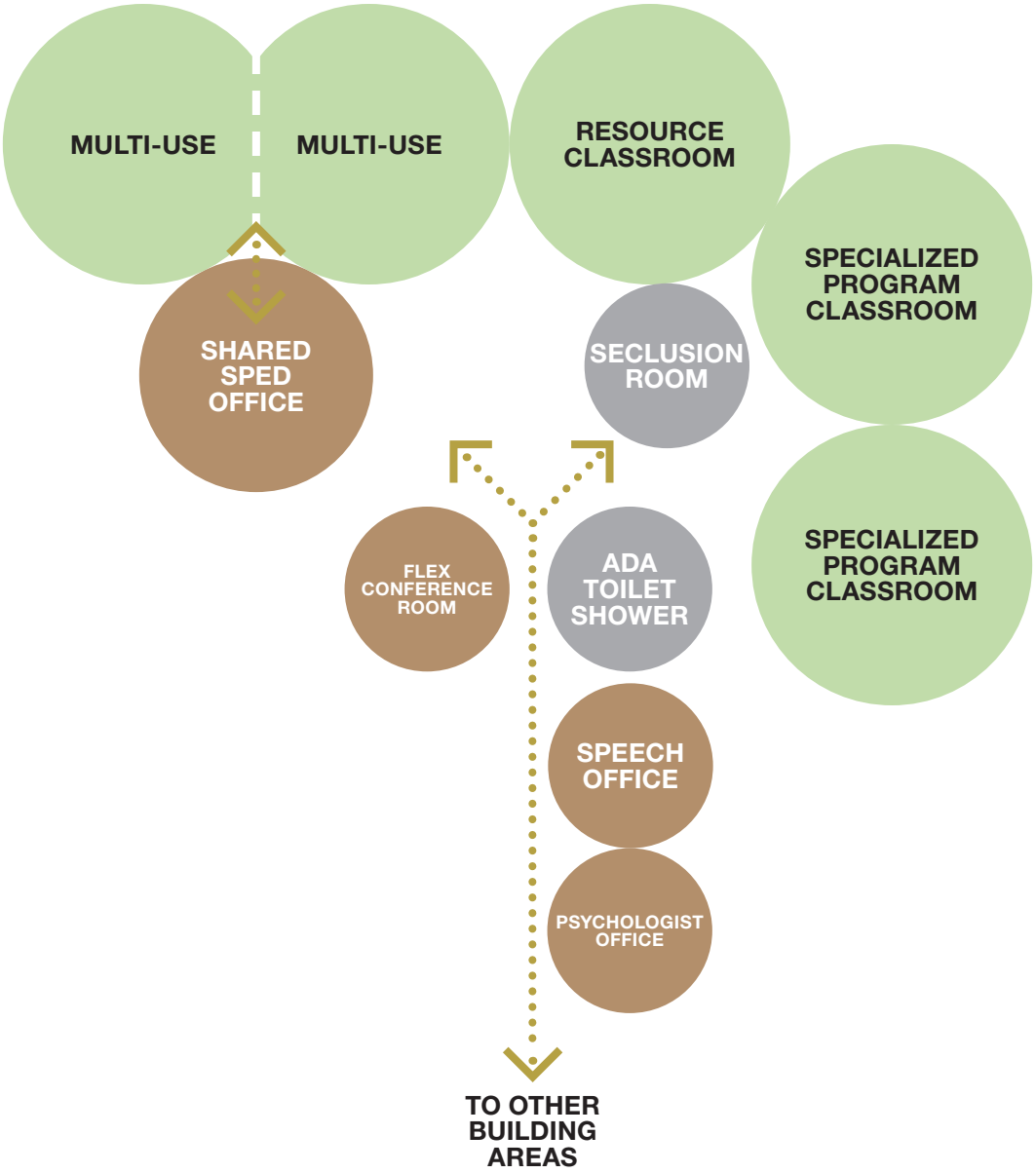
Specialized Programs: Seclusion Room (continued)

Security

- No lock on door
- Ensure fixtures are recessed and/or protected, as noted previously
- Shatterproof glass only

Communications N/A

e. Specialized Programs Adjacency Diagram



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f. Physical Education Area Program

Beaverton School District New Elementary School

Area Program

Date: May, 2014

Academics Programs	# of Teaching Stations	QTY.	S.F. Room	S.F. Total
Physical Education				
Gymnasium		1	6,700	6,700
Instructor's Office		1	120	120
Stage		1	900	900
Stage Storage Room		1	200	200
PE Storage Room		1	400	400
Chair Cart Storage Room		1	150	150
Outdoor PE Storage		1	150	150
Covered Play @50% of Program Area (See Section VI: Outdoor Fields)		1	5,000	5,000
Total Net Area this Functional Group				**13,620**
See complete Building Program in Section V				

The Area Program above lists the rooms and spaces for this functional grouping within the building. The room narratives which follow provide detailed descriptions and requirements which are unique to each room, space, or area.

Note: There is a room narrative for a Multi-purpose Room, however the area for this function is not currently in the program. If budget allows, it could be included with the building design as desired.

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f. Physical Education Room Narratives

Physical Education: Gymnasium (with fixed bleacher and stage)

Activities and Functions

The gymnasium supports the District's physical education program, as well as community events.

The role of the gymnasium in P.E. activities is changing. The future of P.E. instruction will involve a greater emphasis on lifetime fitness. While sports will always have a place in the school curricular and extracurricular activities, the greater goal is to introduce students to fitness activities that they can continue to utilize into adulthood and throughout their lives (e.g. running, aerobics, strength training, dance, etc.). Consequently, the gym will be used for a wider range of activities than simply basketball or volleyball.

Elementary gyms are used for a range of other non-instructional activities - both during the school day and after hours (e.g. YMCA, THPRD, Mad Scientist, school carnivals). The gym accommodates various sizes of group activities, team events, traditional sports and station work.[1]

Size and Capacity

Physical education areas include the gymnasium, P.E. instructor's office and P.E. equipment storage (indoor and outdoor). One (1) gymnasium will be provided for each elementary school. See program for square footage guidelines.

Location and Adjacencies

- Gym should be positioned near covered play areas and playfields
- Adjacent to boys/girls restrooms (locker rooms are not required)
- Near drinking fountains with water bottle fillers
- The gym should be located convenient to the main entry (in the public section of the facility) to facilitate community use
- The gym should be located far from classrooms due to acoustical concerns
- Easily accessible from parking lots and cafeteria
- Storage room accessible to gym and outdoor covered play area

Walls, Windows, Ceilings and Doors

- Sets of double doors with view panels or side lights serving multiple entry/exit points and storage room
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)
- Balanced reverberation
- High ceiling (20' min) to accommodate basketball and volleyball
- High band of windows or skylights to provide diffuse daylighting; consider ability to reach blinds or provide motorized shades
- Interior window from instructor's office to gym
- Run-out wall padding behind main court hoops (approx. 7' high). No carpet on walls.
- Large operable partition between gym and cafeteria for occasions where larger performance or assembly space is needed

Physical Education: Gymnasium (with fixed bleacher and stage) (continued)

Environmental Conditions for Optimal Learning

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Individual thermostat (protected from ball impacts)
- Enhanced ventilation for indoor air quality
- Air exhaust to outdoors
- Natural lighting

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Large, secure storage area for P.E. equipment that is convenient to gym, instructor's office and covered play area. Storage room will be used to store a variety of equipment, including (but not limited to) 20+ folding gymnastic mats, balls, volleyball (standards), etc.
- Rolling carts to bring equipment outside
- Outdoor storage
- Horizontal and vertical space to maneuver big items into storage (e.g. portable basketball hoops, mats, volleyball standards).
- Double door access to accommodate large equipment and carts.
- Storage area may be positioned off of instructor's office (combo office/storage)
- Hooks for hanging various items.
- Chair cart storage room off of gymnasium

Furnishings, Fixtures, and Equipment

- Six (6) basketball hoops (7'-10') with adjustable backboards (2 on each end of court, and along long walls about 1'-2' from wall
- Side hoops should be positioned far enough apart. Ensure basketball hoop (motorized) mechanism for adjusting height is easy to use; the mechanism should also allow hoops to swing back so that they are out of the way.
- Limited fixed bleacher seating will be provided in the elementary gymnasium (limited seated capacity - design, placement and capacity to be determined during design)
- 20+ folding gymnastics mats
- Four (4) portable volleyball standards
- Three (3) 16' magnetic white boards (no trays)
- Scoreboard

Physical Education: Gymnasium (with fixed bleacher and stage) (continued)

- Lockable (400 sf) equipment storage room adjacent to gymnasium and P.E. instructor's office to accommodate the storage of large and small items. Some items are stored in rolling carts and moveable bins. Wire shelving system is needed.
- Recessed floor plates for volleyball nets
- One (1) cargo net, with tether and pulley system
- Chairs to seat student body in gymnasium (minus bleacher capacity) - dedicated storage area for when not in use

Technology

P.E. rooms should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27.* Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for P.E. rooms. Basic requirements include:

- Space should be proactively wired to ensure flexible and adaptable use of technology
- Ability to set up Wii and/or Xbox (for physical activities)
- Built-in stereo sound system with speakers (protected from ball impacts), with DVD/MP3 playback capabilities (e.g. iPod adapter), as well as speakers, amp, mixer board, etc. Sound amplification system with built-in audio/visual controls.
- Special digital projection needs and oversized screens in gymnasium
- Wireless Internet access point within range to provide adequate capacity for high-density use
- Adequate protected outlets and data drops to ensure flexible use of technology (as appropriate in this space)
- Coordinate placement of a large projection screen in the gym for assemblies, presentations, and sing-alongs.

Electricity

- 120/208 3-phase power
- Minimum of three (3) duplex outlets and two (2) data drops per wall
- Wiring for PA and stereo system, as well as scoreboard
- Wired for technology, as noted above
- All lighting controls protected from ball impacts

Lighting

- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 20-30 foot-candles for gymnasiums.
- Zoned, flexible lighting (dimmable switch)
- Keyed switches for lighting control in gymnasium

Physical Education: Gymnasium (with fixed bleacher and stage) (continued)

- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- Two (2) recessed drinking fountains with water bottle fillers per gym - may be placed immediately outside of gym to avoid slipping hazards due to water on gym floor.
- Restrooms located adjacent to gym

Flooring

- Hardwood gym flooring is preferred by elementary P.E. instructors. Ensure floor is neither too slippery, nor too tacky/rubbery.
- Provide court lines (basketball, volleyball, etc.). P.E. instructors should be consulted during the school design or renovation process regarding floor striping requirements. Instructors caution against excessive striping. Provide basic lines, such as basketball court, side courts with key, three-point line, volleyball, and circles for student positioning. P.E. instructors prefer to use tape to mark other lines.
- Concrete flooring in storage room and instructor's office

Security

- Coded or keyed entry
- Zoned for after-hours accessibility
- Recessed fire extinguisher
- Panic hardware
- Ensure roof access is as far as possible from architectural features that may provide a means of climbing from the roof into the school (e.g. trusses).

Communications

- Wired for Voice Over IP
- Intercom
- 16" GPS satellite clock (caged)
- Bell system
- PA system speakers (protected from ball impacts)
- Consider providing back-up communication methods, such as bullhorn or portable radio, to allow emergency communications in high-noise area.

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[1] The District may wish to consider connecting the gymnasium to the cafeteria / commons via a modular wall, to create a very large multipurpose space for performances, assemblies, or events. This may be discussed as an option during design.

Physical Education: Multipurpose Room

Activities and Functions

An optional space at the elementary level, the multipurpose room may accommodate a range of fitness activities, such as yoga, aerobics, dance, and cross fit exercises. The multipurpose room (if provided) will be designed to complement the district's emphasis on lifetime fitness. The multipurpose room may also be used by non-P.E. programs for team building exercises, art projects, buddy classes, and music/dance activities. The multipurpose room will also be available for community use.

Size and Capacity

A multipurpose room may be provided at some elementary schools (budget permitting). It is important to note that this is not a required space - it is an optional space. While highly desired by elementary staff, this is "wish list" space that is budget-dependent. The required area for the space is not currently included in the building design program.

Location and Adjacencies

When provided, the multipurpose room should be positioned adjacent to gymnasium, restrooms, storage room, and stage

Walls, Windows, Ceilings and Doors

- Large mirror extending across one wall (similar to a dance studio or group exercise room).
- Double-door access to accommodate large equipment
- May provide rock climbing on one wall

Environmental Conditions for Optimal Learning

- Ability to maintain temperature of 68-78 degrees
- Individual thermostat (protected from ball impacts)
- Enhanced ventilation for indoor air quality
- Air exhaust to outdoors

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Access to secure storage area for P.E. equipment that serves gym (discussed under gymnasium section). Storage room will be used to store a variety of equipment used in multipurpose room, including (but not limited to) 20+ folding gymnastic mats
- Double door access to accommodate large equipment and carts.
- Separate storage closet desired; in lieu of storage closet, provide solid portable wall to store equipment behind

Physical Education: Multipurpose Room (continued)

Furnishings, Fixtures, and Equipment

- 20+ folding gymnastics mats
- Two (2) 16' magnetic white boards (no trays)
- Large mirror covering one wall

Technology

- Adequate protected outlets and data drops to ensure flexible use of technology (as appropriate in this space)
- Wii (for physical activities)
- Built-in stereo sound system with speakers (protected from ball impacts), with DVD/MP3 playback capabilities (e.g. iPod adapter), as well as speakers, amp, mixer board, etc.
- Sound amplification system
- Wireless Internet access

Electricity

- 120/208 3-phase power
- Ample electrical outlets and data drops for flexible use of technology
- Wired for technology, as noted above

Lighting

- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 20-30 foot-candles for gymnasiums.
- Zoned, flexible lighting (dimmable switch)
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- Easy access to restrooms and drinking fountains with water bottle fillers

Flooring

- Hardwood flooring
- Basic floor lines to mark boundaries

Physical Education: Multipurpose Room (continued)

Security

- Coded or keyed entry
- Zoned for after-hours accessibility

Communications

- Wired for Voice Over IP
- 12” GPS satellite clock (caged)
- Intercom
- Bell system
- PA system speakers (protected from ball impacts)

Physical Education: Instructor's Office

Activities and Functions

The P.E. instructor office provides work space for the P.E. teacher. The office should have visual access to gymnasium for supervision purposes.

Size and Capacity

One (1) P.E. instructor office will be provided for each elementary school. The office should be large enough to provide an instructor work station, file storage, and storage for smaller equipment items. See program for square footage guidelines.

