BEAVERTON SCHOOL DISTRICT

Beaverton School District

2014 Bond Program

As Approved by Voters May 20, 2014

Page #	Project	Cost Estimate ($M)
	Modernization: Replacement Projects	
A-1	Arts and Communication Magnet Academy (ACMA)	$28.3
A-3	Hazeldale K-5	$24.6
A-5	Vose K-5	$24.8
A-7	William Walker K-5	$24.6
	Modernization: Renovation Projects	
A-9	Capital Center Improvements	$5.0
A-10	Critical Equipment Purchases Five	$24.0
A-11	Oaks Middle School Maintenance	$21.1
A-13	Facility Improvements	$10.0
A-15	District-wide Repairs to Schools and Facilities	$98.0
A-25	Raleigh Hills K-8	$9.7
A-27	School Kitchen Improvements	$0.8
A-28	Springville K-8	$2.0
	Modernization: Regulatory Compliance	
A-29	District-wide ADA Compliance	$2.0
A-30	Domestic and Fire Protection Separation	$0.8
A-31	Green Energy Technology	$5.0
A-32	High School Title IX Compliance; Sunset and Aloha HS	$4.0
A-33	McKay K-5 ADA Upgrades	$0.4
A-35	Security Upgrades	$10.0
A-36	Seismic Upgrades	$4.2
	New Capacity	
A-37	New Elementary School Site, Land Acquisition	$3.0
A-38	New High School	$109.0
A-40	New K-5 in North Bethany	$25.0
A-41	New Middle School on Timberland Site	$51.6
	Technology	
A-43	HVAC Control System Upgrade	$0.8
A-44	IT Data Center at Capital Center	$2.9
A-45	Unified Communication System	$7.2
A-47	Learning Technology: Classroom Systems	$56.0
	Program Implementation Requirements	
--	Prebond planning reimbursement	$1.0
A-48	Program Contingency @ 10% of Total Project Value *	$45.4
A-50	Cost Inflation @ 3.0%/ year of Total Project Value *	$52.8
A-51	Bond Implementation/Management Costs @ $2.5 million/year	$20.0
--	Bond Issuance Services @ 1% of Bond Value	$6.0
	Grand Total	$680.0

* Critical Equipment Purchases and Learning Technology are excluded from Contingency and Cost Inflation mark-ups

2014 Bond
ACMA Replacement Project

Site/School	Arts and Communication Magnet Academy (ACMA) (Gr. 6-12)		
Project Title	ACMA Replacement	Cost Estimate	Cost Est. Date
		$28,300,000	2013

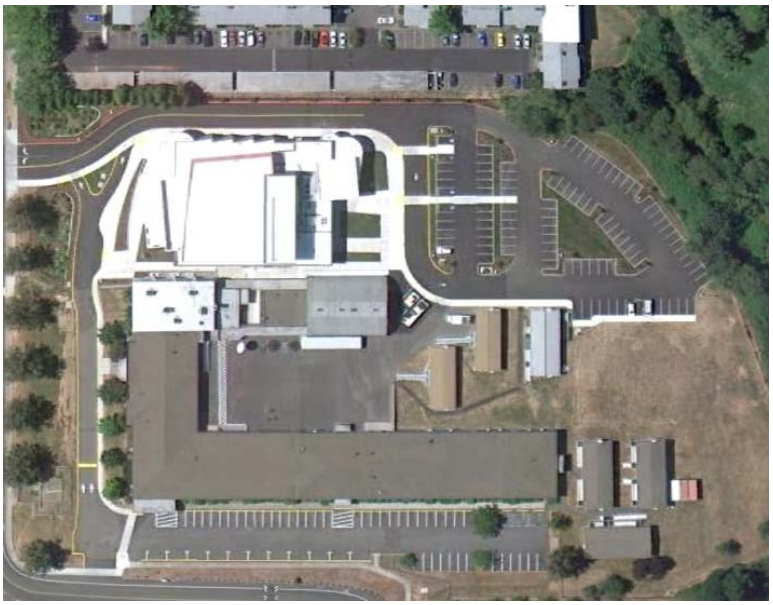
Description of Project Purpose / Problem to be Corrected

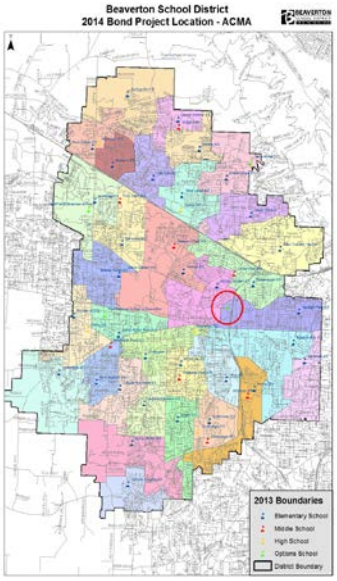
Existing main building is an old one-story structure; original construction in 1949 and 1950. A new state-of-the-art performing arts building was added in 2010. The main building repair needs are estimated to cost $6.4 million. Additional problems not addressed in this estimate include lack of a kitchen or cafeteria, no gym, inadequate science and art rooms, visitor entrance that is far removed from the school main office, a partial fire sprinkler system, bus and parent parking conflict, and in general a poorly configured building to support the ACMA school program. The site currently has 8 portable classrooms. Rather than repair and renovate, replacement would resolve these issues and would provide more capacity.

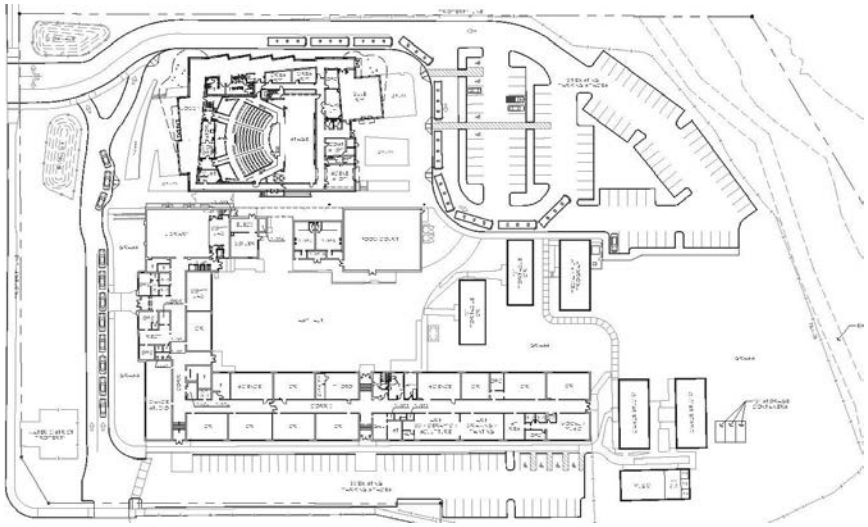
Project Scope

Replacement of main building and adding new facilities, including new classrooms, gymnasium, cafeteria and kitchen. Bus parking and visitor parking would be expanded and re-arranged for safety and efficiency. Portables would be removed and capacity increased to 725. The existing performing arts building would be retained and incorporated into the replacement building's design. During reconstruction, the student body & staff would be relocated to the new middle school on the Timberland site for one year, with temporary busing provided for access to the existing performing arts building.

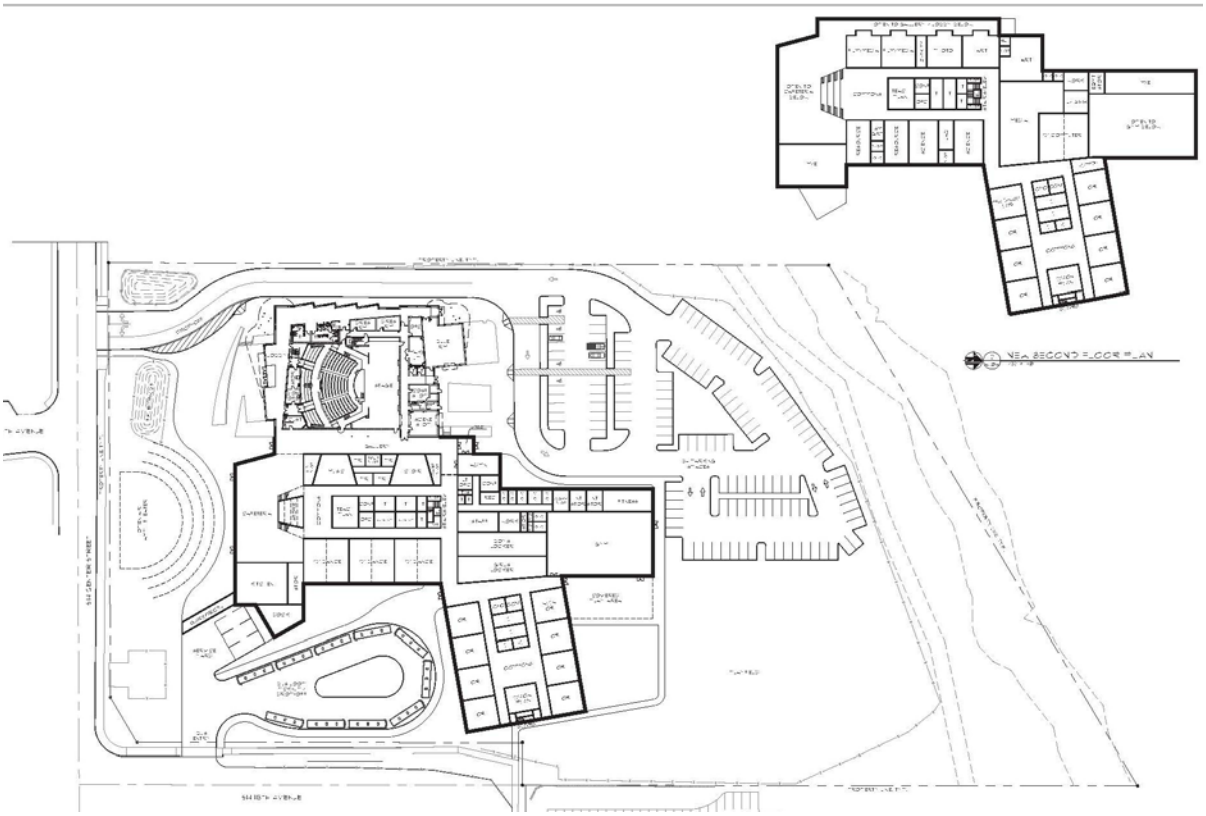
Project Photo / Illustration: Existing ACMA Site







Existing School Site Plan



Conceptual Site and Floor Plan

2014 Bond
Hazeldale Replacement Project

Site/School	Hazeldale Elementary (K-5)		
Project Title	Hazeldale Replacement	Cost Estimate	Cost Est. Date
		$24,600,000	2013

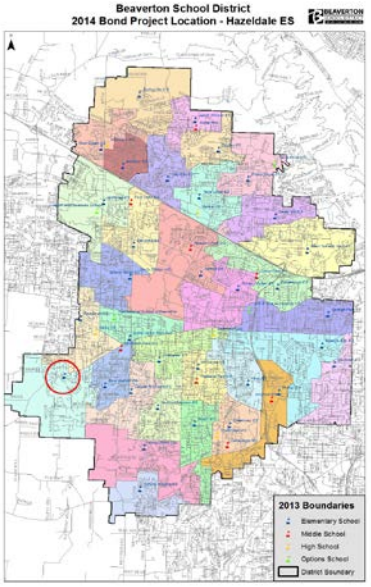
Description of Project Purpose / Problem to be Corrected

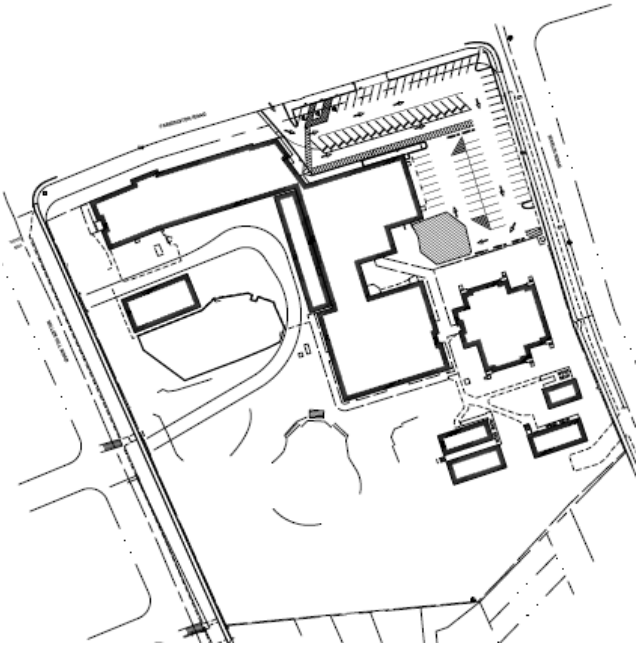
Existing building is old 1-story structure; original construction dates to 1954. Building physical improvement (repairs) requirements are estimated to cost $3 million. Remaining problems not addressed in this estimate include the bus drop-off that surrounds play area (safety); gym, kitchen, and library are undersized; hardwall construction needed in library area and modular; poor visibility between main building and portables (security); front office configuration allows no positive control over visitor access; about 50% of the classroom area has no air conditioning, and the building has only partial fire sprinklers. School site is relatively small: 6.6 acres supporting a permanent modular building plus 5 portable classrooms. Hazeldale's total capacity is 572 students; 477 without portables. A boundary adjustment in 2010 shifted about 115 students to the newly expanded Kinnaman (K-5). Rather than repair and renovate, replacement would resolve all these issues and provide more capacity.

Project Scope

Demolish and remove existing structures. Construct new two-story K-5 school building on-site with a total capacity of 750 students (increase of 178) and eliminate the need for portables. Redesign site to eliminate the bus drop-off / playground conflict; redevelop the field area utilizing additional space available due to smaller footprint of two-story building, and removal of the portables and modular building. During reconstruction, the student body & staff would be relocated to the new middle school on the Timberland site for one year.

