



BORA

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ACKNOWLEDGMENTS

NORTH CLACKAMAS SCHOOL DISTRICT

Bond Steering Committee

Cindy Quintanilla
Garry Kryszak
Matt Utterback
Ron Stewart
Tiffany Shireman

Bora Architects Ed Spec Team

Chris Linn
Leina Naversen
Emily Russell
Amy Running

Bond Program Manager

Gordon Odette, Heery
International

Bond Admin Support

Joel Stuart
Shay James
Deb Botteron

Stakeholder Groups

GENERAL CLASSROOMS

Michael Petersen
Drew Coleman
Emma Vaughan
Chuck Nott

SCIENCE CLASSROOMS

Dan Robinette
Jeff Linman
Allison Quarles

ART

Linda Kieling
Michael Fell
John Telesmanich

MUSIC

Jeff Betts
Erika Lockwood
Greg VanWinkle
Scott Davis

THEATER

Michael Streeter
Carrie Jo Vincent
Scott Walker
Kelley Marchant

P.E. / ATHLETICS

KT Emerson
Jesse Eveland
Vicki Nelms
Matt Krueger
Tim Jacobs
Corey Landolt
Eddie Wilkins

MEDIA / TECHNOLOGY

Tricia George
Melissa Teppo
Leslie Fulton
Ben Stead
Robert Thonstad
Julie Jones

ADMINISTRATION

Ken Costa
Mark Pinder
Joe Bridgeman
Shawna Grant
Bruce Wales
Tim Taylor
David Kruse

COUNSELING & CAREER

Noelle Zentz
Roberto Aguilar
Laura Nelson
Lori Gutierrez

SPECIAL EDUCATION

Cathy Knight
Sherry Cornell
Stephanie Crates
Jason Fleming
Rob Holloway

NUTRITION SERVICES

Greg Collins
Terry Ryan
Lori Yeadon

FACILITIES / CUSTODIAL

Javier Torres
Dan Penna
John Varesio
Melinda Shumaker

MILWAUKIE HIGH SCHOOL DESIGN TEAM

Dan Hess, DOWA-IBI
Elisa Warner, DOWA-IBI

Executive Summary

EXECUTIVE SUMMARY

North Clackamas School District engaged Bora Architects to develop a high school educational specification for the district in January 2017. This document is the result of that work, which includes both a comprehensive area program for district high schools, as well as room requirements and assessment of optimal departmental adjacencies. These educational specifications will be used to inform upcoming projects under the 2016 capital construction bond, including renovation and addition projects at Milwaukie High School and Rock Creek Middle School, which will be expanded to be converted into a high school. Further, the educational specifications are a resource for establishing parity across district high school facilities and to support other future projects.

The work began with a January 30th meeting with the Steering Committee to review goals and deliverables, followed by two rounds of stakeholder meetings conducted over four days in February and March with faculty and staff from Clackamas, Putnam and Milwaukie high schools.

Some stakeholders, along with Bond Steering Committee members, Bora Architects and DOWA-IBI Group (working on the Milwaukie High School replacement), also attended facility tours of West Linn and Sandy High School in February. This provided an opportunity to visualize and experience a major remodel and newly constructed school to inform the high school educational specifications.

Focus groups provided feedback on the subjects of:

- | | |
|----------------------|----------------------------------|
| - General Classrooms | - Media / Technology |
| - Science Classrooms | - Administration |
| - Visual Arts | - Counseling & Career Center |
| - Music | - Special Education |
| - Theater | - Nutrition Services |
| - P.E. / Athletics | - Facilities & Custodial Support |

The last time a comprehensive high school area program was developed for North Clackamas School District was by Bora Architects (formerly Boora) in 1996, prior to the design and construction of Clackamas High School. In the process of updating the educational specifications, stakeholders reflected on the twenty years since the 1996 program update, advising on what does and does not work well at Clackamas and other District high schools (Putnam and Milwaukie). Additionally, focus group participants were asked to consider what is missing from their schools that would improve educational facilities for teachers, students and staff, and to consider adaptability for the future of education 20 to 50 years from the present time.

The two meetings conducted with each stakeholder group provided an iterative feedback process for updating the high school area program and developing space requirements, better reflecting the current and future needs of the school district. Several program departments that existed in the 1996 area program were removed from the current ed spec, including:

- Computer Center. Stakeholders advocated for flexibility to be able to convert regular classrooms or other spaces into computing areas as needed without requiring a dedicated space.
- Vocational Center and communications, business and home economics classrooms. These types of career and technical education courses are currently available to all students in the district at the Sabin-Schellenberg Professional Technical Center.

Additionally, there are a number of spaces in the current area program that were not a part of the 1996 Clackamas HS program, including:

- | | |
|----------------------------------|---|
| - Flex / Extended Learning Areas | - Maker Space |
| - Dance / Fitness Studio | - Multi-Purpose Community Room / Scale-up Classroom |
| - Large Athletics Team Room | - Health & Wellness Center |

These new program spaces were recommended by stakeholders as providing added value to District educational facilities, and vetted by the Bond Steering Committee after issuing the draft of the educational specifications at the end of March. The committee weighed the costs of building additional square feet with the added value provided by these areas, aiming to keep the overall program at 270,000 gross square feet.

The final educational specifications document, completed in May 2017, represents stated needs and vision of District stakeholders, input from the architectural team knowledgeable of evolving high school facilities, and thoughtful review and feedback from the Bond Steering Committee. This document will provide a road map for exciting growth at North Clackamas School District in both the immediate future and the decades to come.

Comprehensive High School Area Program

PROGRAM SUMMARY

Program Department	2017 HS Ed Spec		1996 HS Ed Spec		Delta	
	TS	SF	TS	SF	TS	SF
CORE ACADEMICS						
Instructional Space (Classrooms & Support)	38	49,290	36	44,340	2	4,950
Science Classrooms & Support	8	12,980	8	12,620		360
FINE & PERFORMING ARTS						
Visual Arts	4	7,130	4	6,350		780
Music	2	7,100	2	5,740		1,360
Theater	3	18,025	2	15,075	1	2,950
PHYSICAL EDUCATION / ATHLETICS	5	46,065	5	43,045		3,020
MEDIA CENTER / LIBRARY	3	10,140	3	11,320		-1,180
EDUCATION SUPPORT						
Administration	1	6,235		4,025	1	2,210
Counseling / Career Center		3,900		3,665		235
SPED	2	3,410	2	3,735		-325
Commons		16,055		16,670		-615
Food Service		4,795		4,795		
Custodial & Building Support		11,310		9,575		1,735
HEALTH & WELLNESS CENTER		2,245				2,245
DISCONTINUED PROGRAMS						
Computer Center			1	6,445	-1	-6,445
Communications / Business / Home Ec			4	6,510	-4	-6,510
Vocational Center			3	7,714	-3	-7,714
TOTAL NET SF	66	198,680	70	201,624	-4	-2,944
Net/Gross Ratio of 36%		71,525		72,585		-1,060
TOTAL GROSS SF		270,205		274,209		-4,004

CORE ACADEMICS

Instructional Space	2017 Ed Spec				Clackamas HS	1996 Ed Spec			Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF		Qty.	SF Ea.	SF	
Classrooms	38	38	900	34,200	Classrooms	36	900	32,400	+2 qty. for ELL / computer labs
Classroom storage alcove		38	50	1,900					
Teacher Planning Areas			L.S.	8,550	Teacher Planning/Work	4	2,700	10,800	Lump sum - allocate as needed
Flex / Extended Learning Areas			L.S.	4,000					Stakeholder input
Teacher Conference/Work					Teacher Conf/Work	4	285	1,140	
Phone Rooms		4	60	240					Private / separate from planning area
Toilets		8	50	400					
Subtotal	38			49,290				44,340	

Science Classrooms	2017 Ed Spec				Clackamas HS	1996 Ed Spec			Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF		Qty.	SF Ea.	SF	
General Science (Physics / Biology)	6	6	1,350	8,100	Physics	2	1,200	2,400	Combined physics & biology per user preference
					Biology	4	1,200	4,800	
Chemistry	2	2	1,350	2,700	Chemistry Physics	2	1,200	2,400	1,200 SF too small per user input
Lab Prep Area - General Science		3	480	1,440					1 shared per 2
Lab Prep Area - Chemistry		1	540	540	Lab Prep Area	4	480	1,920	General Science classrooms
General Storage		1	200	200	General Storage	1	200	200	Larger area req'd for chemistry
		-	900		Staff Planning/Work	1	900	900	Teachers prefer own classrooms
Subtotal	8			12,980				12,620	

FINE & PERFORMING ARTS

Visual Arts	2017 Ed Spec				Clackamas HS	1996 Ed Spec			Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF		Qty.	SF Ea.	SF	
Drawing/Painting Studio	2	2	1,600	3,200	Drawing/Painting Studio	2	1,500	3,000	40'x40' square
Ceramic Studio	1	1	1,800	1,800	Ceramic Studio	1	1,700	1,700	
Kiln Room		1	180	180					Space for 4 kilns
Digital Art / Photography / Yearbook	1	1	1,200	1,200	Journalism	1	1,350	1,350	
Storage - Gen. Art Classrooms		3	250	750	Storage	1	300	300	Insufficient for 4 classrooms
Gallery / Display									25 LF on wall of main bldg lobby
Subtotal	4			7,130				6,350	

Music	2017 Ed Spec				Clackamas HS	1996 Ed Spec			Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF		Qty.	SF Ea.	SF	
Band/Orchestra Room	1	1	2,400	2,400	Band Room	1	2,400	2,400	80-90 students
Band/Orchestra Office		1	90	90	Office	1	90	90	
Instrument Storage		1	750	750	Instruments	1	300	300	Undersized compared to needs
Band General Storage		1	140	140	Storage	1	140	140	
Choral Room	1	1	1,600	1,600	Choral Room	1	1,600	1,600	
Choral Office		1	90	90	Office	1	90	90	
Choral Storage		1	80	80	Storage	1	80	80	
Riser Storage		1	300	300					Stakeholder need
Small Practice Rooms		4	100	400	Practice Rooms	4	60	240	
Ensemble Practice Room		1	400	400	Ensemble / Orchestra	1	400	400	
Uniform Storage		1	450	450					150 band uniforms & 100 choral robes
Music Library		1	100	100	Music Library	1	200	200	
Choral Library		1	100	100					
Staff restrooms, changing & shower		2	100	200	Staff restrooms, changing & shower	2	100	200	
Subtotal	2			7,100				5,740	

Theater	2017 Ed Spec				Clackamas HS	1996 Ed Spec			Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF		Qty.	SF Ea.	SF	
Auditorium - Seating for 600		1	6,160	6,160	Auditorium	1	6,160	6,160	
Sound & Light Locks		4							Incl. w/auditorium
Stage	1	1	2,900	2,900	Stage	1	2,900	2,900	
Control Room		1	360	360	Control Room	1	360	360	
Sound Board		1	100	100					Added per stakeholder need
Fore-stage / Orchestra Pit		1	250	250	Fore-stage	1	250	250	
Dressing/Make-up/Toilets/Shower		2	580	1,160	Dressing areas	2	580	1,160	
Rehearsal Theater / Black Box	1	1	2,120	2,120	99 seats	1	2,250	2,250	99 seats; 43' x 40'
Black Box Control Room		1	100	100					Upper galley
Dance / Fitness Studio	1	1	2,025	2,025					45' x 45' Elective + P.E. classroom
Scene Shop/Storage		1	1,350	1,350	Scene Shop/Storage	1	925	925	Existing is undersized
Prop Room		1	400	400					Adjacent to stage
Costume Room		1	400	400	Costume Room	1	120	120	Existing is undersized; Incl. laundry
Drama Office		1	160	160	Drama Office	1	160	160	
Box Office		1	70	70	Box Office	1	70	70	
Concessions		1	70	70					
Storage		1	400	400	Storage	1	400	400	
					TV/Radio/Skill Ctr	2	160	320	Not needed
Subtotal	3			18,025				15,075	

PHYSICAL EDUCATION / ATHLETICS

P.E. / Athletics	2017 Ed Spec				1996 Ed Spec				Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF	Clackamas HS	Qty.	SF Ea.	SF	
Main Gymnasium w/ 2000 seats	1	1	13,500	13,500	Main Gymnasium	1	13,300	13,300	13,500 is actual CHS gym size
Auxiliary Gymnasium	1	1	9,000	9,000	Auxiliary Gymnasium	1	9,000	9,000	
Wrestling (60 x 60)		1	4,000	4,000	Wrestling (60 x 60)	1	4,000	4,000	30-50 people
Weight Room	1	1	3,000	3,000	Weight Room	1	1,920	1,920	1,920 SF too small
Health Classroom	2	2	900	1,800	Health Classroom	2	900	1,800	
Boys Locker / Coaches									
Coach Office		1	220	220					
Coach Locker		1	300	300					
Men's Coaching Area		1	500	500	Boys Locker/Team Rooms/Coaches	1	5,000	5,000	
Boys Lockers		1	1,550	1,550					
Toilets / Showers		1	350	350					
Regular Team Room		3	350	1,050					
Large Team Room		1	800	800					
Girls Locker / Coaches									
Coach Office		1	220	220					
Coach Locker		1	300	300					
Women's Coaching Area		1	500	500	Girls Locker/Team Rooms/Coaches	1	5,000	5,000	
Girls Lockers		1	1,550	1,550					
Toilets / Showers		1	350	350					
Regular Team Room		3	350	1,050					
Large Team Room		1	800	800					
Large Team Room		1	800	800					At stadium or remote from other team rooms
Unisex Coach / Referee Locker Room		2	200	400					Stakeholder need
Individual Unisex Locker Room		2	100	200					Stakeholder need
Training Room		1	300	300	Training Rooms - Boys & Girls	2	250	500	Need room for ice & whirlpool therapy
Hydration Therapy Room		1	200	200	Box Office / Ticket	1	200	200	
Box Office - Ticket Area		1	200	200					
Concessions		1	225	225	Concession	1	225	225	Separate from Box Office / Tickets
P.E. Storage		1	900	900	P.E. Storage	2	300	600	Existing storage insufficient
Athletic Storage		1	1,250	1,250					
Athletic Equipment / Uniform Storage		1	750	750	Equipment Storage	1	1,500	1,500	Need dedicated uniform storage
Subtotal	5			46,065				43,045	

MEDIA CENTER / LIBRARY

Media Center / Library	2017 Ed Spec				Clackamas HS	1996 Ed Spec			Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF		Qty.	SF Ea.	SF	
Media Center		1	6,000	6,000	Media Center	1	8,600	8,600	Reduced to add Multi-Purpose Community Room (see Admin)
Technology	1			-					
Open Teaching Area	1			-					
Project / Study Areas		3		-	Small Conference	3	110	330	Within Media Ctr.
Classroom	1	1	900	900	Classroom	1	650	650	Enclosed. Need full-size classroom
Maker Space		1	650	650					
Storage		1	100	100					
Staff Storage & Work Area									
Circulation / Checkout Desk		1	320	320					2 work stations
Office		1	190	190					Adj. to checkout
Work Room		1	300	300	Storage/Work Area	1	950	950	
Periodical Storage & Curriculum		1	150	150					
Textbook Storage		1	740	740					Compact shelving
Tech Office		1	600	600	Tech Office	1	600	600	
MDF / Network Room		1	190	190	Network Room	1	190	190	
Subtotal	3			10,140				11,320	

EDUCATION SUPPORT

Administration	2017 Ed Spec				1996 Ed Spec				Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF	Clackamas HS	Qty.	SF Ea.	SF	
Admin Open Work Area / Waiting		1	800	800	Reception / Sec / Waiting	1	725	725	Breakdown based on actual at CHS
Principal's Office with Conf. Area		1	330	330	Principal's Office	1	330	330	W/ 6 person table
Vice Principal (VP) Office - Curriculum		1	150	150	Vice Principal Curriculum	1	150	150	2 doors to admin suite & main circ
VP Office - Attendance / Student Management Office		1	150	150	Vice Principal Attendance	1	150	150	2 doors to admin suite & main circ
SMO Admin Work Area / Waiting		1	240	240	SMO	1	240	240	
Attendance Advisor / Dean		1	140	140	Attendance/Dean	1	140	140	
SRO Office		1	140	140	SRO Office	1	140	140	
Athletics Director / Vice Principal		1	140	140	Vice Prin/Athletics	1	140	140	2 doors to admin suite & main circ
AD's Assistant Workstation		1	100	100	AD Assistant	1	100	100	
AD Storage		1	200	200					
Nurse Station/Office		1	185	185	Nurse	1	185	185	Window to circ.
Health Room w/Toilet		1	190	190	Health Room	1	190	190	
Bookkeeper Office		1	135	135	Bookkeeper Office	1	135	135	Window to circ.
Attendance Office		1	120	120	Attendance Office	1	120	120	Window to circ.
Campus Monitor's Office		1	110	110	Attendance Clerk	1	110	110	Shared by 2 people
Multi-Purpose Community Room / Scale-Up Classroom	1	1	1,500	1,500					4 teaching walls; Seats licensed staff (65-70); Used by community
Media closet		1	50	50					For MPR
Medium Conference Room		1	300	300	Conference Room	1	300	300	Seats 8-10. Shared w/ Counseling
Small Conference Room		1	80	80					Seats 3-4 people
Record Storage		1	200	200	Record Storage	1	100	100	Need for significant additional space
Vault/Fireproofed File Cabinets		1	200	200	Vault	1	110	110	Transcripts, student records
Work Room		1	190	190	Work Room	1	190	190	W/microwave, sink & refrigerator
Copy Room		1	120	120					
Mail Room		1	130	130	Mail Room	1	130	130	
Supply Storage		1	100	100	Supply Storage	1	100	100	
Toilets		2	80	160	Toilets	1	80	80	
Mother's Room		1	75	75					Added per stakeholder input
					Office - extra CSD	1	110	110	Not needed / not existing at CHS
					Telephone Office	1	50	50	Not existing at CHS
Subtotal	1			6,235				4,025	

2017 Ed Spec					1996 Ed Spec				Notes / Reason for Change
Counseling / Career Center	T.S.	Qty.	SF Ea.	SF	Clackamas HS	Qty.	SF Ea.	SF	
Reception/Secretaries/Waiting		1	175	175	Reception / Sec / Waiting	1	420	420	3 work stations Updated per actuals for at CHS
Counseling/Student Services		1	700	700	Career / Student Services	1	1,225	1,225	
Counseling Offices		6	140	840	Counseling Offices	8	90	720	1 counselor per 250 students + therapist.
		2	90	180					
Vice Principal		1	140	140	Vice Principal / Activities	1	140	140	
Registrar		1	120	120	Registrar	1	120	120	
Trillium Family Services		2	100	200	Family Services	1	265	265	Two small offices required per stakeholder input.
File/Record/Portfolio Storage (Fireproof)		1	145	145	File / Record / Portfolio Storage (Fireproof)	1	85	85	Existing is significantly undersized
Career Center and Conference Area		1	1,050	1,050	Classroom / Conference	1	500	500	Updated per actual SF at CHS
Toilets		2	80	160					Existing at CHS
Work Area		1	100	100	Work Area	1	100	100	
Data Processing / File Room		1	90	90	Data Processing	1	90	90	
Subtotal	-			3,900				3,665	