Location and Adjacencies

- Office should have visual access to gymnasium and stage via a large window. It should be positioned for optimal supervision of gym area.
- Adjacent to storage room

Walls, Windows, Ceilings and Doors

- Window to gymnasium
- Self-closing door with view panel or side lights
- Window to gym, stage
- Ceiling height of 9'-10'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)

Environmental Conditions for Optimal Learning

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Access to secure storage area for P.E. equipment that serves gym (discussed under P.E. Storage section).
- Secure file storage for confidential records
- Shelving for reference materials

Furnishings, Fixtures, and Equipment

- One (1) 4' white board
- One (1) desk with chair
- Three (3) movable bookcases

Physical Education: Instructor's Office (continued)

- Ample deep, flexible shelving
- Two (2) guest chairs
- Two (2) 42" lateral file cabinets

Technology

Offices should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for offices. Basic requirements include:

- Room should be proactively wired to ensure flexible and adaptable use of technology
- Wireless Internet access point within range
- Provide power and data to support workstations
- Printer required
- Access to gymnasium sound system equipment

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) data drops per wall
- Wired for technology, as noted above

Lighting

- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 30 foot-candles for offices.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards. Stained concrete flooring recommended.

Security

- Coded or keyed entry

Physical Education: Instructor's Office (continued)

Communications

- Wired for Voice Over IP
- Intercom
- 8" GPS satellite clock
- Within hearing range of central bell and P.A. speakers

Physical Education: Stage

Activities and Functions

Multipurpose space that may be used for student productions, instructional space, and/or storage.

Size and Capacity

The stage should be large enough to accommodate 90 students on risers. See program for square footage guidelines.

Location and Adjacencies

The area program assumes that the stage will be located adjacent to the gymnasium. The overall goal is to situate the stage next to a large, multipurpose area that can accommodate a large audience.

Walls, Windows, Ceilings and Doors

- Large operable partition between gym and cafeteria for occasions where larger performance or assembly space is needed.
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)
- Provide wide doorways at stage entry for props and students carrying large instruments.
- Provide three (3) entry points to stage. Ensure that adults aren't placed in the position of passing through restrooms intended for use by students because it is the only means to access spaces such as a stage.

Environmental Conditions for Optimal Learning

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Under-stage storage is to be avoided, if possible; however, If storage is provided under stage, must be 1-hour fire rated with sprinklers, with consideration of access and safety issues (e.g. lifts, space, setbacks, etc.)
- Adequate prop and production storage off of the stage area in separate storage room
- Sound system and AV control storage area. See program for square footage guidelines.
- Dedicated area for chair storage. See program for square footage guidelines.

Physical Education: Stage (continued)

Furnishings, Fixtures, and Equipment

- Lift or ramp to access stage (portable device not acceptable)
- Curtains on a pulley system
- Mounted tack boards
- Mounted white board at teaching wall
- Sound-rated operable partition to allow option of using stage as a teaching space (as budget allows)
- Basic cyclorama and side curtains to allow flexibility for play performances
- Stage risers to accommodate a minimum of 90 students
- Chairs to seat student body in gymnasium (minus bleacher capacity) - provide dedicated storage area for when not in use

Technology

As the stage may be used as an educational space, it should be technologically wired, organized and equipped as a classroom according to *BSD's Technical Standards, Division 27*. The following recommendations are offered as guidelines based on the projected use of the space for instructional purposes. Please refer to the Informational Technology section of this document for additional information.

- Ample outlets and data drops to ensure flexible use of technology
- Integrated audio enhancement technology and sound system
- Stage equipped with audio visual and technological resources similar to a classroom, to allow the area to be used as a multipurpose teaching space.
- Extra-large mounted screen at stage

Electricity

- 120/208 3-phase power
- Adequate number of outlets and data drops to support both performance and classroom activities.
- Electrical outlet(s) and data drop(s) in ceiling (see Informational Technology section for additional details)[1]
- Special electrical requirements associated with stage - to be determined during design.
- Wired for technology, as noted above

Physical Education: Stage (continued)

Lighting

- Natural daylighting
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards
- The stage should be equipped with proper adjustable stage lighting.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Secure storage of sound equipment in adjacent area

Communications

- Wired for Voice Over IP
- Intercom
- 12" GPS satellite clock backstage
- Bell system
- PA system speakers

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[1] May serve wireless access point or other purpose. Ceiling-mounted data projectors are not anticipated, as use of this technology is not anticipated long-term. Flexibility is preferred over fixed equipment when planning for technology, as it is continuously changing. See section on Information Technology for additional information.

Physical Education: Stage Storage Room

Activities and Functions

This area provides a dedicated storage space adjacent to the stage. Stored materials may include stage props, equipment, instructional materials, and other items.

Size and Capacity

- General supplies and smaller props, positioned near stage
- Large and tall space capable of storing large sets and props
- Sized at approximately 200 sf. See program for square footage guidelines

Location and Adjacencies

- Located adjacent to stage

Walls, Windows, Ceilings and Doors

- High ceilings to accommodate movement and storage of tall items
- Double door access
- Durable materials to withstand the bumps and dings associated with frequent moving of large items

Environmental Conditions for Optimal Learning

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Storage of a range of props and materials for stage productions, as well as instructional materials for when stage is used as a classroom.
- Open floor space for bulky sets, with shelving for smaller props
- May provide space for lighting and audio equipment

Furnishings, Fixtures, and Equipment

- Open shelving
- Lockable cabinets
- Assorted bins

Technology N/A

Physical Education: Stage Storage Room (continued)

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) data drops per room (to provide option of repurposing space in future years, if needed)

Lighting

- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Durable, hard surface flooring. Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry

Communications N/A

Physical Education: PE Storage Room

Activities and Functions

The P.E. storage room provides dedicated, enclosed storage for the gymnasium. Instructors will store and access a variety of equipment, such as balls, nets, mats, cones, and other items.

Size and Capacity

- The storage room shall be sized at approximately 400 square feet. See area program for additional details.
- Horizontal and vertical space to maneuver big items into storage (e.g. portable basketball hoops,mats, volleyball standards).

Location and Adjacencies

- The P.E. storage room is located adjacent to the gymnasium
- Convenient to P.E. instructor's office

Walls, Windows, Ceilings and Doors

- High ceilings to accommodate tall items such as volleyball standards
- Double door access to accommodate large equipment and carts.
- Durable materials to withstand the bumps and dings associated with frequent moving of large items

Environmental Conditions for Optimal Learning

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

Storage for a variety of P.E. supplies and equipment, including (but not limited to) mats, weights, exercise equipment, balls, volleyball standards, nets, rackets, and technological equipment (Wii, Xbox).

- 20+ folding gymnastics mats, cart, and four (4) portable volleyball standards
- Rolling carts

Furnishings, Fixtures, and Equipment

- Flexible rack shelving
- Perimeter shelving with ropes to secure balls
- Storage for health kits
- Hooks for hanging various items.

Physical Education: PE Storage Room (continued)

- Cargo nets
- Bins and carts

Technology N/A

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) data drops per room (to provide option of repurposing space in future years, if needed)

Lighting

- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Secure storage
- Coded or keyed entry - door lockable from both sides

Communications N/A

Physical Education: Chair Cart Storage Room

Activities and Functions

This area is a dedicated, secure room for the storage of folding chairs stored on portable (rolling) racks, providing easy access for set-up and removal of the chairs for special events held in the gym.This also ensures sufficient quantity of chairs available if simultaneous events are held in the gym and cafeteria.

Size and Capacity

The room should be sufficiently large to accommodate storage of approximately four racks, each accommodating 84 chairs. See program for square footage guidelines.

Location and Adjacencies

- Adjacent to gymnasium and situated such that door hardware does not cause a safety hazard for P.E. activities

Walls, Windows, Ceilings and Doors

- Secure, double door access; provide 42-inch wide doors
- Durable surfaces; consider bumper rail to protect wall finishes

Environmental Conditions for Optimal Learning

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Sufficient floor space to accommodate required chair racks and allow for maneuvering them in and out

Furnishings, Fixtures, and Equipment

- 250 high-quality, heavy-duty folding chairs
- 4 heavy-duty steel storage racks with lockable heavy-duty casters, designed to hold 84+/- chairs each

Technology N/A

Electricity

- 120/208 3-phase power

Lighting

- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Physical Education: Chair Cart Storage Room (continued)

Plumbing N/A

Flooring

- Sealed concrete; provide transition threshold to adjoining gymnasium flooring

Security

- Coded or keyed entry

Communications N/A

Physical Education: Outdoor PE Storage

Activities and Functions

This space is intended to accommodate P.E. equipment to be used during outdoor P.E. classes and/or recess activities.

- Design for maximum efficiency in terms of access and use
- Ensure that storage is secure and lockable

Size and Capacity

Storage areas shall be sized appropriately to the types of equipment and/or items stored. The outdoor P.E. storage room is sized at approximately 150 square feet. See area program for square footage guidelines.

Location and Adjacencies

- External access
- Near covered play area
- Visibility from playing fields; should be positioned so that they are easily monitored by staff (natural surveillance).

Walls, Windows, Ceilings and Doors

- High ceilings to accommodate tall items
- Lockable double doors to accommodate bulky or wide items

Environmental Conditions for Optimal Learning N/A

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Storage for a variety of P.E. and athletic supplies and equipment, including (but not limited to) balls, rackets, bats, bases.

Furnishings, Fixtures, and Equipment

- Room for carts
- Flexible rack shelving
- Perimeter shelving with ropes to secure balls
- Hooks
- Cargo nets
- Assorted bins

Physical Education: Outdoor PE Storage (continued)

Technology N/A

Electricity

- 120/208 3-phase power
- One (1) duplex outlet per wall

Lighting

- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Hard surface flooring. Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Central locking systems and procedures are needed to ensure that equipment remains secure and undamaged following use by multiple groups.

Communications N/A

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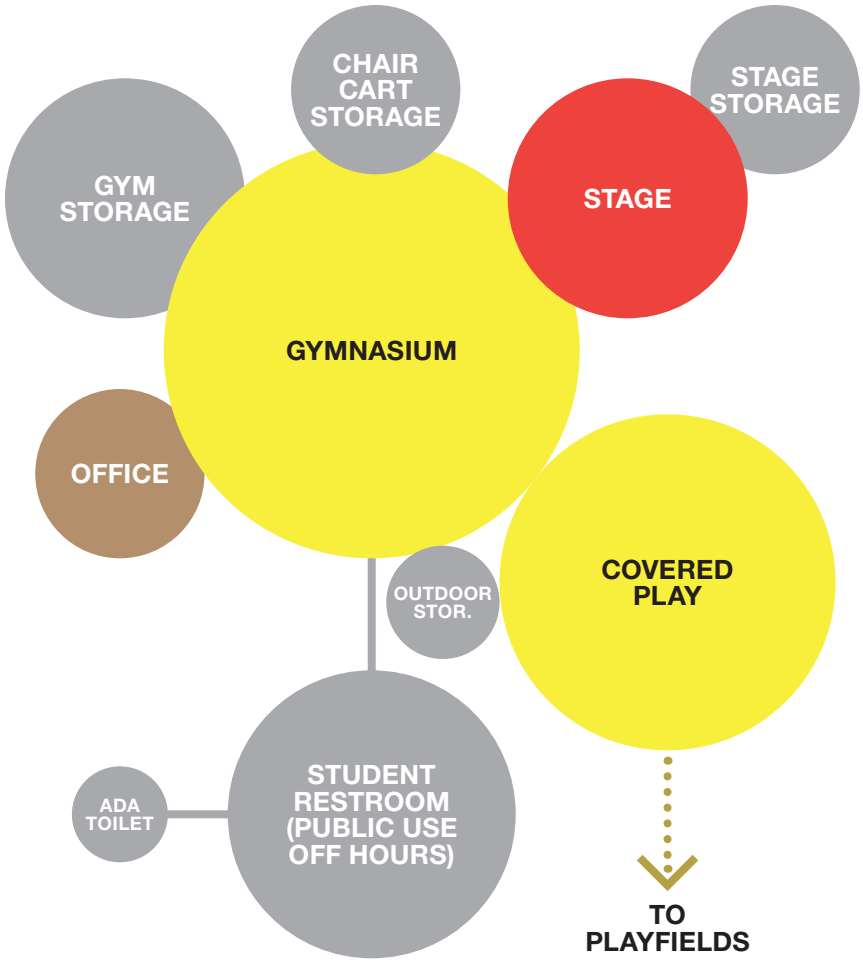
f. Physical Education Adjacency Diagram



NOTE: USE OF THE COVERED PLAY STRUCTURE FOR BUS TRANSITIONS TO BE DETERMINED DURING BUILDING/SITE DESIGN

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g. Administration / Support & Health Area Program

Beaverton School District New Elementary School

Area Program

Date: May, 2014

Administration / Support & Health	# of Teaching Stations	QTY.	S.F. Room	S.F. Total
Administration				
Entry / Reception / Lobby (includes Secretarial Area)		1	600	600
Principal's Office		1	180	180
Assistant Principal's Office		1	120	120
Volunteer Room		1	150	150
Conference Room		1	220	220
Counselor's Office		1	150	150
Administration Support Areas				
Workroom & Copy		1	400	400
Office Storage		1	75	75
Mail Delivery & Process Center		1	50	50
Records Storage		1	200	200
Staff Room with Kitchenette		1	750	750
Staff Restroom		2	60	120
Health				
Health Room		1	150	150
ADA Accessible Unisex Restroom		1	60	60
Total Net Area this Functional Group				**3,225**
See complete Building Program in Section V				

The Area Program above lists the rooms and spaces for this functional grouping within the building. The room narratives which follow provide detailed descriptions and requirements which are unique to each room, space, or area.

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g. Administration / Support & Health Room Narratives

Administration / Support & Health: Entry / Reception / Lobby

Activities and Functions

The lobby and waiting area provides visitors with a "first impression" of the interior of the school. The functions of the main entry / lobby include:

- Provide a welcoming, yet secure, atmosphere
- Provide ability to monitor visitor access to school facility
- Generate a sense of wonder among students
- Display culturally-relevant materials
- Comfortable waiting area for parents and visitors
- Enhance wayfinding for building users and visitors
- Accommodate multiple activities at one time
- Provide sufficient space for queuing of visitors
- Provide separation between visitors and administration, ensuring a degree of privacy in the main office
- Carefully consider the pros and cons of an interior courtyard, seeking input from administrators, teachers and maintenance staff.[1]

Size and Capacity

The lobby and waiting area needs to be sufficiently large to accommodate a high amount of traffic, while allowing space for queuing at the check-in counter, completing forms and other activities. See program for square footage guidelines.

Location and Adjacencies

- The lobby/waiting area is positioned at the main entry to the building, adjacent to the administrative area. This placement allows staff to supervise the main entry, as well as welcome, assist, and direct visitors.
- Line of sight to monitor the exterior of the school in terms of persons coming to the front door essential.

Walls, Windows, Ceilings and Doors

- Four (4) sets of double doors with view panels or side lights at main entry form "entry vestibule"
- Door to main office
- Large window(s) for visibility
- Access control measures are needed to prevent visitors from bypassing the reception desk.
- High ceilings with extra vertical wall space leaves area for a mural, flags or other displays.
- Designer should consider innovative ways of designing easily rotated display areas into the lobby.
- Provide wide corridors to prevent overcrowding during high-traffic times.