Project Photo / Illustration: Current Hazeldale Site





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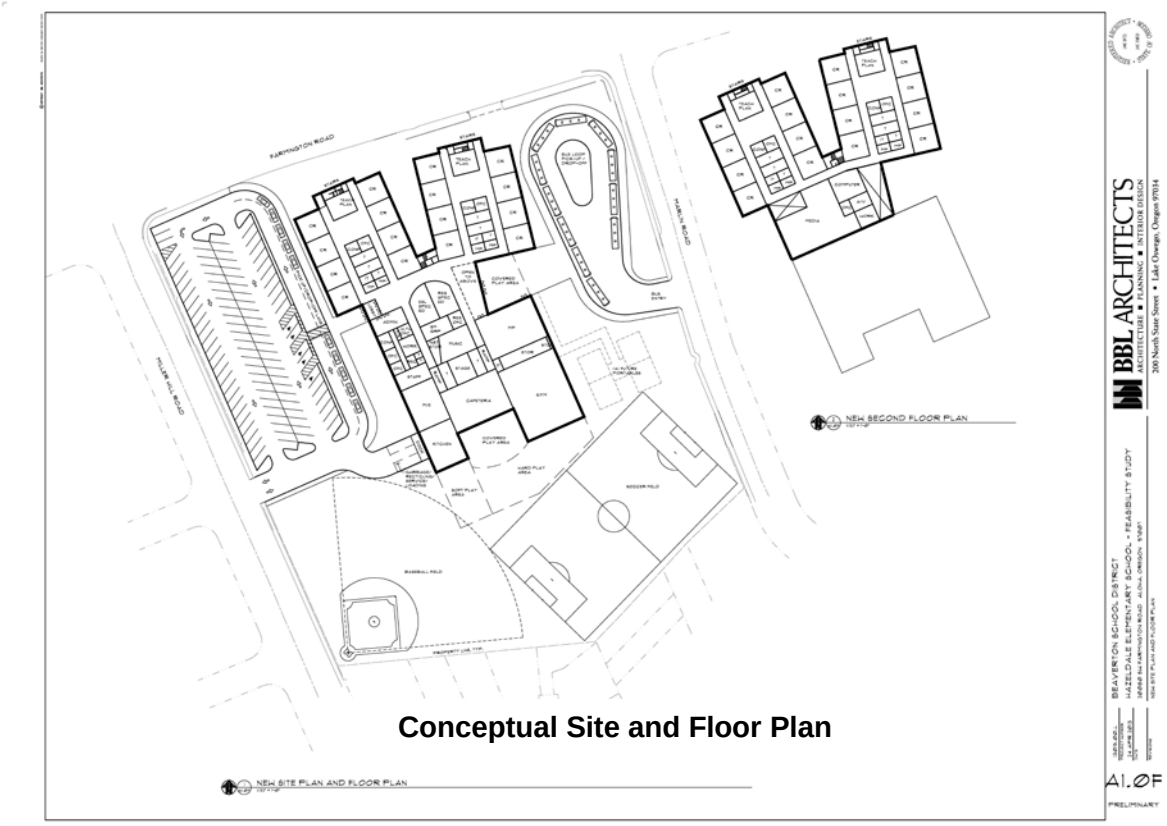


Conceptual Site and Floor Plan

2014 Bond
Vose Replacement Project

School Name	Vose Elementary (K-5)		
Project Title	Vose Replacement	Cost Estimate	Cost Est. Date
		$24,800,000	2013

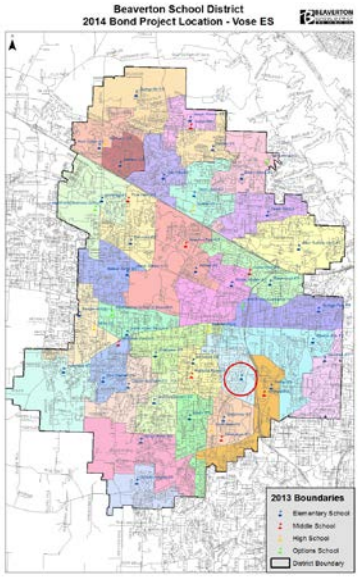
Description of Project Purpose / Problem to be Corrected

Existing building is an old one-story structure; original construction began in 1959 with significant additions completed in 1962. An addition to the library occured in 1967. Building repair needs are estimated to cost $3.6 million. Additional issues not addressed in this estimate include an undersized parking area, a bus drop-off location that is in conflict with parent drop-off and parking, the cafeteria, kitchen, gym and library are undersized, and the building does not have a fire sprinkler system. The site currently has 9 portable classrooms. The front office has no control over building access for visitors and visibility is poor. The total capacity is 670 with portables; 499 without portables. Rather than repair and renovate, replacement would resolve these issues and would provide more capacity.

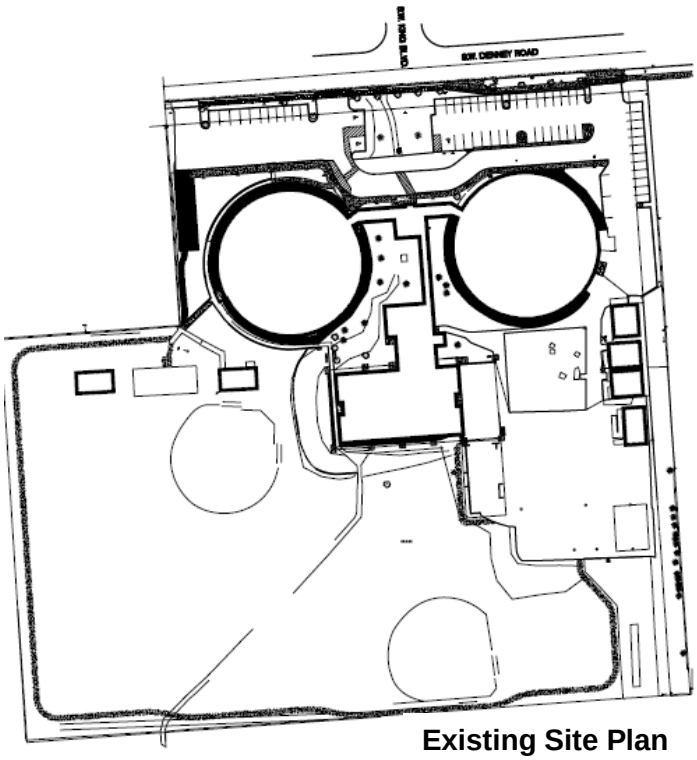
Project Scope

Demolish and remove existing structure. Construct new two-story K-5 school building with a total capacity of 750 students (increase of 80), eliminating the need for portables. Reconfiguration of the parking areas to separate the buses from the parent drop-off/parking will eliminate the current conflicts. Redevelop the field area utilizing additional space available due to smaller footprint of two-story building and removal of the portables. During reconstruction, the student body & staff would be relocated to the new middle school on the Timberland site for one year.

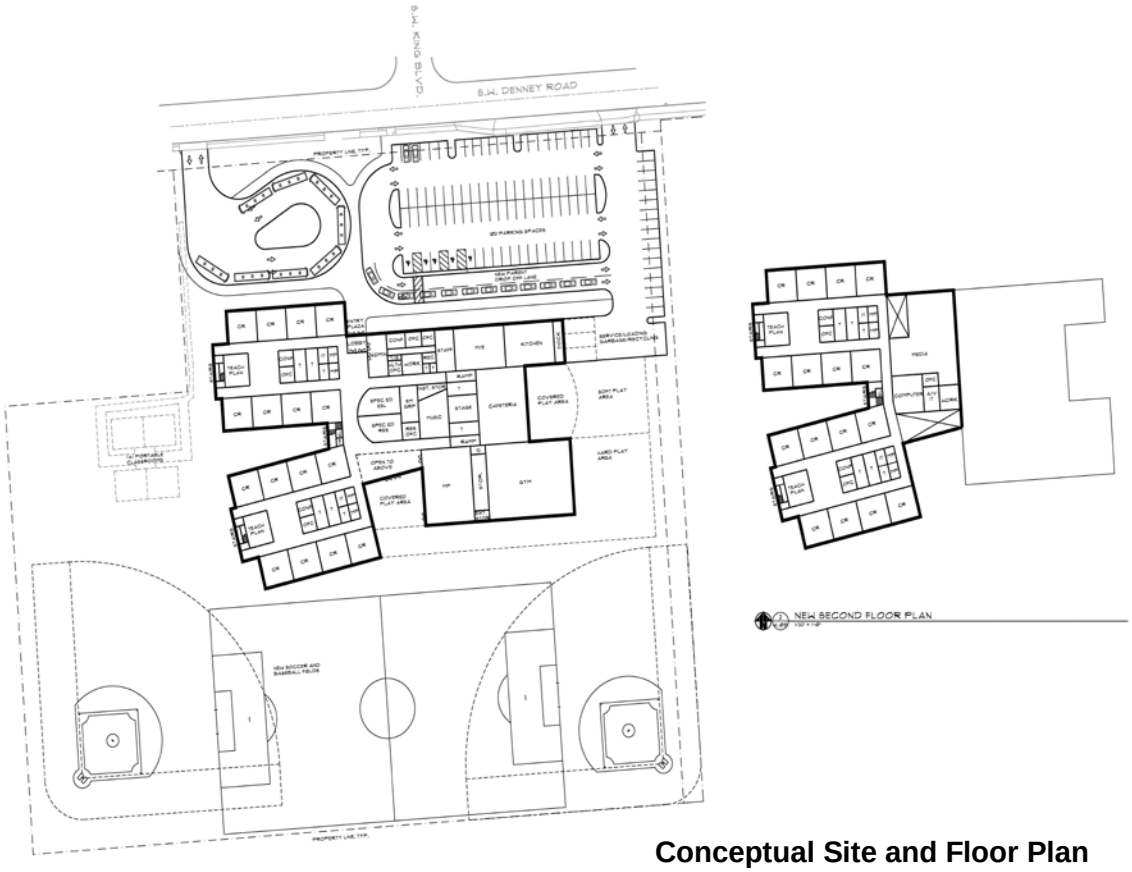
Project Photo / Illustration: Current Vose Site Plan



2014 Bond
Vose Replacement Project



Existing Site Plan



Conceptual Site and Floor Plan

2014 Bond
William Walker Replacement Project

Site/School	**William Walker Elementary (K-5)**		
Project Title	William Walker Replacement	**Cost Estimate**	**Cost Est. Date**
		$24,600,000	2013

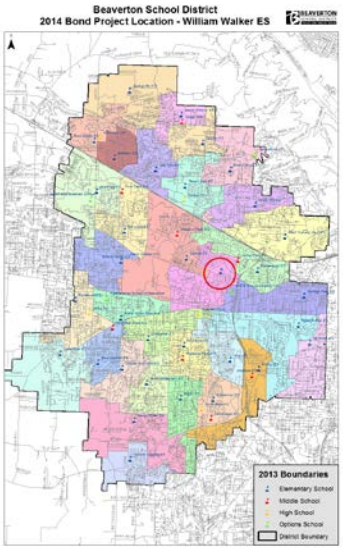
Description of Project Purpose / Problem to be Corrected

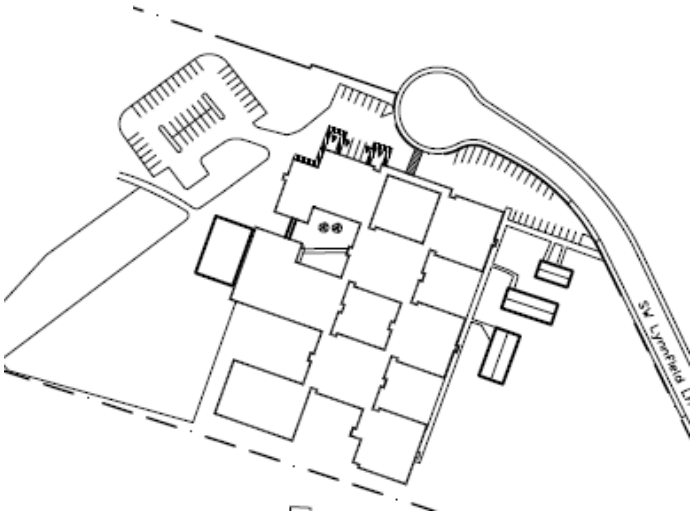
Existing building is an old one-story structure; original construction dates to 1960. Building repair requirements are estimated to cost $3.4 million. Additional problems not addressed in this estimate include disjointed long corridors, conflicts with an overlapping bus and parent drop-off area, lack of positive control of visitor access, low ceilings in classrooms, a partial fire sprinkler system, and exposed heating & ventilation ductwork. School site is 9.2 acres with 7 portable classrooms, which occupy much of the school's field space. About 1.6 acres on the west edge of the school property is being sold to THPRD, which will improve the adjacent Cedar Hills Park. Students will have priority use of the upgraded park fields during school hours. The school has a total capacity of 590 students; 457 without the portables. Rather than repair and renovate, replacement would resolve all these issues and provide more capacity.

Project Scope

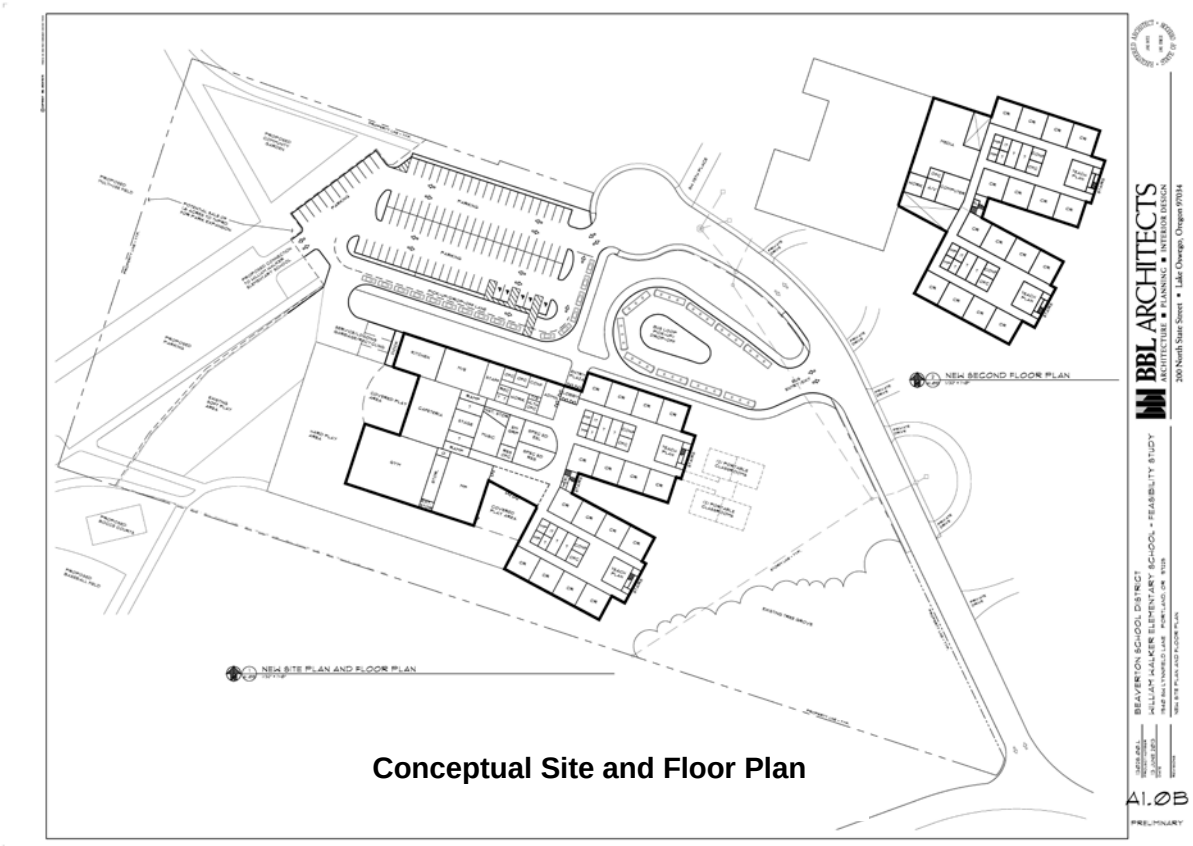
Demolish and remove existing structure. Construct a new two-story K-5 school building with a total capacity of 750 students (increase of 160), eliminating the need for portables. Redesign site to eliminate the bus and parent drop-off conflict. Configure the replacement building to maximize the connection to the park fields to the west. During reconstruction, the student body & staff would be relocated to the new middle school on the Timberland site for one year.