EDUCATION SUPPORT, CONTINUED

Special Education	2017 Ed Spec				1996 Ed Spec				Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF	Clackamas HS	Qty.	SF Ea.	SF	
LEEP Classroom	-	-	900	-	Life Skills: Kitchen / Laundry	1	600	600	Only 1 required district-wide
SLC/A Classroom	1	1	900	900	Special Ed Classroom 1	1	600	600	Need full-sized classroom
Kitchen / Laundry		1	400	400					Used by SLC/A and LEEP Classrooms
TLC and SLC/B Classroom	1	1	900	900	Alternative Ed Classroom	1	600	600	Need full-sized classroom
Restroom		1	110	110	Bathroom w/Shwr	1	85	85	Actual size at CHS.
Conference / Testing Room		1	150	150					Stakeholder need
Resource Learning Classrooms		2	400	800					One per specialist
Speech Language Pathologist		1	150	150	Speech Language Pathologist Office	1	150	150	
					Independent Skill Center	1	1,215	1,215	Terminology is no longer used
					Time Out	1	85	85	Use TLC & SCL/A alcoves
					Physical Therapy	1	400	400	Not needed
Subtotal	2			3,410				3,735	

2017 Ed Spec					1996 Ed Spec				Notes / Reason for Change
Commons / Cafeteria	T.S.	Qty.	SF Ea.	SF	Clackamas HS	Qty.	SF Ea.	SF	
Commons / Cafeteria		1	13,500	13,500	Commons / Cafeteria	1	13,500	13,500	
Vending		1	100	100	Vending	1	400	400	Alcoves in commons
Chair Storage		1	500	500					500 chairs for events
Coffee Shop		1	400	400	Coffee Shop	1	400	400	Can be remote from commons; Existing at CHS
Student Store with Storage 10 x 10		1	480	480	Student Store with Storage 10 x 10	1	480	480	Should be near gym
Student Leadership		1	325	325	Student Government Office/Workroom	1	325	325	
Faculty Lounge / Dining Room		1	750	750	Faculty Lounge / Dining Room	1	1,325	1,325	Existing is larger than needed
					Community Office	1	120	120	Not used
					Alcohol Prevention / Law Enforcement	1	120	120	Not used - see SRO Ofc in Admin.
Subtotal	-			16,055				16,670	

2017 Ed Spec					1996 Ed Spec				Notes / Reason for Change
Food Service	T.S.	Qty.	SF Ea.	SF	Clackamas HS	Qty.	SF Ea.	SF	
Servery		1	1,500	1,500	Serving	1	1,500	1,500	
Serving windows		2	150	300	Serving windows	2	150	300	
Kitchen		1	1,600	1,600	Kitchen / Storage / Vendors	1	1,600	1,600	
Dish Washing		1	350	350	Dish Washing	1	350	350	
Freezer		1	150	150	Freezer	1	150	150	
Cooler		1	150	150	Cooler	1	150	150	
Dry Storage		1	260	260	Dry Storage	1	260	260	
Staff Lockers and Toilets		2	200	400	Staff Lockers & Toilet	2	200	400	
Office		1	85	85	Office	1	85	85	
Subtotal	-			4,795				4,795	

EDUCATION SUPPORT, CONTINUED

2017 Ed Spec					1996 Ed Spec				Notes / Reason for Change
Custodial & Building Support	T.S.	Qty.	SF Ea.	SF	Clackamas HS	Qty.	SF Ea.	SF	
Janitor Rooms		8	60	480	Janitor Rooms			580	Qty. and SF based on actuals at CHS
Office		1	230	230	Office			230	
Lockers & Break Room		1	300	300	Lockers			215	With shower. Break room added per stakeholder need.
Combined Shop & Storage		1	2,550	2,550	Shop			550	Combine per stakeholder request
Student Toilets (M/F)				6,000	Storage			2,000	
Gender Neutral Toilets		4	80	320	Toilets			6,000	1-2 / floor. New district standard
IDF Rooms		6	50	300					Necessary spaces
Mechanical / Electrical Areas									Actual at CHS
Chiller		1	350	350	*Mechanical/Electrical areas included in grossing factor				
Boiler		1	350	350					
Electrical		1	200	200					
Emergency Generator		1	230	230					
Mechanical Penthouse									8,000 SF-excluded from NSF
Subtotal	-			11,310				9,575	

HEALTH & WELLNESS CENTER

2017 Ed Spec					2017 Putnam HS				Notes / Reason for Change
Health & Wellness Center	T.S.	Qty.	SF Ea.	SF	Putnam HS	Qty.	SF Ea.	SF	
Waiting		1	170	170	Waiting	1	172	172	Rounded SF
Reception		1	135	135	Reception	1	133	133	Rounded SF
Conference / Break		1	310	310	Conference / Break	1	309	309	Rounded SF
Laboratory		1	160	160	Laboratory	1	161	161	Rounded SF
Toilets		2	50	100	Water Closet 1	1	51	51	Rounded SF &
					Water Closet 2	1	47	47	Combined
Exam Rooms		3	105	315	Exam 1	1	100	100	Rounded SF &
					Exam 2	1	110	110	Combined
Dental Exam		1	145	145	Exam 3	1	100	100	Rounded SF
Large Office		1	125	125	Dental Exam	1	144	144	Rounded SF
					Office 2	1	126	126	
					Office 1	1	93	93	
					Office 3	1	90	90	
Offices		7	90	630	Office 4	1	90	90	Rounded SF &
					Office 5	1	89	89	Combined
					Office 6	1	90	90	
					Office 7	1	90	90	
					Office 8	1	90	90	
Storage		1	55	55	Storage	1	54	54	Rounded SF
Janitor		1	55	55	Janitor	1	55	55	
Mechanical		1	45	45	Mechanical	1	43	43	Rounded SF
Subtotal	-			2,245				2,237	

CAPACITY ANALYSIS

CLASS SIZE GOAL OF 32 STUDENTS / 75% UTILIZATION RATE

Capacity Summary	Note	Value	Capacity Comments
Regular Teaching Stations	(1), (2)	62	Reflects a target operational capacity of 1,800 students. Allowance is made for students enrolled at Sabin.
Total seats based on class size goals		2,004	
Prep Factor for General Ed Classrooms		0.75	
Total Adjusted Capacity		1,557	

Regular Teaching Stations	Note	Qty.	Class Size Goals (3)	Capacity at 100% Use	Prep Factor (4)	Adjusted Capacity
General Classrooms (Incl. Scale-Up & Health)	(1)	41	32	1,312	0.75	984
Self-contained SPED Classrooms	(5)	2	15	30	0.75	23
Science Labs / Science Classrooms		8	32	256	0.75	192
Visual Art Classrooms		4	32	128	0.75	96
Music Classrooms		2	32	64	1.00	64
Performing Arts (Main Stage & Black Box)		2	32	64	0.75	48
P.E. (Main Gym, Aux Gym & Weight Room)	(2)	3	50	150	1.00	150
TOTAL		62		2,004		1,557

Special Use Teaching Stations	Note	Qty.	Comment
SPED Resource Learning Classrooms	(5)	4	Resource specialists meet with 10 students per period.
Dance Room		1	Performing Arts elective classroom (low utilization)
Other (Describe)		0	
TOTAL		5	

Notes

- (1) For general instruction not requiring a specialized classroom. Includes a Scale-Up Classroom and two Health Classrooms.
- (2) The main gym and auxiliary gym are counted as regular teaching stations.
- (3) Class size goal of 32 students for most classes. P.E. classes have a class size goal of 50 students.
SPED has a class size goal of 15 students.
- (4) A prep factor of 0.75 has been calculated to take into account that classrooms will not be occupied every period of the day.
- (5) Self-contained SPED classrooms are counted as teacher stations for capacity purposes (with a lower class size).
SPED classrooms for delivering pull-out services are not counted as teaching stations for capacity purposes.

Adjacency Diagrams & Room Requirements

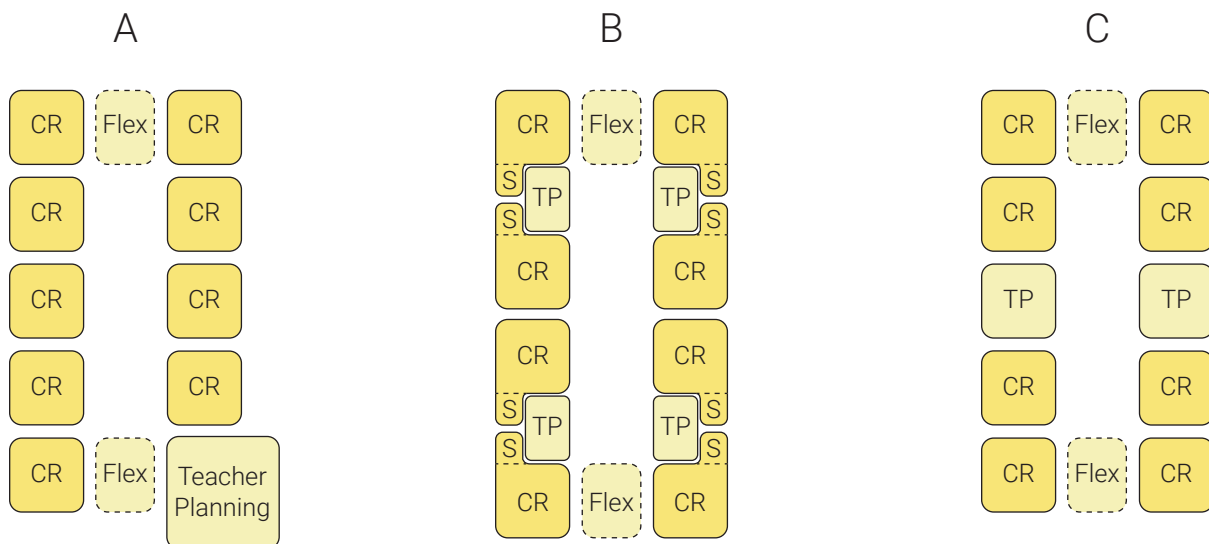
CORE ACADEMICS

GENERAL CLASSROOMS

AREA PROGRAM

Instructional Space	2017 Ed Spec				1996 Ed Spec				Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF	Clackamas HS	Qty.	SF Ea.	SF	
Classrooms	38	38	900	34,200	Classrooms	36	900	32,400	+2 qty. for ELL / computer labs
Classroom storage alcove		38	50	1,900					
Teacher Planning Areas			L.S.	8,550	Teacher Planning/Work	4	2,700	10,800	Lump sum - allocate as needed
Flex / Extended Learning Areas			L.S.	4,000					Stakeholder input
Teacher Conference/Work					Teacher Conf/Work	4	285	1,140	
Phone Rooms		4	60	240					Private / separate from planning area
Toilets		8	50	400					
Subtotal	38			49,290				44,340	

ADJACENCY DIAGRAM



The diagrams above show three options for distribution of Classrooms (CR), Teacher Planning Areas (TP), and Flexible / Extended Learning Areas. Currently at Clackamas HS, there is one 2,200 SF teacher planning room in each of four classroom wings. This is similar to Option A above, except that the high school doesn't currently have Flex / Extended Learning Areas.

In Option B, the Teacher Planning is distributed in smaller 450 SF planning rooms that are shared between two classrooms, which might include a

copy machine and work table. The resulting classroom shape creates a small storage alcove (S) where a teacher desk, mobile laptop cart or other supplies could be located. This was the preferred option for stakeholders interviewed.

In Option C, the same total Teacher Planning area is divided into 900 SF rooms that can be scheduled as or reconfigured into classrooms as needed.

ROOM REQUIREMENTS

GENERAL CLASSROOMS

General Description & Use

Teaching stations scheduled for use as general classrooms.

The total number of required classrooms / teaching stations has been increased by two to provide spaces that can be converted to computer labs when needed for testing or other purposes.

Location & Key Adjacencies

When possible, teachers prefer classrooms to be grouped by department - i.e. History, Language, English. This allows teachers to share resources and allows students to be able to easily locate a teacher to get help in a particular subject.

Classrooms should be located close to Teacher Planning and Flex / Extended Learning areas.

Storage Needs

Provide casework for storage around perimeter of classroom.

Material Requirements

Bulletin boards and white boards around perimeter of room for use by instructors and students. Multiple walls can function as a teaching wall.

Some glass may be used to provide visual access to circulation areas, but limit use of glass to retain areas for bulletin boards, white boards and casework for storage.

Provide overlapping sliding panels that allow instructors to quickly change out visual information for different classes within a single teaching wall.

M/E/P & Tech Requirements

Provide audio wiring and wifi hotspots for every classroom.

Students should be able to stream wirelessly to the screen.

Provide charging stations with separate circuit for mobile laptop carts in each classroom. Provide space for storage of cart with good ventilation for heat-generating equipment.

Provide climate controls for individual classrooms to promote a comfortable learning environment.

Acoustical Requirements

Provide good acoustical separation to minimize disruptions to the learning environment.

Furniture

Provide tables and chairs that allow flexible configuration.

Equipment

Ceiling-mounted projectors.

Other Requirements

Provide access to daylight for optimal learning.

ROOM REQUIREMENTS (CONTINUED)

TEACHER PLANNING AREAS

General Description & Use

Teacher Planning Areas provide separate spaces for teachers to plan classes outside of the classroom.

Phone Rooms provide a private space away from collaborative areas to make a confidential phone call.

Location & Key Adjacencies

Teacher Planning Areas should be close to Classrooms and Phone Rooms - distributed equally throughout classroom wings. See adjacency diagram.

Storage Needs

If teachers do not have individual use of a particular classroom, provide lockable casework for storage of work materials in Teacher Planning Areas.

Material Requirements

Provide glass enclosure into Teacher Planning Areas to allow students to be able to easily locate a teacher if help is needed when the teacher is not in his or her classroom.

M/E/P & Tech Requirements

Teacher Planning Areas to provide equal AV functions as provided in classrooms, including projection and sound, so that teachers can replicate the classroom environment during planning periods.

Phone Rooms should provide telephone, data, and wifi capabilities to allow for phone and video conferencing.

Acoustical Requirements

Phone rooms should provide acoustical privacy.

Furniture

- Work tables and chairs for individual and collaborative group work in Teacher Planning Areas
- Individual desk and chair in Phone Room.

Equipment

Provide a copy machine for teacher's use in printing course materials and handouts.

FLEX / EXTENDED LEARNING AREAS

General Description & Use

Areas for student break-out work during scheduled classes, or as an informal study area for use outside of class time.

Flex areas may be fully enclosed, partially enclosed, or unenclosed. They may be combined with Teacher Planning Rooms adjoining two classrooms as shown in Adjacency Diagram Option B.

Location & Key Adjacencies

Should be near classrooms primary circulation for clear oversight by teachers.

Storage Needs

No permanent storage required.

Material Requirements

Use glass or no enclosure to allow for supervision by teacher from the classroom to the Flex Area.

Provide writing surfaces such as white boards.

M/E/P & Tech Requirements

Provide wifi access throughout the school to include flex areas.

Acoustical Requirements

Flex areas can be unenclosed or open to circulation, thus there are no acoustical isolation requirements. However, some measures could be taken (e.g. partial enclosure with sound absorbing acoustical panels) to mitigate distracting noise in flex areas adjacent to main circulation areas.

Furniture

Tables and chairs that can be reconfigured for maximum flexibility

Equipment

-

Other Requirements

-

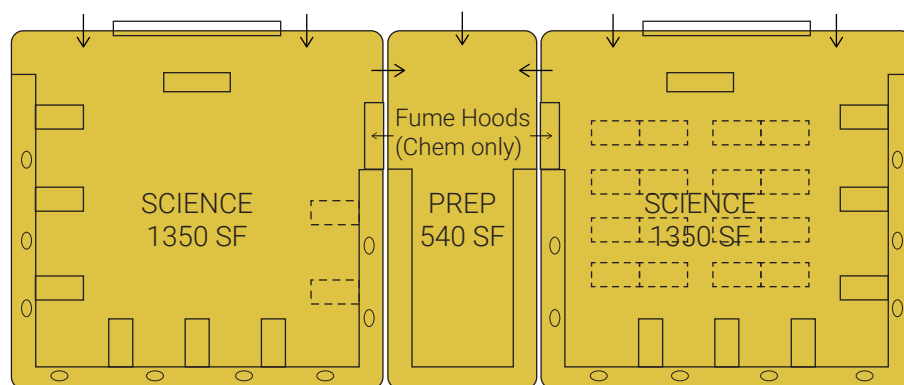
CORE ACADEMICS

SCIENCE CLASSROOMS

AREA PROGRAM

Science Classrooms	2017 Ed Spec				Clackamas HS	1996 Ed Spec			Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF		Qty.	SF Ea.	SF	
General Science (Physics / Biology)	6	6	1,350	8,100	Physics	2	1,200	2,400	Combined physics & biology per user preference
					Biology	4	1,200	4,800	
Chemistry	2	2	1,350	2,700	Chemistry Physics	2	1,200	2,400	1,200 SF too small per user input
Lab Prep Area - General Science		3	480	1,440	Lab Prep Area	4	480	1,920	1 shared per 2 General Science classrooms
Lab Prep Area - Chemistry		1	540	540					Larger area req'd for chemistry
General Storage		1	200	200	General Storage	1	200	200	
		-	900		Staff Planning/Work	1	900	900	Teachers prefer own classrooms
Subtotal	8			12,980				12,620	

ADJACENCY DIAGRAM



This diagram shows the relationship between two science classrooms and an adjoining prep room between them.

Two classroom layouts are depicted - 6 fixed and 2 floating peninsulas for lab work, as well as flexible tables in the center of the room arranged for a lecture format.

ROOM REQUIREMENTS

GENERAL SCIENCE & CHEMISTRY CLASSROOMS

General Description & Use

Teaching stations for science courses. Instructional format includes lectures as well as lab work.

Location & Key Adjacencies

Faculty stated a preference that science classrooms be grouped together on the same floor, allowing teachers to share resources and students to be able to easily locate a teacher for coursework assistance. The organization of science classrooms is site-dependent, as some schools have learning community models that do not allow centralized organization.