Administration / Support & Health: Entry / Reception / Lobby (continued)

- Avoid use of rough surfaces (e.g. brick) in lobbies and corridors with heavy student traffic. Such materials are difficult to use as display surfaces. Furthermore, brick tends to scratch students during busy transitions where “bottleneck” conditions push students against the walls.
- Provide one (1) automated (ADA) accessible door.
- Adequate ventilation for indoor air quality
- Sound attenuation and the acoustical design of the space are important aspects, enabling interaction between secretaries and students/parents/visitors.

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)
N/A

Furnishings, Fixtures, and Equipment

- Bi-level counters, including low-level student counter for students (high counter is intimidating to students).
- Volunteer check-in station (computer)
- Standing height countertop for visitors to complete written paperwork
- Defibrillator located near front door
- Integrated display areas
- Clear directional signage with easy to read fonts, understandable symbols. Signs should clearly direct visitors to check in at main desk. Other signage should include notification of closed campus, no smoking signs, and 24-hour surveillance camera notification. Signs should not interfere with the intentional line of sight surveillance or provide concealment opportunities.
- Furnished comfortable seating area which may include a combination of seating options.[2]
- Table for display of materials.

Technology

- Ample outlets and data drops to ensure flexible use of technology
- Volunteer check-in station
- Reader board (type and placement will be a design-based decision)
- Television/monitor mounted for announcements and school-wide media transmittal
- Wireless Internet access with capacity for high-density use
- Computer workstation for volunteer check-in

Administration / Support & Health: Entry / Reception / Lobby (continued)

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) data drops per wall
- Wired for technology, as noted above

Lighting

- Natural daylighting (as noted above)
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 10-20 foot-candles.
- Vacancy sensors set to turn off at 10 minutes (sensor type to be determined based on ceiling height and spatial characteristics)
- Avoid placing light fixtures in extremely high-bay locations and above stairways (difficult to access by custodial staff)
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Requires visual and physical supervision of entry
- Clear wayfinding and clarification of circulation is important.
- Coded or keyed entry
- Access to exterior doors controlled remotely by administrative staff. Main office/entry may audio/visual access control devices (such as a buzzer-based entry system) for front door to allow staff monitoring of building access.
- Zoned for after-hours community use. Doors are preferred over "roll-up" gates when blocking off areas, as it is easier for authorized staff to pass through the barriers.
- Mirrors may be strategically placed to allow secretaries to view adjacent corridors.

Administration / Support & Health: Entry / Reception / Lobby (continued)

Communications

- Wired for Voice Over IP
- Intercom
- GPS 16” Satellite Clock
- Public address (PA) speakers
- Bell system

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[1] Interior courtyards are a nice way to “bring the outdoors in” - students often congregate and even eat lunch in these areas. Teachers and administrators express positive experiences with interior courtyards and their impact on the school environment. However, these areas are considerably less popular with maintenance and custodial staff - indeed, maintenance will not typically service these areas. If an interior courtyard is provided, it is important to select low-maintenance vegetation and materials. A plan must be developed to maintain the area long-term (through the inevitable changes in leadership and community involvement).

[2] Furniture selection may vary based on site-based needs and budget.

Administration / Support & Health: Secretarial Area

Activities and Functions

The secretarial area is more than a simply a work area for three (3) staff members - the area plays a crucial role access control and wayfinding, allowing secretaries to intercept and direct visitors. This is a high-activity area with a public interface.

Size and Capacity

The secretarial area shall accommodate three (3) workstations. One of the included workstations should be partially or fully enclosed for privacy. See program for square footage guidelines.

Location and Adjacencies

- The secretarial area is positioned near the school's main entry and lobby.
- In the placement of the admin area (and secretarial desks), there is a natural tension between the need to supervise the entry and intercept visitors, and the need to maintain a confidential work area and respect student privacy. Work areas should be structured to discourage parents or visitors from having the opportunity to view computer monitors, printed materials on desks, or items in staff mailboxes.
- The constant flow of visitor traffic can also be very distracting to all secretarial staff in the open admin area. At least one (1) workstation should be positioned at the reception counter. Another workstation should be deliberately positioned away from the flow of traffic to discourage interruptions.
- Located in close proximity to mailboxes, workroom, health room.
- The area should be convenient to other administrative employees that may require support (e.g. principal, assistant principal, etc.).
- Visual control of the health room, mailboxes, main entry, lobby, waiting area, vestibule and parking lot.

Walls, Windows, Ceilings and Doors

- Self-closing door with view panel leading to lobby
- Transaction counters to provide barrier of protection, with possible use of protective acrylic glass
- Large interior window to school's main entry
- Exterior window to building approach and parking lot
- Minimum of two (2) remote exits from main office for security reasons
- Ceiling height of 9'-12'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)
- Tackable wall surface or mounted tack boards
- Provide window coverings such as blinds for lockdown; consider ability to reach blinds or provide motorized shades

Administration / Support & Health: Secretarial Area (continued)

Environmental Conditions

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality
- Natural lighting

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Adjacent lockable storage. Provide separate fireproof storage room for cumulative files. BSD will retain use of hard-copy files (particularly for student records) for the near future. File area should be hidden, yet accessible. Evaluate the specific file types and determine quantities during design.
- Ample secure built-in storage for valuable items, such as currency and lost and found items

Furnishings, Fixtures, and Equipment

- Staff mailboxes/mail slots in adjacent area, determine size and quantity during design
- High and low transaction counters
- Extended built-in counter space facing lobby.
- Secure Records Storage room
- Secure drawers and cabinetry, including lockable bank drawer
- Locking and fireproof file cabinets (cum files)
- Three (3) office chairs
- One modular semi-enclosed office cubical with desk and secure file cabinets/drawers
- Counters will be used as desk space for two (2) of the three (3) workstations - additional desks not required for these workstations.
- Guest seating for a minimum of four (4) visitors

Technology

Offices should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for offices. Basic requirements include:

- Area should be proactively wired to ensure flexible and adaptable use of technology
- Ample outlets and data drops to ensure flexible use of technology
- Three (3) computer workstations, including one with a small dedicated desktop printer
- Central intercom

Administration / Support & Health: Secretarial Area (continued)

- Wireless Internet access point within range to provide adequate capacity for high-density use
- Use of handheld technologies are becoming more prevalent in staff communications - technological planning should support this.

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) data drops per wall; additional two (2) outlets and two (2) data drops along counter area to accommodate workstations.
- Wired for technology, as noted above
- Central charging area for administrative radios
- Emergency HVAC shut-off button (with laminated shut-off procedures attached adjacent to button)

Lighting

- Natural daylighting (as noted above)
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 30 foot-candles for offices.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Security features will be finalized during design, referencing the District's 2014 School Security Guidelines
- Lobby should have ability to be quickly secured in the event of a lockdown
- Main office/entry may audio/visual access control devices (such as a buzzer-based entry system) for front door to allow staff monitoring of building access
- Requires visual and physical supervision of entry and lobby
- Visual supervision of parking lot
- Coded or keyed entry, allowing main office to be secured after hours
- Remote control of door access at main entry
- Secure file storage

Administration / Support & Health: Secretarial Area (continued)

- File cabinets in Records Storage room shall be fire proof
- Access to land-line in main office as a back-up in the event that phones are down (particularly in an emergency situation) - designate a secure room within main office. Confirm availability of land-line after VOIP implementation.
- Minimum of two (2) remote exits from main office for security purposes
- Provide “escape route” from main office that can be accessed by staff in the event of an emergency (or access to other safe area)

Communications

- Wired for Voice Over IP at each work station
- Access to land-line as back-up
- Intercom
- 12” GPS satellite clock
- Public address (PA) speakers
- Bell system
- Radio handsets and charging station

Administration / Support & Health: Principal's Office

Activities and Functions

Office provides administrative, organizational and meeting space for the principal.

Size and Capacity

The principal's office should be large enough to accommodate a small meeting table, in addition to the required work space. See program for square footage guidelines.

Location and Adjacencies

- Located in the main administrative area
- Near secretarial area and conference room
- Adjacent to assistant principal's office, with connecting door
- Adjacent to conference room (possibly with adjoining door)
- May be positioned to be accessible from corridor (as well as from main office), allowing entry without going through the main office. The purpose of this option is to increase the principal's approachability by students.
- Desired functional adjacencies and room-to-room access options should be discussed during design.

Walls, Windows, Ceilings and Doors

- Self-closing interior door with view panel or side lights, leading to main office
- Exterior door recommended (for access and security)
- Door to main corridor (optional)
- May include direct door to conference room (optional)
- Interior window to central administrative area
- Exterior window to entry or parking lot
- Ceiling height of 9'-10'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)

Environmental Conditions

- Natural daylighting
- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Secure file storage for confidential records
- Shelving for reference materials

Administration / Support & Health: Principal's Office (continued)

Furnishings, Fixtures, and Equipment

- One (1) 4' white board
- One (1) executive-style desk with chair
- One (1) movable bookcase
- One (1) small conference table with six (6) chairs
- Two (2) 42" lateral file cabinets

Technology

Offices should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for offices. Basic requirements include:

- Room should be proactively wired to ensure flexible and adaptable use of technology
- Wired for office as well as meeting functions
- Wireless Internet access point within range
- Provide power and data to support a minimum of one (1) workstation
- Printer required

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) data drops per wall
- Wired for technology, as noted above

Lighting

- Natural daylighting (as noted previously)
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 30 foot-candles for offices.
- Flexible lighting (bi-level switching to provide high and low light levels) for use during meetings
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Administration / Support & Health: Principal's Office (continued)

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry
- Secure file storage
- Provide "escape route" from main office that can be accessed by staff in the event of an emergency (or access to other safe area)

Communications

- Wired for Voice Over IP
- Intercom
- 8" GPS satellite clock
- Public address (PA) system

Administration / Support & Health: Assistant Principal's Office

Activities and Functions

Office provides administrative, organizational and meeting space for the assistant principal.

Size and Capacity

One (1) assistant principal's office shall be provided for each elementary school. The assistant principal's office should be large enough to accommodate a workstation, as well as two guest chairs. See program for square footage guidelines.

Location and Adjacencies

- Located in the main administrative area
- Adjacent to principal's office
- Near secretarial area and conference room

Walls, Windows, Ceilings and Doors

- Self-closing door with view panel or side lights (to main office)
- May provide connecting door to principal's office (optional)
- Interior window to central administrative office
- Ceiling height of 9'-10'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)

Environmental Conditions

- Natural daylighting
- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Secure file storage for confidential records
- Shelving for reference materials

Furnishings, Fixtures, and Equipment

- One (1) 4' white board
- One (1) desk with chair
- One (1) movable bookcase
- Two (2) guest chairs

Administration / Support & Health: Assistant Principal's Office (continued)

- Two (2) 42" lateral file cabinets

Technology

Offices should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for offices. Basic requirements include:

- Room should be proactively wired to ensure flexible and adaptable use of technology
- Wired for office as well as meeting functions
- Wireless Internet access point within range
- Provide power and data to support a minimum of one (1) workstation

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) data drops per wall
- Wired for technology, as noted above

Lighting

- Natural daylighting (as noted previously)
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 30 foot-candles for offices.
- Vacancy sensors set to turn off at 10 minutes
- See BSD Technical Standard, Div 26: Electrical for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry
- Secure file storage
- Provide "escape route" from main office that can be accessed by staff in the event of an emergency (or access to other safe area)

Administration / Support & Health: Assistant Principal's Office (continued)

Communications

- Wired for Voice Over IP
- Intercom
- •8" GPS satellite clock
- Public address (PA) system

Administration / Support & Health: Volunteer Room

Activities and Functions

The degree of parental involvement is very high in elementary schools. The volunteer work room provides dedicated work, storage and meeting space for parent volunteers. The room may be utilized as:

- Small work area for volunteers
- PTO storage[1]
- Repository for information (flyers, sign-up sheets, etc.) on events and resources that may be of interest to parents
- Small staging area for volunteer-based school events

Size and Capacity

The Volunteer Room is sized similarly to a large office. See program for square footage guidelines.

Location and Adjacencies

- The volunteer room shall be positioned in or near the main office
- Convenient to workroom

Walls, Windows, Ceilings and Doors

- Interior door to lobby or corridor
- Interior window
- Self-closing door with view panel or side lights
- Ceiling height of 9’-10’
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)

Environmental Conditions

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Effective ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Open (movable) shelving for materials and supplies
- Cubbies or cabinet for personal belongings of volunteers

Administration / Support & Health: Volunteer Room (continued)

Furnishings, Fixtures, and Equipment

- Flexible workspace
- Storage cabinet or cubbies
- Ample tack boards or tackable wall surface for flyers, sign-up forms, etc.
- One (1) mounted 4' white board
- Varied comfortable seating options

Technology

- Ample outlets and data drops to ensure flexible use of technology
- Wireless Internet access point within range to provide adequate capacity for high-density use

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) data drops per wall
- Wired for technology, as noted above

Lighting

- Natural daylighting (as noted above)
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 30 foot-candles for offices.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry

Administration / Support & Health: Volunteer Room (continued)

Communications

- Wired for Voice Over IP
- 8” GPS satellite clock
- Within hearing range of central bell system and PA speakers

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[1] A separate PTO storage closet was desired, but is not included in the current area program. This is a “wish list” item that may be reconsidered during design, budget permitting.

Administration / Support & Health: Conference Room

Activities and Functions

The conference room provides meeting space for administrative staff and faculty. Meeting space may be on a scheduled or impromptu basis.

Size and Capacity

The conference room shall be sized to seat up to eight (8) people (conference style seating). See program for square footage guidelines.

Location and Adjacencies

The conference room will be frequently accessed by administrative staff and visitors. The room should be positioned near the secretarial area to allow administrative staff to escort visitors to the room without disrupting offices or compromising security in private areas. The room should also be close to the principal and assistant principal offices, as they will be using the room most frequently.

Walls, Windows, Ceilings and Doors

- Two self-closing doors with view panel or side lights (one door from main office, the other from corridor)
- Ceiling height of 9'-10'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)

Environmental Conditions

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- If sink is provided (optional), provide under-counter storage for coffee supplies, etc.

Furnishings, Fixtures, and Equipment

- One (1) 6' white board
- One (1) eight-person rectangular conference table
- Eight (8) guest chairs

Administration / Support & Health: Conference Room (continued)

Technology

Conference rooms should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for conference rooms. Basic requirements include:

- Room should be proactively wired to ensure flexible and adaptable use of technology
- Provide ability to connect a laptop to data projection and video streaming devices for viewing by room participants
- Wireless Internet access point within range to provide adequate capacity for high-density use

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) data drop per wall
- Electrical outlet(s) and data drop(s) in ceiling (see Informational Technology section for additional details)[1]
- Wired for technology, as noted above

Lighting

- Natural daylighting (as noted above)
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 35-50 foot-candles.
- Flexible lighting (bi-level switching to provide high and low light levels)
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- Sink desired, budget permitting (for coffee, etc.)