Project Photo / Illustration: William WalkerSite View





Existing Site Plan



Conceptual Site and Floor Plan

2014 Bond
Capital Center Improvement & Renovation Project

Site/School	**Capital Center (East Section)**		
Project Title	Capital Center Improvement & Renovation	**Cost Estimate**	**Cost Est. Date**
		$5,000,000	2013

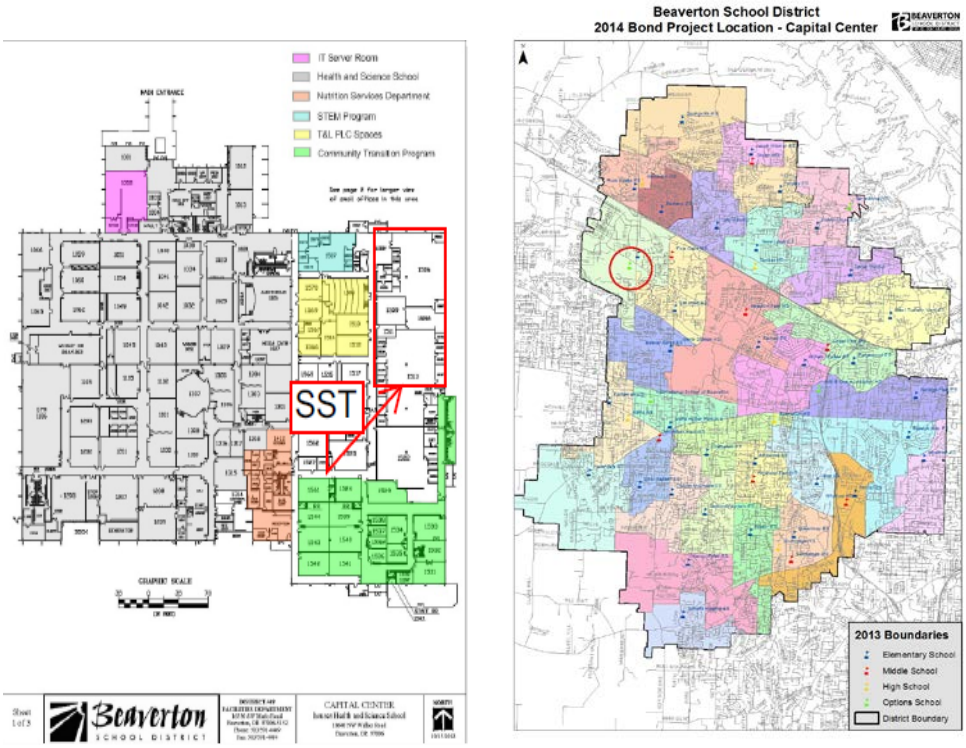
Description of Project Purpose / Problem to be Corrected

The Capital Center was purchased in 2008 primarily for the development of the Health Sciences School. The east side also houses STEM, Nutrition Services, and SPED Transition Program. Future K-12 occupancy of these spaces requires seismic upgrades. Additionally, the HVAC system and roof are in need of replacement.

Project Scope

The east section of the building is in need of a new roof and associated seismic upgrades.
A new HVAC system is needed to replace rooftop units which have far exceeded their lifespan and very energy inefficient. Building improvements will be made to house the School of Science and Technology.

Project Photo / Illustration: Capital Center Existing Floor Plan & Location



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2014 Bond
Critical Equipment Purchases

Site	**District-wide**		
Project Title	Critical Equipment Purchases	**Cost Estimate**	**Cost Est. Date**
		$24,000,000	2013

Description of Project Purpose / Problem to be Corrected

Previously, the District's General Fund budget has purchased equipment and materials to support classrooms and departments including items such as: curriculum, musical instruments, wireless networks, file servers, software, copiers, school buses, vehicles and cleaning equipment. These items can be purchased from resources generated by general obligation bonds. The School Board has asked administration to identify potential savings in general fund by purchasing necessary equipment and materials through bond funds.

Project Scope

Transfer equipment and materials purchases from general fund to bond resources to support strategies to implement the District's goal and strategic plan. The budget for this project is fixed at $3 million per year for 8 years.

2014 Bond
Five Oaks Renovation Project

Site/School	Five Oaks Middle School (Grades 6-8)		
Project Title	Five Oaks Renovation	Cost Estimate	Cost Est. Date
		$21,100,000	2013

Description of Project Purpose / Problem to be Corrected

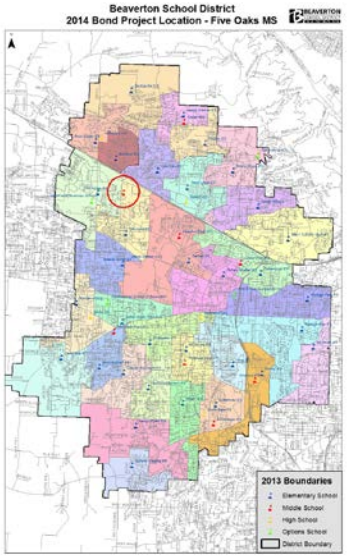
Existing building is a one-story structure, originally constructed in 1976 with an open classroom design. Alterations in subsequent years to enclose classrooms led to odd configurations, which require passage through one classroom to reach another, and also compromised the effectiveness of the HVAC system. Additional deficiencies include interior classrooms with no natural light; inadequate science laboratories, a front office that does not have positive control over building access for visitors, and limited gymnasium capacity.

Building repair needs are estimated to cost $4.5 million. This project would modernize the building, addressing the repair requirements and other deficiencies. The site currently has 9 portable classrooms. The current total capacity is 1,236 with portables; 1,047 without portables. Building replacement is estimated to cost $47 million; renovation is the better alternative.

Project Scope

Addition of science lab support areas, expanding teaching area by adding classroom space in four wings of the current building, and replacing and expanding the gymnasium. Also includes, modification of school entry to control access through a single point at the administrative office, HVAC replacement, and upgrading of finishes throughout existing space where needed. Methodology is designed to allow renovation work to be performed while school is in session.

Project Photo / Illustration: Five Oaks Middle School Site



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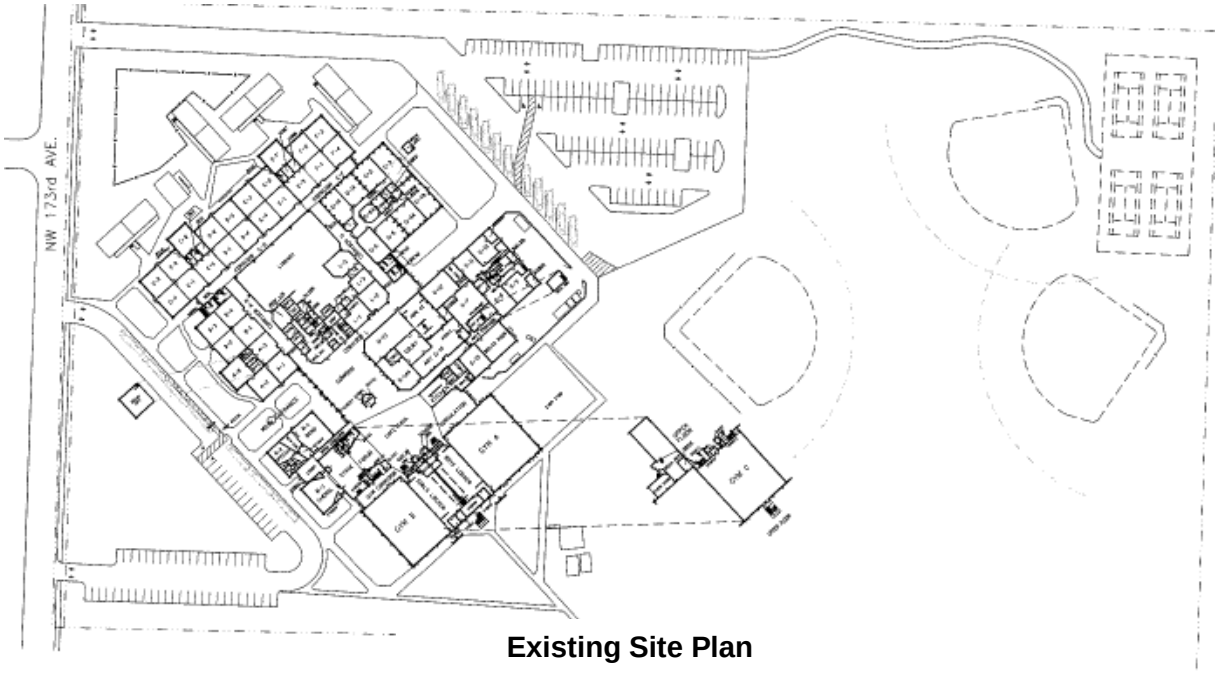
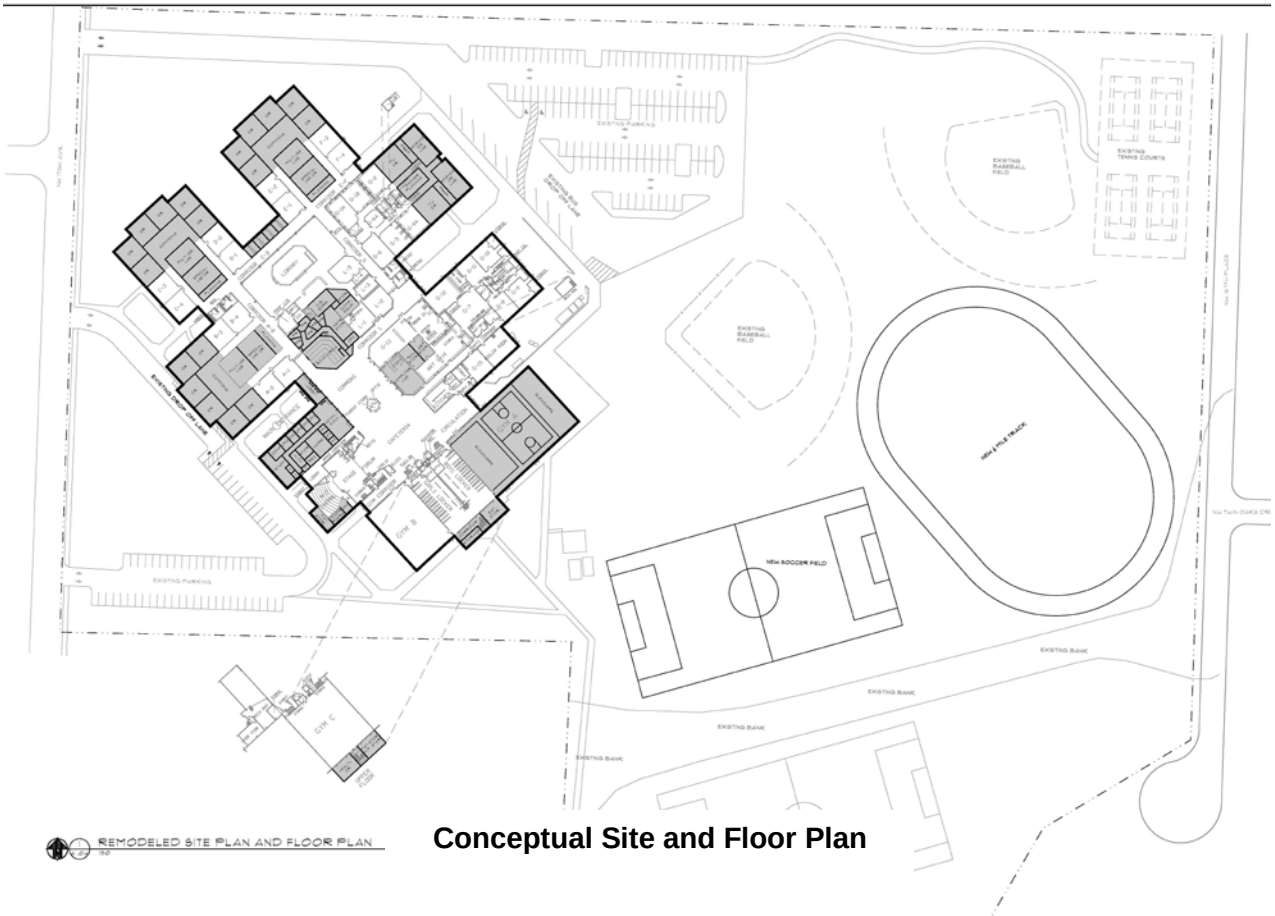


Existing Site Plan



Conceptual Site and Floor Plan

2014 Bond
Maintenance Facility Improvement Project

Site/School	**Maintenance Facility**		
Project Title	Facility Improvements	Cost Estimate	Cost Est. Date
		$10,000,000	2013

Description of Project Purpose / Problem to be Corrected

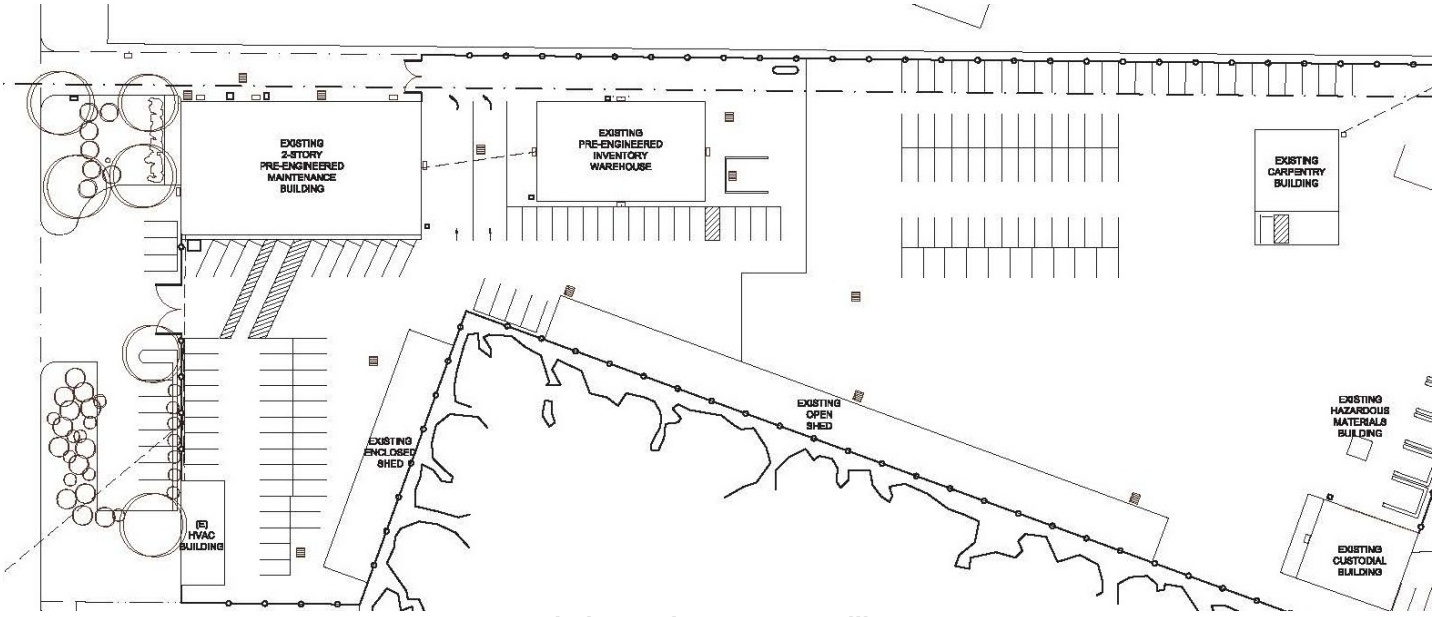
The current Maintenance and Custodial Facility was acquired in 1971. It now serves more than 50 schools and over 5 million square feet of space, is the same in size and functionality as when the district had only 28 schools in 1971. The buildings are worn-out and severely undersized for the staff that cleans, maintain, and keep our buildings open, which results in significant operational challenges. Equipment parking needs have expanded, causing staff parking to overflow into the surrounding neighborhood.