Stakeholders also stated a preference for location of science classrooms on the ground floor, adjacent to exterior doors for outdoor instruction.

Storage Needs

Casework and countertops for storage should be provided around three sides of the classroom perimeter.

All lab stations (peninsulas) as well as the teaching/demo station should include built in storage.

Include displays cases in the wall between classrooms and the hallway that can be accessed from the classroom.

The science department shares one general storage area at 200 SF that can be used to house computer carts.

See also requirements for Lab Prep Areas.

Material Requirements

Glazing to bring natural light into the classroom is good for the learning environment, however, limit use of glass to allow maximum storage capacity in caseworks around perimeter of room. Use of glazing must include shades to darken the room for projection.

Provide white board and tack board at the teaching wall.

M/E/P & Tech Requirements

Provide 4 gas jets and 4 sinks in general science rooms, and 8 gas jets and 8 sinks in chemistry rooms. Provide additional 1 gas & sink for the teaching station.

All science classrooms require safety showers, and chemistry rooms will need an eye wash (both plumbed with distilled water).

Provide ample electrical outlets. Overhead power is preferred. Instructor should have switch to shut off the power to student stations as needed.

Acoustical Requirements

Provide good acoustical separation to minimize disruptions to the learning environment.

Furniture

Teaching Bench: A demonstration station with built-in storage should be located at the front of the classroom near the teaching wall, within sight of all student lab stations. The teaching bench may include an optional cover plate that opens up for access to gas, water and power connections.

Lab Stations: 6 fixed peninsulas and 2-3 'floating' peninsulas that can be moved as needed.

Student Tables: Provide 2 person tables (not individual desks) that allow flexible seating arrangements into lecture or group formats.

Equipment

Provide ceiling mounted projectors.

Provide a fume hood in each chemistry classroom (2-way, adjoining with prep room).

Other Requirements

Based on site-specific conditions, a garden or greenhouse space may be specified for environmental science courses or other use.

LAB PREP AREAS (GENERAL SCIENCE AND CHEMISTRY)

General Description & Use

Areas for classroom laboratory preparation and storage for materials, supplies, and specialty equipment. A larger prep room is required for chemistry classrooms (540 SF) compared to general science classrooms (480 SF) due to increased storage needs.

Location & Key Adjacencies

One prep room is shared by two science classrooms, with doors providing direct access to the science classrooms as well as the main circulation. See adjacency diagrams.

Storage Needs

Provide casework for storage of materials, supplies and equipment.

Material Requirements

Provide surfaces that are corrosion-resistant and easy to maintain.

M/E/P & Tech Requirements

Provide sink for each prep room. Provide distilled water and plumbing hookups necessary for equipment list below (ice machine, washing machines, etc.) and provide fume hood ventilation.

Acoustical Requirements

-

Furniture

Provide casework with counter tops and space for one work station in each Lab Prep Area.

Equipment

Chemistry Prep:

- Fume hood with sink (2-way into classroom)
- Distilled water
- Ice machine
- Dish washer
- Refrigerator

General Science:

- 1 refrigerator to be shared between all general science prep rooms.

Other Requirements

-

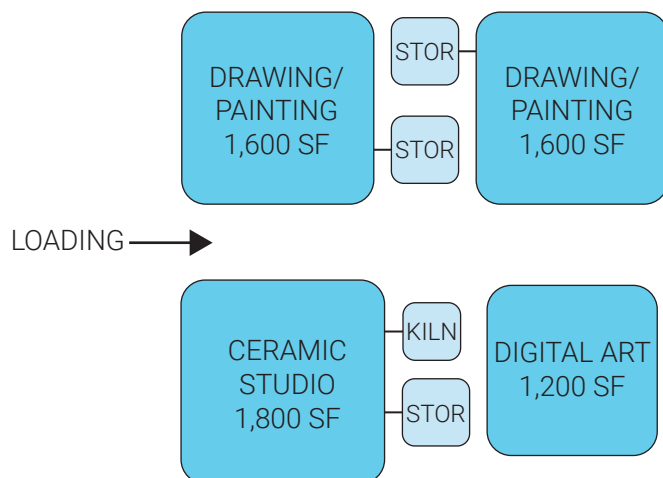
FINE & PERFORMING ARTS

VISUAL ARTS

AREA PROGRAM

Visual Arts	2017 Ed Spec				1996 Ed Spec				Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF	Clackamas HS	Qty.	SF Ea.	SF	
Drawing/Painting Studio	2	2	1,600	3,200	Drawing/Painting Studio	2	1,500	3,000	40'x40' square
Ceramic Studio	1	1	1,800	1,800	Ceramic Studio	1	1,700	1,700	
Kiln Room		1	180	180					Space for 4 kilns
Digital Art / Photography / Yearbook	1	1	1,200	1,200	Journalism	1	1,350	1,350	
Storage - Gen. Art Classrooms		3	250	750	Storage	1	300	300	Insufficient for 4 classrooms
Gallery / Display									25 LF on wall of main bldg lobby
Subtotal	4			7,130				6,350	

ADJACENCY DIAGRAM



The diagram above describes required spaces within the visual arts program and required adjacencies to classroom storage areas. It is preferred that the art classrooms be located together. Classrooms should also be located near the loading dock for ease of deliveries and movement. The department should also have a dedicated display wall in the main building entry, and ideally the department will be located near the entrance.

ROOM REQUIREMENTS

DRAWING / PAINTING STUDIOS

General Description & Use

Provide two art classrooms to be scheduled for drawing and painting courses, each with an adjoining storage room.

Optimal room proportion is square (40' x 40').

Location & Key Adjacencies

Located near other Visual Arts classrooms, preferably on the ground floor for loading access, and near the school entrance for visibility and ease of displays.

Storage Needs

Provide an adjoining storage space for each studio.

Provide adequate in-class storage accessible to students within the studio as identified below:

- Vertical storage for large works and canvas
- Flat file storage for paper, projects and portfolios:
 - (30) 30" deep storage units
 - (15) 48" deep storage units
- Adjustable shelving to accommodate various heights of work
- Space for in-progress work including drying wet work
- Storage for portable displays when they are not in use
- Locking cabinets including those for hazardous materials

Provide maximum casework and counter space and along perimeter of the room.

Material Requirements

Exterior glazing is necessary to provide natural light and accurate color rendering in the space. Provide shades to darken room for projection when necessary.

Glass may be used to provide visual access to circulation areas, but in limited amounts to retain wall space for casework, teaching and pin-up walls.

Provide a white board/projection surface at the teaching wall.

Provide tackable surface wall to allow pin-up of student work.

M/E/P & Tech Requirements

Industrial sinks are required. Recommend 1 sink per 10 students, therefore 4 sinks given class sizes of 35-45 students (including 1 ADA sink). Provide multiple sink stations to maximize efficiency.

2-3 power drops from the ceiling.

Provide three levels of lighting: natural light, full spectrum overhead and task. Provide capability of darkening for image projection and high contrast situations.

Acoustical Requirements

Provide good acoustical separation to minimize disruptions to the learning environment.

Furniture

Prefer flexible furnishings to accommodate individual and group work that can be reconfigured into varied layouts and life drawing / painting around a central subject. Provide adjustable tables with surface area to accommodate students working on art up to 24" x 36".

Equipment

Provide adequate floor space for equipment, e.g. drying racks, light boxes, paper cutter, printing press, easels.

Other Requirements

Access to outdoor areas can provide an extension of the classroom space for art students.

ROOM REQUIREMENTS (CONTINUED)

CERAMICS STUDIO & KILN ROOM

General Description & Use

Provide one ceramics classroom and adjoining kiln and storage rooms.

The classroom shall provide separate areas within the room for hand-building and wheel throwing, as well as an area with counters for mixing glazes and spraying.

Location & Key Adjacencies

See Drawing / Painting Studios for requirements.

Storage Needs

Provide an adjoining storage space.

Provide the following storage within the studio:

- Maximum casework and counter space and along perimeter of the room. Counter tops shall provide storage for materials distribution and collection and glaze staging.
- Shallow shelving (not cabinets) for glazes in a variety of sizes.
- Storage and station for 5 gallon buckets of dipping glazes.
- Adequate in-class storage accessible to students including adjustable shelving for various stages of work (i.e. leather hard, bone dry, bisqueware and glazeware).
- Individual locker type cabinets or tables with lockers for in-progress work
- Shelving for resources
- Cabinets for working tools, surface tools and texture tools.

Material Requirements

See Drawing / Painting Studios for requirements.

M/E/P & Tech Requirements

Industrial sinks are required.

2-3 power drops from the ceiling.

Hose and floor drains in ceramics studio for dust control. Provide a large, durable trap for easy maintenance.

Specialized ventilation and cooling system in the kiln room.

Acoustical Requirements

See Drawing / Painting Studios for requirements.

Furniture

Tables for flexible furniture arrangements.

Equipment

- 10 ceramic wheels in ceramics studio

- 4 kilns in kiln room

Provide adequate floor space for equipment, damp clay cabinets, ceramics slab roller, wedging table.

Other Requirements

Access to outdoor areas can provide an extension of the classroom space for art students.

DIGITAL ARTS /PHOTOGRAPHY CLASSROOM

General Description & Use

A computer-focused classroom for digital arts, photography and yearbook courses. Provide an adjoining storage room for yearbook storage that can double as a photography studio.

Location & Key Adjacencies

Near other arts classrooms.

Storage Needs

Provide adequate in-class storage accessible to students:

- Locking cabinets for equipment and supplies (cameras, printer ink, papers, etc.)
- Some flat storage for paper, projects and portfolios

Material Requirements

White board/projection surface at the teaching wall.

Tackable surfaces for displaying work.

M/E/P & Tech Requirements

Provide electrical outlets to accommodate the needs of one computer per student, plus, printers, scanners and other technology.

2-3 power drops from the ceiling.

Ventilation and A/C system to handle increased heat load from computers

Acoustical Requirements

See Drawing / Painting Studios for requirements.

Furniture

Teaching station to be situated to the rear of the classroom behind student desks and facing the projection / teaching wall. Configuration allows instructor to monitor all student computer monitors simultaneously.

Equipment

- 35 -40 desktop computers with heavy graphics capabilities
- Black and white printer connected to all student computer stations
- Color printer connected only to instructor's computer
- Scanners
- Projector and screen
- Speakers

Other Requirements

Access to outdoor areas can provide an extension of the classroom space for art students.

GALLERY / DISPLAY

General Description & Use

Provide 25 Linear Feet of display wall within the lobby / building entry. Display of student art will enliven the building entry and show student opportunities to engage in the arts.

Equipment

- Wires for hanging 2D artwork
- Optional lockable glass display cabinets and display pedestals

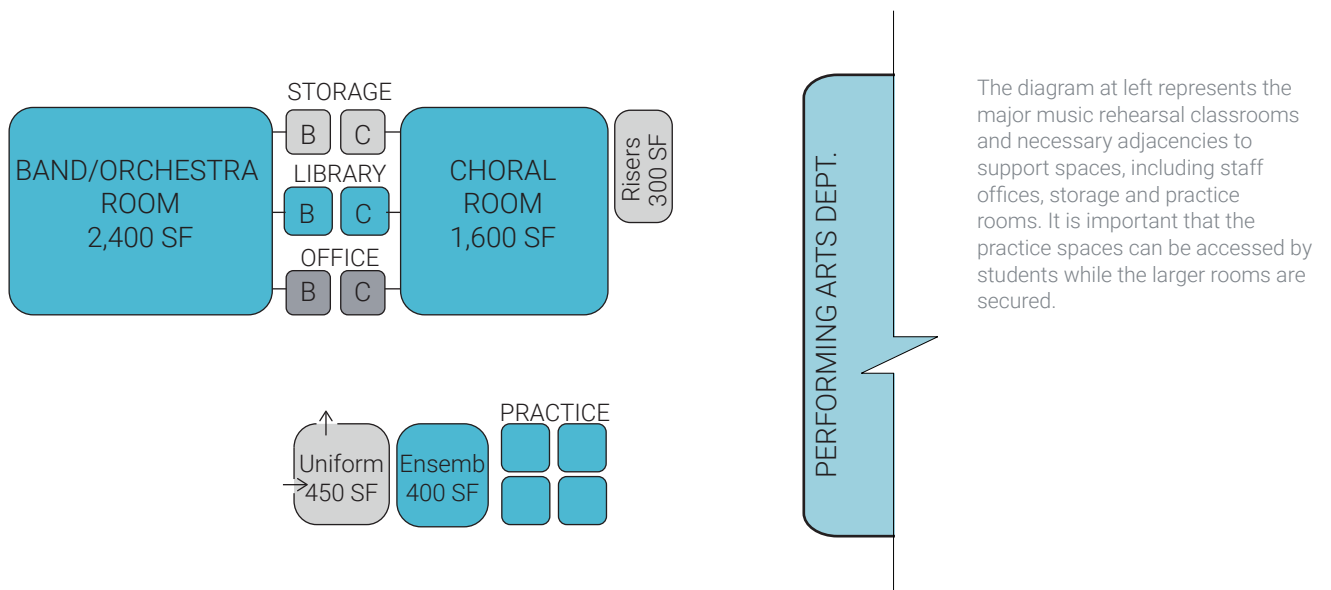
FINE & PERFORMING ARTS

MUSIC

AREA PROGRAM

Music	2017 Ed Spec				1996 Ed Spec				Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF	Clackamas HS	Qty.	SF Ea.	SF	
Band/Orchestra Room	1	1	2,400	2,400	Band Room	1	2,400	2,400	80-90 students
Band/Orchestra Office		1	90	90	Office	1	90	90	
Instrument Storage		1	750	750	Instruments	1	300	300	Undersized compared to needs
Band General Storage		1	140	140	Storage	1	140	140	
Choral Room	1	1	1,600	1,600	Choral Room	1	1,600	1,600	
Choral Office		1	90	90	Office	1	90	90	
Choral Storage		1	80	80	Storage	1	80	80	
Riser Storage		1	300	300					Stakeholder need
Small Practice Rooms		4	100	400	Practice Rooms	4	60	240	
Ensemble Practice Room		1	400	400	Ensemble / Orchestra	1	400	400	
Uniform Storage		1	450	450					150 band uniforms & 100 choral robes
Music Library		1	100	100	Music Library	1	200	200	
Choral Library		1	100	100					
Staff restrooms, changing & shower		2	100	200	Staff restrooms, changing & shower	2	100	200	
Subtotal	2			7,100				5,740	

ADJACENCY DIAGRAM



ROOM REQUIREMENTS

BAND, ORCHESTRA, AND CHORAL ROOMS

General Description & Use

Flat-floor rehearsal rooms for use by band, orchestra and choral groups. Orchestra is combined with the Band Room.

Location & Key Adjacencies

Music department should be located together in proximity to main entrance, commons or classroom areas to allow rehearsals to be heard by the greater student body when desired for greater awareness and integration of the music department.

Located adjacent to auditorium stage. Need a direct route from rehearsal rooms to stage for ease of moving a piano.

Classroom spaces should provide direct connection to storage areas and teacher offices.

Storage Needs

General Storage

1 general storage area each for band/orchestra and choral.

Instrument Storage

750 square feet of storage space should be distributed as follows:

- Provide area along walls of band room for lockable instrument storage cabinets to include
 - (2) flute / clarinet cabinets
 - (2) mid-size cabinets
 - (3) large cabinets for tuba, baritone saxophone, etc.
- Provide a separate storage room for large equipment such as drum line carriers, amps, marching tubas
- Also provide regular student lockers outside of band room that can be assigned for band student use.

Riser Storage:

- Riser storage adjacent to choral room

Uniform Storage:

Shared by choral (100 robes) and band (150 uniforms).

Does not need to be enclosed.

Provide two points of entry to storage area for ease of distributing uniforms to students.

Music Libraries

Separate Band/Orchestra and Choral libraries.

Choral requires space for 2,100 titles.

Material Requirements

Avoid hard / sound-reflective surfaces like concrete for band / orchestra and choir rooms.

Band Room:

- Heavy drapes for sound absorption
- Carpeted (or rubber) flooring

Choral Room:

- Provide drapes and acoustical panels

M/E/P & Tech Requirements

Provide two speakers and live recording capability in each rehearsal room.

Provide live audio / video feed from Auditorium.

Acoustical Requirements

Use of heavy drapes around upper portions of Band Room will provide sound absorption and tuning of the room. Avoid hard / reflective surfaces that can produce deafening acoustical conditions for the instructor.

Choir room should have a low to moderate reverberation time - not too "live" or "dead." Avoiding excessive reverberation allows better audibility in rehearsals.

Furniture & Equipment

Chairs & music stands

Portable risers for Choral Rehearsal room - quiet, stage quality

Recording equipment

Other Requirements

Recessed double doors with removable astragal. Avoid floor tripping hazards

Ability to secure band & choral rehearsal rooms if students need access to practice rooms after regular school hours

ROOM REQUIREMENTS (CONTINUED)

SMALL & ENSEMBLE PRACTICE ROOMS

General Description & Use

Small Practice Rooms for 3-5 players.

Ensemble Practice Room for 12 players and can also serve as a small classroom.

Location & Key Adjacencies

Close to music rehearsal rooms and teacher offices.

Storage Needs

No long term storage but provide space for a piano.

Material Requirements

Provide opaque enclosure with a small window in the doors.

No locks on doors.

M/E/P & Tech Requirements

-

Acoustical Requirements

Provide good acoustical separation between practice spaces and non-orthogonal walls to avoid standing sound waves.

Furniture & Equipment

Chairs & music stands

Other Requirements

Practice areas must be accessible by students while the band and choral rooms are locked.

OFFICES AND STAFF RESTROOMS

General Description & Use

Two teacher offices (1 band/orchestra, 1 choral)

Two individual staff restrooms with shower and changing area.

Location & Key Adjacencies

Close to music rehearsal rooms and teacher offices.

Storage Needs

Provide casework in offices for instructors' personal storage needs.

Material Requirements

-

M/E/P & Tech Requirements

-

Acoustical Requirements

Provide acoustical separation of offices for confidentiality.

Furniture & Equipment

Provide desk and casework for storage in offices.

Provide a small bench for changing areas.