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry

Administration / Support & Health: Conference Room (continued)

Communications

- Wired for Voice Over IP
- Intercom
- One (1) 8” GPS satellite clock
- Public address (PA) speakers
- Bell system

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[1] May serve wireless access point or other purpose. Ceiling-mounted data projectors are not anticipated, as use of this equipment is expected to shift to new, emerging technologies. Flexibility is preferred over fixed equipment when planning for technology, as it is continuously changing. See section on Information Technology for additional information.

Administration / Support & Health: Counselor's Office

Activities and Functions

The counselor's office provides administrative, organizational and meeting space for the school guidance counselor.

Size and Capacity

The counseling office must be large enough to accommodate small meetings, in addition to the required work space. Typically, one (1) counselor office will be provided for elementary schools with a capacity of up to 750 students. See program for square footage guidelines.

Location and Adjacencies

Ideally, the counseling office should be accessible from both the corridor and the administrative area. The office should be placed in a highly visible location that is easy accessible by students (without having to walk through the main office).

Walls, Windows, Ceilings and Doors

- Self-closing doors with view panels or side lights - one leading to admin and the other leading to hallway
- Interior window with view to corridor/hallway
- Ceiling height of 9'-10'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)
- Exterior window desired for natural daylighting

Environmental Conditions

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishing, Fixtures and Equipment)

- General office storage for supplies and equipment
- Area to display materials (brochures, flyers, booklets, etc.)
- Shelving for reference materials

Furnishing, Fixtures and Equipment

- One 4' white board
- Mounted tack board
- One (1) desk with chair

Administration / Support & Health: Counselor's Office (continued)

- Two (2) 42" lateral secure file cabinets
- Two (2) movable bookcases
- Four (4) guest chairs

Technology

Offices should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for offices. Basic requirements include:

- Room should be proactively wired to ensure flexible and adaptable use of technology
- Wireless Internet access point within range
- Provide power and data to support workstations
- Printer required (for printing confidential information)

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) data drops per wall
- Power and data outlets to support flexible use of technology
- Wired for technology, as noted above

Lighting

- Natural daylighting (as noted above)
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 30 foot-candles for offices.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Administration / Support & Health: Counselor's Office (continued)

Security

- Coded or keyed entry
- Secure file storage
- Provide "escape route" from main office that can be accessed by staff in the event of an emergency (or access to other safe area)

Communications

- Wired for Voice Over IP
- Intercom
- 8" GPS satellite clock

Administration / Support & Health: Workroom and Copy

Activities and Functions

The workroom serves as the main production hub of the school facility. The room is used by staff in the main office, as well as by teachers and volunteers.

Size and Capacity

This room should be large enough to accommodate production activities and large equipment. See program for square footage guidelines.

Location and Adjacencies

- The work room is positioned within the administrative offices, adjacent to the secretarial area.
- Exterior hallway access desirable

Walls, Windows, Ceilings and Doors

- Ceiling height of 9'-10'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)

Environmental Conditions

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Enhanced ventilation for indoor air quality, which may include exhaust vent to outdoors.

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Cabinetry and shelving for easily accessible supplies
- Secure, fire protected record storage
- Ample counters for workspace and table-top equipment storage

Furnishings, Fixtures, and Equipment

- Photo copier/fax/scanner/printer
- Secure, enclosed fire-protected storage room
- Work island with under-counter storage
- Upper and lower storage cabinets along counters
- Binding machine
- Paper cutter
- Laminator
- Shredder

Administration / Support & Health: Workroom and Copy (continued)

- Dye cut machine
- One (1) 4' white board
- All appliances to be Energy Star rated, unless not readily available
- Include flexible furnishings for a variety of equipment, copy machines, laminator, dye-cut machine, riso machine etc. Shelving should be adjustable and flexible to accommodate changing needs.

Technology

- Ample outlets and data drops to ensure flexible use of technology
- Wireless Internet access point within range to provide adequate capacity for high-density use

Electricity

- 120/208 3-phase power
- Minimum of three (3) duplex outlets and two (2) data drops per wall (including dedicated outlet and data drop for central printer/scanner/copier/fax machine)
- Wired for technology, as noted above

Lighting

- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 30 foot-candles for offices.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- May include hand washing sink (TBD during design)

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Requires visual access to secretarial area and check-in counter
- Coded or keyed entry

Administration / Support & Health: Workroom and Copy (continued)

Communications

- Wired for Voice Over IP
- Intercom
- 8” GPS satellite clock
- Within hearing range of central bell system and PA speakers

Administration / Support & Health: Office Storage

Activities and Functions

This space provides general storage for office supplies.

Size and Capacity

Storage room for general office supplies. See program for square footage guidelines.

Location and Adjacencies

The office storage room is located in the main office, near the secretarial area.

Walls, Windows, Ceilings and Doors

- Durable, impact resistant walls
- Lockable door with view panel

Environmental Conditions

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- General office supplies, including paper, binders, toner, file folders, etc.
- Storage of small office equipment items (surplus items, etc.)

Furnishings, Fixtures, and Equipment

- Heavy duty open shelving (may be combination of mobile and fixed)
- File cabinets (as needed)
- Ability to store oversized materials

Technology

- Consider adding data drops to allow option of repurposing space in future (this is not planned - however, with a 50-year planning horizon, spaces may be adapted in the future if enrollment grows beyond capacity, or if programmatic needs change).

Electricity

- 120/208 3-phase power
- Power/data to allow option of repurposing to office space in future, if needed (not anticipated)

Administration / Support & Health: Office Storage (continued)

Lighting

- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry
- Secure file storage

Communications N/A

Administration / Support & Health: Mail Delivery & Process Center

Activities and Functions

The mail delivery/process center encompasses:

- Staff mailboxes
- Counter space for sorting mail and preparing shipments
- Storage for mailing supplies

Size and Capacity

See program for square footage guidelines.

Location and Adjacencies

Designers should work with District staff to determine the optimal position for the mail delivery/process center. This space is typically integrated into the workroom or secretarial area. As secretarial staff members distribute the mail, mailboxes must be conveniently positioned for staff to easily place items into boxes. However, the mailboxes should be separated from public access (to the extent that this is feasible) for privacy reasons. The PTO mailbox should always be located separately from the staff mailboxes.

Walls, Windows, Ceilings and Doors

- Typically open to another space (e.g. secretarial area or work room)
- Depending on the positioning of the mail delivery/process center, these items will be worked out during design.

Environmental Conditions

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Sufficient mailboxes for the projected number of staff and teachers working within the facility
- Storage for mailing supplies, boxes, forms

Furnishings, Fixtures, and Equipment

- Counter space for sorting mail and preparing shipments
- All appliances to be Energy Star rated, unless not readily available
- Shelving for mailing supplies

Administration / Support & Health: Mail Delivery & Process Center (continued)

Technology

- Positioned for easy access to a copier (e.g. in adjacent work room)

Electricity

- 120/208 3-phase power
- Data/power outlets (number and placement will be determined during design, based on positioning of room or integration with other space)

Lighting

- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Ensure that mailboxes are positioned within visual access of secretarial staff to allow monitoring of area, ensuring that unauthorized persons are not perusing staff/teacher mail.
- Position PTO mailbox in a separate area from staff mailboxes

Communications

- To be determined during design, based on positioning of room or integration with other space. Easy access to phones, intercom needed.
- Central clock visible from area
- Within hearing access of PA system

Administration / Support & Health: Records Storage

Activities and Functions

This area provides secure storage of student records and other sensitive or confidential information.

Size and Capacity

The records storage room is approximately 200 sf. See program for square footage guidelines.

Location and Adjacencies

- Located in main office
- Located adjacent to secretarial area

Walls, Windows, Ceilings and Doors

- Wall, ceiling, and door to have two-hour fire rating

Environmental Conditions

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Large quantities of paper files containing printed student records
- Confidential materials

Furnishings, Fixtures, and Equipment

- Multiple fireproof file cabinets
- Safe

Technology N/A

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) data drops per room (to provide option of repurposing space in future years, if needed)

Lighting

- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Administration / Support & Health: Records Storage (continued)

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry
- Secure file storage

Communications N/A

Administration / Support & Health: Staff Room with Kitchenette

Activities and Functions

The staff/faculty room serves as the break room for teachers and administrators. Activities include food preparation, food storage, dining, sitting and socializing.

Size and Capacity

The staff lounge room shall accommodate a kitchenette and tables/chairs for informal dining. See program for square footage guidelines.

Location and Adjacencies

- The staff room is positioned within the main office area.
- The room shall be located near staff restrooms.
- Staff room needs to be separate and not easily accessed by parents & volunteers.

Walls, Windows, Ceilings and Doors

- One door leading to administrative office area; may also include an additional doorway leading to a school corridor to allow faculty to access without entering the secretarial area.
- Natural light
- Minimum of one (1) wall with tackable surface for flyers, sign-up forms, announcements, etc.
- Ceiling height of 9'-11'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)

Environmental Conditions

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Effective ventilation to support indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- General kitchen storage needs - utensils, dishes, coffee and filters, paper products, etc.

Furnishings, Fixtures, and Equipment

- One (1) dishwasher
- Microwave in upper cabinets
- Up to three (3) vending machines
- Full-size refrigerator with ice maker
- Coffee maker
- All appliances to be Energy Star rated, unless not readily available

Administration / Support & Health: Staff Room with Kitchenette (continued)

- Tackboards (2)
- White board
- Counter space for food preparation
- Upper and lower storage cabinets along counters
- Pull out drawers under counters
- One (1) 4' white board
- Round tables and chairs
- Flexible seating options

Technology

- Ample outlets and data drops to ensure flexible use of technology
- Wireless Internet access point within range to provide adequate capacity for high-density use

Electricity

- 120/208 3-phase power
- Minimum of three (3) duplex outlets and two (2) data drops per wall
- Dedicated circuits for coffee maker, microwave, full-sized refrigerator, dishwasher, and up to three (3) vending machines
- Wired for technology, as noted above

Lighting

- Natural daylighting (as noted above)
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 30 foot-candles for offices.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- One double sink
- Plumbing for one (1) dishwasher and one (1) refrigerator with ice maker
- Garbage disposal

Administration / Support & Health: Staff Room with Kitchenette (continued)

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry
- Preference for natural daylight must be balanced with the need for privacy in this space.

Communications

- Wired for Voice Over IP
- Intercom
- 8" GPS satellite clock
- Public address (PA) speakers
- Bell system

Administration / Support & Health: Health Room

Activities and Functions

The health room provides examination, treatment and resting space for sick or injured children. Although elementary schools no longer have a dedicated full-time nurse, workspace is needed for the itinerant nurse serving multiple schools. A range of procedures may occur within the health room, including:

- First aid for injuries
- Health screenings
- Lice checks
- Dispensing of medication
- Storage of student health records
- Rest area for sick or injured students
- Area to change out of wet or soiled clothing (extra clothes storage)

Areas within the health room include:

- Nurse work station
- Examination table
- Sufficient space for two (2) cots with divider curtain (similiar to a clinic)
- Storage
- Adjacent ADA accessible unisex restroom

Size and Capacity

The health office must be large enough to accommodate a minimum of two (2) screened cots, as well as an examination area, dedicated ADA accessible unisex restroom and nurse's workstation. The room must be large enough to accommodate a stretcher. See program for square footage guidelines.

Location and Adjacencies

The health office shall be located in the main administrative area. The health room must be positioned so that it can be visually monitored from the secretary's desk, yet protected from public view via the lobby. A small waiting area outside the health room is desired.

Walls, Windows, Ceilings and Doors

- Self-closing door with view panel or side lights
- Privacy curtain between cots
- Ceiling height of 9'-10'
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)

Administration / Support & Health: Health Room (continued)

Environmental Conditions

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Secure file storage for confidential student health records
- Secure refrigerated and non-refrigerated storage for medication
- Clothes closet storage (sized according to need, based on Title I status)

Furnishings, Fixtures, and Equipment

- One (1) desk for nurse's station
- Two (2) tack boards or tackable wall surface
- Lockable medicine cabinet
- Lockable refrigerator for temperature-sensitive medication storage
- Two (2) student cots, separated by privacy curtain
- Biohazard waste disposal
- Mounted hand sanitization station
- Surface-mounted soap dispenser at sink (provided by owner)
- Mountain paper towel dispenser near sink
- Linen closet in restroom
- Built-in, lockable, upper and lower cabinets, as needed
- All appliances to be Energy Star rated, unless not readily available
- One (1) office chair (for nurse's workstation)
- One (1) movable bookcase
- One (1) guest chair
- One (1) 42" lateral secure file cabinet
- Built-in, lockable, upper and lower cabinets, as needed

Technology

- Ample outlets and data drops to ensure flexible use of technology
- One (1) computer workstation with printer
- Wireless Internet access point within range to provide adequate capacity for high-density use
- Data outlets positioned near desk for computer and printer

Administration / Support & Health: Health Room (continued)

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) data drops per wall
- Wired for technology, as noted above

Lighting

- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards. Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- ADA accessible restroom with toilet, sink
- Plumbing for refrigerator/ice maker
- Eye wash

Flooring

- Hard-surfaced flooring - flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

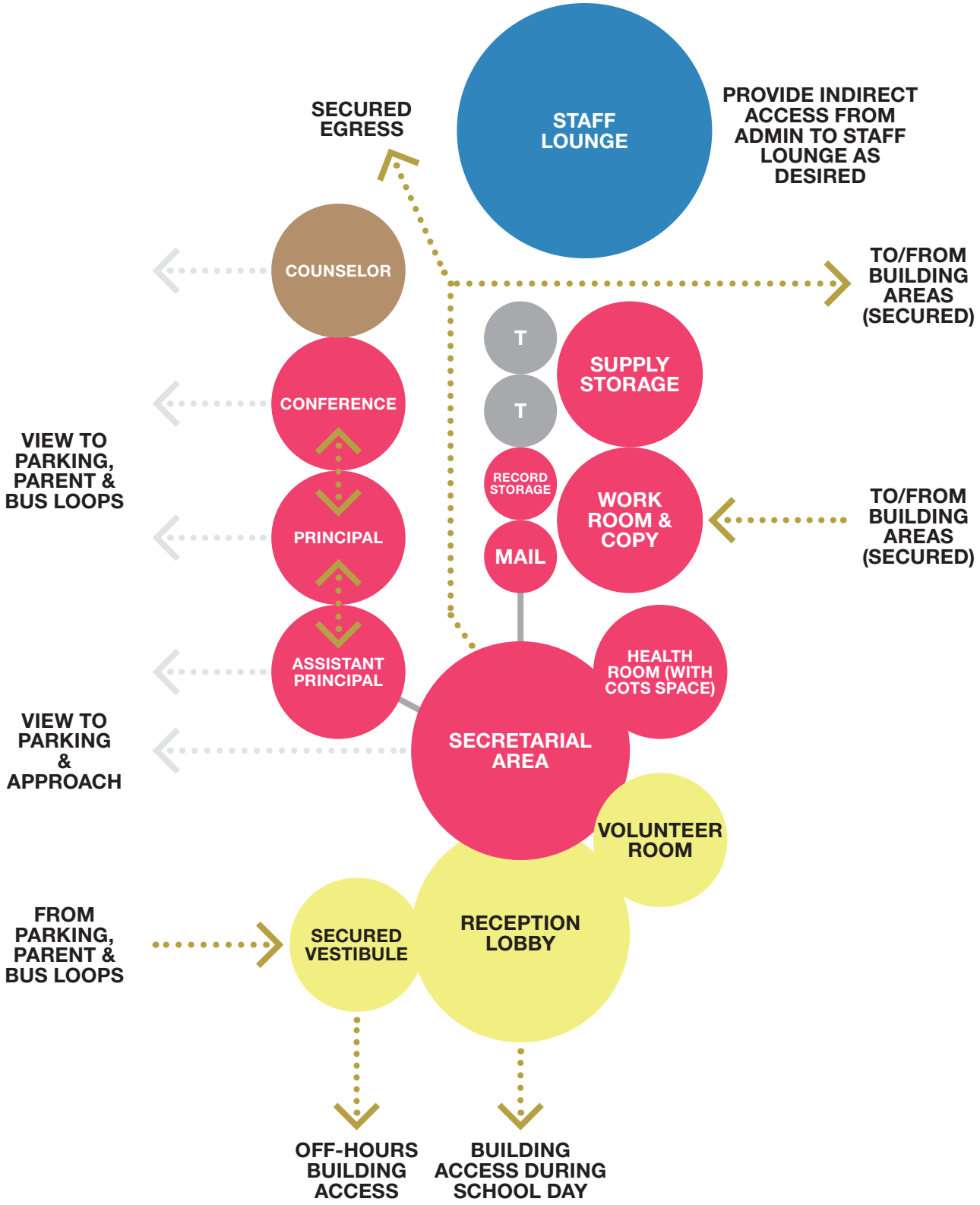
- Coded or keyed entry
- Secure file storage