Project Scope

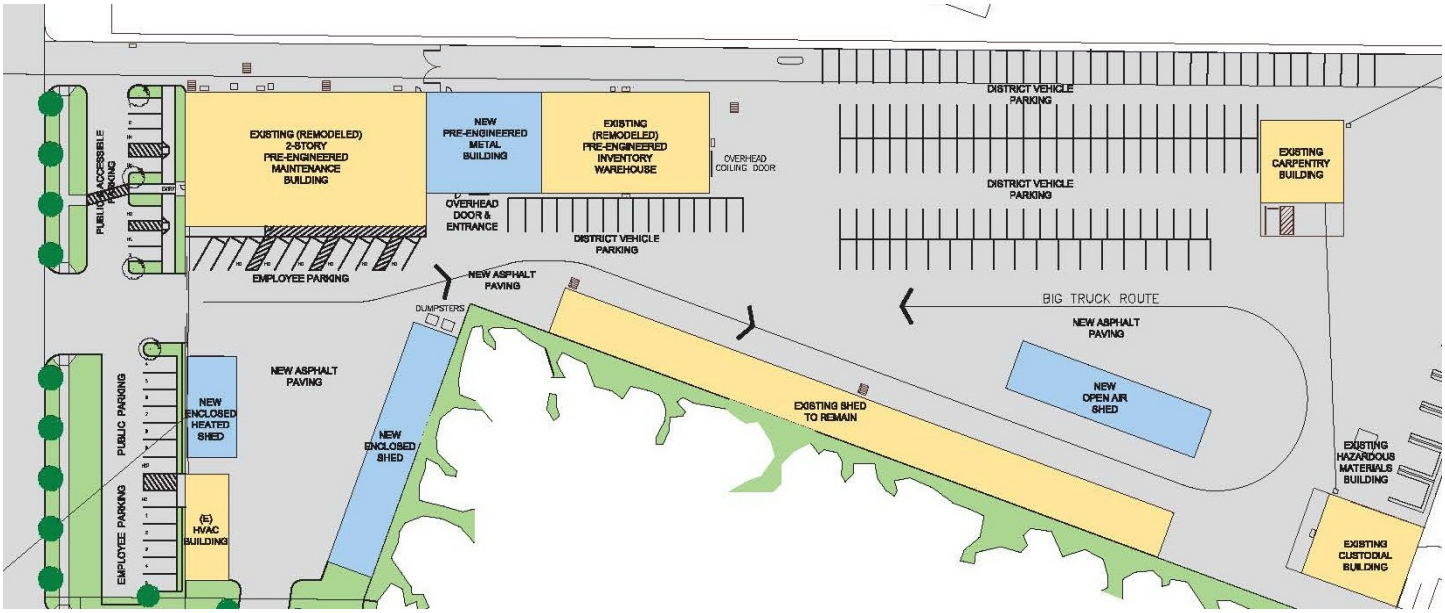
Renovation of both the site and buildings to provide a functional Maintenance Facility including a 4,050 square feet addition, increased parking, and remodeling of the current floor plan to provide more appropriate space utilization, upgraded to current ADA, structural, electrical, heating, and cooling codes.

Project Photo / Illustration of Current Maintenance Facility and Site

2014 Bond
Maintenance Facility Improvement Project



Existing Maintenance Facility



Proposed Maintenance Facility Site Plan

2014 Bond
District-Wide Repair Projects

Site/School	**District-Wide**		
Project Title	Repair Projects	Cost Estimate	Cost Est. Date
		$98,000,000	2013

Description of Project Purpose / Problem to be Corrected

Detailed inspections of each District facility have documented hundreds of improvement requirements affecting virtually every building. This work is needed to preserve the integrity of the buildings and protect the investments provided by taxpayers. Continued reliability of heating & ventilation systems, building electrical systems, weatherproof integrity of roofs and building envelopes, is essential to ensure effective support of the learning environment for students.

District facility assets include 51 schools and 7 support facilities totaling 5 million square feet of building space and 800 acres of property.

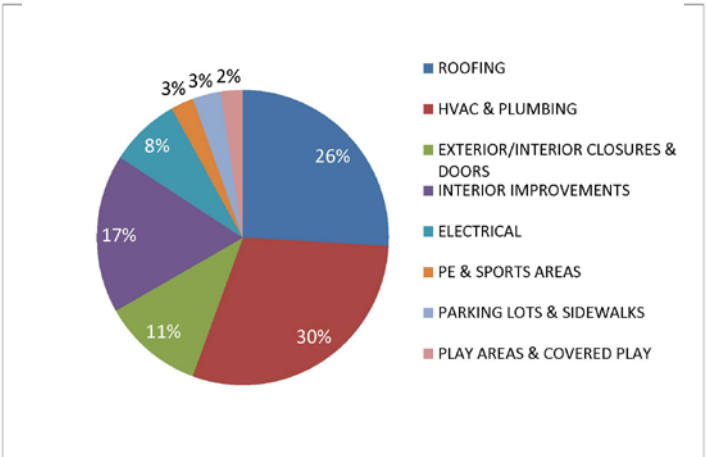
Project Scope

Hundreds of specific projects ranging from complete replacement of building components such as roofs and plumbing systems, to improvements of heating, ventilation & cooling systems; electrical systems; physical education, covered play areas, sports facilities; parking lots and sidewalks; and other facility elements.

The costs for these types of improvements at schools planned for replacement have been removed from this project.

Distribution of Requirements

District-wide Repair Project Categories



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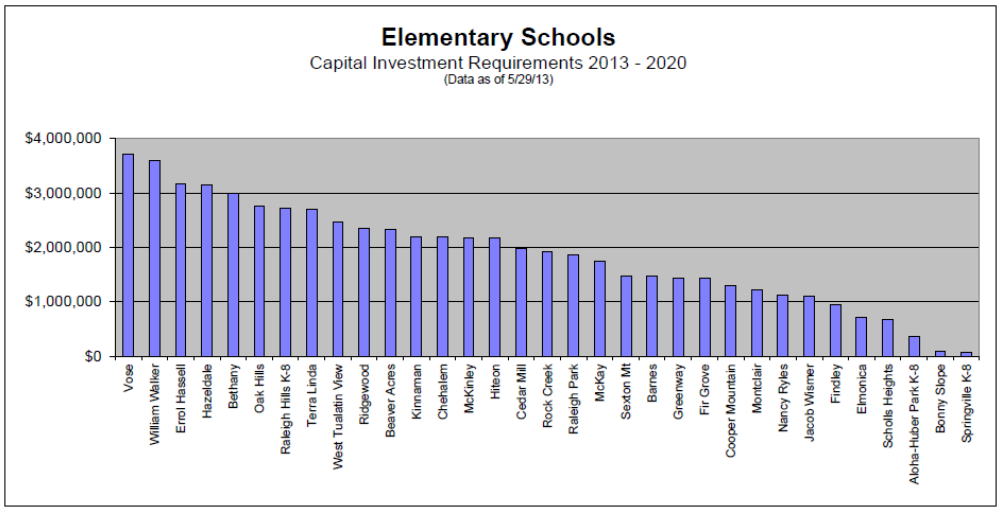
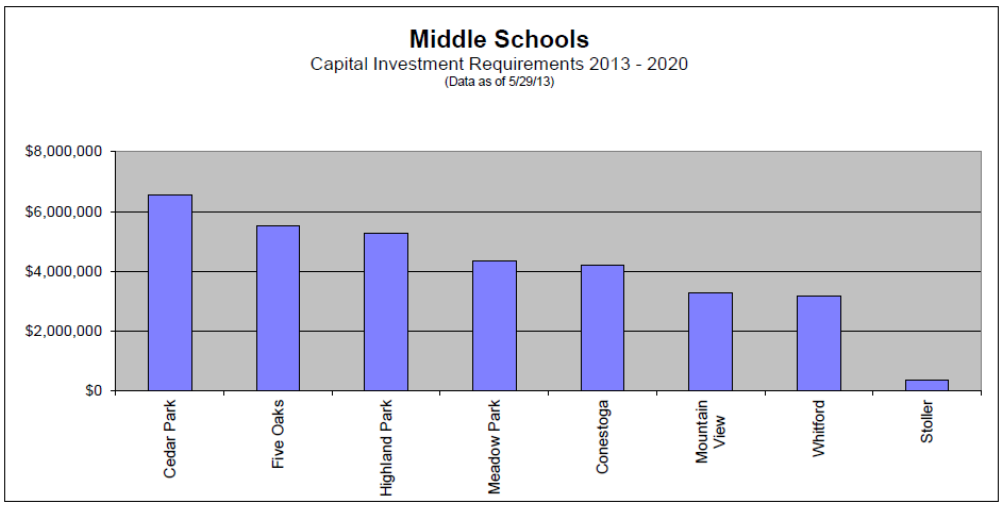
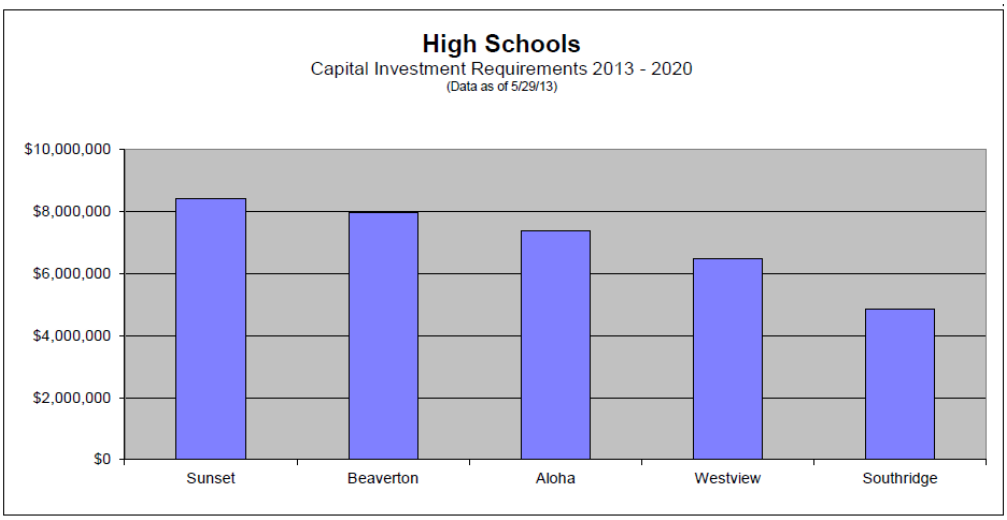
2014 Bond
District-Wide Repair Projects







2014 Bond - Modernization
Repair Projects – Closures & Doors

	District-wide Repair Projects		
Project Title	Closures and Doors	**Cost Est.**	**Cost Est. Date**
		Included in Repair Total	2013

Description of Project Purpose / Problem to be Corrected

The closures and doors portion of the repairs provides data on doors and associated hardware systems throughout the district that are in various states of deterioration and functional failure. Many of the door components are obsolete and repair parts are no longer available. The pictures below are examples of damaged grills and rusted panels, broken hinge brackets that would no longer be in service if it wasn't for the backing plates and rivets installed by maintenance personnel, and a door that is separating and will become a security problem under continued heavy use. Replacement of these doors and associated hardware systems will restore proper functionality with regard to regular facility operation and security. Newer systems will be easier to maintain when malfunctions occur, due to the availability of replacement parts for more modern systems.

Project Scope

Approximately 11% of the Repairs line item budget provided by bond funding is programmed to go toward the doors closures and building hardware throughout the district.

Photo Examples

Damaged Grill & Rusted Door Panel

Broken Door Hinge Bracket

Door Separation Failure

2014 Bond – Modernization
Repair Projects – Electrical

	District-wide Repair Projects		
Project Title	Electrical Systems	**Cost Est.**	**Cost Est. Date**
		Included in Repair Total	2013

Description of Project Purpose / Problem to be Corrected

Many of the electrical components in our schools are obsolete and parts are becoming scarce are no longer available at all. The photos below are examples of two of these systems. The fire alarm system at Jacob Wismer shown below in the left photo is rapidly becoming obsolete. The few parts that may still be available, are extremely difficult to locate, are very expensive and are proving to be intermittently unreliable. A full replacement will restore optimal operation and will help reduce the disruptions the system is causing at the facility during malfunction annunciation (audible alert tones). The right photo is an example of an obsolete disconnect system. Replacement components for this cabinet are no longer available.

Project Scope

Approximately 8% of the Repairs line item budget provided by bond funding is programmed to go toward the improvement and replacements of obsolete electrical systems throughout the district.

Photo Examples

Fire Alarm Panel with Obsolete Technology

Obsolete Electrical Disconnect Panel

2014 Bond – Modernization
Repair Projects – HVAC & Plumbing

	District-wide Repair Projects		
Project Title	HVAC and Plumbing	**Cost Est.**	**Cost Est. Date**
		Included in Repair Total	2013

Description of Project Purpose / Problem to be Corrected

Throughout the district, numerous HVAC units and their associated controls are beyond end-of-life. The photo on the left shows an example of rusted out fan assembly in a classroom unit ventilator at Beaverton High School. The center photo shows the "original" unit ventilator pneumatic controls.

In addition, many plumbing systems in our older buildings are pushing the limits of their service life. Some schools still have galvanized steel water pipes that discolor the water and give it an unpleasant odor. The right photo is an example of a failed sewer line from below the concrete floor in the kitchen at Oaks Hills. This specific section of pipe was dug up and replaced in early October, 2013. It serves as an example of other problems not photographical.

Project Scope

Approximately 30% of the Repairs line item budget provided by bond funding is programmed to go toward the improvement of failing HVAC and plumbing systems throughout the district.

Photo Examples

Rusted Unit Ventilator Fan Assembly

Original Ventilator

Failed Sewer Line Below Kitchen

2014 Bond – Modernization
Repair Projects – Interiors

	District-wide Repair Projects		
Project Title	Interior Improvements	**Cost Est.**	**Cost Est. Date**
		Included in Repair Total	2013

Description of Project Purpose / Problem to be Corrected

BSD buildings get heavy use throughout the year and interior conditions degrade over time. Failure or malfunction of other facility systems may also cause deterioration (examples: plumbing leaks, roof leaks, etc). The left photo below is an example of ceiling tiles damaged by a roof leak. The center photo shows wall damage caused by furniture hitting up against a classroom partition wall at Five Oaks. The right photo shows an example of floor tiles that have had to be replaced over time at Whitford. As our facilities age, it becomes impossible to find materials that match the existing floors when doing repairs. Ceiling tile patterns are also subject to the same obsolescence. Funding for total replacement of these components will restore the functional and aesthetic value of these systems within many of our facilities.

Project Scope

Approximately 17% of the Repairs line item budget provided by bond funding is programmed to go toward the improvement of building interiors throughout the district.

Photo Examples

Roof Leak Damaged Ceiling

Wall Damage

Patched Flooring

BEAVERTON SCHOOL DISTRICT
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2014 Bond – Modernization
Repair Projects - Pavements

	District-wide Repair Projects		
Project Title	Parking Lots and Sidewalks	**Cost Est.**	**Cost Est. Date**
		Included in Repair Total	2013

Description of Project Purpose / Problem to be Corrected

In many parking lots across the district, the asphalt surfacing is showing serious signs of deterioration. Frequent heavy bus wheel loads accelerate the problem. Many of the areas observed have deteriorated beyond the life extending process of applying a slurry seal coating. Replacement of the worst areas is needed, such as the area depicted in the top photograph. There are also many areas for which a slurry seal would extend the useful life of pavements. The bottom photo shows a section of parking lot at Aloha High School which may be a candidate project for this option. Lack of timely replacement or preservation of pavement surfaces leads to water infiltration, loss of subsurface strength, and total failure of the layered pavement structure, which is very costly.

In addition, many areas of sidewalk and curbing throughout the district are crumbling apart due to age, or are being lifted or damaged by tree roots. Improvements to these areas will restore structural integrity and enhance safety by eliminating trip hazards and injury due to falls.

Project Scope

Approximately 3% of the Repairs line item budget provided by bond funding is programmed to go toward the improvements of parking lots and sidewalks throughout the district.

Example Photos

Severe Alligator Cracking; Requires Replacement

Slurry Seal Candidate

2014 Bond – Modernization
Repair Projects – PE & Sports

	District-wide Repair Projects		
Project Title	PE and Sports Areas	**Cost Est.**	**Cost Est. Date**
		Included in Repair Total	2013

Description of Project Purpose / Problem to be Corrected

Numerous PE and sports areas in the district are in need of improvements. The photo below shows the deteriorating track surface at Ridgewood Elementary. This track is used regularly and can pose a trip hazard to the users as the rubber continues to delaminate from the concrete substrate. The track is also experiencing problems with drainage and roots lifting the track base.

Another example of a PE area that needs upgrades is the t-bar drop ceiling in the gymnasium at Raleigh Hills (no photo). The ceiling is constantly subject to damage from balls used in the PE curriculum. Installation of alternate lighting and modification of the ceiling system would help eliminate the inherent issues with the current system.

Project Scope

Approximately 3% of the Repairs line item budget provided by bond funding is programmed to go toward the improvement of PE and sports areas throughout the district.