Other Requirements

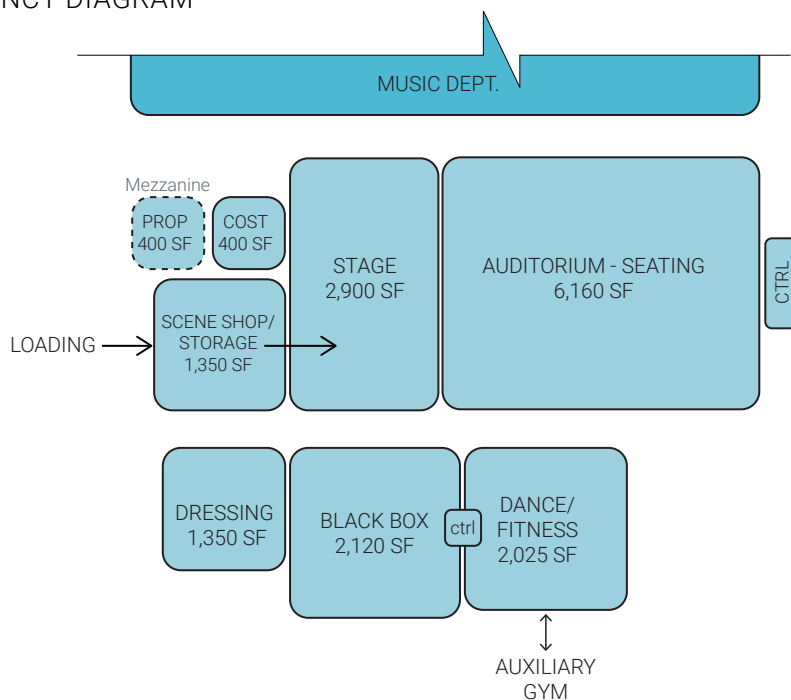
Key card access to restrooms for staff use only.

FINE & PERFORMING ARTS THEATER

AREA PROGRAM

Theater	2017 Ed Spec				Clackamas HS	1996 Ed Spec			Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF		Qty.	SF Ea.	SF	
Auditorium - Seating for 600		1	6,160	6,160	Auditorium	1	6,160	6,160	
Sound & Light Locks		4							Incl. w/auditorium
Stage	1	1	2,900	2,900	Stage	1	2,900	2,900	
Control Room		1	360	360	Control Room	1	360	360	
Sound Board		1	100	100					Added per stakeholder need
Fore-stage / Orchestra Pit		1	250	250	Fore-stage	1	250	250	
Dressing/Make-up/Toilets/Shower		2	580	1,160	Dressing areas	2	580	1,160	
Rehearsal Theater / Black Box	1	1	2,120	2,120	99 seats	1	2,250	2,250	99 seats; 43' x 40'
Black Box Control Room		1	100	100					Upper galley
Dance / Fitness Studio	1	1	2,025	2,025					45' x 45' Elective + P.E. classroom
Scene Shop/Storage		1	1,350	1,350	Scene Shop/Storage	1	925	925	Existing is undersized
Prop Room		1	400	400					Adjacent to stage
Costume Room		1	400	400	Costume Room	1	120	120	Existing is undersized; Incl. laundry
Drama Office		1	160	160	Drama Office	1	160	160	
Box Office		1	70	70	Box Office	1	70	70	
Concessions		1	70	70					
Storage		1	400	400	Storage	1	400	400	
					TV/Radio/Skill Ctr	2	160	320	Not needed
Subtotal	3			18,025				15,075	

ADJACENCY DIAGRAM



Provide direct access from loading area into the scene shop and onto the stage via roll-up doors. Costumes and props can be located adjacent to the scene shop and stage for access. Music classrooms, including Band, Orchestra, and Choral rehearsal, must also be located close to the stage with a direct path for moving the piano between stage and rehearsal areas.

Dressing and Black Box are located adjacent to the side of the stage. The Black Box theater can serve as a green room for events in the auditorium. The Dance / Fitness Studio is adjacent to the Black Box with a shared control area between them. The Dance / Fitness Studio is also used by the P.E. Department, and should be located close to the Auxiliary Gym for use as a flex area for warm-ups and dynamic activity.

ROOM REQUIREMENTS

AUDITORIUM / STAGE & ORCHESTRA PIT

General Description & Use

The 600 seat auditorium can be envisioned as three parts:

- 300 seats on main level nearest stage
- 150 seats on main level behind cross aisle
- 150 seats in balcony

Use of these divisible areas allow for both large performances at full capacity (often desired for music performances) as well as more intimate theater performances. The Black Box theater can also be used as an intimate theater venue.

Location & Key Adjacencies

Stage should be open directly into scene shop behind via garage doors. Materials can be loaded directly from outdoors through the scene shop onto the stage.

Stage must also be close to the music department.

Since the auditorium will be visited by members of the public who are not regular students or visitors, there should be a simple route from the main building entry to the auditorium lobby and ticketing areas.

Storage Needs

See Scene Shop / Storage and Box Office / Concessions

Material Requirements

Users prefer simple black surfaces within the auditorium over more refined surfaces such as natural wood.

Stage

- Utilitarian materials allowing theater groups to drill into stage
- Painted black
- Soundproof stage floor (not hollow)
- Structural capability to support large lifts

Emphasize quiet materials for optimal acoustic environment, e.g. avoid metal roof that can generate noise in expansion/contraction or rain.

M/E/P & Tech Requirements

LED lighting

Provide live audio / video feeds to choir room, band room, black box, and pit.

Requires good ventilation and a quiet HVAC system, so as not to disturb a quiet portion of a performance.

Acoustical Requirements

Auditorium shall be reflective in the front half of the seating area towards the stage, diffusive on the side walls of the back half of the seating area, and absorptive on the rear walls.

Furniture

Seating for 600

Equipment

2 trap doors in stage floor

3-piece cover over orchestra pit with mechanical pit lift operation. Mechanical operation provides both ease of use and better safety for students and faculty.

Provide catwalk access for lighting.

See also Control Room / Sound Board requirements.

Other Requirements

Ability to project from behind or in front of stage.

CONTROL ROOM & SOUND BOARD

General Description & Use

Lighting and audiovisual controls for Auditorium.
Can also be used for a 20-student production class.

Location & Key Adjacencies

Control room located to the rear of the auditorium seating area.
Sound board should be located in the seating area.

Storage Needs

-

Material Requirements

-

M/E/P & Tech Requirements

Provide pass-through in control room for lighting console and sound. Provide mid-auditorium plug-in locations at sound board.

Acoustical Requirements

-

Furniture

-

Equipment

Lighting, sound and electrical equipment as needed.

Other Requirements

-

DRESSING/MAKE-UP/TOILETS/SHOWER

General Description & Use

Provide two dressing areas with adjoining restrooms (boys and girls) for use by theater department. Provide a separate makeup area shared by boys and girls.

Location & Key Adjacencies

Close to costume room, auditorium stage and black box theater.

Storage Needs

See costume room.

Material Requirements

-

M/E/P & Tech Requirements

Needs good ventilation and lighting for dressing and makeup.
Plumbing for 2 toilets and shower each for boys and girls.

Acoustical Requirements

-

Furniture

Provide seating with tables and lit mirrors.

Equipment

Clothing racks.

Other Requirements

-

ROOM REQUIREMENTS (CONTINUED)

BLACK BOX THEATER

General Description & Use

The black box is a flexible 99-seat theater/performance space.
It can also serve as a green room for the auditorium.

Location & Key Adjacencies

Adjacent to dance studio.

Black Box and Dance Studios share a control room between them.
Control area should be situated in the upper galley of the theater.

Close to stage and auditorium.

Storage Needs

See Scene Shop / Storage

Material Requirements

Black painted floors and walls.

Theater can have windows for classroom use, but requires black-out shades.

M/E/P & Tech Requirements

Requires good ventilation and a quiet HVAC system, so as not to disturb a quiet portion of a performance.

Live audio / video feed from Auditorium (allows Black Box use as overflow during large events).

Acoustical Requirements

Provide good acoustical isolation to avoid distracting noise during rehearsal and performances.

Furniture

99 seats on risers.

Equipment

Tech gallery

Cyclorama (projection)

Legs (stage drapes)

Catwalk or Genie Lift for access to lighting

Other Requirements

-

DANCE / FITNESS STUDIO

General Description & Use

The dance studio can be scheduled as an electives classroom for performing arts, and also used as a flex area by physical education for warm-ups and dynamic activity.

Location & Key Adjacencies

Near auditorium; adjacent to Black Box with shared control room between. Should also be in close proximity to P.E. areas, particularly the Weight Room and Auxiliary Gym.

Storage Needs

Provide a small audio closet.

Material Requirements

- Sprung floor
- Fixed mirrors and bars around room perimeter for dance.

M/E/P & Tech Requirements

Good ventilation to accommodate many students engaged in physical activities.

Acoustical Requirements

Speakers from above.

Furniture

-

Equipment

Other Requirements

-

SCENE SHOP, PROP ROOM, & COSTUME ROOM

General Description & Use

Scene Shop: Space for set building and storage of materials and equipment.

Costume Room: Storage and laundry of costumes for theater

Prop Room: Storage of props for theater

Location & Key Adjacencies

Scene Shop: Located directly behind the stage, accessible to both stage and outdoor loading dock via rolling garage doors.

Prop and Costume Rooms: Next to scene shop and also located behind stage. Prop room can be at a mezzanine level over the costume room if needed. Costume room near dressing areas.

Storage Needs

See equipment requirements for items to be stored in scene shop.

- Provide Power hand tool pantry/storage and 80° 20 drawer roller cabinet.

Provide shelving and racks for prop and costume storage

Material Requirements

-

M/E/P & Tech Requirements

Provide dedicated lighting for prop room, separate from stage lights.

Washer and dryer hookups in costume room and scene shop.

Sink in scene shop to include paint trap.

Acoustical Requirements

Provide good acoustical isolation in scene shop to minimize noise from power equipment use and to prevent potential distractions during performances.

Furniture

Provide work tables for scene shop .

Equipment

Provide space for the following equipment used in the scene shop:

- Power tools: Table saw and table; power miter saw; drill press (standing); sanding stations (belt & orbital units); band saw; panel saw; scroll saw; joiner; planer; MIG welder
- CNC router
- Support systems: High water pressure hose, larger air compressor (drop down hose rigs); vac system; shop fans

- Small equipment: First aid kit; charging station; assorted power and non-powered hand tools

- Ladders; dollies; hear press brake and slip roll; genie lift

Other Requirements

-

BOX OFFICE, CONCESSIONS & STORAGE

General Description & Use

Box office and concessions for performance ticketing and refreshments. A storage area is also provided with these front-of-house support spaces.

Location & Key Adjacencies

Locate in auditorium lobby. Box office should be highly visible and easily accessed from the main building or theater complex entrance to accommodate visitors who may be coming to a single performance and are not familiar with the campus.

Storage Needs

400 SF storage room provided for front of house support.

Material Requirements

-

M/E/P & Tech Requirements

Full refrigerator and sink in Concessions.

Acoustical Requirements

-

Furniture

-

Equipment

Accommodate any required equipment needed for issuing tickets and dealing with monetary transactions for refreshments or admissions.

Other Requirements

-

PHYSICAL EDUCATION / ATHLETICS

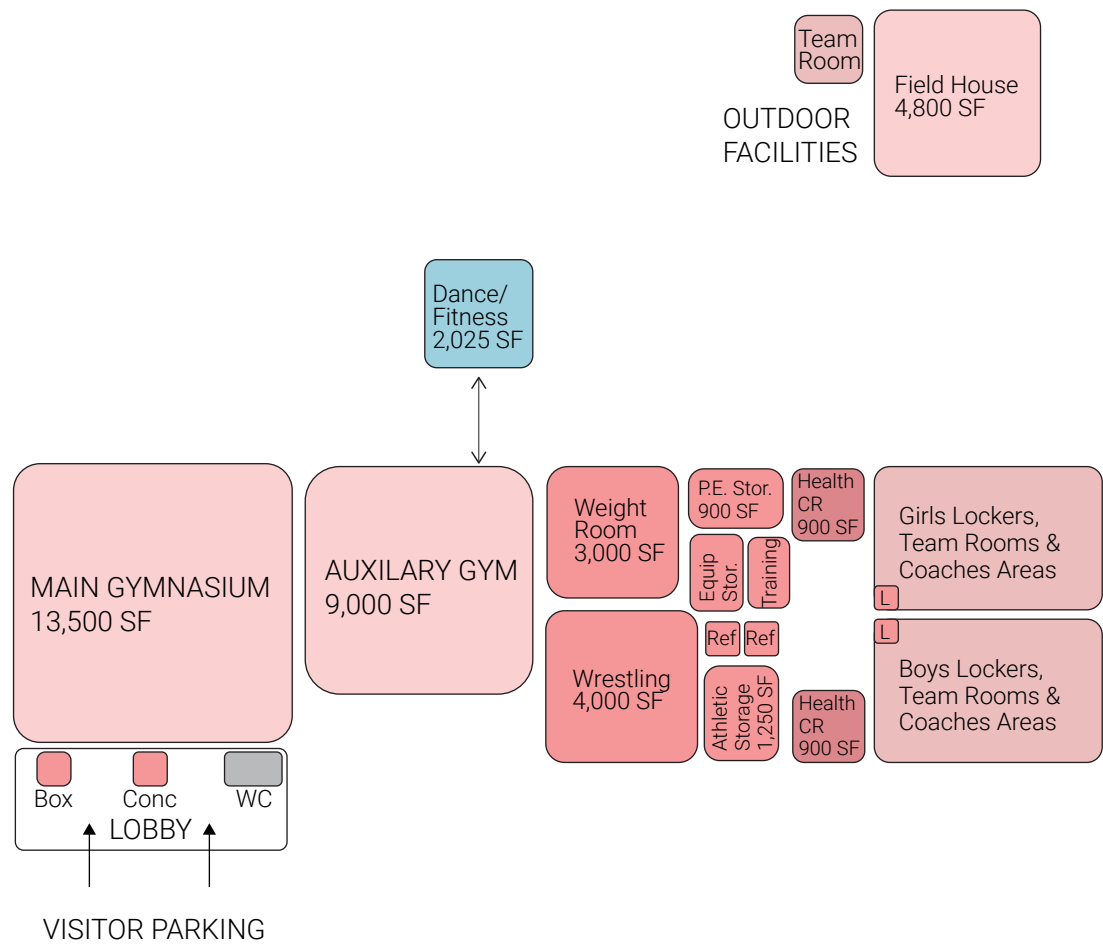
AREA PROGRAM

P.E. / Athletics	2017 Ed Spec				1996 Ed Spec				Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF	Clackamas HS	Qty.	SF Ea.	SF	
Main Gymnasium w/ 2000 seats	1	1	13,500	13,500	Main Gymnasium	1	13,300	13,300	13,500 is actual CHS gym size
Auxiliary Gymnasium	1	1	9,000	9,000	Auxiliary Gymnasium	1	9,000	9,000	
Wrestling (60 x 60)		1	4,000	4,000	Wrestling (60 x 60)	1	4,000	4,000	30-50 people
Weight Room	1	1	3,000	3,000	Weight Room	1	1,920	1,920	1,920 SF too small
Health Classroom	2	2	900	1,800	Health Classroom	2	900	1,800	
Boys Locker / Coaches									
Coach Office		1	220	220					
Coach Locker		1	300	300					
Men's Coaching Area		1	500	500	Boys Locker/Team Rooms/Coaches	1	5,000	5,000	
Boys Lockers		1	1,550	1,550					
Toilets / Showers		1	350	350					
Regular Team Room		3	350	1,050					
Large Team Room		1	800	800					
Girls Locker / Coaches									
Coach Office		1	220	220					
Coach Locker		1	300	300					
Women's Coaching Area		1	500	500	Girls Locker/Team Rooms/Coaches	1	5,000	5,000	
Girls Lockers		1	1,550	1,550					
Toilets / Showers		1	350	350					
Regular Team Room		3	350	1,050					
Large Team Room		1	800	800					
Large Team Room		1	800	800					At stadium or remote from other team rooms
Unisex Coach / Referee Locker Room		2	200	400					Stakeholder need
Individual Unisex Locker Room		2	100	200					Stakeholder need
Training Room		1	300	300	Training Rooms - Boys & Girls	2	250	500	Need room for ice & whirlpool therapy
Hydration Therapy Room		1	200	200	Box Office / Ticket	1	200	200	
Box Office - Ticket Area		1	200	200	Concession	1	225	225	Separate from Box Office / Tickets
Concessions		1	225	225	P.E. Storage	2	300	600	Existing storage insufficient
P.E. Storage		1	900	900	Equipment Storage	1	1,500	1,500	Need dedicated uniform storage
Athletic Storage		1	1,250	1,250					
Athletic Equipment / Uniform Storage		1	750	750					
Subtotal	5			46,065				43,045	

ADJACENCY DIAGRAM

Key adjacencies include proximity of the main gymnasium to the visitor parking and box office, concessions and restrooms. The auxiliary gym should be near the main gym, although it may be located on a different level of the building. It should be adjacent to the weight room to allow use as a flex area, and also near to the Dance / Fitness Room within the Performing Arts department. The Wrestling Room should be on the same floor as the main gym and close to the Auxiliary Gym.

Health classrooms should be close to coaches offices within the locker rooms, and double as film rooms for team use. Training rooms should be located near the locker areas and also close to an exit route with access to outdoor facilities. One large team room can be located at the outdoor stadium, or within the main building but separated from other team areas.



ROOM REQUIREMENTS

MAIN & AUXILIARY GYMS

General Description & Use

The main and auxiliary gymnasiums are facilities that can be scheduled for as teaching stations for P.E. classes, and used for athletics competitions and other gatherings of the student body.

If possible, the main gymnasium should be configured so that three basketball courts or volleyball courts can be used at the same time. The auxiliary gym must also fit a full-sized basketball / volleyball court.

An elevated track in the main gym provides an additional fitness & training amenity.

The auxiliary gym serves as a separate teaching station for P.E. classes or multi-purpose space for either warm-ups or games at athletic competitions. It can also serve as a flex area for the weight room (in lieu of a second fitness room) if adjacent to it.

Location & Key Adjacencies

The gymnasium entry should be located close to visitor parking for ease of access and wayfinding by visitors.

Ticketing should be located in the lobby / front entrance to the gymnasium. Concessions should be near ticketing but separated from it to avoid congestion in the two queuing areas. Public restrooms should also be located near the main gymnasium entrance / lobby.

Ideally, spectators will access bleacher seating from the level above the main floor of the gym. Otherwise, the flow of spectators must be kept away from the court-side team bench areas.

Storage Needs

The following storage areas are associated with the P.E. and athletics programs:

- 900 SF P.E. storage
- 1,250 SF general athletics storage
- 750 SF athletics equipment & uniform storage
- 1,000 SF Field House storage for track, baseball and softball. See Outdoor Facility Requirements.

Provide smart storage solutions that take advantage of the entire height of the rooms.

Material Requirements

Specify durable and easy-to-clean materials.

M/E/P & Tech Requirements

Provide air conditioning for comfort of students, coaches and visitors.

Acoustical Requirements

Provide balanced reverberation and acoustic separation between spaces as needed.