Communications

- Wired for Voice Over IP
- Intercom
- 8" GPS satellite clock
- Within hearing range of central bell system and PA speakers

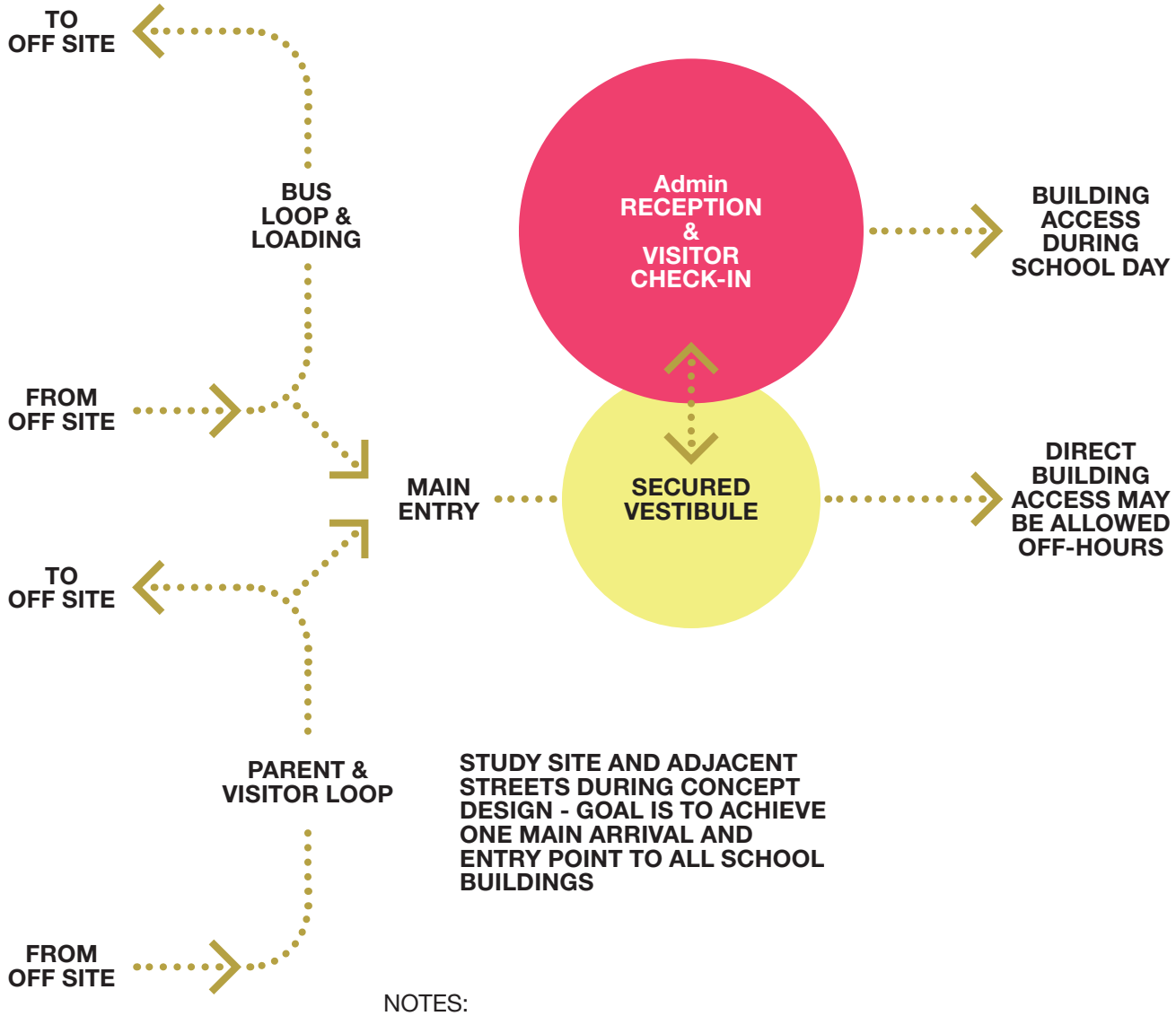
g. Administration / Support & Health + Building Arrival Adjacency Diagrams

Administration / Support & Health



Parent, Visitor and Bus Access

Concept similar at Elementary, Middle and High Schools.



NOTES:

- BUILDING MAIN ENTRY TO BE CLEARLY VISIBLE AND OBVIOUS TO ALL WHEN ARRIVING AT SCHOOLS
- PARENT-VISITOR SECURED VESTIBULE ALLOWS OFF-HOURS BUILDING ACCESS BUT IS LOCKED DURING THE SCHOOL DAY
- BUILDING EGRESS MAY BE ALLOWED THROUGH THE SECURED VESTIBULE DURING THE SCHOOL DAY BUT WITHOUT RE-ENTRY
- PROVIDE SEPARATED BUS AND PARENT LOOPS
- OTHER EXTERIOR DOORS TO BUILDING SECURED DURING SCHOOL DAY

h. Cafeteria / Commons & Food Service Area Program

Beaverton School District New Elementary School

Area Program

Date: May, 2014

Educational Support	# of Teaching Stations	QTY.	S.F. Room	S.F. Total
Cafeteria & Commons				
Cafeteria - Commons		1	3,750	3,750
Chair & Table Storage		1	300	300
Before / After School Care Storage		1	75	75
Restrooms		2	240	480
ADA Accessible Unisex Restroom		1	60	60
Food Service				
Full Prep Kitchen and Workstation		1	2,000	2,000
Staff Restroom with half-high lockers (included in Kitchen S.F. Area)				
Custodian (included in Kitchen S.F. Area)				
Receiving		1	50	50
Total Net Area this Functional Group				**6,715**
See complete Building Program in Section V				

The Area Program above lists the rooms and spaces for this functional grouping within the building. The room narratives which follow provide detailed descriptions and requirements which are unique to each room, space, or area.

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h. Cafeteria / Commons & Food Service Room Narratives

Cafeteria / Commons & Food Service: Cafeteria / Commons

Activities and Functions

The cafeteria accommodates student meals (2-3 meals per day), as well as social activities, presentations and performances. The cafeteria receives frequent community use, and requires placement in the “public” area of the facility.

The cafeteria area includes the following spaces (See program area for square footage):

- Dining Area
- Point-of-Sale (POS)
- Tables and Chairs Storage
- Hand washing stations
- Adjacent student restrooms sharable with gym
- Provide One (1) ADA accessible unisex restroom near gym
- Before/afterschool child care program storage

Size and Capacity

The cafeteria should be designed with maximum flexibility to accommodate future growth. The space must be designed to allow efficient serving, consumption and clean-up of meals - including back-to-back lunch periods encompassing 750 students over 90 minutes or less. The size of the cafeteria to reflect:

- The estimated number of meals served per day
- Desired number of lunch periods (three at elementary level)
- Projected use for assemblies, community events
- Configured for future expansion (e.g. ability to change from a single serving line to a U-shaped line if student capacity increases)

Participation in school meal programs varies by neighborhood and is not directly proportion to the student population. The BSD Administrator for Nutrition Services will work closely with the design team during the programming phase to determine specific needs related to cafeteria and kitchen capacity. Site level involvement of Nutritional Services staff is a critical part of the design process.

Location and Adjacencies

- The cafeteria shall be centrally located and positioned in the “public” area of the school building to facilitate community use (while securing instructional areas, as needed).
- Restrooms should be located adjacent to the cafeteria and gym.
- The cafeteria shall be located adjacent to the kitchen and servery.
- Custodial closet located within easy access.
- Easy access to table/chair storage
- Easy access to before/afterschool child care program storage closet

Cafeteria / Commons & Food Service: Cafeteria / Commons (continued)

Walls, Windows, Ceilings and Doors

- Open design
- Multiple egress points, sets of double doors with outdoor access
- Large operable partition between gym and cafeteria for occasions where larger performance or assembly space is needed.
- Windows with blackout blinds; consider ability to reach blinds or provide motorized shades
- Non-porous, washable surfaces
- 12'-18' ceiling - high enough to ensure fixtures are placed out of students' reach
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)
- Tackable wall surfaces for display of nutritional information and materials, flyers, etc.)
- Kitchen and prep area walls constructed of fiber reinforced panels (FRP) over water (6') over mold-resistant greenboard (sealed seams and joints). Wash area walls equipped with stainless steel panels (6').

Environmental Conditions

- Natural lighting
- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality
- Sound attenuation and the acoustical design of the space are important aspects, enabling socialization/ conversations for students. If the space is to be used for other functions such as performance, the design needs to respond to those potential uses as well.

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Dedicated table/chair storage adjacent to dining area
- Dedicated storage closet for before/afterschool child care program
- Servery equipment that is stationed in the cafeteria for use during meals times needs to be able to be stored and secured outside the cafeteria for off-hours uses (same utilities supply issues as for the serving line).

Furnishings, Fixtures, and Equipment

- Ensure servery equipment is movable for flexible arrangements, as well as ease of cleaning and maintenance.
- Handwashing stations
- Surface-mounted, owner-provided soap and paper towel dispensers at each student hand washing station. Position paper towel dispensers far enough away from sinks to allow multiple students to wash/dry at same time.

Cafeteria / Commons & Food Service: Cafeteria / Commons (continued)

- Food service accessories (e.g. napkin dispensers, condiments, etc.) to be determined by food service consultant.
- All appliances to be Energy Star rated, unless not readily available
- Wireless point-of-sale station (desk/chair with card storage, display and access area)
- Tables and seating to accommodate student capacity; provide hydraulic-assist folding tables with wheels for ease of maintenance
- Two (2) 6' tables for napkins, utensils and condiments

Technology

The cafeteria should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for the commons/cafeteria area. Basic requirements include:

- Wireless Point of Sale station
- Ample outlets and data drops to ensure flexible use of technology
- Wireless Internet access with capacity for high-density use
- Extra-large projection screen and built-in sound system

Electricity

- Three-phase 120/208V power
- Minimum of four (4) duplex outlets and two (2) data drops per wall
- Electrical outlet(s) and data drop(s) in ceiling (see Informational Technology section for additional details)[1]
- Wired for technology, as noted above
- Consider innovative ways to provide power to portable server equipment. There are inherent problems with providing under-floor power and low-voltage utilities to the foodservice stations. Traditional in-floor utilities boxes don't hold up well to maintenance and heavy-duty daily use.

Lighting

- Natural daylighting (as noted above)
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 20-30 foot-candles for cafeterias.
- Flexible lighting (bi-level switching to provide high and low light levels or dimmer switch)
- Vacancy sensors set to turn off at 10 minutes
- May provide special lighting for events

Cafeteria / Commons & Food Service: Cafeteria / Commons (continued)

- Lighting fixtures mounted out of student reach
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- Two student hand washing stations, each with three (3) faucets, as well as mounted soap and paper towel dispensers. Where possible, provide recessed stations in alcoves.

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards. Hard-surfaced flooring typical of cafeteria spaces, such as ground/polished concrete. Avoid colored stains, as they are more likely to show discoloration from food spills.

Security

- Zoned to permit after-hours use

Communications

- Wired for Voice-over IP/Intercom
- 16" satellite GPS clock
- Central bell
- PA speakers

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[1] May serve wireless access point or other purpose. Ceiling-mounted data projectors are not anticipated, as use of this technology is not anticipated long-term. Flexibility is preferred over fixed equipment when planning for technology, as it is continuously changing. See section on Information Technology for additional information.

Cafeteria / Commons & Food Service: Chair & Table Storage

Activities and Functions

This area is a dedicated, secure room for the storage of cafeteria tables, allowing the commons to be used for other purposes when meals are not being served.

Size and Capacity

The room should be sufficiently large to accommodate storage of all cafeteria tables. See program for square footage guidelines.

Location and Adjacencies

- Adjacent to cafeteria/commons

Walls, Windows, Ceilings and Doors

- Secure, double door access
- Durable surfaces

Environmental Conditions

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings,Fixtures and Equipment)

- Sufficient floor space to accommodate all cafeteria tables in folded position

Furnishings, Fixtures and Equipment N/A

Technology N/A

Electricity

- 120/208 3-phase power

Lighting

- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Cafeteria / Commons & Food Service: Chair & Table Storage (continued)

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry

Communications N/A

Cafeteria / Commons & Food Service: Before / After School Care Storage

Activities and Functions

This room provides dedicated storage for the school's before/after school care program. Nearly all of Beaverton's elementary schools include an onsite before/after school program that is hosted in a multipurpose area (e.g. gym or commons). These programs require an area to store supplies and materials during school hours.

Size and Capacity

A small room (75 sf) shall be provided for this space. See program for square footage guidelines.

Location and Adjacencies

The area program assumes that this storage room will be located adjacent to the school commons/cafeteria. However, the room may also be positioned off of the gymnasium, depending on where the school intends to host this program. Designers should work closely with District staff to determine optimal placement of this space, based on the intended location of before/after school services.

Walls, Windows, Ceilings and Doors

- Secure, double doors
- Durable surfaces

Environmental Conditions

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Storage of a variety of educational and recreational materials, such as games, toys, art supplies, books, and other items.