Photo Example – Failed Running Track Surface

BEAVERTON SCHOOL DISTRICT
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2014 Bond – Modernization
Repair Projects – Play Areas

	District-wide Repair Projects		
Project Title	Play Areas and Covered Play	**Cost Est.**	**Cost Est. Date**
		Included in Repair Total	2013

Description of Project Purpose / Problem to be Corrected

Playground structures are exposed to the elements and experience heavy use year round. Many of our play systems are at or beyond end of life based on industry standards. Some of these systems are showing signs of deterioration that may present a safety hazard to children. Wooden decking, such as the samples shown below in the photo, are no longer BSD standard. Coated steel decks and bridge components are now used to eliminate weather deterioration and the resulting splinter and cracking issues inherent to the wooden components. The photo below also shows corrosion due to failure of the coatings on the structural fittings after many years of being exposed to the elements.

Many of our old swing systems are rusting due to the UV deterioration of the old coatings. These structures require more frequent inspections and often time require more intense maintenance programs to ensure safety of the structure and all of the integral components. Condensation can also cause rust to develop from the inside of the pipes and may eventually lead to sudden structural failure with a potential for collapse.

Project Scope

Approximately 3% of the Repairs budget provided by bond funding is programmed to go toward the improvements of play areas and covered play structures.

Example Photos

Old-style Wood Decking Beginning to Splinter

Old Swing Set with Evidence of Rusting

2014 Bond – Modernization
Repair Projects - Roofing

	District-wide Repair Projects		
Project Title	Roofing	**Cost Est.**	**Cost Est. Date**
		Included in Repair Total	2013

Description of Project Purpose / Problem to be Corrected

The pictures below were taken of the roof at Sunset High School. The photos show examples of some of the patches on two different roofing systems on the building. Although this site is believed to have the worst roof conditions in the district, all roofing systems across the district exhibit various stages of deterioration. Improvements and replacements of roofing systems are critical in protecting the structures beneath them. Failing roof systems can lead to moisture intrusion and damage resulting in costly repairs, mold and mildew issues. Avoiding these repairs through proper planning and roof replacements, can also help to avoid disruption of the daily operations and educational processes taking place within the facility.

Project Scope

Approximately 26% of the Repairs line item budget provided by bond funding is programmed to go toward the improvement of roofing systems throughout the district.

Example Photos – Depicting Typical Failed & Patched Areas

Example of a Patched Roof

Roof with Extensive Seam Resealing

2014 Bond
Raleigh Hills K-8 Renovation Project

Site/School	**Raleigh Hills K-8**		
Project Title	Raleigh Hills K-8 Renovation	Cost Estimate	Cost Est. Date
		$ 9,700,000	2013

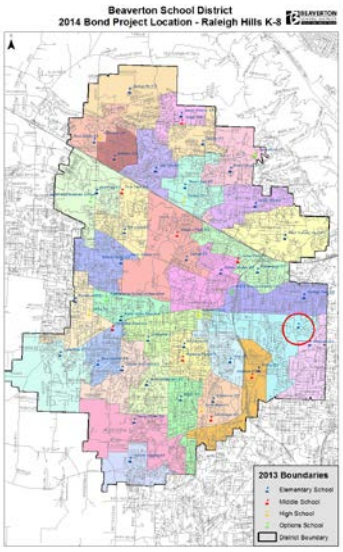
Description of Project Purpose / Problem to be Corrected

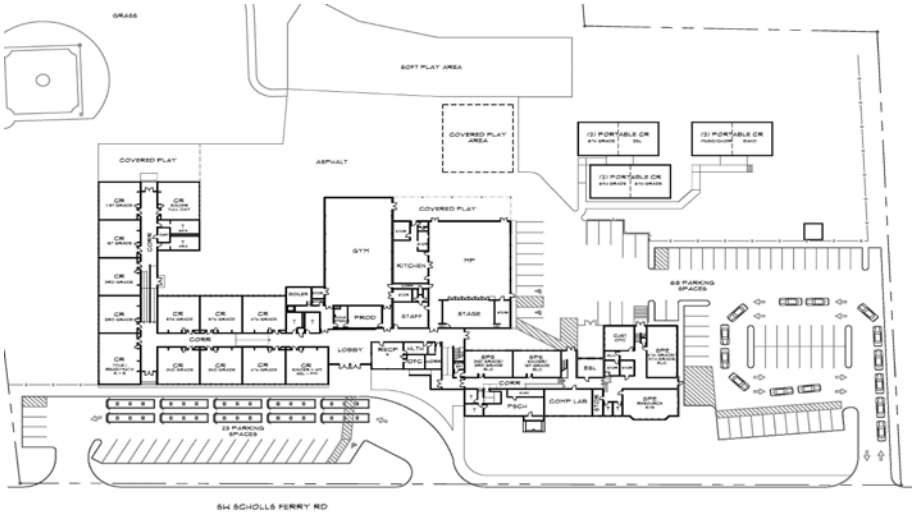
Original construction of the Raleigh Hills school occurred in increments from 1927 through the mid-1950s. It was converted from a K-5 into a K-8 school in 2005. However the building remains essentially in a K-5 configuration, which presents challenges in delivering programs for the 6 – 8 grade level students. Physical improvements to Raleigh Hills are needed to better support the full K-8 program. Needs include: modern science lab classroom, gym improvements, new seating in the cafeteria and classroom furniture. The existing building does not have adequate stage or cafeteria space. Band, music, and sixth grade classes are currently housed in portable buildings.

Project Scope

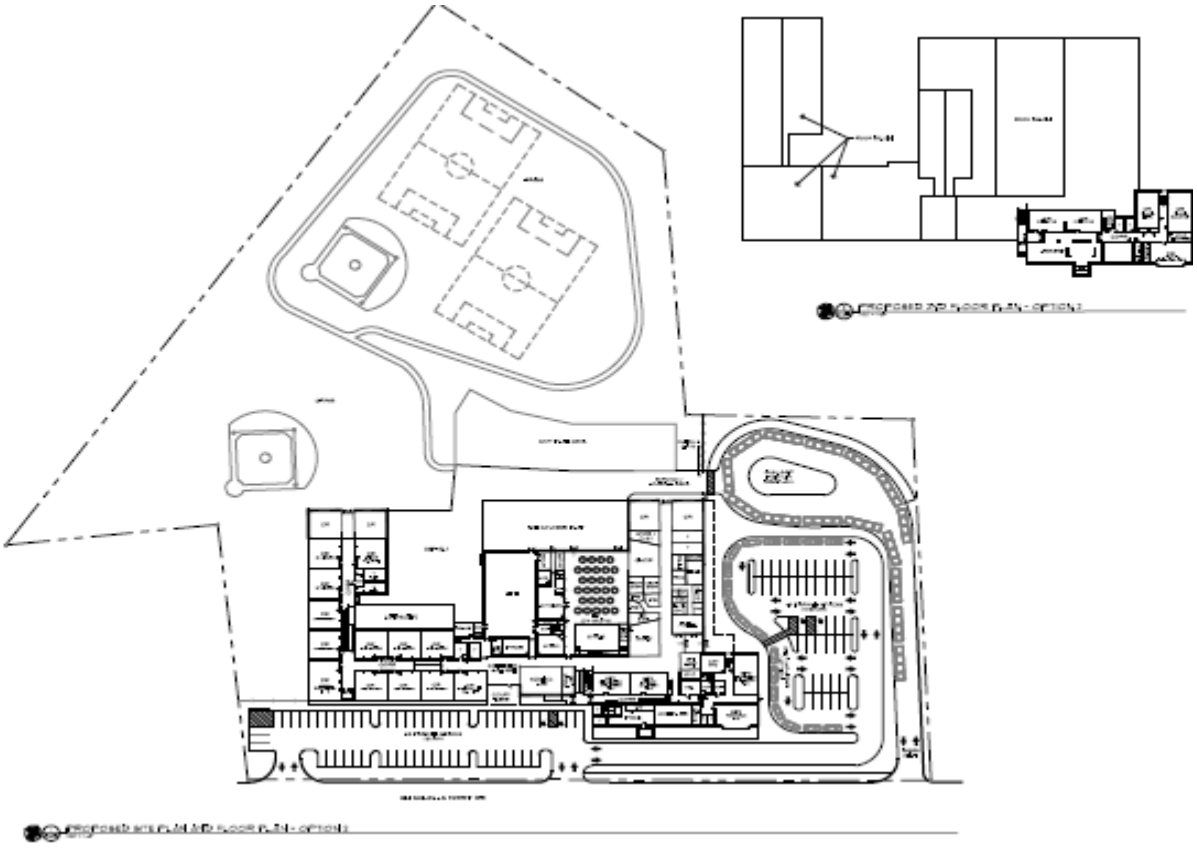
Construct a building addition with classrooms, choir & band rooms; remove drop ceiling from gym; modernize classrooms to create appropriate grade level 6-8 science lab classroom; expand cafeteria; replace covered play structure; purchase new cafeteria seating and classroom furniture. Parking and vehicle access will be improved to separate bus and automobiles. Security will be improved with a relocated visitor entrance. Portable classrooms will be removed.

Project Photo / Illustration: Raleigh Hills K-8 School Site





Current Site & Floor Plan



Proposed Site & Floor Plan

2014 Bond
School Kitchen Improvement Projects

Site/School	Various		
Project Title	School Kitchen Improvements	Cost Estimate	Cost Est. Date
		$ 800,000	2013

Description of Project Purpose / Problem to be Corrected

Various schools require improvements to physical layouts of serving lines and kitchens, safety issues at walk-in freezers and coolers, end of life of built-in dishwashers, plumbing and electrical needs for new equipment, staff lockers, health code plumbing issues, and a small amount of equipment replacement. These items have not been duplicated in the Physical Facility Improvements project.

Project Scope

Remodels to several school kitchens and serving lines- Ridgewood ES; Stoller MS; Health & Sciences HS; Merlo Station HS

Replacements of built-in dishwashers: Bethany ES; Cooper Mountain ES; Errol Hassell ES; Elmonica ES

Add Plumbing and electrical for new combi-ovens: Barnes ES; Fir Grove ES; Rock Creek ES; Merlo Station HS; Nancy Ryles ES

Plumbing changes to drains in kitchens – need in-direct waste lines (Health Dept. compliance issue): Bethany ES; Cedar Mill ES; Elmonica ES; Jacob Wismer ES; Raleigh Hills K-8; Ridgewood ES; Terra Linda ES; Cedar Park MS; Whitford MS

Addition of hand washing sinks: Raleigh Hills K-8

Addition &/or Replacement of walk-in coolers and freezers: Beaver Acres ES; Elmonica ES; Raleigh Hills K-8; Raleigh Park ES; Ridgewood ES; Merlo Station HS; Conestoga MS (freezer)

Additions of staff lockers: Five Oaks MS; Chehalem ES

Replacement of equipment: New Convection Oven – Barnes ES; Frost Top Freezer (outlawed refrigerant) – Conestoga MS; Greenway ES (reach in cooler); Salad Bar Hood & 2 burner range/griddle – Elmonica; 2 Convection Ovens – Whitford MS; Combi-Oven – Five Oaks MS; New Combi-Oven & Prep Tables- Ridgewood ES; Highland Park MS (Serving line wells); Ridgewood (Add steam table).

2014 Bond
Springville K-8 Improvements Project

Site/School	**Springville K-8**		
Project Title	Springville Site Improvements	**Cost Estimate**	**Est. Date**
		$2,000,000	2013

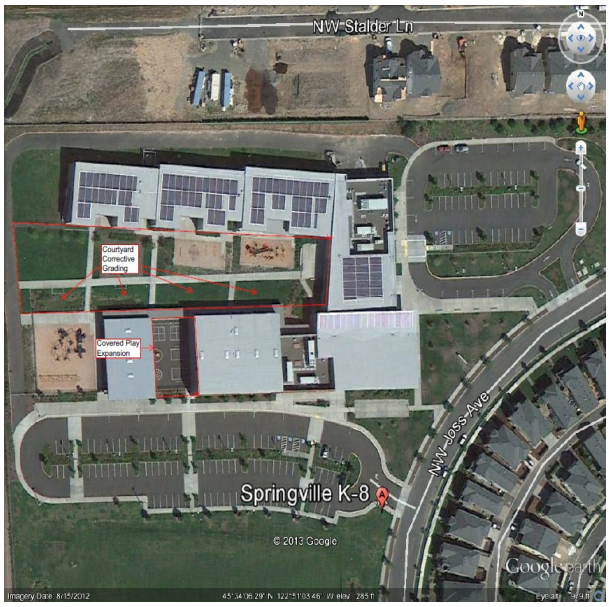
Description of Project Purpose / Problem to be Corrected

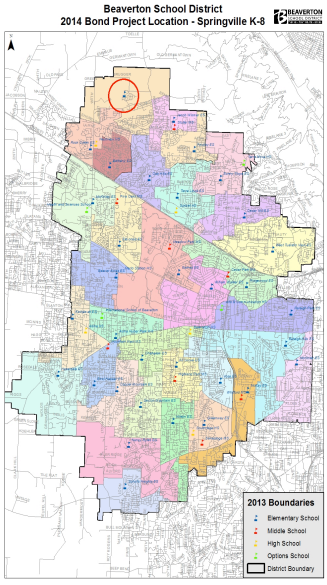
The existing covered play structure is undersized and needs weather protection enhancements. The center courtyard is in need of corrective grading, and landscaping for safety and usability. Additional site drainage is needed.

Project Scope

The scope of the work includes an extended covered play structure, canopy, modifications to drainage, and site grading improvements in the center courtyard. Addition of a temporary double-classroom portable will be sited off the classroom wing until the new Bethany K5 is constructed.

Project Photo / Illustration - Springville K-8 Site





Site/School	**District-wide ADA Compliance**		
Project Title	ADA Improvements at Various Sites	Cost Estimate	Cost Est. Date
		$2,000,000	2013

Description of Project Purpose / Problem to be Corrected

The Americans with Disabilities Act of 1990 and the ADA Amendments Act of 2008, require the District to have full program accessibility. Though this requirement can often be achieved on a case by case basis through program relocations and other administrative changes, that is not always the case. Removing physical barriers from our buildings is frequently necessary to provide full access to our facilities by students, staff, parents, and visitors.

A comprehensive survey has identified approximately over 2,000 accessibility barriers that need to be addressed in 57 buildings.

Project Scope

This funding would correct about 25% the identified deficiencies. The work would address ADA compliance issues in cafeterias, stairs, steep ramps, restrooms, classrooms, offices, parking lots, sidewalks, etc. Individual projects will be selected from the list of barriers, as needed, to ensure that individuals who require ADA compliant access are accommodated.

2014 Bond
Separation of Domestic and Fire Protection Water Lines

Site/School	**Various**		
Project Title	Separation of Domestic and Fire Protection Water Lines	Cost Estimate	Cost Est. Date
		$800,000	2013

Description of Project Purpose / Problem to be Corrected

Currently, many of the district's older elementary schools have fire sprinkler systems that were retro-fitted and were fed off the domestic waterlines. These lines do not have adequate capacity to extinguish fires and require a separate feed line from the water main in the street. In addition, a separate pipe riser room is necessary with a double check valve to prevent cross contamination.

Project Scope

Records indicate at least seven schools remain to have this cross-connection problem addressed. This project would correct this issue at these schools:

Chehalem
Greenway
Elmonica
Cooper Mountain
Fir Grove
Raleigh Hills K-8
Rock Creek

2014 Bond
Green Energy Technology Compliance

Site/School	All new construction and major renovation projects		
Project Title	Green Energy Technology	Cost Estimate	Cost Est. Date
		$5,000,000	2013

Description of Project Purpose / Problem to be Corrected

Effective January 1, 2013, State of Oregon Senate Bill 1533 requires that all construction or major renovation of public buildings include green energy technology of an amount equal to at least 1.5% of the total contract price associated with that building.

Project Scope

From Senate Bill 1533: "Eligible public building projects are new capital construction projects for which the total contract price is $1,000,000 or more for a single building or a group of buildings on the same site and major renovations that exceed $1,000,000 and 50% of the insured value of the building."