Furniture

Provide bleachers with easy handrail assembly and disassembly (2,000 seats in main gym and 500 seats in auxiliary gym).

Equipment

Provide a built-in sound system and electronic scoreboards at both ends of both the main and auxiliary gymnasiums.

Other Requirements

-

WRESTLING ROOM & WEIGHT ROOM

General Description & Use

Wrestling room with a 60' x 60' area for practice and competition
Weight room (teaching station) for team training and lifting.

Location & Key Adjacencies

Wrestling room on same floor as main gym and near mat storage.
Weight and should be located near auxiliary gym. The auxiliary gym can also serve as a flex area for the weight room.

Storage Needs

See overall storage requirements identified under Main & Auxiliary Gyms. Include an area for storage of wrestling mats within the 1,200 SF P.E. storage
Provide racks for storing free weights and other equipment in weight and fitness rooms.

Material Requirements

Wrestling room should provide mat floors that define two separate areas for to separate JV and Varsity practice and competition.

M/E/P & Tech Requirements

-

Acoustical Requirements

-

Furniture

-

Equipment

Training and fitness equipment as used by P.E. / athletics staff.

Other Requirements

-

LOCKER ROOMS, COACH/REFEREE ROOMS, TEAM ROOMS

General Description & Use

Locker room changing, restrooms, shower and team areas are provided to support P.E. classes, home athletic team students and coaches, visiting teams and referees.

Coaching rooms are used as meeting rooms for in-season sports teams.

2 unisex / individual changing and shower areas are provided for students and 2 for referees or visiting coaches.

Location & Key Adjacencies

Close proximity to main and auxiliary gyms, weight, fitness and wrestling rooms, training rooms uniforms and storage. Since locker areas include coach offices, they should also be located close to Health Classrooms which are taught by P.E. staff.

One large team room should be located remotely from the locker areas to allow for separation of home and visiting athletics teams when necessary. This large team room can be located at stadium or anywhere remote from the team rooms in the locker area.

The training rooms should be easily accessible to both the large athletic program areas as well as the outdoor practice fields for student safety in event of injury.

Storage Needs

Provide lockers for student use.

Material Requirements

Provide lockers and benches in changing and team rooms.
Provide white boards in team rooms

M/E/P & Tech Requirements

Need a few individual showers and changing areas. Communal showering areas are not used regularly.

Provide restroom and showers in coach and referee areas.

Hydration therapy room requires additional ventilation for extra heat produced by ice machine and whirlpool.

Acoustical Requirements

-

Furniture

-

Equipment

-

ROOM REQUIREMENTS (CONTINUED)

TRAINING & HYDROTHERAPY ROOMS

General Description & Use

Provide one sports training area shared by boys and girls for treatment of injured or sick athletes.

Provide a smaller hydration therapy room for administering ice and whirlpool therapies.

Location & Key Adjacencies

Close to P.E. areas, locker / team rooms, coach's offices and easily accessed from outdoor athletic facilities.

Storage Needs

Provide lockable storage for health records.

Storage for first aid or medical supplies and linens.

Material Requirements

-

M/E/P & Tech Requirements

Plumbing for sinks, ice machine and whirlpool therapy.

Acoustical Requirements

See General Classroom Requirements

Furniture

Treatment tables

Equipment

Ice machine and whirlpool therapy equipment.

Others as required by trainers and athletics staff.

Other Requirements

-

HEALTH CLASSROOMS

General Description & Use

Classrooms for teaching health classes; can double as a film room for use by teams.

Location & Key Adjacencies

Close to P.E. areas, locker / team rooms and coach's offices

Storage Needs

See General Classroom Requirements

Material Requirements

See General Classroom Requirements

M/E/P & Tech Requirements

See General Classroom Requirements

Acoustical Requirements

See General Classroom Requirements

Furniture

See General Classroom Requirements

Equipment

Same as general classroom requirements, but allow team access to room for use of projector or large monitor.

Other Requirements

-

OUTDOOR FACILITY REQUIREMENTS

Sport	#	Teams	Practice Areas	Competition Areas	Lighting	Scoreboard	Artificial Turf	Requirements
Baseball	3	Freshman, JV & Varsity	2		X	X	X	Freshman / JV field includes dugouts and minimal seating. Varsity field includes dugouts, seating and press box. Lighting & scoreboards for both fields.
Softball	3	JV, JV2 & Varsity	2		X	X	X	JV field includes dugouts and minimal seating. Varsity field includes dugouts, seating and press box. Lighting and scoreboards for both fields.
Cross Country	4	Boys & Girls JV & Varsity	-					No special facilities required.
Football	3	Freshman, JV & Varsity	1	1	X	X	X	Practice areas with artificial turf (no scoreboard or lighting). See Stadium / Field for competition area requirements (serves as second practice area).
Soccer	6	Boys & Girls Freshman, JV & Varsity	1			X	X	One dedicated practice / competition area with artificial turf (no lighting required). Additional stadium competition area shared with football - see Stadium / Field requirements.
Tennis	4	Boys & Girls JV & Varsity	4 or 8*		X*	X		*Provide 4 doubles courts with lighting or 8 doubles courts without lighting.
Track & Field	4	Boys & Girls JV & Varsity	1		X	X	X	8 lane all weather track, 1 pole vault area, 2 jump areas (one long jump and one triple jump), high jump, discus, javelin, and shot put. Provide adequate safety clearances so all events can occur simultaneously. See Stadium / Field requirements.
Stadium / Field					X	X	X	Used for Football, Soccer, and Track & Field. Provide ticketing area, concessions, restrooms, and ADA accessible press box. Covered home seating for 2,000 and uncovered visitor bleachers for 500.
Field House					X		X	4,800 SF unconditioned practice facility for baseball and Softball. Garage door and regular door with key card entry; Artificial turf on pad over concrete floor. Includes approx. 1,000 SF storage for track, baseball and softball.
Toilets								Restroom facilities should be available close to all exterior field & court areas.

The table above was adapted from the Athletics Fields District Standards as seen in the North Clackamas School District Ten Year Facility Master Plan dated February 13, 2013. The requirements shown here have been updated based on input from P.E. and athletics staff.

Athletics practice and competition areas should be provided on-campus whenever possible. This will provide a measure of safety in that athletes will have immediate access to trainer in the event of injury.

The field house is an enclosed but unconditioned practice facility that is separate / auxiliary from the main school building.

One large team room can be located either in the main school building or at the stadium. The large team room should be located remotely from the main team areas to in order to keep teams separate. A large team room at the stadium can be used by the home team or visiting team if desired.

Facilities managers noted the need for a high water line pressure in the stadium / field area to allow use of pressure washers on the stadium seating and track surface.

MEDIA CENTER / LIBRARY

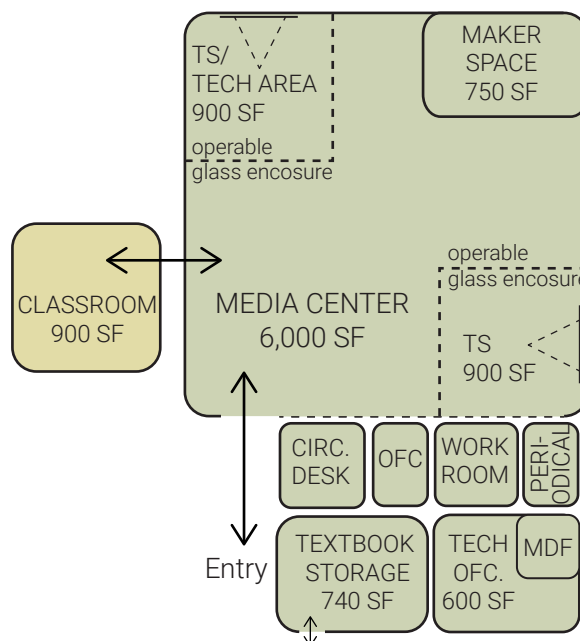
AREA PROGRAM

Media Center / Library	2017 Ed Spec				Clackamas HS	1996 Ed Spec			Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF		Qty.	SF Ea.	SF	
Media Center		1	6,000	6,000	Media Center	1	8,600	8,600	Reduced to add Multi-Purpose Community Room (see Admin)
Technology	1			-					
Open Teaching Area	1			-					
Project / Study Areas		3		-	Small Conference	3	110	330	Within Media Ctr.
Classroom	1	1	900	900	Classroom	1	650	650	Enclosed. Need full-size classroom
Maker Space		1	650	650					
Storage		1	100	100					
Staff Storage & Work Area									
Circulation / Checkout Desk		1	320	320					2 work stations
Office		1	190	190	Storage/Work Area	1	950	950	Adj. to checkout
Work Room		1	300	300					
Periodical Storage & Curriculum		1	150	150					
Textbook Storage		1	740	740					Compact shelving
Tech Office		1	600	600	Tech Office	1	600	600	
MDF / Network Room		1	190	190	Network Room	1	190	190	
Subtotal	3			10,140				11,320	

ADJACENCY DIAGRAM

The circulation desk should be located just inside the entrance, and adjacent to the staff office and workroom. These spaces should have glazing for visibility and supervision into the media center. Textbook storage should be easily accessible from the circulation desk.

An enclosed, full-size classroom should be located adjacent to the meeting center. Within the media center are two teaching walls that can be enclosed with operable glass panels to allow acoustical separation while maintaining visibility into the overall media center.



ROOM REQUIREMENTS

MEDIA CENTER & CLASSROOM

General Description & Use

The media center and library is a multi-purpose space that includes display and storage of about 25,000 books, reference material in digital format, a technology zone for computing, and three teaching stations (one as a separate, enclosed classroom and two within the media center). It is also used for small groups work and individual study.

The space should be open and welcoming space to students, staff and the greater community, who frequently use the media center for a range of functions in the evening hours after the school day.

Location & Key Adjacencies

Because the space is often used by the public, it should be located in highly visible and easily accessible part of the school close to the main entrance.

Since community access must be provided outside of regular school hours, there needs to be means for creating a secure separation from the rest of the building.

Technology area should be located to a side or corner of the media center rather than in the middle of the space (see adjacency diagram.) Position computer stations so all screens can be monitored by the media specialist at one time.

Storage Needs

Shelving for 25,000 volumes

Material Requirements

Use of glass into walls of media center that adjoin staff work areas, enclosed classroom, teaching areas and project / study rooms to allow media center staff to be able to supervise the entire area.

Provide operable glass panels to enclose teaching areas within the open media center as needed. This allows for acoustical separation when needed for class times, while maintaining visual access to the entire media center.

M/E/P & Tech Requirements

The media center requires a large number of electrical outlets in the walls and floor to allow for flexibility of furniture and shelving arrangements to provide power for computers and other equipment. Plugs should lock in place.

In addition to the full-size, enclosed classroom (see General Classrooms for requirements), there are two teaching walls within the open media center which should be equipped with projection and data for a teaching station.

Provide charging stations for use by student, teachers and visitors.

Acoustical Requirements

The space must be able to provide acoustical separation between teaching areas and the larger media center through use of operable glass panels. Excellent acoustical separation is also required between the media center and maker space, which may generate noise through equipment use.

Furniture

- Shelving for 25,000 books and other media displays
- Tables and chairs for reading and study
- Provide modular furniture that is easy to clean
- Provide technology-integrated furnishings

Equipment

One of the two teaching areas within the overall media center is associated with a technology area that includes space for 40-45 computer stations. Media center staff will need to determine the optimal mix of fixed desktops and monitors versus laptops that are checked out from the circulation desk.

Provide a scanner and printing stations.

Other Requirements

-

ROOM REQUIREMENTS (CONTINUED)

CIRCULATION DESK, STAFF OFFICE, WORKROOM, TEXTBOOK AND PERIODICAL STORAGE

General Description & Use

These are the work areas for media center staff. The circulation desk stationed at the entry / exit to the media center allows students to check out books and other media, as well as laptops for daily use. The staff utilize the office and work room as support spaces.

Periodical storage provides reference materials for teachers and curriculum DVDs. The textbook storage room provides storage for textbooks and novels issued as course reading.

Location & Key Adjacencies

These spaces must be in close configuration. The circulation desk is placed near the entrance to media center for the check-out process and monitoring people entering and exit the space. The office should be directly adjacent to the circulation desk, followed by the work room.

Textbook storage must also be close to the work area and adjacent to main circulation corridor with a window facing the hallway to allow student check-out and return of course-issued books. Periodical storage should also be included close to these staff work areas.

Storage Needs

Provide compact shelving units for textbook storage.

Material Requirements

Provide glass walls where support spaces adjoin media center to allow staff supervision of students.

M/E/P & Tech Requirements

Provide a large sink in the work room

Acoustical Requirements

-

Furniture

Provide work table in textbook storage room for processing books. Provide shelving for compact storage in text book storage room and shelving and racks as required for periodical storage.

Provide 2 work stations and storage casework in staff offices. Provide work tables, counters and casework storage in work room.

Equipment

-

PROJECT / STUDY ROOMS & MAKER SPACE

General Description & Use

Three small project / study rooms can be utilized by students for individual or group work, as well as by teachers and parents as small meeting rooms.

There is also a maker space room provided for students to create 2D or 3D objects utilizing new technologies.

Location & Key Adjacencies

Enclosed spaces connecting to the media center.

Storage Needs

There is a dedicated storage space connected to the maker space.

Material Requirements

Glass walls are required facing the media center to allow staff to supervise students utilizing the spaces.

M/E/P & Tech Requirements

Project / study rooms may include screens or projection for group meetings.

The maker space will have significant needs for power and data due to use of equipment and new technologies. Provide a flexible arrangement for connecting equipment that can allow the space to adapt as technologies are brought in or phased out.

Acoustical Requirements

Ability to provide acoustical separation between teaching areas through use of sliding glass panels

Excellent acoustical separation is required between the media center and maker space since noise can be generated by use of equipment.

Furniture

Provide table and seating for 5-6 in project / study rooms. Consider technologically integrated furniture.

Provide work tables and work stations for setup of computing stations to operate special equipment in the maker space.

Equipment

LCD screen or projection in project / study rooms.

Technology & media center staff to identify special equipment to be provided in maker space.

Other Requirements

-

TECH OFFICE AND MDF / NETWORK ROOM

General Description & Use

One office for use by Technology and Information services.

MDF room for servers

Location & Key Adjacencies

-

Storage Needs

Provide storage in tech office.

Provide 2-post rack for servers in MDF room with no other storage to avoid crowding the server equipment.

Material Requirements

-

M/E/P & Tech Requirements

Provide ample power supply and outlets for work computing equipment and servers.

Acoustical Requirements

-

Furniture

Work stations in tech office.

Equipment

As required by Tech and Information Services.

Other Requirements

-

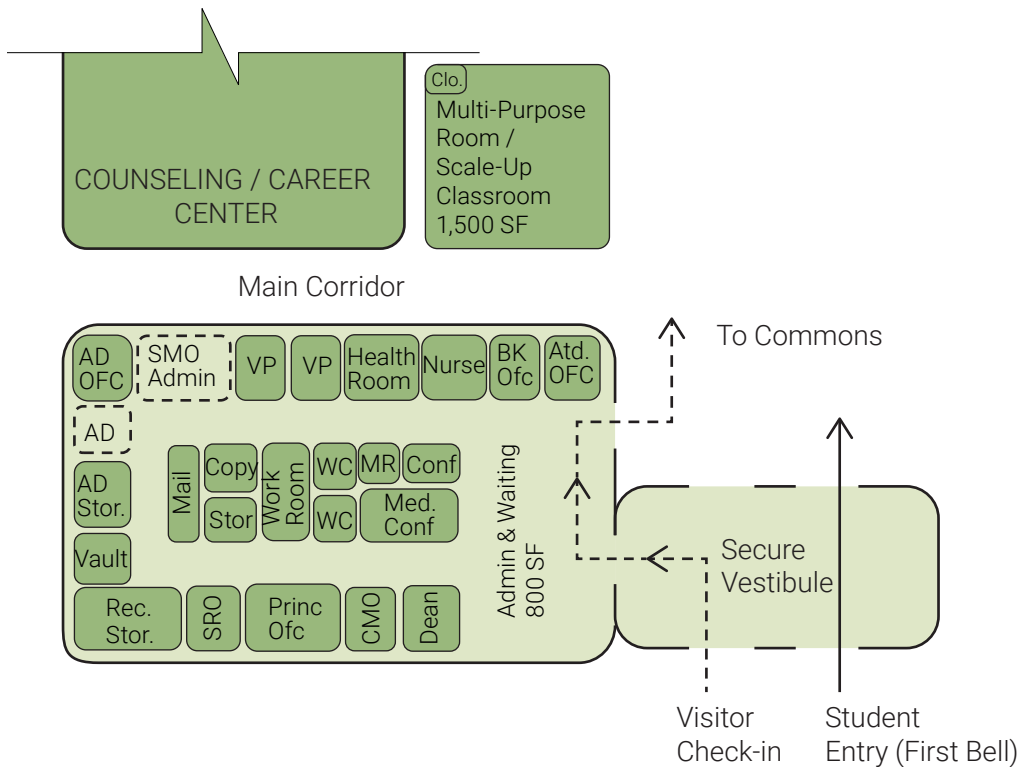
EDUCATION SUPPORT

ADMINISTRATION

AREA PROGRAM

Administration	2017 Ed Spec				1996 Ed Spec				Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF	Clackamas HS	Qty.	SF Ea.	SF	
Admin Open Work Area / Waiting		1	800	800	Reception / Sec / Waiting	1	725	725	Breakdown based on actual at CHS
Principal's Office with Conf. Area		1	330	330	Principal's Office	1	330	330	W/ 6 person table
Vice Principal (VP) Office - Curriculum		1	150	150	Vice Principal Curriculum	1	150	150	2 doors to admin suite & main circ
VP Office - Attendance / Student Management Office		1	150	150	Vice Principal Attendance	1	150	150	2 doors to admin suite & main circ
SMO Admin Work Area / Waiting		1	240	240	SMO	1	240	240	
Attendance Advisor / Dean		1	140	140	Attendance/Dean	1	140	140	
SRO Office		1	140	140	SRO Office	1	140	140	
Athletics Director / Vice Principal		1	140	140	Vice Prin/Athletics	1	140	140	2 doors to admin suite & main circ
AD's Assistant Workstation		1	100	100	AD Assistant	1	100	100	
AD Storage		1	200	200					
Nurse Station/Office		1	185	185	Nurse	1	185	185	Window to circ.
Health Room w/Toilet		1	190	190	Health Room	1	190	190	
Bookkeeper Office		1	135	135	Bookkeeper Office	1	135	135	Window to circ.
Attendance Office		1	120	120	Attendance Office	1	120	120	Window to circ.
Campus Monitor's Office		1	110	110	Attendance Clerk	1	110	110	Shared by 2 people
Multi-Purpose Community Room / Scale-Up Classroom	1	1	1,500	1,500					4 teaching walls; Seats licensed staff (65-70); Used by community
Media closet		1	50	50					For MPR
Medium Conference Room		1	300	300	Conference Room	1	300	300	Seats 8-10. Shared w/ Counseling
Small Conference Room		1	80	80					Seats 3-4 people
Record Storage		1	200	200	Record Storage	1	100	100	Need for significant additional space
Vault/Fireproofed File Cabinets		1	200	200	Vault	1	110	110	Transcripts, student records
Work Room		1	190	190	Work Room	1	190	190	W/microwave, sink & refrigerator
Copy Room		1	120	120					
Mail Room		1	130	130	Mail Room	1	130	130	
Supply Storage		1	100	100	Supply Storage	1	100	100	
Toilets		2	80	160	Toilets	1	80	80	
Mother's Room		1	75	75					Added per stakeholder input
					Office - extra CSD	1	110	110	Not needed / not existing at CHS
					Telephone Office	1	50	50	Not existing at CHS
Subtotal	1			6,235				4,025	

ADJACENCY DIAGRAM



The administrative suite should be located at the building entrance to provide secured check-in of visitors. It should be close to the commons and counseling center. Staff generally use private offices, with some providing a window or door to the main circulation corridor to allow student / visitor access to these offices while maintaining a private professional zone inside the administrative suite.