Furnishings, Fixtures, and Equipment

- Flexible storage options preferred over fixed
- Flexible shelving and assorted bins

Technology N/A

Electricity

- 120/208 3-phase power
- Outlet on each wall to provide option of charging equipment during off-hours

Cafeteria / Commons & Food Service: Before / After School Care Storage (continued)

Lighting

- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry

Communications N/A

Cafeteria / Commons & Food Service: Full Prep Kitchen and Workstation

Activities and Functions

The kitchen serves up to three (3) meals per day (breakfast, lunch, and "early supper") in District schools. A base kitchen shall be provided, as food preparation shall occur onsite. Functions include cooking, serving, and point of sale. Room shall be provided for a kitchen workstation, adjacent staff restroom with half-high lockers, as well as staff storage lockers. See program area for square footage guidelines.

Size and Capacity

Approximately 2-5 Nutrition Services staff persons are stationed at each elementary school. The kitchen should be designed to accommodate:

- The estimated number of meals served per day (varies based on free lunch eligibility rates, presence of afterschool programs, and open/closed campus policies)[1]
- Desired number of lunch periods
- All specialized equipment detailed in the BSD Technical Standard, Div 11: Nutrition Services
- Flexible serving area with moveable components to adapt to changing needs
- Servery large enough to queue students effectively, with careful consideration of the placement of the doors, serving line, tray return, and other areas.
- Room for a staff workstation, restroom with staff lockers, and custodial closet.

Location and Adjacencies

The kitchen and cafeteria shall be centrally located and positioned in the "public" area of the school building to facilitate community use (while securing instructional areas, as needed). The kitchen area includes the following spaces:

- Full Kitchen
- Dish Return/warewashing
- Servery
- Dry, Refrigerated, and Frozen Storage
- Breakfast/Snack Cart Parking
- Receiving area/service yard (large capacity truck access for food deliveries - box trucks and possibly semis)[2]
- Adjacent staff restroom/staff lockers
- Staff workstation
- Adjacent custodial closet

The kitchen should have easy access for deliveries

Cafeteria / Commons & Food Service: Full Prep Kitchen and Workstation (continued)

Walls, Windows, Ceilings and Doors

- Washable, non-porous finishes
- Kitchen and prep area walls constructed of fiber reinforced panels (FRP) over water (6') over mold-resistant greenboard (sealed seams and joints). Wash area walls equipped with stainless steel panels (6').
- 48" double doors near building service yard
- Sound insulation according to ANSI Standard S12.60 2002 (or most current edition)
- Exterior doors to truck dock

Environmental Conditions

- Nonporous surfaces (e.g. flooring, counters, and ceilings) designed to support safe and sanitary conditions.
- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality
- Air exhaust to outdoors
- Adjacent restroom and custodial closet must open to a separate atmosphere

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Ample dry, refrigerated and frozen storage. Refrigerated and frozen storage needs are greater than dry storage needs (refer to BSD Technical Standard, Div 11: Nutrition Services
- For specific requirements). District does not have a central food warehouse - there are significant local storage needs at school kitchens within the district.
- Built-in storage for dishes, cutlery, pots/pans, serving dishes, small appliances
- Secure storage for appliances, utensils and chemical cleaning products that may be hazardous if accessed by students
- Secure file storage near work area

Furnishings, Fixtures, and Equipment

Note: The following equipment list is only an approximation - a foodservice design consultant will need to conduct one or more focus group sessions with Nutrition Services during the school design process, and provide final recommendations on the FF&E needs of the kitchen at that time.

- Commercial dishwasher with conveyor system and chemical system and booster heater
- Two (2) double-stack ovens
- Microwave oven
- Jacketed kettle
- Locker storage for kitchen staff (number of lockers site-based decision based on number of staff)

Cafeteria / Commons & Food Service: Full Prep Kitchen and Workstation (continued)

- Walk-in freezer with metal shelving
- Walk-in cooler with metal shelving
- Reach-in (free-standing) cooler
- 16-crate milk cooler
- 8-crate milk cooler
- Up to six (6) mobile service line units (possibly additional snack units in future)
- Two salad bars
- One (6) elementary-height condiment bar
- Two hot cabinets
- One (1) Point of Sale (POS) system
- Minimum of eight (8) crowd control stanchions
- Two (2) 50-gallon garbage and two (2) 50-gallon recycling units
- Half-height lockers for kitchen staff to store personal belongings

See *BSD Technical Standard, Div 11: Nutrition Services* for a full list of fixtures and equipment.

- All appliances to be Energy Star rated, unless not readily available
- Desk, office chair, secure filing cabinet in work area (within main kitchen - a separate kitchen office is not provided at the elementary level)
- Stainless steel (food service grade) work tables with drawers and shelving in food prep area

Technology

- Wireless Internet access point within range to provide adequate capacity for high-density use
- Wireless point-of-sale (POS)
- One (1) computer workstation in office

Electricity

- Three Phase 120/208V power
- Electricity sized for expansion - particularly for the addition of a second free-standing cooler or freezer in the future
- Dedicated circuits may be required for walk-in cooler, freezer, dishwasher, and other large equipment items (Note: electrical requirements to be confirmed with kitchen design consultant)
- Ample electrical outlets for small countertop appliances
- Oven exhaust hoods/cooking hoods, dishwasher exhaust hoods
- Consider options for mid-floor power in servery for portable warmer/cooler units

Cafeteria / Commons & Food Service: Full Prep Kitchen and Workstation (continued)

- Minimum of two (2) duplex outlets and two (2) data drops per wall, including near workstation
- Refrigerator/freezer on emergency generator
- Wired for technology, as noted above
- Coordinate with design of emergency generator to ensure that adequate power is available for the critical kitchen equipment

Lighting

- Natural daylighting (as noted above)
- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 75 foot-candles for kitchen/food prep areas.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- Adequate hand-washing sinks for kitchen staff, per code, to be located during design (separate from culinary food-prep sinks). Sink number and placement according to code.
- Two-compartment deep sinks to allow three-step wash with indirect drains with air gap
- Garbage disposals in dishwashing area and culinary sinks
- Washroom behind kitchen for cleaning and hanging mats (wash station, pressure wash equipment, area to hang mats)
- Ovens require water connection and floor drain
- Adjacent custodial closet with mop sink and chemical dispensing unit (must open to separate atmosphere, remote from prep areas)
- Hot water system
- Floor troughs/floor drain
- Water and electric for ice machine. Ice machine should be located in an area that is accessible by kitchen staff, yet available for after-hours community use (when kitchen is secured)
- One (1) employee restroom (must open to separate atmosphere, remote from prep areas)
- Grease trap (required by health department)

Flooring

- Hard surfaced, non-slip flooring (refer to District standards - Altro Designer 23 Safety Flooring recommended)

Cafeteria / Commons & Food Service: Full Prep Kitchen and Workstation (continued)

Security

- Kitchen requires visual and physical supervision of servery
- Kitchen and serving area should be designed so that they may be secured when food is not being served
- Lockable storage
- Fire extinguisher
- Coded or keyed entry. Kitchen and serving area should be designed so that they may be secured when food is not being served.

Communications

- Wired for Voice Over IP
- Intercom
- 12” GPS satellite clock
- Public address (PA) speakers
- Bell system

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[1] The school will provide after-school meal service if over 50% of student body is free or reduced-lunch eligible. May also be provided if after school programs require.

[2] See BSD Technical Standard, Div 32: Grounds and Exterior Improvements for service yard design information

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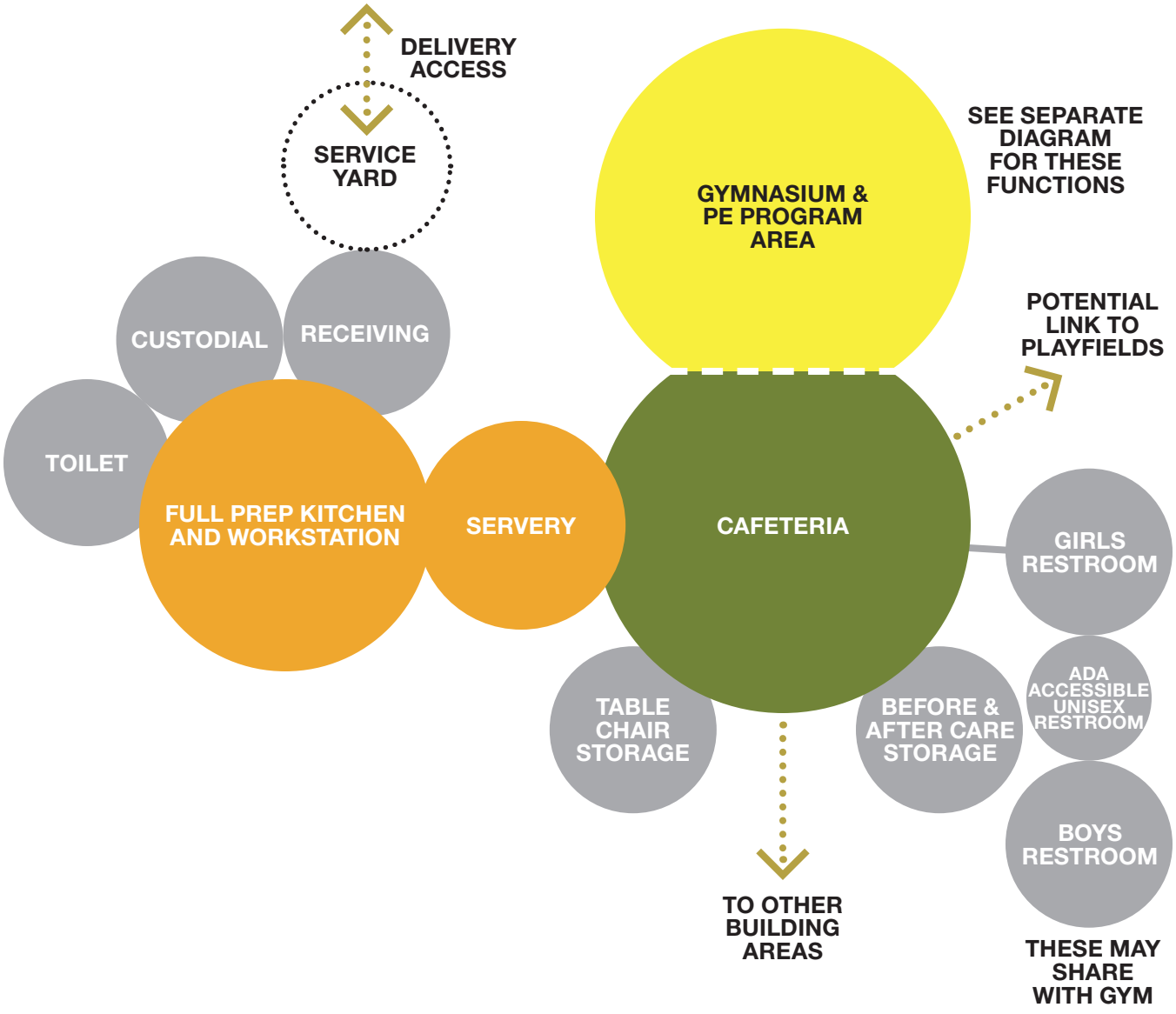
h. Cafeteria / Commons & Food Service Adjacency Diagram



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i. Building Support Area Program

Beaverton School District New Elementary School

Area Program

Date: May, 2014

Building Support	# of Teaching Stations	QTY.	S.F. Room	S.F. Total
Custodial / Restrooms / Technologies				
Custodial Office		1	120	120
Distributed Custodial Closets		4	75	300
Distributed IDF Rooms		4	50	200
MDF Room		1	200	200
Distributed Staff Restrooms		4	60	240
Distributed Student Restrooms		8	240	1,920
General Building Storage		1	500	500
Custodial Supplies Central Storage		1	100	100
Receiving Area		1	100	100
Kiln Room		1	100	100
Boiler & Mechanical		1	1,000	1,000
Main Electrical Rooms		1	300	300
Sub Electrical Rooms		2	75	150
Riser Room		1	80	80
Elevator (Assume 1)		1	120	120
Elevator Equipment		1	80	80
Mechanical Fan Rooms		TBD	TBD	TBD
Total Net Area this Functional Group				**5,510**
See complete Building Program in Section V				

The Area Program above lists the rooms and spaces for this functional grouping within the building. The room narratives which follow provide detailed descriptions and requirements which are unique to each room, space, or area.

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i. Building Support Room Narratives

Building Support: Custodial Office

Activities and Functions

The custodial office provides a workstation for custodial staff to monitor and record building data, organize service tickets, and access email. The office is used by multiple custodians over the course of day and evening shifts.

Size and Capacity

One (1) custodial office will be provided for each elementary school. See program for square footage guidelines.

Location and Adjacencies

- The custodial office should be located near the building's shipping and receiving area, ideally near the main equipment room.
- Proximity to the cafeteria, HVAC system, and loading docks is beneficial.

Walls, Windows, Ceilings and Doors

- Self-closing door with view panel or side lights
- Interior window

Environmental Conditions

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Shelving for product and systems manuals
- Four file cabinets (two per workstation)
- Convenient to custodial supplies central storage room

Furnishings, Fixtures, and Equipment

- One (1) standard office desk with chair
- One (1) smaller workstation with chair
- One (1) bookcase for printed manuals
- Four (4) lateral file cabinets (as noted above)
- Larger table for plans

Building Support: Custodial Office (continued)

Technology

Offices should be technologically wired, organized and equipped according to *BSD's Technical Standards, Division 27*. Please refer to the Informational Technology section of this document for additional information on the baseline technological standards for offices. Basic requirements include:

- Room should be proactively wired to ensure flexible and adaptable use of technology
- Wireless Internet access point within range
- Provide power and data to support workstations
- Printer required

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets and two (2) data drops per wall
- Wired for technology, as noted above
- Charging station for radio handsets

Lighting

- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards, including an average, maintained (horizontal) 30 foot-candles for offices.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Hard surface flooring - may include VCT, ceramic or terrazzo tile, linoleum, or stained concrete

Security

- Coded or keyed entry
- Secure file storage

Communications

- Wired for Voice Over IP
- Intercom
- Radio handsets for custodial / grounds (with charging station)
- 8" GPS satellite clock
- Within hearing range of central bell system and PA speakers

Building Support: Distributed Custodial Closets

Activities and Functions

Distributed Custodial Closets provide secure storage area for cleaning and maintenance supplies, equipment and tools.

Size and Capacity

A typical 750-student elementary school will include four (4) standard distributed custodial closets spread throughout the building. See program for square footage guidelines.

Location and Adjacencies

Distributed custodial closets should be dispersed throughout the building, providing adequate coverage. Desired adjacencies include:

- In close proximity to restrooms
- Near kitchen and commons
- Close to community use areas, such as the gymnasium
- Close to SPED classrooms

If the school is a multi-story building, distributed custodial closets are needed on each floor.