The applicable technologies include: Solar PV, Solar Thermal, Geothermal Electric, or "Passive solar thermal system, day lighting system or combined system must reduce the building's baseline energy use by 20% or more, as demonstrated with whole building energy modeling prepared under the direction of a professional engineer."

It should be noted that strategies of implementation are highly site/building specific. If it is deemed that green energy technology is not appropriate at a specific site, it is possible that the expenditure for green technology could be applied elsewhere in the program. As such, individual project locations and green technology costs will be determined during design of each project. The cost estimate on this document is thus reflected as a percentage of all new construction and major renovations program-wide and is not reflected in the individual projects presented as part of this bond planning effort.

2014 Bond
High School Title IX Compliance Projects

Site/School	**Aloha and Sunset High Schools**		
Project Title	High School Title IX Compliance	**Cost Estimate**	**Cost Est. Date**
		$ 4,000,000	2013

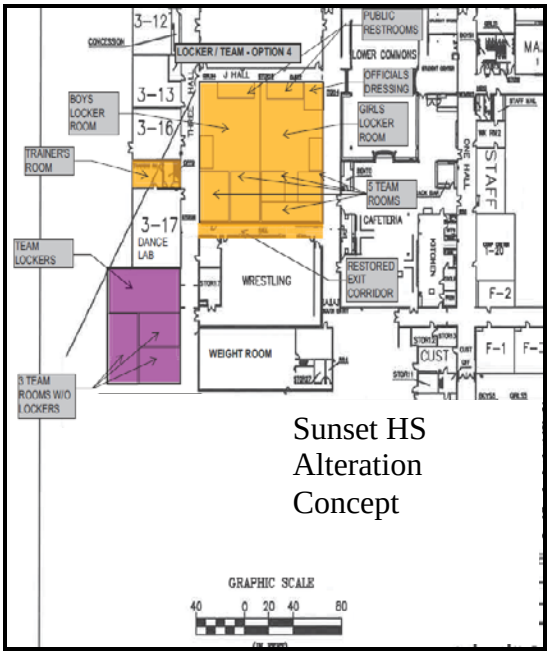
Description of Project Purpose / Problem to be Corrected

Title IX compliance in high school athletics requires that the District upgrade athletic facilities. Facility compliance reviews at Aloha HS and Sunset HS have identified issues that need to be addressed to achieve gender equity with consideration to the participating sports programs. Physical education programs will also benefit from these improvements.

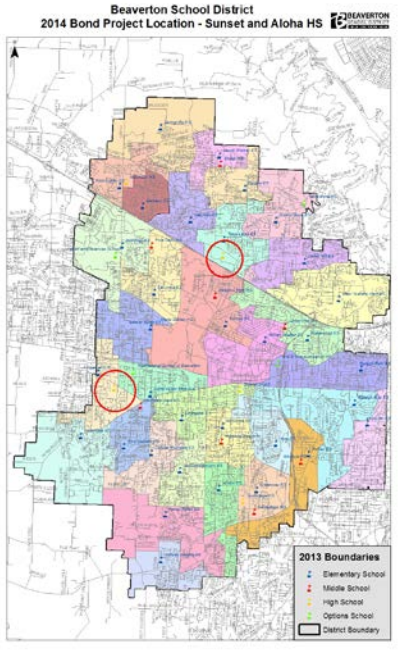
Project Scope

Modify existing team/equipment rooms, trainer rooms, and locker areas to achieve equality between genders for sports programs. The estimated cost is based upon a study at Sunset HS, where a solution was developed and is estimated to cost about $2,100,000. A sketch is shown below for Sunset HS is a prototype for the work needed at both high schools.

Project Photo / Illustration: Sunset High School Alteration Plan; Sunset HS & Aloha HS Locations Shown on Map



Sunset HS Alteration Concept



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2014 Bond
McKay ADA Upgrade Project

Site/School	**McKay Elementary (K-5)**		
Project Title	McKay ADA Upgrade	**Cost Estimate**	**Cost Est. Date**
		$ 421,000	2013

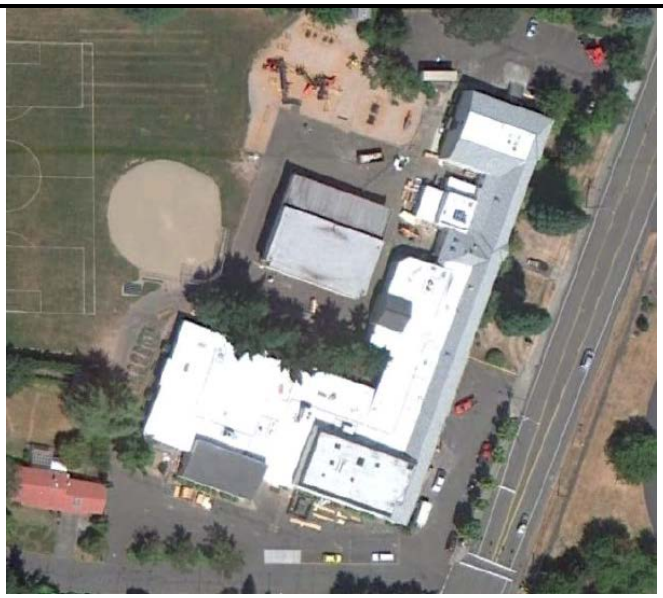
Description of Project Purpose / Problem to be Corrected

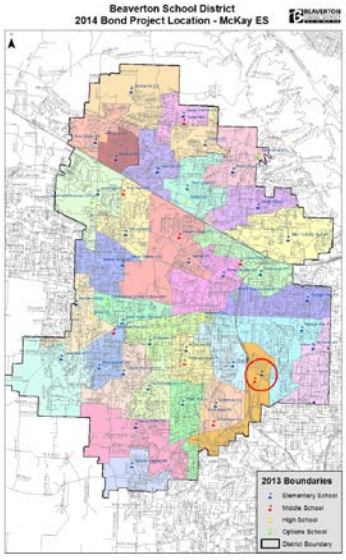
Over many years, this 1929-era school has had multiple modifications, additions, and conversion of basement areas and other non-teaching spaces into classrooms. As a result, the existing building has no Americans with Disabilities Act (ADA) access to the lower level staff room, counseling area, and classrooms. Current exiting does not meet modern code requirements. This project would provide alterations to provide required ADA accessibility and code compliant emergency exiting. Within the last several years, this school has benefited from significant investments in reroofing, plumbing replacement, seismic upgrades, heating and ventilation improvements, and is not a candidate for replacement.

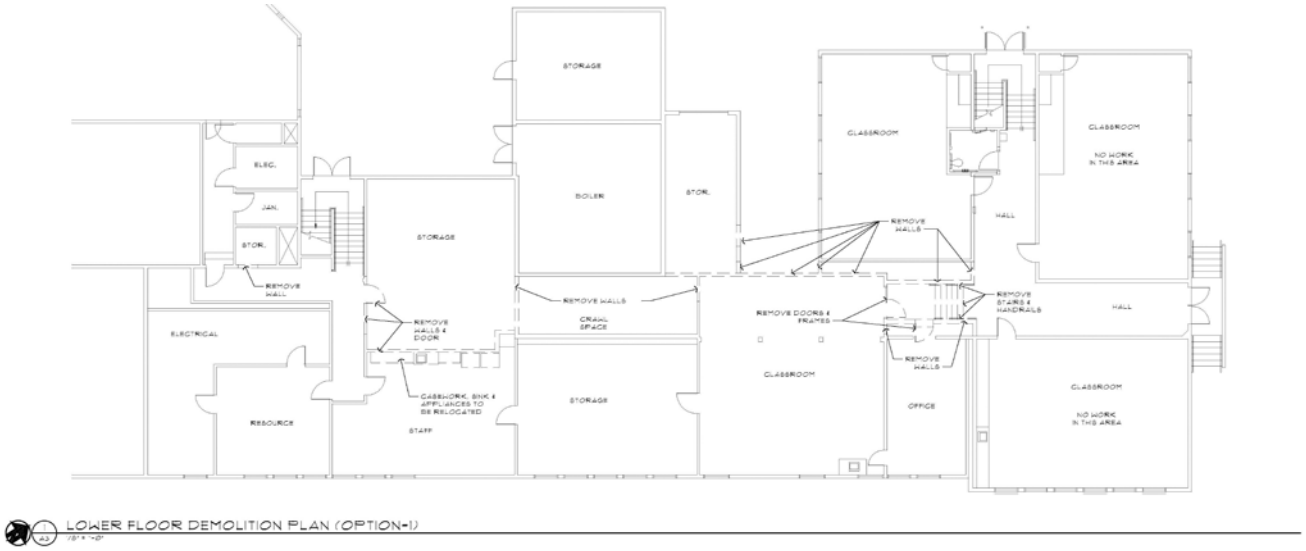
Project Scope

Demolish certain walls and re-route mechanical systems in basement and main level. Install elevator and create new hallway in basement level.

Project Photo / Illustration: McKay Site Plan & Location

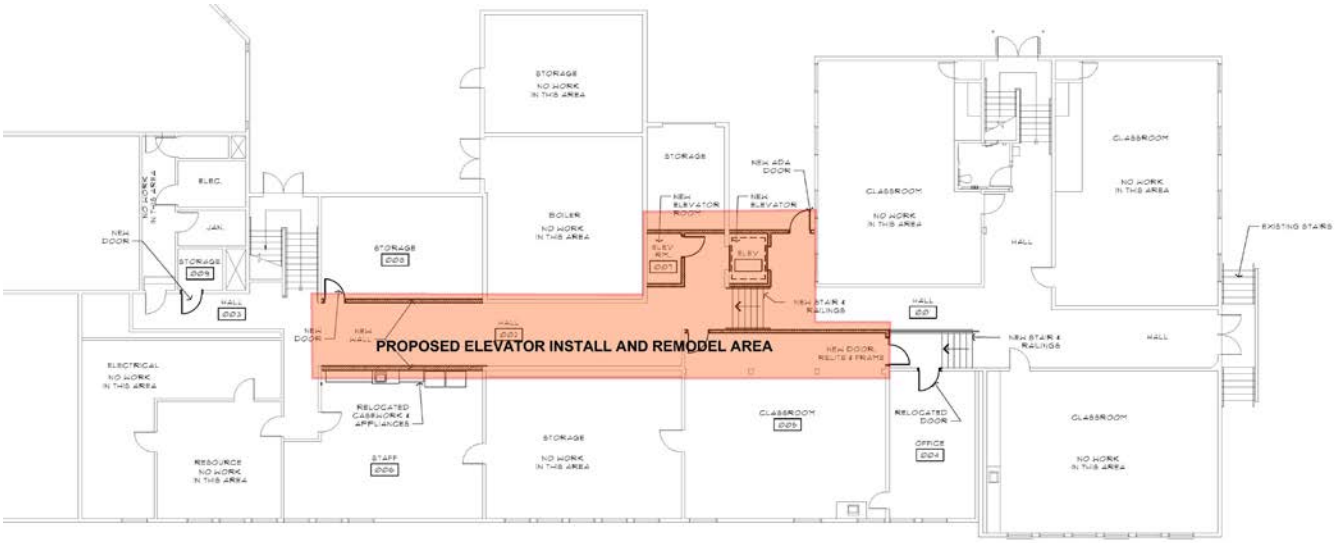






LOWER FLOOR DEMOLITION PLAN (OPTION-1)

Current Floor Plan



LOWER FLOOR PLAN (OPTION-1)

Proposed Floor Plan

2014 Bond
Security Upgrade Project

Site/School	District-wide		
Project Title	Security Upgrades	Cost Estimate	Cost Est. Date
		$ 10,000,000	2013

Description of Project Purpose / Problem to be Corrected

BSD will address the changing security threat environment at schools in consideration of a rising number of life threatening events that have occurred across the country.

With the assistance of a security consultant, BSD is currently in the process of developing facility design standards that take into account security, community values, feasibility, and affordability. This analysis will encompass leading a team of Beaverton School District staff members through a threat assessment process that considers the types of credible security threats to students and staff and the corresponding effective countermeasures. The scope will include buildings and exterior sites/grounds. The deliverable will be a report establishing security standards, which will be used as the basis for a subsequent site-by-site analysis to identify needed physical facility improvements to meet this standard. The report will also establish the District's security standard for new school designs.

Project Scope

Complete security retrofits in existing buildings by installing improvements such as: security cameras, remote entry door unlatching, keyless entry, visitor routing control, etc., as determined by a site-by-site analysis of needs compared to the security standard.

(New school designs also will follow the security standards; costs are contained within those projects' budget estimates.)

2014 Bond
Seismic Upgrade Projects

Site/School	Beaver Acres, Cedar Mill, Cooper Mountain, AHS, BHS		
Project Title	Seismic Upgrades	Cost Estimate	Cost Est. Date
		$4,100,000	2014

Description of Project Purpose / Problem to be Corrected

In the mid-1990s the Beaverton School District conducted a district-wide investigation of the seismic stability of its schools, and subsequently began a targeted program to seismically upgrade and improve them, generally in conjunction with other related projects such as roof replacements. Much work has been completed since that time. Currently there are five schools that remain in need of high priority seismic upgrades and are listed below.

Project Scope

Rehabilitation of five schools as follows:

Beaver Acres Elementary: The 2008 addition of 14 classrooms brought seismic upgrades to the existing west end of the school, however the east third of the original structure needs improvement of connection walls to roofs.

Cedar Mill Elementary: Previous 1997 reroofing project completed all necessary lateral path load connections to a majority of the building. The remainder of the lateral upgrades consist of improving the attachments of walls to their foundations, walls to the floor diaphragms, and improving the connections of the gym trusses to their supporting columns.

Cooper Mountain Elementary: In 2010, a roof-level lateral upgrade was completed for the majority of the school. The current work involves diaphragm blocking at the roof perimeter for portions of the gym, and an upgrade to plywood-sheathed shear walls and studwall anchor bolts in the cafeteria, lounge, and various classrooms.

Aloha High School: A 1996 reroof of areas in the north and east quadrants involved seismic upgrades. To complete them, the east quadrant requires strapping at the roof level. The west quadrant requires in-plane shear transfer connections, out-of-plane ties, and diaphragm strapping, while the gym needs roof level lateral upgrades.

Beaverton High School: An extensive reroof in 1998 made very substantial improvements to the main section of the building. Work done in 2008 included lateral improvements to the gym area and other remodels have strengthened second floor to wall connects in limited zones. Most portions of the older parts of existing second floor framing would benefit from similar improvements.

2014 Bond
New Elementary School Site Project

Site/School	**New Elementary School Site**		
Project Title	Land Acquisition	**Cost Estimate**	**Cost Est. Date**
		$3,000,000	2013

Description of Project Purpose / Problem to be Corrected

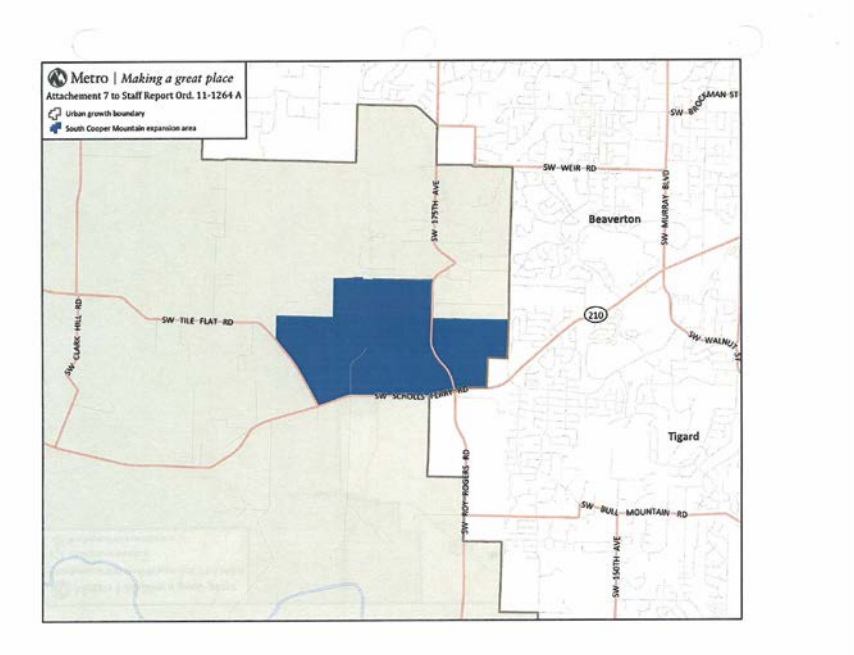
Concept Planning for the South Cooper Mountain area of the City of Beaverton has demonstrated the need for additional elementary school capacity as that area develops over the next few years. Property values are expected to increase substantially in the future as that community grows. Purchasing the land for a future school now would ensure that it will be available when needed and very likely be much less costly than waiting until the school is needed. The Beaverton 2010 School Facility Plan identifies the target elementary school site size to be about 7 to 10 acres. Exact size needed depends upon the site geometry, topography, and development constraints.