ROOM REQUIREMENTS

ADMIN OPEN WORK AREA / WAITING

General Description & Use

Serving as the 'front door' to the school – the front desk and adjacent administration offices provides a secure and welcoming entrance.

Provide 2-3 open work stations for administrative staff with check-in desk for visitors. Provides a waiting area for visitors to meet with staff.

Location & Key Adjacencies

Locate directly adjacent to the main building entrance and near the bus drop-off. Provide a secured vestibule so that visitors must check in at the reception desk before entering the school.

Provide good visibility from Administrative suite to outdoor areas to allow natural surveillance of building entry. Provide low exterior landscaping / avoid plantings outside of building entrance that could limit visibility over time.

Admin area should be close to commons and counseling / career center.

Storage Needs

Provide lockable storage cabinets in the open work area.

Material Requirements

Use glass to provide visibility to entry vestibule and outdoor areas near the visitor check-in.

Provide tackable surfaces on walls in front office for displaying school information.

M/E/P & Tech Requirements

-

Acoustical Requirements

-

Furniture

Provide comfortable seating and tables for students and visitors.

Standing height, and ADA height, desk for visitors to use for completing paperwork.

Equipment

Computer workstation for visitor check-in.

Large monitor mounted for school announcements.

Other Requirements

-

ROOM REQUIREMENTS (CONTINUED)

STAFF OFFICES

General Description & Use

Private and shared offices used by administrative staff, including:

- Private offices
 - Principal's office with 6 person meeting area
 - Attendance Advisor / Dean
 - SRO Office
 - Campus Monitor's Office (shared by two people)
- Private offices with 2 doors: one to administrative suite and one to main circulation
 - Vice Principal of Curriculum
 - Vice Principal - Attendance / SMO
 - Vice Principal - Athletics Director
- Private offices with a window to main circulation for student / visitor use
 - Attendance Office
 - Bookkeeper's Office
 - Nurse's Office (with adjacent health room)
- Semi-enclosed / shared work areas for assistant roles
 - SMO Admin / Waiting
 - Athletic Director's Assistant

Location & Key Adjacencies

Close to main entrance and administrative reception area. Close to counseling center and commons.

Provide window to main corridor at the bookkeeper and attendance offices, and nurse station for student check-in.

Provide two entrances, one to hallway and one to admin suite for the VP, SMO, and AD offices.

Storage Needs

See storage and work area requirements.

Provide secure/lockable casework shelving in Health Room for medical supplies and storage of active health records.

Material Requirements

Private offices with windows to exterior or circulation areas. Provide blinds when needed for privacy.

M/E/P & Tech Requirements

Provide plumbing for a sink in the Health Room as well as in the attached restroom.

Acoustical Requirements

Provide acoustical separation between offices, conference rooms, and waiting areas.

Furniture

Individual work stations and casework for storage.

Provide an additional meeting table and chairs for groups of 6 in Principal's office.

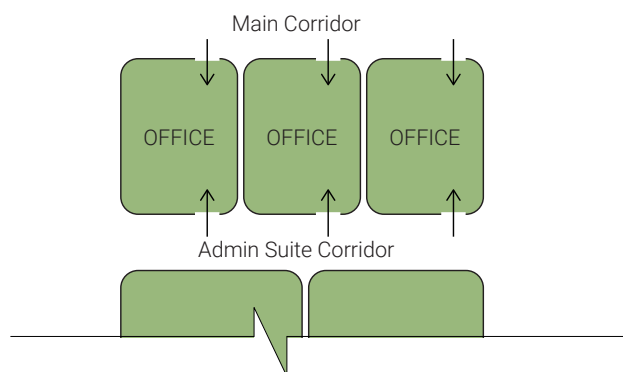
Provide chairs for waiting in health office and SMO area.

Equipment

Provide medical equipment as needed for Nurse's Station.

Other Requirements

-



MULTI-PURPOSE ROOM / SCALE-UP CLASSROOM

General Description & Use

A multi-purpose meeting room is to be provided to seat all licensed staff (65-70 people). This can also serve as a community meeting space in during evening and weekend hours.

Additionally, the space functions as a Scale-Up Classroom and teaching station. This is type of specialized classroom can help prepare students for active learning environments found in higher education. It can be shared for use as a classroom by any teacher as needed.

Location & Key Adjacencies

The room should be located near the main building entrance and close to but separate from the Administration suite, to allow use by students during the school day and by community members after hours.

Storage Needs

A media closet should adjoin the multi-purpose room.

Material Requirements

Writing surfaces and projection screens on all four walls of the room.

M/E/P & Tech Requirements

Provide technology for teleconferences and AV, with projection on four walls of the room. Provide outlets for plugging in laptops.

Acoustical Requirements

Provide good acoustical separation to minimize disruptions to the learning environment.

Furniture

Different modes of furniture may be provided for community and teacher use and use as a classroom.

The Scale-Up Classroom typically entails round tables to seat 8-10 students at each, with teaching station in center of classroom.

The room may be used with other flexible furnishings such as 2-person tables and chairs for multi-purpose and community use.

Equipment

A Scale-Up Classroom provides AV for teaching walls on all four walls of the room. This includes projectors and screens or LCD screens, with writing and pin-up surfaces on all four sides adjacent to screens.

Other Requirements

Provide access to daylight for optimal learning.



Scale-up classroom with interactive SMART boards on four walls, and a teaching station in the center of the room surrounded by round tables for students.

ROOM REQUIREMENTS (CONTINUED)

CONFERENCE ROOMS

General Description & Use

Medium (8-10 person) and small (3-4 person) conference rooms are to be provided within the administrative suite. These are shared with the counseling group, which provides one additional medium-sized conference room.

Location & Key Adjacencies

Conference rooms are shared with counseling and other users, thus they should easily accessed from the admin entry / reception area.

Storage Needs

See storage and work area requirements.

Material Requirements

Provide white boards in conference rooms.

M/E/P & Tech Requirements

Provide technology for teleconferences, AV and projection.

Provide outlets for plugging in laptops.

Acoustical Requirements

Good acoustical separation is required between offices, conference rooms, and waiting areas.

Furniture

Seats and conference tables for groups of 10 and 4 for medium and small conference rooms.

Equipment

Monitors, screens, and other AV and projection equipment as required by administrative groups.

Other Requirements

Conference & meeting rooms to provide single action lock from interior side.

STORAGE AND WORK AREAS

General Description & Use

Work areas include a work room and copy room for administrative use, as well as a mail room used by all school staff.

Storage areas include supply storage, records storage and fireproof vault. Additional storage is required within the Bookkeeper's Office.

Location & Key Adjacencies

Mailboxes should be located near the front desk but not accessible by public.

The work room, copy room and supply room should be adjacent to one another and close to staff restrooms

Storage Needs

Records storage room needs space for cumulative 75 year storage.

Vault includes 7-8 file cabinets.

Material Requirements

Fireproofing in vault room.

M/E/P & Tech Requirements

The work room should include a sink and plumbing hookups for a refrigerator.

Acoustical Requirements

-

Furniture

-

Equipment

The work room should include a microwave and refrigerator.

Other Requirements

Spaces must be lockable for security.

RESTROOMS AND MOTHER'S ROOM

General Description & Use

Provide two gender-neutral private restrooms for staff use.

Provide a private mother's lactation room.

Location & Key Adjacencies

Restrooms should be close to conference and work rooms.

Storage Needs

-

Material Requirements

-

M/E/P & Tech Requirements

Plumbing as required for restrooms.

It is recommended that a sink be provided in the mother's room.

Acoustical Requirements

-

Furniture

Provide a comfortable chair and small table or counter in the mother's room.

Equipment

It is recommended that a small refrigerator is provided in the mother's room.

Other Requirements

-

EDUCATION SUPPORT

COUNSELING / CAREER CENTER

AREA PROGRAM

Counseling / Career Center	2017 Ed Spec				Clackamas HS	1996 Ed Spec			Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF		Qty.	SF Ea.	SF	
Reception/Secretaries/Waiting		1	175	175	Reception / Sec / Waiting	1	420	420	3 work stations Updated per actuals for at CHS
Counseling/Student Services		1	700	700	Career / Student Services	1	1,225	1,225	
Counseling Offices	6		140	840	Counseling Offices	8	90	720	1 counselor per 250 students + therapist.
	2		90	180					
Vice Principal		1	140	140	Vice Principal / Activities	1	140	140	
Registrar		1	120	120	Registrar	1	120	120	
Trillium Family Services		2	100	200	Family Services	1	265	265	Two small offices required per stakeholder input.
File/Record/Portfolio Storage (Fireproof)		1	145	145	File / Record / Portfolio Storage (Fireproof)	1	85	85	Existing is significantly undersized
Career Center and Conference Area		1	1,050	1,050	Classroom / Conference	1	500	500	Updated per actual SF at CHS
Toilets		2	80	160					Existing at CHS
Work Area		1	100	100	Work Area	1	100	100	
Data Processing / File Room		1	90	90	Data Processing	1	90	90	
Subtotal	-			3,900				3,665	

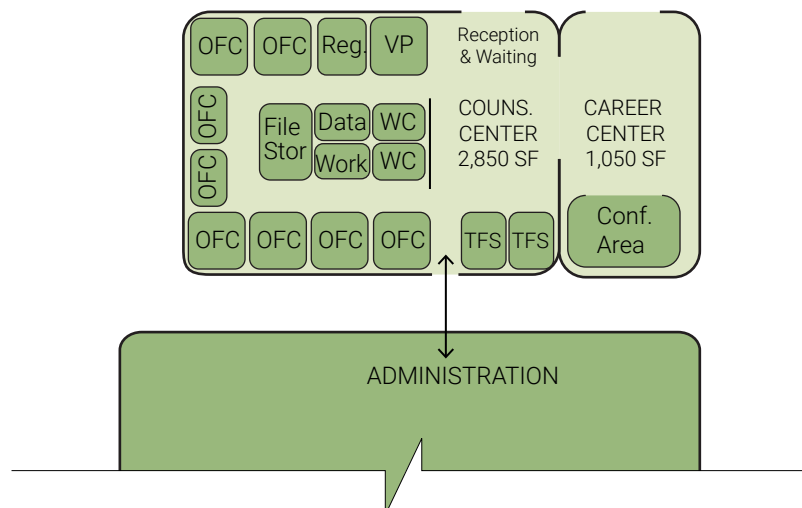
ADJACENCY DIAGRAM

The counseling and career center should be highly visible and situated in the heart of the school, off of the commons, to promote access by students.

Once inside, there is an additional layer of privacy and enclosure provided for the counselor office areas to promote confidentiality.

The counseling center will benefit from adjacency to the administrative suite, as conference rooms are shared between both groups.

COMMONS



ROOM REQUIREMENTS

COUNSELING RECEPTION & CONFERENCE

General Description & Use

The counseling center provides guidance to students and parents, as well as assistance with college and career planning. The reception and waiting area will provide a welcoming center for students to access these services with three work stations.

It also provides a conference room connected to the main reception area for use by counseling, administration and other groups.

Location & Key Adjacencies

The counseling and career center should be highly visible to students and easily accessible from the commons.

Locate counseling near the administration suite and special education areas. Medium conference rooms are shared between counseling and administration and should be located to provide convenient access for both groups.

Storage Needs

Provide secure storage and lateral file cabinets in work area to maintain confidentiality.

M/E/P & Tech Requirements

Provide technology for teleconferences, AV and projection. Provide outlets for plugging in laptops.

Material Requirements

Provide glass walls at the reception area to welcome students in for support.

Acoustical Requirements

Provide acoustical separation from building circulation to avoid distraction and establish an initial layer of privacy. Provide good acoustical separation for conference room.

Furniture

Reception should include furniture for 3 work stations and comfortable seating and tables for visitors.

Provide conference table and seating for 8-10 in conference room.

Equipment

Secure printer at secretary's desk for confidential files.

Projection equipment and phones as required for conference room.

Other Requirements

Conference & meeting rooms to provide single action lock from interior side.

COUNSELING OFFICES

General Description & Use

Each guidance counselor or therapist will have his or her own private office. These are used for meetings with students, parents and teachers, as well as in collaboration with other counselors. Additionally, the Registrar and Vice Principal of Activities will have private offices in this department, along with two small offices reserved for use by Trillium Family Services.

Location & Key Adjacencies

After entering the reception area, students often wait for counselors in the corridors outside their offices. Thus counselor offices should be adjoined to this reception area but in a separate overall space with one additional layer of privacy for students and counselors beyond the counseling entry. Corridors should be wide enough to allow accessible passage while students are seated outside of the offices.

Storage Needs

Secure storage and lateral file cabinets for confidential files.

Material Requirements

Counseling offices require solid walls to ensure student privacy. Doors can include a small relites. When not in confidential meetings, counselors typically work with their doors open to invite visitors in and promote collaboration within the department.

Provide windows to the outdoors, which are beneficial for the therapeutic aspect of the work.

Acoustical Requirements

Provide excellent acoustical isolation between offices for privacy.

Furniture

Provide a desk and filing cabinets in all offices. In addition, include a small meeting table for 3-4 people in each 140 SF counseling office.

Equipment

-

Other Requirements

-

CAREER CENTER & CONFERENCE AREA

General Description & Use

The career center is student resource area and place for college representatives to use when visiting the school. This area includes an open area for computer work stations for use by students, career center staff and visitors, as well as an adjoining, semi-enclosed conference area.

Location & Key Adjacencies

Locate next to counseling entrance and reception area counseling. The career center should be close to the commons to promote student access.

Storage Needs

Secure storage and lateral file cabinets for confidential files.

Material Requirements

Glass walls at the reception area.

Tackable and white board surfaces in waiting area and conference room.

Acoustical Requirements

Provide acoustical separation from building circulation to avoid distraction and establish an initial layer of privacy.

Furniture

Provide computer stations for visitors in the main career as well as desks for staff. Provide a conference table and seating for the conference area.

Equipment

Computers for open career area

Monitors, screens, and other AV and projection equipment as required for conference area.

Other Requirements

Provide a ticker screen outside of the career center in the commons to communicate events and other information with students.

STORAGE, WORK AREAS AND OTHER SUPPORT SPACES

General Description & Use

Provide a work area, data processing / file room counseling and career center use, as well as two staff restrooms.

The storage room includes files for current and former student and requires good security to ensure privacy.

Location & Key Adjacencies

Locate support spaces centrally within the counseling and career center for convenient access by staff.

Storage Needs

The file storage room includes files for every student and requires good security to ensure student privacy. Archive files include student records stored for seven years after graduation and are accessed frequently by the Registrar. Space must be fireproofed.

Material Requirements

Fireproofing in file storage room.

M/E/P & Tech Requirements

Plumbing as required for restrooms.

Acoustical Requirements

-

Furniture

-

Equipment

-

Other Requirements

Spaces must be lockable for security.

EDUCATION SUPPORT

SPECIAL EDUCATION

AREA PROGRAM

Special Education	2017 Ed Spec				1996 Ed Spec				Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF	Clackamas HS	Qty.	SF Ea.	SF	
LEEP Classroom	-	-	900	-	Life Skills: Kitchen / Laundry	1	600	600	Only 1 required district-wide
SLC/A Classroom	1	1	900	900	Special Ed Classroom 1	1	600	600	Need full-sized classroom
Kitchen / Laundry		1	400	400					Used by SLC/A and LEEP Classrooms
TLC and SLC/B Classroom	1	1	900	900	Alternative Ed Classroom	1	600	600	Need full-sized classroom
Restroom		1	110	110	Bathroom w/Shwr	1	85	85	Actual size at CHS.
Conference / Testing Room		1	150	150					Stakeholder need
Resource Learning Classrooms		2	400	800					One per specialist
Speech Language Pathologist		1	150	150	Speech Language Pathologist Office	1	150	150	
					Independent Skill Center	1	1,215	1,215	Terminology is no longer used
					Time Out	1	85	85	Use TLC & SCL/A alcoves
					Physical Therapy	1	400	400	Not needed
Subtotal	2			3,410				3,735	

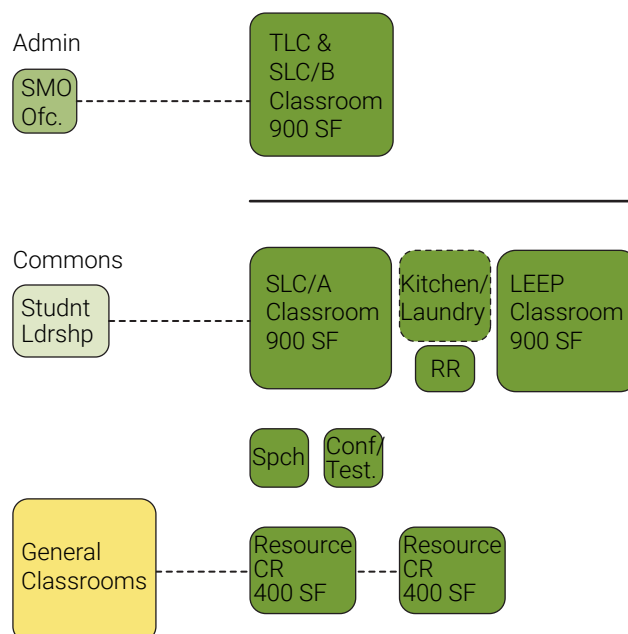
ADJACENCY DIAGRAM

The TLC-SLC/B Classroom can be remote from other SPED and General classrooms throughout the school, but should be close to the SMO Office under the administration program department.