Walls, Windows, Ceilings and Doors

- Washable paint on walls
- Durable wainscoting on walls near sink
- Securable windowless door

Environmental Conditions

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality
- Exhaust fan vented to outside

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Ample adjustable, open shelving is preferred over cabinets by custodial staff
- Adequate storage space for buffing equipment

Furnishings, Fixtures, and Equipment

- Eye wash station
- Low-height or floor sink

Building Support: Distributed Custodial Closets (continued)

- Floor scrubber equipment and charging station
- Carpet extractor (if school is carpeted)
- “Ship ladder” roof access

Technology N/A

Electricity

- 120/208 3-phase power
- Minimum of two (2) duplex outlets per wall
- Floor scrubber charging station

Lighting

- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- Eye wash station
- Low-level or floor sink with plumbing for cleaning chemicals

Flooring

- Hard surface flooring - stained concrete preferred by custodial staff. Flooring type will be a site-based decision, to be determined during the deign process, based on the District’s facilities standards. Stained concrete is preferred by custodial staff.

Security

- Coded or keyed entry
- Secure storage (such as a lockable cabinet) for storage of chemical cleaners that may be hazardous if accessed by students
- Secured and accessible only by authorized personnel

Communications N/A

Building Support: Distributed IDF Rooms

Activities and Functions

These spaces are wiring closets serving all areas of the school building.

Size and Capacity

A minimum of four (4) wiring closets per elementary school shall be provided. Distributed IDF Rooms should be generously sized, providing ample room for changing equipment needs. See BSD's Technical Design Standard, Division 27: Comm. for detailed requirements.

Location and Adjacencies

Location of wiring closets to be determined during design process. The design team should work closely with IT staff in positioning the distributed IDF rooms within the facility. No more than 270' between wiring closets.

Walls, Windows, Ceilings and Doors

- Self-closing, lockable door that is secured and accessible only by authorized personnel
- Sound insulation
- "Equipment Room" sign mounted on door (for security purposes - general label avoids alerting potential intruder of the location of critical technological and communications systems)

Environmental Conditions

- Environmentally controlled environment with ability to maintain appropriate temperature and humidity levels for the proper functioning and maintenance of technological equipment
- Adequate ventilation for indoor air quality
- Requires standalone HVAC

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Free standing racks
- Space to permit easy maintenance of different equipment items stored within closet

Furnishings, Fixtures, and Equipment

- Free-standing racks with a minimum of three (3) feet of space around all sides (to allow easy access to all equipment)

Technology

- Ability to connect laptop to network
- Wireless Internet access

Building Support: Distributed IDF Rooms (continued)

Electricity

- Dedicated power
- Ample wall outlets
- On emergency generator
- Standalone HVAC

Lighting

- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry
- Secured and accessible only by authorized personnel
- "Equipment Room" sign mounted on door (for security purposes - general label avoids alerting potential intruder of the location of critical technological and communications systems)

Communications N/A

Building Support: MDF Room

Activities and Functions

The Main Distribution Frame (MDF) Room connects and manages the telecommunications wiring, connecting to individual Distributed IDF Rooms.

Size and Capacity

One (1) MDF per elementary school shall be provided.

Location and Adjacencies

The design team should work closely with IT staff in positioning the MDF and Distributed IDF Rooms within the facility.

Walls, Windows, Ceilings and Doors

- Self-closing, lockable door that is secured and accessible only by authorized personnel
- Sound insulation
- “Equipment Room” sign mounted on door (for security purposes - general label avoids alerting potential intruder of the location of critical technological and communications systems)

Environmental Conditions

- Standalone system to provide environmentally controlled environment with ability to maintain appropriate temperature and humidity levels for the proper functioning and maintenance of technological equipment
- Adequate ventilation for indoor air quality

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, and Equipment)

- Free standing racks
- Space to permit easy maintenance of different equipment items stored within closet

Furnishings, Fixtures, and Equipment

- Free-standing racks with a minimum of three (3) feet of space around all sides (to allow easy access to all equipment)

Technology

- One (1) computer workstation with printer (to allow local printing of confidential information)
- Wireless Internet access

Building Support: MDF Room (continued)

Electricity

- Dedicated power
- Ample wall outlets
- On emergency generator

Lighting

- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards.
- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry
- Secured and accessible only by authorized personnel
- "Equipment Room" sign mounted on door (for security purposes - general label avoids alerting potential intruder of the location of critical technological and communications systems)

Communications N/A

Building Support: Distributed Staff Restrooms

Activities and Functions

Dedicated men's and women's restrooms for use by staff members and teachers. The restroom shall be well-designed using attractive, high-quality materials.

Size and Capacity

The number of restrooms will be dictated by building codes. It is anticipated that one (1) set of distributed staff restrooms will be provided in or near the main office, and additional staff restrooms will be distributed among the classrooms areas for teachers. See program for square footage guidelines.

Location and Adjacencies

- A set of distributed staff restrooms should be located near the administrative office area.
- Additional staff restrooms should be dispersed among academic areas, to provide convenient access by teachers.
- Place restrooms to optimize staff access.
- Avoid situating staff restrooms in area where queuing outside the door would be undesirable.
- The restrooms should be in close proximity to a custodial closet.

Walls, Windows, Ceilings and Doors

- Non-porous surfaces wherever possible
- Washable paint on walls
- Protected wall surfaces - durable wainscot to extend a minimum of 6' up restroom walls
- Anti-graffiti products commensurate with surface material
- Self-closing door with privacy lock
- Sound insulation

Environmental Conditions

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality
- Exhaust fan vented to outside

Storage (General Needs - Specific Requirements Listed under Furnishings, Fixtures, Equipment)

- In-room storage for paper supplies

Building Support: Distributed Staff Restrooms (continued)

Furnishings, Fixtures, and Equipment

- Individual shatterproof vanity mirror above sink
- Fixtures (toilets, sinks, etc.) to code (minimum of one ADA compliant unit per restroom)
- Sanitary supplies dispenser in women's restroom
- Surface-mounted, owner-provided soap and paper towel dispenser
- Trash receptacle

Technology N/A

Electricity

- 120/208 3-phase power
- One(1) duplex outlet above sink / counter area; additional duplex outlet on wall with door

Lighting

- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards - 20-30 foot-candles for restrooms.
- Multi-stall restrooms should be equipped with ultrasonic technology sensors to detect movement inside stalls and around corners. Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- One (1) hand washing sink per restroom with hot/cold water
- One (1) standard wall-mounted toilet and stall and one (1) ADA accessible toilet and stall in women's restroom
- One (1) ADA accessible toilet and stall and one (1) urinal in men's restroom
- Floor drain

Flooring

- Custodial staff prefers stained concrete over traditional tiled flooring in restrooms. This will be a site-based decision.

Security N/A

Communications

- Public address (PA) system

Building Support: Distributed Student Restrooms

Activities and Functions

Restrooms for K-5 student use. The restrooms shall be well-designed using attractive, high-quality materials.

Size and Capacity

The number of restrooms will be dictated by building codes. See program for square footage guidelines.

Although the area program lists all distributed student restrooms at the same size, actual restroom size may vary based on location and projected demand. For example, restrooms near areas receiving frequent community use (e.g. commons, gymnasium) will be designed as larger than restrooms situated among classrooms.

Location and Adjacencies

- Restrooms should be positioned near classroom areas and commons areas.
- A pair of restrooms should be located adjacent to the gymnasium and cafeteria. shared by both spaces.
- Custodial closet within proximity of each restroom
- Locate restrooms near areas that have a natural auditory surveillance, when possible (e.g. main corridors, offices)
- Place restrooms near areas used for recreation

Walls, Windows, Ceilings and Doors

- No doors at restroom entry/exit point for non-unisex restrooms (to provide auditory supervision); staggered walls for privacy
- Non-porous surfaces wherever possible
- Washable paint on walls
- Protected wall surfaces - durable wainscot to extend a minimum of 6’ up restroom walls
- Anti-graffiti products commensurate with surface material
- Sound insulation

Environmental Conditions

- Ability to maintain temperature of 68-78 degrees when occupied (heating to 68-72 degrees; cooling to 75-78 degrees; unoccupied at 55 degrees)
- Adequate ventilation for indoor air quality
- Exhaust fan vented to outside

Building Support: Distributed Student Restrooms (continued)

Storage (General Needs - Specific Requirements Listed under Furnishing, Fixtures and Equipment) N/A

Furnishings, Fixtures, and Equipment

Restroom fixture count will be determined by code and divided up among the programmed spaces.

- Individual mirrors mounted over each sink (instead of one long mirror)
- Hand washing sinks
- Toilet paper roll dispensers in each stall
- Toilet partitions to code (including one ADA compliant unit per restroom)
- Urinals in boys' restrooms to code
- Surface-mounted, owner-provided soap and paper towel dispensers
- Trash receptacle
- All appliances to be Energy Star rated, unless not readily available

Technology N/A

Electricity

- 120/208 3-phase power
- One(1) duplex outlet above sink/counter area; additional duplex outlet on opposite wall

Lighting

- Provide light levels in compliance with Illumination Engineering Society of North America (IESNA) guidelines and NFPA 101 standards - 20-30 foot-candles for restrooms.
- Multi-stall restrooms should be equipped with ultrasonic technology sensors to detect movement inside stalls and around corners. Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing

- Hand washing sinks (to code) with hot/cold water - mounted at a height that is appropriate to the elementary-aged student population.
- In girls' restrooms, wall-mounted toilets and stalls (to code), including one (1) ADA accessible toilet and stall. Toilets should elementary sized.
- In boys' restrooms, wall-mounted toilet and stall/urinals (to code), including one (1) ADA accessible toilet and stall. Toilets and urinals should be elementary sized.
- Floor drain

Building Support: Distributed Student Restrooms (continued)

Flooring

- Custodial staff prefers stained concrete over traditional ceramic tile in restrooms. This will be a site-based decision.

Security

- Shatterproof mirrors (small individual mirrors over sinks, rather than one long mirror)
- Locate restrooms near areas that provide natural auditory surveillance
- Vandalism-resistant and impact-resistant materials
- Interior maze-type entry design to allow for auditory surveillance from hallway
- Avoid finishes that allow access to the ceiling area (such as ceiling tiles) to prevent hiding of contraband materials

Communications

- Public address (PA) system
- Bell system

Building Support: Kiln Room

Activities and Functions

The kiln room provides a dedicated, enclosed space for firing and storing ceramic art projects.

Size and Capacity

The kiln room is similar in size to a typical office (approximately 100 sf). See program for square footage guidelines.

Location and Adjacencies

- The kiln room should be located such that it is convenient for use by all teachers

Walls, Windows, Ceilings and Doors

- Indicator lights signifying when kiln room is in use
- Durable walls
- Ensure proper setbacks of kiln from walls; current code requires 1-hour construction

Environmental Conditions

- Kilns generate significant heat and fumes when in use. Standalone HVAC is needed with venting for kiln to outside.

Storage (General Needs - Specific Requirements Listed under Furnishing, Fixtures and Equipment)

- Short-term in-room storage of projects
- Supplies related to firing and glazing activities

Furnishings, Fixtures, and Equipment

- One (1) large kiln minimum; confirm exact size and if multiple kilns are desired during building design
- Heavy-duty, adjustable deep shelving; wire-type rack shelving may be desired

Technology N/A

Electricity

- 120/208 3-phase power (ensure that kiln is designed to run on this voltage)
- Sufficient power for operation of kiln

Building Support: Kiln Room (continued)

Lighting

- Vacancy sensors set to turn off at 10 minutes
- See *BSD Technical Standard, Div 26: Electrical* for detailed requirements.

Plumbing N/A

Flooring

- Room must have non-combustible flooring such as concrete or ceramic tile. Flooring type will be a site-based decision, to be determined during the design process, based on the District's facilities standards.

Security

- Coded or keyed entry
- Ensure that kiln room meets all applicable fire codes (sprinkler system requirements, etc.)
- Provide smoke and heat detectors wall or ceiling-mounted high in the space

Communications N/A

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Adjacency Diagrams Legends

General Legend

(Applies to Elementary School, Middle School and High School Diagrams)

Rooms

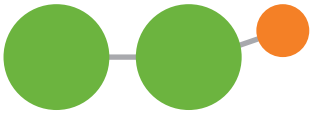
Rooms or spaces immediately adjacent and sharing one or more common walls.

Interconnected

Rooms or spaces with direct access between or through one or both spaces.

Subdivided

Room or space that is dividable.



Suite or Cluster

Individual rooms grouped together but not interconnected. (May share common circulation pathways)

Adjacent

Individual rooms or functional groups proximate to one another but not interconnected or adjoining

Primary Circulation

Primary circulation pathway between spaces or building areas.

Notes:

1. Diagrams do not represent rooms/spaces to scale, and are not floor plan layouts.
2. Adjacencies may be modified as building designs develop.
3. Not every programmed space is included - Diagram are to show generalized groupings of functional areas.

Color Code

(Applies to Elementary School, Middle School and High School Diagrams)

- Academics
- Science & Technology Instruction (Includes Computer & Flex Labs)
- Extended Learning (Includes Enclosed Flex Learning)
- Media Center
- Visual & Performing Arts
- Physical Education - Activities Spaces
- Specialized Learning Programs
- Counseling, Careers, Student Support Spaces
- Cafeteria
- Food Service
- Administration (All Functions Including Health/Nurse)
- Program & Building Support (Storage/Restrooms)
- Teacher Instructional - Related
- Public & Visitor

V

Elementary School Complete Area Program

Overall Area Program

Beaverton School District New Elementary School

Area Program

Date: May, 2014

Building Summary	# of Teaching Stations	Total Area
Core Academics Programs	30	59,827
Educational Support		9,940
Building Support		5,510
SUBTOTAL		75,277
NET TO GROSS RATIO OF 30%		22,583
TOTAL GROSS SQUARE FEET		97,860
Teaching Stations Derived by Capacity (See Note #1)	30	
Total Indicated Teaching Stations	30	
Gross square feet per student		130

Notes:

1. Program based on Grade Levels K-5 and 750 student capacity @25 students per classroom
2. Net to gross ratio captures circulation, stairways, wall thickness, mechanical chases, etc.
3. Program assumes all-day kindergarten with 5 kinder classrooms & related spaces
4. Distributed program area such as for restrooms will be assigned as the building is designed. Final room size for multi-fixture restrooms will match with anticipated intensity of use. For example, restrooms near higher-capacity functions such as a Cafeteria-Commons space will be larger.
5. Programmed storage areas within a functional group can also be subdivided as desired during the building design process.
6. The covered play structure will be designed to shelter a 10,000 SF area. Because the construction cost is significantly less than for enclosed building area, the SF area reflected in the calculation of the total building area is half of this number, or 5,000 SF.