Project Scope

Purchase approximately 10 acres for a future K-5 school in the southwest area of the school district.

Project Photo / Illustration

South Cooper Mountain Planning Area



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2014 Bond
New High School Project

Site/School	**New High School**		
Project Title	New High School	**Cost Estimate**	**Cost Est. Date**
		$109,000,000	2013

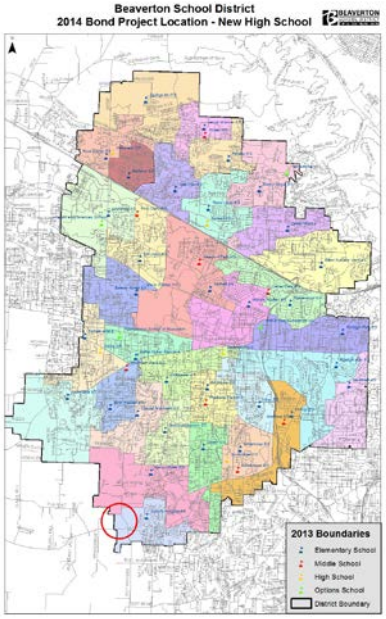
Description of Project Purpose / Problem to be Corrected

High school enrollment is at, or above, building capacity at 4 of the 5 comprehensive high schools. Currently, comprehensive high school building capacity is supplemented by the use of 21 portable classrooms, which provide a capacity of 483 students. This intensive reliance on portables strains the capacity of school common areas such as cafeterias, gyms, media centers, PE facilities, and restrooms. The most overcrowding is at Westview where 16 portable classrooms are in use. High school enrollment is forecasted to further increase. By 2020, high school enrollment is projected to reach 112% of district-wide capacity if portable classrooms continue to be used; without portables, enrollment would reach 118% of capacity by 2020. Adding a 6th high school, and eliminating the portables at the comprehensive high schools is projected to result in occupied capacity dropping to 94% in 2017. The District needs additional capacity at the high school level as soon as possible.

Project Scope

Construct a new 2,200 student high school on property acquired by the Beaverton School District in the 2006 Bond program. Include associated facilities and athletic fields.

Project Photo / Illustration: Site Plan (below), High School Enrollment and Capacity Chart (next page)



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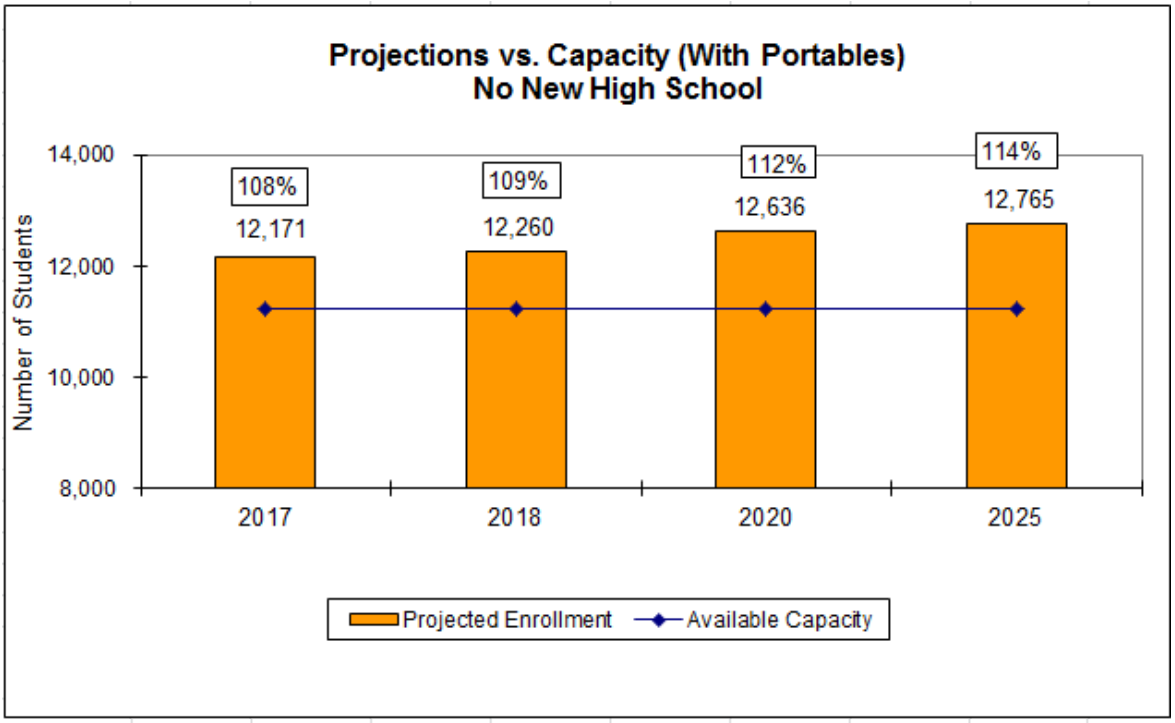
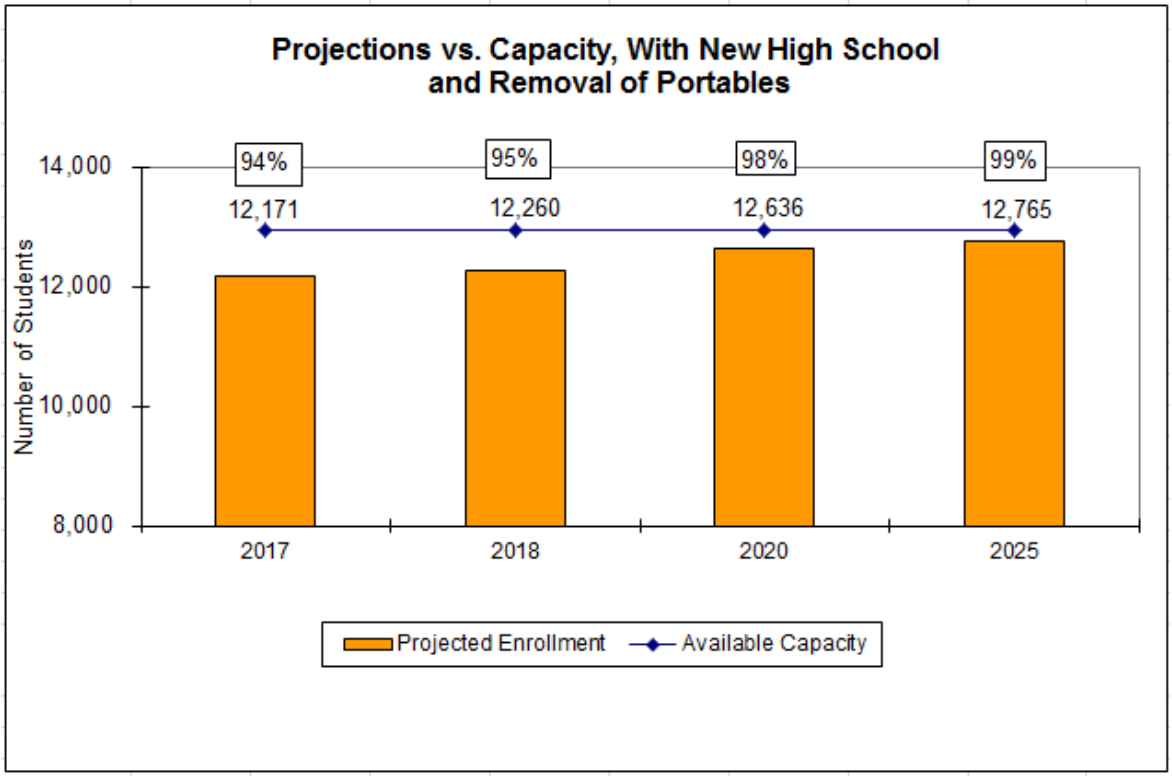
2014 Bond
New High School Project





Site/School	**New Elementary School (K-5)**		
Project Title	New Elementary School	**Cost Estimate**	**Est. Date**
		$25,000,000	2013

Description of Project Purpose / Problem to be Corrected

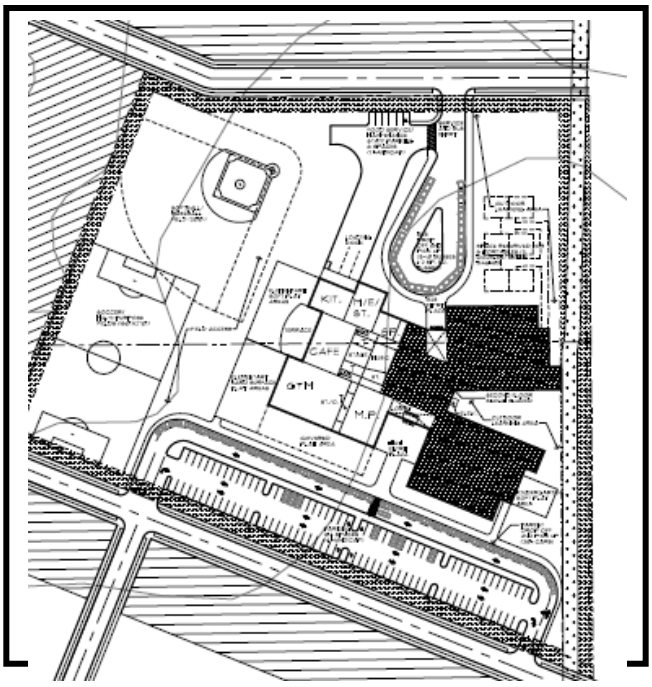
The rapidly-growing North Bethany area expects a large influx in population over a 20-year period. The school currently serving this area is Springville K-8. Springville school capacity is 836, but population forecasts indicate that Springville's enrollment will exceed 105% of its available capacity well before 2020. Constructing an additional K-5 school in North Bethany will add District capacity for approximately 750 students.

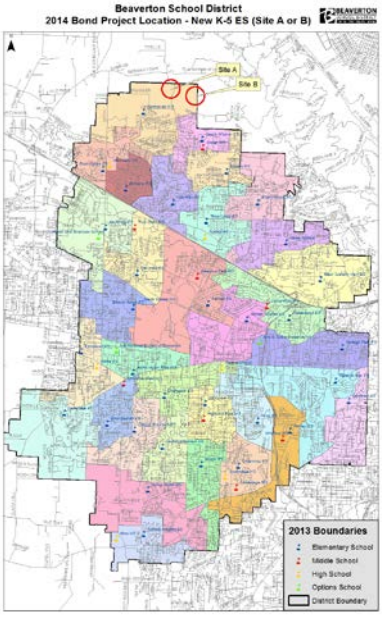
Project Scope

Construct new two-story K-5 school building with a total capacity of 750 students. The District owns two sites in North Bethany, both of which are suitable for an elementary school. The drawing below was created for Site B as an example of what a school might look like at that site.

Project Photo / Illustration – New Elementary School – Concept Plan and Location Map

Concept Example for Site B





Site/School	New Middle School on Timberland Site		
Project Title	New Middle School	Cost Estimate	Est. Date
		$51,590,000	2013

Description of Project Purpose / Problem to be Corrected

In the 2013-14 school year, total District middle school capacity is expected to occupy 91% of available middle school capacity. By 2020, projected occupancy rises to 98%. Additional middle school capacity is going to be needed between 2020 and 2025.

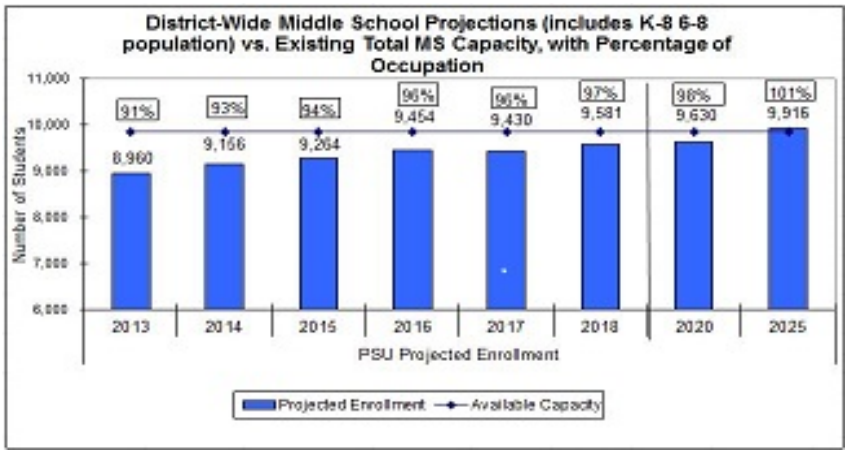
In addition to capacity concerns, the District should address the modernization needs of all older buildings. Analysis has shown that several elementary schools, which need significant repair and improvement work, are prime candidates for replacement as the more economical solution than continuing to invest in functionally inadequate buildings.

The Timberland site will temporarily house students from the schools that are undergoing replacement. The construction work for each school replacement is anticipated to take one year. At the end of the series of replacement projects, the Timberland site school will become a Middle School, and will provide new capacity for approximately 1,100 students. Each replacement school will also provide some additional capacity at the K-5 level.

Project Scope

Construct an 1100-student Middle school facility on the Timberland site to provide additional District capacity for middle school students. This school is a critical component of the 2014 Bond because it will be used as a temporary elementary school for schools undergoing replacement construction. This project should be completed early in the Bond program in order to provide the temporary school space as soon as possible.