SLC/A and LEEP Classrooms should be near the restroom. SLC/A also benefits from proximity to the Student Leadership room.

Resource Classrooms can and should be dispersed among General Classrooms.

The conference room is an important central resource that will be used by all SPED staff, in addition to testing rooms.



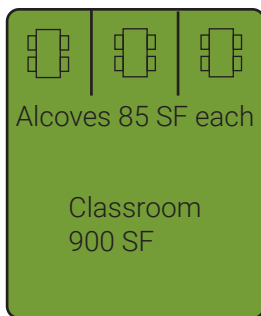
ROOM REQUIREMENTS

LEEP, SLC/A AND TLC-SLC/B CLASSROOMS

General Description & Use

Three types of SPED classrooms may be provided in a comprehensive high school. Quantities should be verified with NCSD personnel as needs vary between district schools.

- LEEP Classroom. Adjacent to kitchen and laundry. Students typically have sensitive medical needs. This type of classroom is not required at all high schools.
- SLC/A Classroom. Adjacent to kitchen and laundry for teaching life skills as well as break-out alcoves.
- TLC-SLC/B Classroom. Includes break-out alcoves. Students may have behavioral issues requiring more supervision and isolated spaces.



TLC-SLC/B and SLC/A classrooms can include small alcoves within the overall program area. These would provide semi-enclosed spaces for students to access when needing to be away from others, while allowing the instructor to continue supervision of the overall group. These spaces can be provided in lieu of the Time Out room used in the 1996 Clackamas HS program, which is more difficult to supervise.

Location & Key Adjacencies

Generally, students in Special Education programs would benefit from more inclusiveness and proximity to general classrooms. While SPED spaces can be dispersed in the school, they should remain in relative proximity to each other for access to shared resources such as the conference room, testing rooms, and specialist offices. They should be located on the main floor of the building.

LEEP and SLC/A classrooms must be located near the SPED restroom. SLC/A benefits from being close to the Student Leadership area (see Commons program department).

The TLC -SLC/B classroom can be remote from other SPED and general classrooms due to behavioral issues that must be considered. This classroom should be located near the SMO office within the Administration department.

Material Requirements

Provide tackable surfaces and white boards on perimeter walls.

M/E/P & Tech Requirements

Kitchen and laundry adjoining LEEP and SLC/A classrooms.

All sinks should be ADA compliant.

Provide technology for use of laptops in classrooms.

Acoustical Requirements

Provide good acoustical separation to minimize disruptions to the learning environment.

Furniture

Desks or tables for 15-20 students per class.

Provide breakout alcoves with a table and chairs in SLC/A and TLC-SLC/B classrooms.

Other Requirements

All spaces must be ADA-accessible with spaces for wheelchairs.

RESTROOM

General Description & Use

A restroom for use by SPED programs with an ADA toilet and shower. Provide space for an optional changing table and Hoyer lift.

Location & Key Adjacencies

The restroom should be in relative proximity to all SPED program areas, but must be directly adjacent to the SLC/A and LEEP classrooms.

M/E/P & Tech Requirements

Provide ADA toilet, sink and shower.

Equipment

Provide space to accommodate a changing table and Hoyer lift if needed.

Other Requirements

All spaces must be ADA-accessible with spaces for wheelchairs.

RESOURCE LEARNING CLASSROOMS

General Description & Use

Each Resource Learning Specialist will have their own small classroom for meetings with up to 10 students per class period to assist them with specific learning disabilities.

Location & Key Adjacencies

Students using Resource Learning Classrooms are enrolled in general education courses. These classrooms should be well-integrated with general classrooms, but provide general proximity to other SPED program areas including the conference room, testing rooms and classrooms.

M/E/P & Tech Requirements

Provide technology for use of laptops in classrooms.

Acoustical Requirements

Resource Learning classrooms should be private and soundproof.

Furniture

Work stations for approximately 10 students and one teacher.

Other Requirements

All spaces must be ADA-accessible with spaces for wheelchairs.

CONFERENCE & TESTING ROOM AND SPEECH LANGUAGE PATHOLOGIST OFFICE

General Description & Use

The conference room is a space shared by all Special Education staff. The speech pathologist and testing offices should also be centrally located and easily accessed from other SPED spaces.

Location & Key Adjacencies

Speech Language Pathologist should have visual access to conference room.

Conference and testing room should be in general proximity to other SPED classrooms and Resource Learning Classrooms.

Material Requirements

Relites in testing/conference rooms.

M/E/P & Tech Requirements

Provide AV, projection and communications in conference rooms.

Provide technology for use of laptops.

Acoustical Requirements

Conference rooms, testing rooms and specialist offices should be private and soundproof.

Furniture

Conference table and chairs for conference room

Desk and personal casework for specialist office

Small desk and chair in testing rooms

Equipment

Provide computer stations for testing in testing rooms.

Other Requirements

All spaces must be ADA-accessible with spaces for wheelchairs.

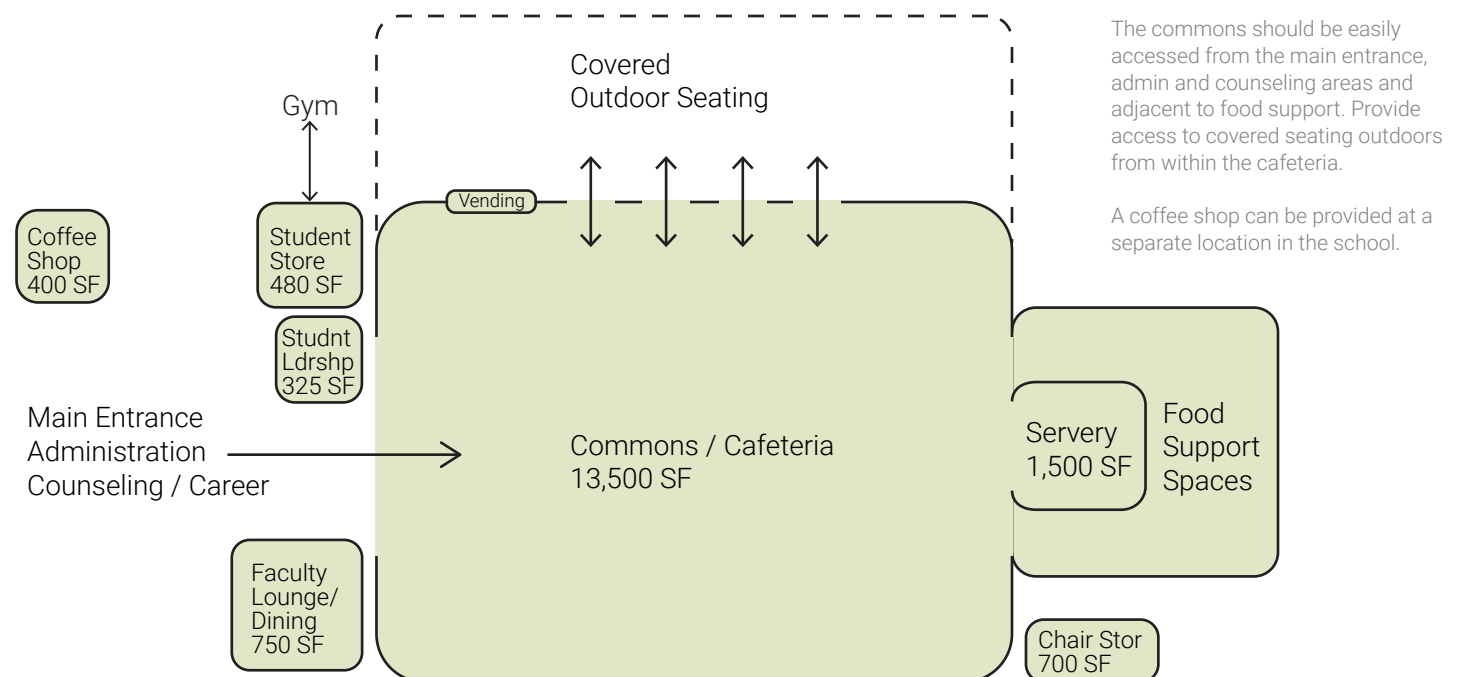
EDUCATION SUPPORT

COMMONS

AREA PROGRAM

2017 Ed Spec					1996 Ed Spec				Notes / Reason for Change
Commons / Cafeteria	T.S.	Qty.	SF Ea.	SF	Clackamas HS	Qty.	SF Ea.	SF	
Commons / Cafeteria		1	13,500	13,500	Commons / Cafeteria	1	13,500	13,500	
Vending		1	100	100	Vending	1	400	400	Alcoves in commons
Chair Storage		1	500	500					500 chairs for events
Coffee Shop		1	400	400	Coffee Shop	1	400	400	Can be remote from commons; Existing at CHS
Student Store with Storage 10 x 10		1	480	480	Student Store with Storage 10 x 10	1	480	480	Should be near gym
Student Leadership		1	325	325	Student Government Office/Workroom	1	325	325	
Faculty Lounge / Dining Room		1	750	750	Faculty Lounge / Dining Room	1	1,325	1,325	Existing is larger than needed
					Community Office	1	120	120	Not used
					Alcohol Prevention / Law Enforcement	1	120	120	Not used - see SRO Ofc in Admin.
Subtotal	-			16,055				16,670	

ADJACENCY DIAGRAM



ROOM REQUIREMENTS

COMMONS / CAFETERIA, COFFEE SHOP & FACULTY LOUNGE

General Description & Use

The commons serves a both a cafeteria and the 'hub' of the school for students. It is also used as a venue for social and community activities and presentations. It is sized for 900 students.

Provide a separate food service destination to serve coffee and smoothies or other snacks.

Location & Key Adjacencies

The commons should be easy to access from the main building entrance, administrative and counseling areas. Located in the public area of the school, it must be available for use after hours.

It should be close to faculty dining and the student store and leadership room. It should open onto a covered outdoor eating area with tables.

The commons flows directly into the servery and must be in very close proximity to other food service areas, except the coffee shop.

The coffee shop is an independent destination to purchase food and drinks that can be near the building entry or other location to create a secondary student hub.

Storage Needs

Provide chair storage area adjacent to commons that can be used by different groups to set up events and regular lunch periods.

Provide an alcove for storage of vending machines.

Provide shelving and casework in the coffee shop service area.

Provide shelving in faculty lounge for storage of dishes, coffee supplies or other pantry items.

Material Requirements

Custodial staff prefer polished concrete floors. Avoid vinyl / linoleum tile that requires labor-intensive stripping and waxing. All materials should be easy to clean and maintenance friendly.

M/E/P & Tech Requirements

Provide ample electrical outlets in commons. Custodial staff prefer wall outlets for maintenance needs. Floor outlets create a safety issue when refinishing the floors, but approximately 3 floor outlets will be required in the commons.

Provide a kitchenette in the staff area.

Acoustical Requirements

Provide balanced reverberation and acoustic separation between spaces as needed. Consider acoustical panels in commons to absorb excessive sound that may be caused by high occupancy.

Furniture

Provide one type of table in commons - stakeholders prefer long oval tables with attached benches that can fold up easily for transfer to storage.

Provide 4-5 cafe style tables or counter spaces for the coffee shop and 5 tables in the faculty lounge.

Equipment

Cash registers for points of sale. Vending machines in commons.

Faculty Lounge requires a sink, refrigerator, microwave, dish washer and coffee machine.

Other Requirements

-

STUDENT STORE & STUDENT LEADERSHIP ROOM

General Description & Use

The student leadership room is used as an office and workroom for student government. The student store is used to sell school supplies and other goods as managed by the student body.

Location & Key Adjacencies

The student store and leadership room should be close to the commons. The student room should also be close to the gym.

Storage Needs

Provide 10' x 10' secured storage area within the student store.

Material Requirements

-

M/E/P & Tech Requirements

Provide wifi access for computer use.

Acoustical Requirements

-

Furniture

Provide shelving and work counters in student store.

Provide student work stations in the leadership room.

Equipment

-

Other Requirements

-

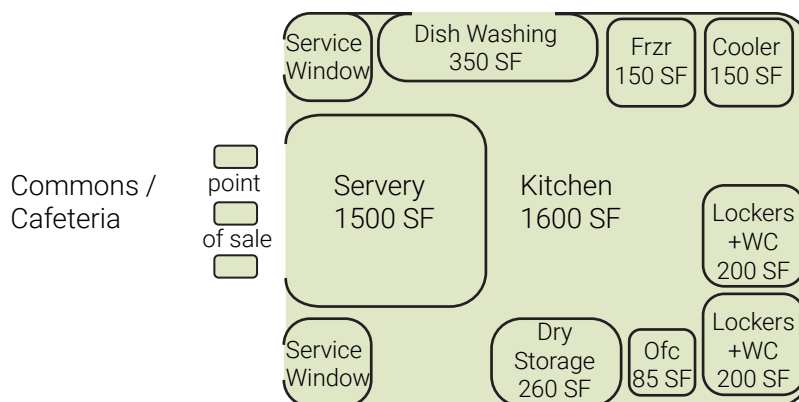
EDUCATION SUPPORT

FOOD SERVICE

AREA PROGRAM

Food Service	2017 Ed Spec				1996 Ed Spec				Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF	Clackamas HS	Qty.	SF Ea.	SF	
Servery		1	1,500	1,500	Serving	1	1,500	1,500	
Serving windows		2	150	300	Serving windows	2	150	300	
Kitchen		1	1,600	1,600	Kitchen / Storage / Vendors	1	1,600	1,600	
Dish Washing		1	350	350	Dish Washing	1	350	350	
Freezer		1	150	150	Freezer	1	150	150	
Cooler		1	150	150	Cooler	1	150	150	
Dry Storage		1	260	260	Dry Storage	1	260	260	
Staff Lockers and Toilets		2	200	400	Staff Lockers & Toilet	2	200	400	
Office		1	85	85	Office	1	85	85	
Subtotal	-			4,795				4,795	

ADJACENCY DIAGRAM



The servery is accessed by students from within the cafeteria. Separate serving windows (such as the snack shack and sandwich central as seen at Clackamas High School) allow separate queuing outside of the servery areas. These service windows should be accessible by food service staff from the kitchen.

ROOM REQUIREMENTS

FOOD SERVICE

General Description & Use

Food service areas for preparing breakfast and lunch for students, as well as a servery and service windows where students can select from daily food choices. Points of sale include registers for purchase.

Location & Key Adjacencies

Servery opens directly into commons.

Serving windows (snack shack and sandwich central) allow additional student food choices separate from the main servery. These spaces must be accessible by staff from the main kitchen area.

Sight lines must be maintained from the kitchen to the servery and commons areas.

The points of sale must be close to the service windows and servery opening for a secure, clear and controlled exit. Provide ample space around registers.

The dish washing should be accessible from both inside the kitchen area as well as through a window outside the kitchen. The dish washing area must be towards the front of the kitchen nearest the servery / commons.

Storage Needs

Provide a walk-in freezer and cooler as well as dry storage as outlined in the area program. Provide lockers for food service staff. Also provide ample shelving and counter space with storage below it throughout kitchen and food preparation areas.

Material Requirements

Custodial staff prefer polished concrete floors. Avoid vinyl / linoleum tile that requires labor-intensive stripping and waxing. All materials should be easy to clean and maintenance friendly.

M/E/P & Tech Requirements

Servery needs ample electrical outlets at registers for incorporating new kitchen equipment and allowing kitchen space to be reconfigured as necessary.

Provide sinks and dish washing equipment as required by staff. In addition to any sinks required in the food preparation areas, three sinks must be provided directly in front of the dishwasher.

Provider staff restrooms adjacent to locker areas.

Provide separately controlled HVAC zone for kitchen due to larger cooling needs than the rest of the building.

Acoustical Requirements

Provide sound absorption to minimize noise from kitchen activities and high occupancy in commons and servery.

Furniture

Desk space in office. Benches in locker areas.

Equipment

Mechanically-operated coiling doors closing off service windows and servery opening need a manual override in the event a false fire alarm or mechanical function triggers accidental closure.

Provide a washer and dryer in the kitchen for towels.

Provide dish washing, stoves, freezers, refrigeration and other equipment as required by nutrition services staff.

Cafeteria trays and dishes can be collected on carts throughout the commons, but a conveyance system for students to drop off dirty dishes and trays would be an improvement to operations.

Other Requirements

-

EDUCATION SUPPORT

CUSTODIAL & BUILDING SUPPORT

AREA PROGRAM

Custodial & Building Support	2017 Ed Spec				1996 Ed Spec				Notes / Reason for Change
	T.S.	Qty.	SF Ea.	SF	Clackamas HS	Qty.	SF Ea.	SF	
Janitor Rooms		8	60	480	Janitor Rooms			580	Qty. and SF based on actuals at CHS
Office		1	230	230	Office			230	
Lockers & Break Room		1	300	300	Lockers			215	With shower. Break room added per stakeholder need.
Combined Shop & Storage		1	2,550	2,550	Shop			550	Combine per stakeholder request
Student Toilets (M/F)				6,000	Storage			2,000	
Gender Neutral Toilets		4	80	320	Toilets			6,000	1-2 / floor. New district standard
IDF Rooms		6	50	300					Necessary spaces
Mechanical / Electrical Areas									Actual at CHS
Chiller		1	350	350	*Mechanical/Electrical areas included in grossing factor				
Boiler		1	350	350					
Electrical		1	200	200					
Emergency Generator		1	230	230					
Mechanical Penthouse									8,000 SF-excluded from NSF
Subtotal	-			11,310				9,575	

ROOM REQUIREMENTS

CUSTODIAL & BUILDING SUPPORT

General Description & Use

Custodial staff use janitorial rooms distributed evenly across all wings of the school. There should be a custodian's office as well as a combined locker and break room with a shower. Additionally, there is a large combined shop and storage room for maintenance and storage of school furnishings and equipment.

This program department also includes student toilets (boys and girls) which should be distributed throughout all areas of the school. Additionally, there should be a few gender neutral toilet rooms provided on every floor to alleviate student use of staff restrooms.

Anticipated needs for mechanical, electrical, and IDF rooms are also outlined in the area program.

Location & Key Adjacencies

Janitor rooms should be dispersed throughout the building (one per floor or wing).

The custodial office and combined shop & storage room should be located near the building's shipping & receiving area.

Storage Needs

Provide space for flammable storage.

Provide ample storage in combined shop & storage room for all custodial equipment listed below.