Academics Area Program

Beaverton School District New Elementary School

Area Program

Date: May, 2014

Academics Programs	# of Teaching Stations	QTY.	S.F. Room	S.F. Total
a. Kindergarten				
Kindergarten Classrooms	5	5	1,100	5,500
Kindergarten Commons / Flex Space		2	400	800
Kindergarten Restrooms		5	50	250
b. Grade 1-5 Classrooms				
General Classrooms	25	25	950	23,750
Flex Commons - Multiuse Area / Alcoves		5	500	2,500
Flex Teacher Planning & Conference Rooms		5	150	750
Neighborhood Workroom		1	250	250
ELL Classroom		1	950	950
Computer Lab (Locate near Classrooms)		1	1,000	1,000
c. Media Center: Library / Media Center				
Library / Media Center		1	3,000	3,000
Library / Media Center Workroom		1	200	200
Library / Media Office		1	100	300
Computer Lab		1	1,000	1,000
c. Music				
Music Room		1	1,200	1,200
Music Storage Room		1	250	250
d. Specialized Programs				
Resource Classroom		1	950	950
Specialized Program Classroom		2	1,200	2,400
Multi-Use Room		2	250	500
Shared SPED Office		1	250	250
Flex Conference Room		1	200	200
Psychologist Office		1	120	120
Speech Office		1	120	120
ADA Restroom with Shower		1	100	100
Seclusion Room		1	67	67

Academics Area Program

Beaverton School District New Elementary School

Area Program

Date: May, 2014

Academics Programs	# of Teaching Stations	QTY.	S.F. Room	S.F. Total
e. Physical Education				
Gymnasium		1	6,700	6,700
Instructor's Office		1	120	120
Stage		1	900	900
Stage Storage		1	200	200
PE Storage Room		1	400	400
Chair Cart Storage Room		1	150	150
Outdoor PE Storage		1	150	150
Covered Play @50% of Program Area (See Section VI: Outdoor Fields)		1	5,000	5,000
Total Net Area This Functional Group	**30**			**59,827**

Educational Support Area Program

Beaverton School District New Elementary School

Area Program

Date: May, 2014

Educational Support	# of Teaching Stations	QTY.	S.F. Room	S.F. Total
f. Administration				
Entry / Reception / Lobby (includes Secretarial Area)		1	600	600
Principal's Office		1	180	180
Assistant Principal's Office		1	120	120
Volunteer Room		1	150	150
Conference Room		1	220	220
Counselor's Room		1	150	150
Administration Support Areas				
Workroom & Copy		1	400	400
Office Storage		1	75	75
Mail Delivery & Process Center		1	50	50
Records Storage		1	200	200
Staff Lounge with Kitchenette		1	750	750
Staff Restroom		2	60	120
Health				
Health Room		1	150	150
ADA Accessible Unisex Restroom		1	60	60
g. Cafeteria & Commons				
Cafeteria - Commons		1	3,750	3,750
Chair & Table Storage		1	300	300
Before / After School Care Storage		1	75	75
Restrooms		2	240	480
ADA Accessible Unisex Restroom		1	60	60
Food Service				
Full Prep Kitchen and Workstation		1	2,000	2,000
Staff Restroom with half-high lockers (included in Kitchen S.F. Area)				
Custodian (included in Kitchen S.F. Area)				
Receiving		1	50	50
Total Net Area This Functional Group	**0**			**9,940**

Building Support Area Program

Beaverton School District New Elementary School

Area Program

Date: May, 2014

Building Support	# of Teaching Stations	QTY.	S.F. Room	S.F. Total
h. Custodial / Restrooms / Technologies				
Custodial Office		1	120	120
Distributed Custodial Closets		4	75	300
Distributed IDF Rooms		4	50	200
MDF Room		1	200	200
Distributed Staff Restrooms		4	60	240
Distributed Student Restrooms		8	240	1,920
General Building Storage		1	500	500
Custodial Supplies Central Storage		1	100	100
Receiving Area		1	100	100
Kiln Room		1	100	100
Boiler & Mechanical		1	1,000	1,000
Main Electrical Rooms		1	300	300
Sub Electrical Rooms		2	75	150
Riser Room		1	80	80
Elevator (Assume 1)		1	120	120
Elevator Equipment		1	80	80
Mechanical Fan Rooms		TBD	TBD	TBD
Total Net Area This Functional Group	**0**			**5,510**

Miscellaneous Elements Area Program

Beaverton School District New Elementary School

Area Program

Date: May, 2014

Miscellaneous Elements	QTY.
Site Development Program	
On-Site Parking (Per Current Code Including ADA)	64
Bus Loading Capacity	12
SPED Bus Loading	4
Bike Parking (Per Current Code)	83
Enclosed Service Yard	1
Playing Fields & Courts	
Multi-Use Playfield	1
Soccer-Multipurpose Fields	1
Hard Surface Play Area	5,000 S.F.
Covered Play Area (see PE Program)	10,000 S.F.
Outdoor Learning Area Size TBD	TBD
Soft-Surface Play Area(s)	TBD
Paved Walking / Running Path (to be designed with site planning)	1

VI Items for Consideration During Building Design

Potential Additional Project Scope

The following list summarizes requests from focus group and/or oversight committee members that are not reflected in the current area programs or space narratives. These "optional" features should be revisited during the elementary design process, on a case-by-case basis, if space needs or funding scenarios change.

Parent / Community Rooms

- Multiple groups and committees discussed the importance of having dedicated spaces in schools for parent volunteers and community members. Although there is a general agreement that these types of spaces are beneficial, providing such spaces must be secondary to meeting the basic educational, administrative and support needs of school operations. Early versions of the area programs included more generous allotments for parent/community rooms; some of these were subsequently curtailed in order to provide sufficient teaching stations, meeting rooms and administrative offices. Parent/community support areas should be revisited during design to determine if the allocated spaces are sufficient for the needs of the local community.

P.E./ Athletic Spaces

- As noted in the space narratives for elementary schools, a large multipurpose room was desired for P.E. classes as well as various school-wide activities (e.g. "in-house field trips" where OMSI visits for the day). Although this space was provided in an earlier version of the area program, it was subsequently eliminated in order to provide necessary space for Special Education classrooms and support areas. If spatial needs or funding scenarios change, this space should be reconsidered for inclusion. A description of the proposed room (as it was envisioned by focus group and committee members) appears in the space narratives under the Physical Education section for elementary schools.

Potential Additional Project Scope (continued)

- Artificial turf fields were requested by P.E. instructors at all school types, including at the elementary level. P.E. instructors and coaches feel strongly that grass playing fields are inherently inadequate for local climate conditions; schools are left with soggy fields that are virtually unusable much of the year. Ideally, P.E. instructors and ADs wish that all fields (at all school types) were artificial turf. Due to budget restrictions, the final area programs only provide one (1) artificial turf football field for each high school; only grass fields will be provided at elementary and middle schools. Design teams may wish to revisit these discussions at a later time, as the initial and life-cycle costs of artificial turf will inevitably change.

Special Education

- A separate, enclosed exterior playground for SPED was requested at the elementary level. As this was a “desired” (vs. required) resource, it is not included in the final area program. However, it may be considered during design.
- SPED teachers requested access to a large storage room for supplies, equipment, etc. For the purposes of the Ed Specs, it was assumed that SPED teachers would utilize in-class storage. Budget/space permitting, the addition of a large SPED storage room may be considered during design.

Meeting Rooms

- A reoccurring theme throughout the focus group and committee sessions was a critical need for private meeting space at all facilities. Many focus group/oversight committee members envisioned schools having a variety of smaller meeting rooms interspersed throughout the facility. These would be enclosed, private spaces where sensitive materials could be displayed on the walls, etc. SPED teachers also requested such areas for IEP meetings. Earlier versions of the elementary area programs included more flex meeting rooms than the final versions - some of these areas were cut to provide additional classroom space. Designers should work closely with

Potential Additional Project Scope (continued)

District staff to confirm the number, size and location of meeting rooms.

Music Program Spaces

- Focus group members suggested that the elementary music room should be approximately the size of 1½ classrooms (with separate seating and movement areas) or possibly even two (2) rooms. The elementary music focus group expressed that Opportunity to Learn standards recommend 1.5 music teachers for an elementary school with 600-800 students, and 2 music teachers for 800+ students. Two music teachers would necessitate two music rooms. A large elementary school may be challenged to provide students with adequate instructional time with only one music room. The final area program includes one (1) elementary music room at 1,200 square feet - only slightly larger than a typical classroom. The Oversight Committee felt that a room of this size would be sufficient to support the elementary music program. The size of the elementary music room may be subject to further consideration during design if space needs change.

Library Spaces

- The library focus group felt it would be beneficial to have a separate space for a parent/professional library. At the elementary level, this space would be inaccessible by students (due to possible mature subject matter). The current area program does not include such a space. However, this idea may be revisited during design, at the discretion of the District.

Considerations for Primary Circulation Areas

Although corridors and circulation areas are not specifically addressed in the room narratives, there are important considerations when designing such spaces. Effective corridor designs enhance a school's aesthetics, promote wayfinding, ease transitions between spaces, provide display areas, and augment school security. Some considerations when designing corridors are summarized below:

- Elementary schools should be organized to minimize transitions, ensuring that key areas (such as the library, commons and gymnasium) are centrally located and have a natural "flow." This configuration also allows the school to limit access to instructional areas during after-hours community use.
- Corridors should be designed sufficiently wide to prevent bottlenecks during transitions and emergency evacuations. Elementary instructors report that many schools have egress issues during fire drills - a condition that is exacerbated by larger class sizes. The success of displaying student work in hallways is also driven by hallway width. New buildings should include adequately sized egress pathways. Designers should avoid the use of brick in corridors, as it is a difficult display surface and tends to scratch students when they are pushed alongside the wall.
- Corridors should include ample display areas for student work. Elementary teachers use hallway displays to showcase class projects and curriculum themes. In this manner, corridor displays are a point of pride for students. They also are a communication tool to parents and visitors on recent class activities. Built-in display cases are not as user-friendly as providing large areas of tackable wall surface.
- Corridor designs should facilitate transitioning between public and restricted areas and provide effective wayfinding for students and visitors. They should be designed as aesthetically pleasing with ample natural daylighitng.

Outdoor Fields and Spaces

Elementary schools will include the following playing fields and courts:

- One (1) multiuse playing field
- One (1) soccer/multipurpose field
- Open (non-covered) hard-surfaced play area of 5,000 sf
- Covered, hard-surfaced play area of 10,000 sf
- Outdoor learning area(s)
- Soft-surface play area
- Paved walking/running path

Playing Fields:

Playing fields will be used for a wide variety of activities, including P.E. instruction, recess activities, extracurricular athletic games (e.g. club sports, high school team practices), and community use. Playing fields should be located near the gymnasium, if possible. As stated previously, P.E. instructors expressed a strong preference for artificial turf fields, if funding is available.

Covered Play Area:

Elementary instructors expressed a strong desire for spacious covered play areas, providing opportunities for outdoor P.E. and recess activities during inclement weather. Special considerations for these areas include:

- Provide ample basketball hoops of different heights, as well as striping for wall ball, 4-square, hopscotch, fireball, and tetherball. Consider adding educational features to pavement, such as maps or math/ABC trails.
- Provide adequate lighting for safety and security.
- Provide 2-3 tetherball poles located near and/or under covered area.
- Include at least one (1) solid wall for wall ball.
- The covered play area should be located near the gymnasium.

Outdoor Fields and Spaces (continued)

- A covered pathway is needed extending from the main school building to the covered play area, allowing students to reach the area without getting wet.
- Green “tennis court” style surfacing is preferred over asphalt.
- Consider supervision issues related to restroom use during recess and/or P.E. classes.
- Consider the path of travel when designing covered play areas. Access should not require students to travel through high-traffic areas within the school.
- Ensure that the roof does not drain into this area. The floor should be level (not sloped) to prevent
- pooling of water. Consider enclosing the area with a half-wall to block the wind.
- Provide easy access to exterior P.E. storage room.

Outdoor Learning Area(s):

Outdoor learning areas provide valuable hands-on educational opportunities for students; however, there are inherent maintenance challenges associated with such spaces. When designing outdoor learning areas, designers should work closely with Teaching and Learning and Maintenance and Grounds staff to create spaces that are educationally enriching, yet easy and inexpensive to maintain. Outdoor learning areas may include a variety of difference spaces, such as:

- Planned gathering areas for class discussions or activities (e.g. mini-amphitheater or cluster of benches)
- Nature path with signage highlighting native plants and habitats
- Dramatic play areas
- Learning gardens
- Signage noting sustainable, high performance features of site
- Use of wetlands as an outdoor learning laboratory

Outdoor Fields and Spaces (continued)

Some special considerations for designing outdoor learning areas include:

- Work with the unique features of the school site to develop outdoor learning areas that support a wide variety of learning activities, yet involve little maintenance. Ensure that Grounds staff are included in review of landscape plans and plant material specifications during the design phase of a project. Native, low-maintenance plants should be utilized when possible.
- The development of a “learning garden” should be accompanied by a formal long-term maintenance plan that is not reliant on Grounds staff. Schools often create gardens via raised planter boxes when a staff member or volunteer takes a special interest in the idea; unfortunately, many of these areas fall to ruin when their “champion” leaves. The District’s Grounds staff do not have the manpower to maintain these areas. Schools must commit the necessary time and resources to keep these areas thriving - otherwise, these educational areas turn into eyesores.
- Schools should avoid creating compost piles. Although such areas present learning opportunities on sustainable practices, they tend to attract rodents, insects and other vermin. With the District’s Integrated Pest Management (IPM) program, it is difficult for maintenance and grounds to counter this undesirable effect.
- Stormwater management components such as bio-swales and detention ponds should be limited to less active areas of a site, yet allow for maintenance access.

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A Appendices

BSD Information Technology (IT) Standards

Every classroom

- Enterprise wireless - seamless, safe, open and widely accessible
- Variety of surfaces on which to project images or video
- Short-throw projector
- Mobile device including a camera; appropriate stand for using device as a document camera - this should be the device of the school's choice ,within district parameters
- Audio amplification systems - to be used by staff and students
- App or appliance for device mirroring
- Adequate drops for backup purposes
- Electricity throughout the room - ample outlets to ensure flexible use of technology

Additional Requirements for K-2 Classrooms

- Repurposed Interactive whiteboard
- Assume a minimum of 10 mobile devices - a variety standard with front and back cameras

Additional Requirements for 3-5 Classrooms

- Devices will be provided for each student in thirds: 1/3 laptops; 1/3 tablets; and 1/3 handhelds

Additional Requirements for Middle School Classrooms (6-8)

- Supplemental devices for students who can't afford them in a 1:1 environment
- Proficiency in Oregon's technology standards by eighth grade

Additional Requirements for High School Classrooms (9-12)

- Supplemental devices for students who can't afford them in a 1:1 environment

Common spaces

- Audio amplification systems
- Scalable, mounted projectors
- Device mirroring capabilities
- Robust wireless network connectivity
- Networked printers/copiers

General Considerations for IT

- The infrastructure must support a vast array of devices - both district-owned and student-owned
- New devices will always serve multiple purposes. The District will no longer support the purchase of single-use devices (interactive whiteboards, audience response systems, graphing calculators, etc.).
- There will no longer be a standard application suite. Students will learn to choose the right tool for the required task and process.
- Students will understand that the world shifts rapidly. They will learn to adapt to a changing world. Resilience will be a key to success.
- IT energy will be poured into keeping data secure and creating robust networks. Hardware will be supported differently than it is currently in the District.

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