Project Photo / Illustration: Enrollment and Capacity Charts (below), Site Plan (next page)



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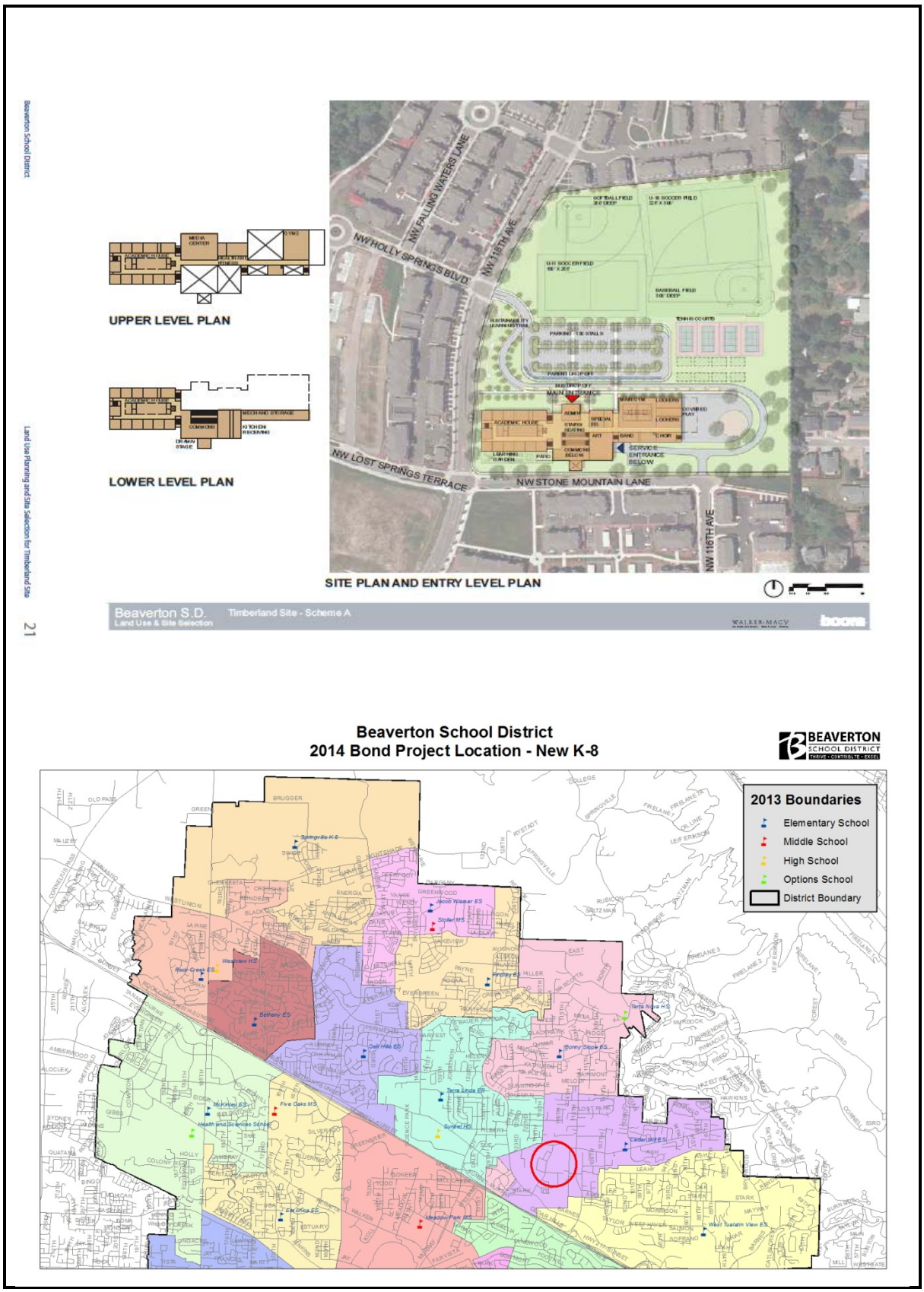

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2014 Bond
HVAC Control System Upgrade Project

School Name	District-wide		
Project Title	HVAC Control System Upgrade	Cost Estimate	Cost Est. Date
		$800,000	2013

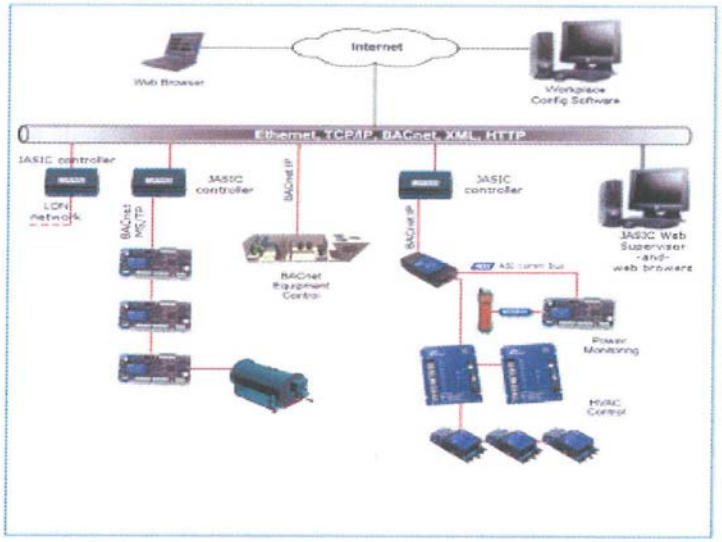
Description of Project Purpose / Problem to be Corrected

All BSD facilities have some level of network control that allows for remote access to the HVAC systems. These control networks provide energy-saving scheduling features, alarms, trending, and remote access for service. This control is currently spread out over five networks of varying versions, many of which are obsolete but still control school-level systems that are far from end of life. Upgrading and consolidating the current network will protect control systems by providing hardware updates and system-specific custom programming that is beyond the scope of standard maintenance budgets. These updates will also provide the platform for future HVAC projects.

Project Scope

Replace obsolete supervisory controllers that are not part of scheduled HVAC upgrades. Install enterprise server to manage the entire District on one platform. This server will be on the district IT servers and provide secure backup programming for all of our controllers ensuring that all security updates and back up procedures are implemented in a timely manner. The updated system will standardize and simplify scheduling, provide alarm management, and is compatible with new energy management tools. This upgrade will save energy, lower maintenance time, and protect our millions of dollars in controls.

Project Photo / Illustration: Typical Enterprise Network



2014 Bond
IT Data Center Project

Site/School	Capital Center		
Project Title	IT Data Center	Cost Estimate	Cost Est. Date
		$2,900,000	2013

Description of Project Purpose / Problem to be Corrected

The Beaverton School District has only one data center to support technology needs of all schools and ancillary locations. The lack of a secondary data center means that should a catastrophic failure occur at the primary site, the time to restore services is measured in days. While the District utilizes cloud-based services, not all District applications are able to be stored in a cloud-based architecture due to network costs and security issues. A secondary site would allow replication of services, providing the ability to recover more quickly and to continue to provide access to the Student Information System, the HR/Finance System, and other critical services while the primary site was repaired.

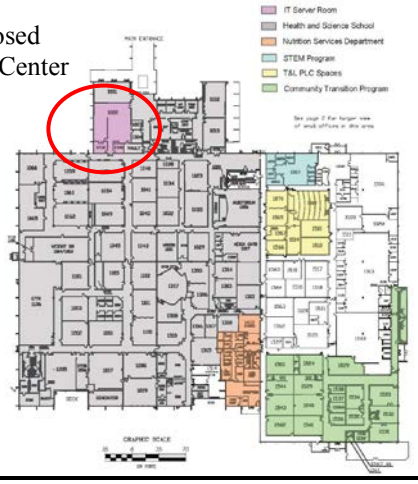
An additional benefit of a secondary site would be the doubling of network capacity. Currently, all network traffic from all schools is routed through the Central Administration building. This frequently creates a constraint that affects internet access for students and teachers. A secondary site would allow network services to be load balanced between two sites, providing a better experience for students and teachers using the network for teaching and learning purposes. The Capital Center has the shell and configuration for a data center that was created when the building was built and is ideal to adapt for this purpose.

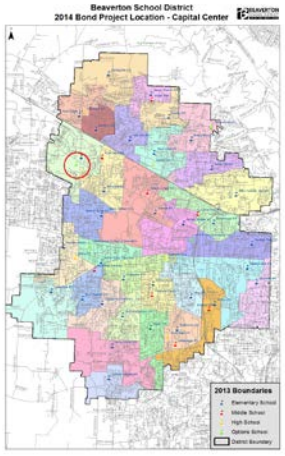
Project Scope

Create an additional data center in the Capital Center building. Each will be a state-of-the-art center and will house the District's servers and data storage medium to support the entire District network. Creation of this data center includes purchasing of new servers and hardware, UPS, emergency generators, fire protection, security access and video surveillance camera systems.

Project Photo / Illustration: Capital Center Floor Plan and Building Location

Proposed
Data Center





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2014 Bond
Unified Communication System Project

Site/School	**District-wide**		
Project Title	Unified Communication System	Cost Estimate	Cost Est. Date
		$ 7,200,000	2013

Description of Project Purpose / Problem to be Corrected

The current District-wide communication system is past end-of-life, causing frequent telephone system failures and difficulty in obtaining replacement equipment. Current systems are not expandable and do not have the capacity for automated call generation; texting; or push notifications in an emergency situation. Current emergency (911) does not locate caller within building – only to the building address. The age of the system, failure rate, and lack of E911 capabilities pose a safety threat to the organization.

Project Scope

The physical improvements were completed in the 2006 Bond to prepare most school and ancillary sites for a Voice Over IP (VOIP) telecommunications system. The scope of the project will include all individual building communication system hardware: desk sets and licenses, unified communication system software, E911 system, and advance notification system (push text, Facebook & Twitter). Additionally, central servers housing and managing the telecommunications system will be replaced. The costing includes systems design and administration during installation; completion of physical improvements to Westview HS; Cedar Park MS; Maintenance and Transportation Facilities; Special Education Facilities; Central Administration Building & Deer Park. This budget will also pay-back funds expended from the 2006 Bond to finance some of the building physical space improvements needed to support the new system equipment.

2014 Bond
Learning Technology: Classroom Systems

School Name	BSD Wide		
Project Title	Digital Conversion: A Vision of Connected Learning	Cost Est.	Cost Est. Date
		$56,000,000	2013

Description of Project Purpose / Problem to be Corrected

Learning must be dynamic, engaging and tailored to the unique needs of each student. Our students have unlimited potential as well as specific learning needs and interests. Now and in the future, they will be asked to think, create, innovate, communicate, and collaborate as engaged members of our global community. Learning shifts must occur in the classroom as students and teachers work together with the varied resources used in our daily lives to find, consume, evaluate, and contribute information. Our classrooms will mirror the world we are preparing our students to navigate and ultimately, lead.

Students need to be able to access information to work in collaboration with teachers, peers and experts on what and how they learn. Printed textbooks contain static information, without an easy way to update the information. The goal of pursuing digital content is to meet the unique learning needs of students so that learning is engaging and efficient, available at any time, and steeped in authentic problem solving. Access to high quality, dynamic information for all students will help close the equity gap.

Teachers need the opportunity to access, modify, and customize curriculum to meet the unique needs of their learners. Teachers know their students well and also know the resources necessary to meet their learning needs. As curriculum transforms to a digital format accessed largely online, students and teachers need modern, mobile technology devices. A combination of district-owned and personally-owned devices will address the lack of available resources available throughout the district, making the initiative sustainable and equitable. In addition to meeting curriculum needs, our Digital Conversion will provide students with technology to support exploration and creation of content. Our vision is that every student and teacher has immediate access to technology and the Internet throughout the school and school day to support their learning.

2014 Bond
Learning Technology: Classroom Systems

Project Scope

Over the life of the bond, BSD will shift from the use of largely print resources to the introduction and application of digital instructional materials, identified and customized to student learning needs. As a result, all students will have access to and engagement with digital content within the 5 years of the bond. A Learning Management System (LMS) will be provisioned to support student learning with personalized digital content. Ongoing professional development will be provided to teachers and administrators through the budget process.

Therefore, the project includes:

- Appropriate procedures and criteria will be developed to identify high quality and district approved digital and print resources
- Purchase digital and print resources aligned to content standards and instructional practice in support of student learning
- Curriculum specialists to curate, create, and aggregate digital content in a Learning Management System

There will be the purchase of mobile computing devices towards a large-scale 1:1 deployment. In addition to the purchase of devices, necessary infrastructure at the school and central level will be purchased to ensure a positive user experience for students. Supporting this move to mobile technology tools will be a standard suite of classroom hardware and software tools and applications. Ongoing professional development will be provided to teachers and administrators through the budget process.

	Bond Program Contingency		
		Cost Estimate	Cost Est. Date
		$45,4000,000	2013

Description of Purpose

All capital engineering and construction projects including those projects that comprise this bond are subject to cost impacts related to unforeseeable events that impact the course of the work. In addition, during the capital planning period it is not possible to prepare final detailed project designs, thereby resulting in some cost associated with the missing detailing not being defined. Use of experience-based contingency to correct for these uncertainties is the commonly accepted approach for developing final budgets in capital programs.

Scope

Contingency is typically derived by using historical data that is applicable for programs and projects of a similar nature to those being implemented, with this historical data being obtained from organizations such as the American Institute of Architecture (AIA) and the American Association of Cost Engineers (AACE). An excerpt from one such source quoted by the Construction Management program at Arizona State University is presented on the second page of this document. The amounts shown are not necessarily directly applicable to all of BSD's capital build program but do illustrate a typical contingency range of 10% to 15% for new construction and up to 20% for renovations. Based upon BSD's previous capital construction experience and that of Portland Public Schools and others in the area, **10% of the program cost,** amounting to $45.4 million, was added to original architect engineer derived estimates to obtain the expected cost of the program (program contingency). The Critical Equipment and Learning Technology projects were not included in the contingency calculation.

Contingency Costs

4. PROJECT CONTINGENCY GUIDELINES

The following definitions are intended for the various contingencies addressed in this chapter:

DESIGN CONTINGENCY - a percentage of the concept budget allowed for programmatic and design changes which occur over the course of the design process. This percentage should diminish as the design goes from concept stage to contract document stage.

CONSTRUCTION CONTINGENCY - a percentage of the concept budget allowed for unforeseeable conditions encountered during the construction phase, i.e., change orders, updated soils reports, etc.

PROJECT CONTINGENCY - the total of Design and Construction contingencies.

Project contingency depends upon the size and type of project. For conceptual and project approval, the contingencies shown in the table are appropriate:

CONTINGENCY AS A PERCENTAGE OF CONSTRUCTION COST

	NEW CONSTRUCTION			REMODELING/RENOVATION	
	Design Contingency	Construction Contingency	Maximum Total Contingency	Design Contingency	Construction Contingency
Conceptual & Design Phase					
Projects $ 5 million & Greater	5% - 7%	3% - 5%	10%	10%	3% to 7%
Projects less than $ 5 million	8% - 10%	5% - 7%	15%	10%	5% to 10%

	Bond Program Issuance Cost and Inflation Coverage		
		Cost Estimate	Cost Est. Date
		$52,800,000	2013

Description of Purpose

In addition to specific project costs and other implementation costs, the Bond program must support bond issuance costs and costs to cover cost inflation between the initial bond project planning date and the time of implementation. In the case of this bond, the time of implementation will range from 2 years to about 8 years, which is a long enough time period that the projects will be impacted by significant cost inflation.

There are also costs associated with packaging, marketing and putting the bonds in place which we will refer to as the cost of issuance.

The costs addressed in this document will be added to address the items above.

Scope

Issuance Costs
Based upon our financial advisors advice and previous experience BSD is allocating $1 million for bond issuance costs for these bonds.

Inflation Costs
A multi-year program must address construction inflationary costs. This is particularly important as the economy improves with more construction activity drawing down regional contractor capacity. In our area, Nike and Intel projects will be major factors influencing constructor demand and construction material demand, thus driving cost inflation. For convenience, most of the costs of individual projects proposed for the Bond have been estimated based upon 2013 costs, with the anticipation that a program-wide inflationary factor would be added. Based upon our experience and Federal estimates of inflation over the 8 year bond period we have allocated 3% per year or $52.8 million for inflation coverage. The Critical Equipment and Learning Technology projects were not included in the inflation calculation.

2014 Bond
Bond Implementation Program Management Costs

	Bond Implementation Program Management		
		Cost Estimate	Cost Est. Date
		$20,000,000	2013

Purpose

Effective and efficient delivery of construction programs requires an investment in project management staffing and related support in order to protect the School District's interests and to guide the program effectively. This work includes defining scopes of work for architectural and engineering contracts; negotiating, awarding, and managing those contracts. It also covers awarding construction contracts and overseeing the construction work, negotiating change orders, coordination with permitting jurisdictions, liaison with District staff who will use the facilities, and

Through previous bond capital programs, BSD has found that it is most effective to establish a core project management staff to perform this work. Based upon the District's previous bond programs, it has been determined that the program management effort will require $2.5 million per year for the 8 year program planned.

Scope

Based upon the size and complexity of the proposed Bond program, the program management core staff will peak at about 29 personnel, of which 4 are currently employed and will move to the new program. To support the management personnel, some investment in computers and program management software will be required, as well as office space and office equipment. For a limited number of the larger projects, in-house project management staff may need to be augmented with contracted project management resources.