Material Requirements

Student toilets:

- Provide hand blowers; Avoid paper towel dispensers which are easily vandalized.
- Use dark colored, heavy duty HDPE floor & ceiling mounted partitions; Do not design or install partitions between urinals. Avoid use of metal finish, which is prone to scratching.
- Design restrooms to provide privacy without the use of entry doors for better sanitation.

Minimize use of carpeting throughout the school, as it is difficult to clean.

Provide square tile walk-off mats at all building entries.

Materials throughout the school should be easy to clean and maintenance friendly. Avoid white paint and specify semi-gloss paint for easier cleaning.

M/E/P & Tech Requirements

Provide shower facility in the locker room.

Include charging stations for vacuums and blowers in each janitor room.

Provide a full-size passenger or service elevator to access any levels of the building above or below the ground floor. This is needed for moving cleaning equipment such as scrubbers and other school furnishings and property including chairs and boxes.

Acoustical Requirements

Provide acoustical separation of shop area and locate near the exterior loading area to minimize disruptions to classrooms.

Furniture

Desk and work station for office; Table and chairs for break area; Bench and lockers in changing and shower area.

Provide a work bench and table in work room.

Equipment

The following equipment is stored in the custodial shop:

- (1) T5 auto scrubber 14" pads
- (1) Boost auto scrubber 20" pads
- (2) riding auto scrubbers 20' pad
- (1) Gas powered pressure washer
- (3) 20" pad side by side's;
- (6) up right vacuums;
- (6) pro team back packs;
- (1) carpet extractor;
- (1) electric powered edger;
- (2) water vacuums;
- (3) gas powered Gators (1 sports, 1 admin., 1 custodial);
- (2) table washers;
- (1) Bathroom machine (Electric)
- Scissor lift 2.5' x 4.5'
- Gator service vehicle 4.5' x 8.5'

Other Requirements

Staff Restrooms

- Provide secured access with key cards.

Roofs

- Prefer mechanical penthouse rather than roof mounted HVAC equipment

Loading dock

- Overall exterior loading area may range from 3,500 - 4,600 SF; verify according to specific site requirements.
- Provide good accessibility and clearance
- Accommodate storage and access for waste management bins:

Recycling:

- (10) roll bin carts
- (1) 10-yard recycling dumpster
- (1) 15-yard recycling dumpster
- (4) 4'x6'x6' metal green recycle dumpsters
- (15 - 25) green recycle tubs on wheels

Garbage:

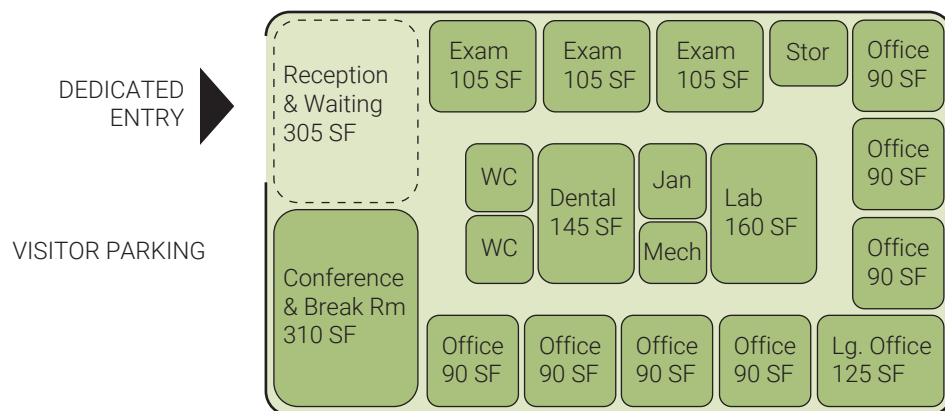
- (2) 30-yard dumpsters

HEALTH & WELLNESS CENTER

AREA PROGRAM

2017 Ed Spec					2017 Putnam HS				Notes / Reason for Change
Health & Wellness Center	T.S.	Qty.	SF Ea.	SF	Putnam HS	Qty.	SF Ea.	SF	
Waiting		1	170	170	Waiting	1	172	172	Rounded SF
Reception		1	135	135	Reception	1	133	133	Rounded SF
Conference / Break		1	310	310	Conference / Break	1	309	309	Rounded SF
Laboratory		1	160	160	Laboratory	1	161	161	Rounded SF
Toilets		2	50	100	Water Closet 1	1	51	51	Rounded SF & Combined
					Water Closet 2	1	47	47	
Exam Rooms		3	105	315	Exam 1	1	100	100	Rounded SF & Combined
					Exam 2	1	110	110	
Dental Exam		1	145	145	Exam 3	1	100	100	
Large Office		1	125	125	Dental Exam	1	144	144	Rounded SF
					Office 2	1	126	126	Rounded SF
					Office 1	1	93	93	
					Office 3	1	90	90	
Offices		7	90	630	Office 4	1	90	90	Rounded SF & Combined
					Office 5	1	89	89	
					Office 6	1	90	90	
					Office 7	1	90	90	
					Office 8	1	90	90	
Storage		1	55	55	Storage	1	54	54	Rounded SF
Janitor		1	55	55	Janitor	1	55	55	
Mechanical		1	45	45	Mechanical	1	43	43	Rounded SF
Subtotal	-			2,245				2,237	

ADJACENCY DIAGRAM



The Health & Wellness Center will be used by the greater community and thus should be accessible from the visitor parking area or the major public way, and provide a dedicated building entry that is easy to locate.

Program includes staff offices and conference room, medical and dental exam rooms and a lab.

The center will be managed by Oregon Health Sciences University.

ROOM REQUIREMENTS

HEALTH & WELLNESS CENTER

General Description & Use

Health and Wellness Center for use by students, teachers, their families, and the greater community. Health services to be managed by OHSU.

Programmed spaces include reception and waiting areas, medical and dental exam rooms, lab room, conference room and private offices.

Location & Key Adjacencies

Provide a dedicated public entrance close to visitor parking areas, the major public way or main building entrance.

Storage Needs

Provide built-in casework for storage in reception areas, exam rooms, lab and offices. Also provide a small storage room.

Material Requirements

Per OHSU requirements.

Provide windows to exterior in offices. Exam rooms should have opaque walls for patient privacy.

M/E/P & Tech Requirements

Per OHSU requirements.

Acoustical Requirements

Provide acoustical privacy in offices and exam rooms for patient confidentiality.

Furniture

- Desks in offices
- Reception counter and chairs and tables in reception / waiting areas
- Conference table and chairs for conference / break room

Equipment

- Medical equipment needs to be identified by OHSU

Other Requirements

-

Appendix

CLACKAMAS HIGH SCHOOL DEPARTMENT PLANS

FOR REFERENCE ONLY



LEVEL 1

0' 25' 50' 100'

Core Academics

- Classrooms
- Science Classrooms
- Teacher Planning
- Computer Lab / Specialized CR

Fine & Performing Arts

- Art / Vocational
- Music
- Theater

Education Support

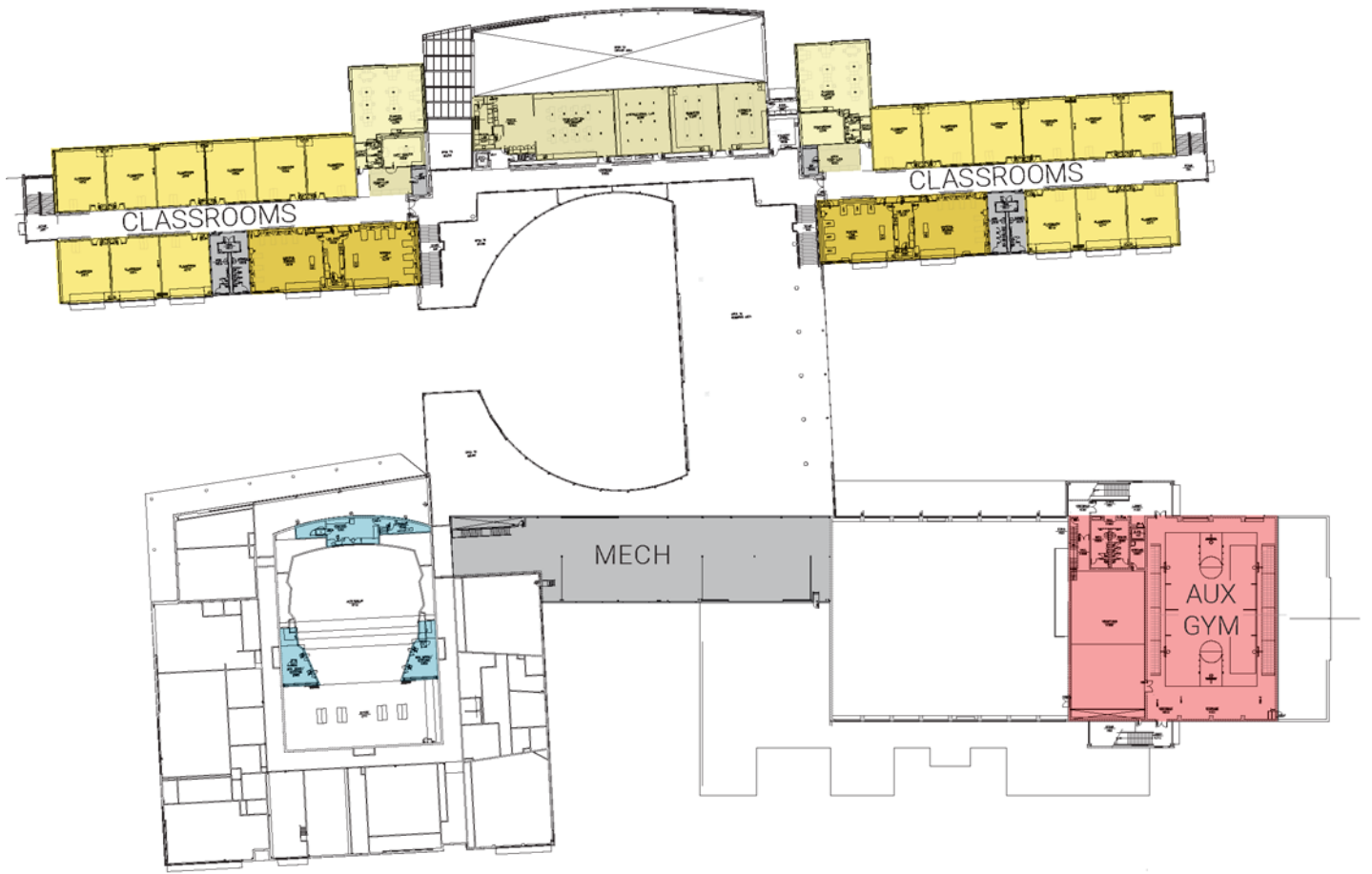
- Media / Technology
- Administration & Counseling
- SPED
- Commons / Food Service

Physical Education / Health

- P.E. / Athletics

Building Support

- Restrooms, Custodial, Storage, Mechanical, etc.



LEVEL 2



BORA

MEETING MINUTES

Date 1/30/2017	By Leina Naversen	
Subject Bond Steering Committee Meeting #1	Project Name NCSD High School Ed Spec	Project Number 15011
Present Matt Utterback, Superintendent Ron Stewart, NCSD *Garry Kryszak, NCSD *Cindy Quintanilla, NCSD	Shay James, NCSD Tiffany Shireman, NCSD Tricia George, NCSD Deb Botteron, NCSD	*Gordon Odette, Heery Steve Nicholas, Heery Chris Linn, Bora *Leina Naversen, Bora
<u>*denotes point contact</u>		
Distribution Those Present		

Minutes

Bond Steering Committee (BSC) Meeting #1 was focused on the review of scope of work, process, participants and schedule for the NCSD High School Ed Spec project.

1. SCHEDULE

- A. The schedule was revised to reflect the following dates:
 - Week of January 30: Kick-Off Meeting with BSC
 - Week of January 30: Follow up conversation between Cindy and Leina to determine specific stakeholder meeting dates and times
 - Week of February 13: First Round of Stakeholder Meetings
 - Week of February 22: Potential Date for High School Tours
 - Week of February 27: Second Round of Stakeholder Meetings
 - March 6: Bond Steering Committee Check-In if necessary
 - Week of March 13: Final Round of Stakeholder Meetings
 - Week of March 27: Draft Ed Spec distributed to Bond Steering Committee for review
 - Week of April 10: Review comments back from Bond Steering Committee
 - Week of April 17: Final Ed Spec published

2. DELIVERABLES

- A. The Ed Spec shall consist of the following written and graphic materials:
 - Executive Summary describing process, planning criteria and design characteristics

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- Spreadsheet summary of required spaces (organized by departments) showing size and quantity
 - Basic bullet-pointed narrative of room requirements
 - Departmental adjacency requirements showing major rooms
 - Appendix referencing other relevant documents provided by NCSD such as Technical Standards
 - Meeting Minutes

3. PARTICIPANTS

- A. The following stakeholder groups were confirmed as participants. Cindy Quintanilla will confirm the specific stakeholder representatives in each group and forward that information to Leina Naversen.
 - Administration
 - Counseling & Career Center
 - Health Center
 - General Classrooms & Teacher Planning
 - Sciences
 - Computer Labs
 - Media Center
 - Performing Arts: Music & Choir, Theater
 - Visual Arts
 - SPED
 - Physical Education including Sports Fields and Stadium
 - Commons & Food Service
 - Custodial & Grounds
 - Transportation
 - Facility & IT Services
 - Security/Risk Management
 - Students: In a manner that reflects the diversity of the student body
- B. The team will clearly communicate to the stakeholder group that their involvement is in an advisory capacity and that final decisions regarding the Ed Spec will be made by the Bond Steering Committee.
- C. The process will include participation from the Milwaukie High School architectural team.
- D. The development of the General Classroom and Teacher Planning components of the Ed Spec need to be prioritized so as to provide timely information to the Milwaukie High School design team.
- E. The process should include a way of defining lessons learned from recent NCSD projects.

4. TOURS

- A. The schedule and scope of the High School tours is going to be reconsidered. The Rock Creek conversion and Milwaukie High School projects are quite different in their scope and logistics. The tours should be relevant to the needs of each project. This may require a different set of tours and groups than what was previously envisioned. Garry and Cindy will meet with Steve Nicholas to discuss and potentially revise the tour calendar.
- B. Tricia requested that the tours include the IT Directors. This will be coordinated through Steve Nicholas.
- C. Initial communications with PPS express concern about touring a large group through Roosevelt High School and the potential disruption that might be caused. PPS has not yet agreed to make Roosevelt available for the tour. They have offered Franklin instead. The BSC prefers to see an active school. More discussion to follow.

5. NEXT STEPS

- A. Cindy and Leina will work together to start scheduling the 3 rounds of stakeholder meetings.

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B. Garry and Cindy will discuss and refine tour locations and groups with Steve Nicholas.

Next Planned Meeting

Week of February 13, 2017: Round 1 of Stakeholder Meetings as determined by Cindy and Leina

March 6, 2017: Bond Steering Committee Update if necessary.

The foregoing is the writer's interpretation of the issues discussed. Please report any discrepancies or omissions to Bora within three business days of receipt of this document.

END OF MEETING MINUTES

BORA

MEETING MINUTES

Date 4/10/2017	By Leina Naversen
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Subject Bond Steering Committee Meeting #2	Project Name NCSD High School Ed Spec	Project Number 15011
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Present Matt Utterback, Superintendent Ron Stewart, NCSD *Garry Kryszak, NCSD *Cindy Quintanilla, NCSD Shay James, NCSD	Tiffany Shireman, NCSD Tricia George, NCSD Deb Botteron, NCSD Gordon Odette, Heery *Steve Nicholas, Heery	Chris Linn, Bora *Leina Naversen, Bora Emily Russell, Bora
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*denotes point contact

Distribution
Those Present

Minutes

Bond Steering Committee (BSC) Meeting #2 was focused on review of the draft NCSD High School Ed Spec dated March 31, 2017.

The March 31 draft area program dated included 294,386 gross square feet compared to a target 270,000 gross square feet. In an effort to revise the area program closer to the 270,000 GSF target, the BSC reviewed new and deleted program elements and requested program increases the 2017 Draft Ed Spec area program compared to the 1996 Ed Spec Program.

1. NEW PROGRAM ELEMENTS:

- A. 1,200 NSF Scale-Up Classroom: Eliminated and combined with 1,500 NSF Multi-Purpose Community Room
- B. 1,500 SF Multi-Purpose Community Room: Remains in program, combined with Scale-Up Classroom.
- C. 2,400 SF Orchestra Room: Eliminated and combined with 2,400 NSF Band Room
- D. 2,025 SF Dance Studio: Remains in program, combined with fitness room.
- E. 2 @ 1,800 SF Fitness Rooms: Eliminated and combined with 2,025 NSF Dance Room
- F. 750 SF Maker Space: Remains in program

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2. REQUESTED PROGRAM INCREASES

The committee reviewed the below list of program spaces that were increased in size or quantity per stakeholder input. These included:

- A. Classroom storage alcoves for teacher's desks
- B. Increase from 1,200 SF to 1,500 SF per classroom; increase in size of Chemistry lab prep area
- C. Increase in the size of storage for general art classrooms
- D. Increase in the size of instrument storage, choral room, small practice rooms
- E. Addition of another ensemble practice room
- F. Scene Shop/Storage increased from 925 SF to 1,350 SF
- G. Costume room increased from 120 SF to 400 SF
- H. Weight room increased from 1,920 SF to 3,000 SF
- I. An overall increase in dept. storage from 2,100 SF to 3,700 SF
- J. Increase in size of enclosed classroom
- K. Large increase in size of staff work area and storage to accommodate the amount of textbook storage requested.
- L. Addition of AD Assistant office and storage
- M. Expansion of record storage, vault/fireproofed storage.
- N. Increase of counseling offices SF and storage SF
- O. Increase of all classroom sizes
- P. Addition of conference room and speech pathologist office

As a general approach, the Ed Spec team was instructed to provide 50% of requested area increases compared to the 1996 program. The revised area program attached to this document shows the detailed adjustments made to the March 31st draft Ed Spec program according to the direction from the Bond Steering Committee.

3. NEXT STEPS

- A. Meet with Cindy Quintanilla to confirm revised area program and review classroom utilization model.
- B. Provide updated Ed Spec to the Steering Committee for final review and comment.

Next Planned Meeting

April 25, 2017: Bora to meet with Cindy Quintanilla and others to review revised area program.

The foregoing is the writer's interpretation of the issues discussed. Please report any discrepancies or omissions to Bora within three business days of receipt of this document.

END OF MEETING MINUTES

NCSD DESIGN AND CONSTRUCTION STANDARDS

Refer to North Clackamas Schools' *Facilities Design Standards Manual for Design and Construction of School Facilities* for detailed requirements for design and construction of the spaces outlined in these Education Specifications.