JEFFCO PUBLIC SCHOOLS

SENIOR HIGH SCHOOL

Planning and Design Standards

Grades 9 - 12

June 2021

Facilities Department
Jefferson County Public Schools R-1
809 Quail Street, Bldg. #4
Lakewood, CO 80215

2021

Senior High School Educational Specifications

INDEX

INTRODUCTION

The underlying concept is that suites and rooms are elements that can be combined to form any number of school configurations and that any given school configuration has minimum requirements for specific rooms and elements.

Although drafted with new school construction in mind, educational specifications have a larger purpose. By establishing a threshold of educational adequacy, educational specifications can be a tool for evaluating adequacy and implementing equity in existing educational environments. They can be applied to assess the rooms, areas, amenities, configurations, and other physical attributes of schools of various ages to objectively evaluate existing construction and identify opportunities for future capital investment.

These Educational Specifications can be used in any number of ways:

- Evaluate a school site
- Plan and design a new school
- Plan and design a new room or suite of rooms within an existing school
- Evaluate an existing school, area, or room
- Assess, identify, and quantify capital needs at existing facilities
- Calculate the permanent student capacity of a new or existing school

These Educational Specifications do not endeavor to assign contractual obligations. The requirements of this document may be paid for by any of a number of funding sources that comprise the total project budget, e.g., the construction contract or the Furniture, Fixtures and Equipment (FF&E) budget.
The intent of this document is to establish educational planning and design standards for the construction of new high schools, and for the remodeling and renovation of existing high schools. The standards apply to the number, sizes and types of spaces required for high schools. This document establishes basic needs to be met within the broader design of high schools. Technical requirements are contained in a separate document.

The specification contained herein is intended to serve a student population range of 1800-2200. Schools designed to have larger or smaller populations will need to make appropriate adjustments, although high schools smaller than 1800 or larger than 2200 are not recommended.

These Educational Specifications establish goals and parameters for activity areas, rooms, school buildings, and site development, including:

- Amenities
- Capacities
- Configurations
- Environments
- Features
- Functions
- Materials
- Performance criteria

- Relationships
- Sizes
- Systems
- Utilities

RELATED FACILITY DOCUMENTS

The following separate documents published by the Facilities Department at Jeffco Schools shall be used in conjunction with these Educational Specifications:

Jeffco Schools 9-12 Educational Space Program Matrices
Technical Guidelines
Technical Details – Volumes I and II

PHILOSOPHY OF THE LEARNING ENVIRONMENT

The focus of any facility should be to support positive education outcomes. While facilities cannot be the change in and of themselves, they play a key role in supporting educational excellence.

Jeffco Schools should offer inspirational learning environments that allow for varied types and sizes of learner-centered engagements. They should provide opportunities for on-line educational support and supplemental instruction.

Design and develop inclusive and welcoming settings, providing opportunities, experiences, and relationships for all learners. Students become successful and contributing members of society through real-life learning experience. Design for potential experience with collaborative partnerships, including public, private and non-profit organizations.

Establish opportunities for hands-on, interest-based, creative and collaborative experiences to include interdependent thought and interdisciplinary work.

Develop transformative learning environments and facilities to support changing learning cultures, programs, student populations, and instructional delivery methods. The design of learning spaces will encourage instructors to achieve their maximum potential and provide learners the greatest opportunities for success.

DESIGN PARAMETERS

A. JEFFCO SCHOOLS DESIGN PARAMETERS

1. General Design Parameters:

a. To establish a consistent design quality across the District.

b. Facilities should allow for educational flexibility in meeting the educational programs established.

2. Site:

a. The site should be designed as an extension of the community and its use should be encouraged by all.

b. Care should be taken to ensure maximum safety of students, staff, and community.

3. **Building Exterior:**
   a. The building exterior should be well-designed, inviting, and be designed as an integral part of its community.
4. **Classrooms and other Designated Teaching Areas:**
   a. General Room Proportions: Utilize classroom plan proportions between 1:1 and 1:1.5, with accepted variations depending upon site and building constraints and other program issues. Teaching nooks or other configurations are discouraged unless noted otherwise. The preference is to allow the space to be sub-divided with movable furniture or other components for maximum flexibility within the teaching space.
   b. While a single "Teaching Wall" is established in the specifications, each teaching space should allow for multiple walls to be used as a teaching wall, which will incorporate the necessary educational tools for the education professional. Care should be taken to ensure minimal distraction of students with concurrent activities going on outside the classroom space.
   c. Design for adequate daylighting without "hot spots" or major variations of light levels within classrooms.
   d. All classrooms shall have windows to the exterior to allow for daylighting opportunities and provide for visual connection to the outdoors.
   e. Use of an interactive short-throw projector at the teaching wall is preferred. Ceiling mounted projectors in approved areas only.
5. **Flexible and Multi-Use Teaching Classrooms:**
   a. Consider integrating one or more flexible or multi-use teaching spaces configured similar to a large classroom space, including additional electrical and data infrastructure for multiple uses.
      1. Science, Technology, Engineering, (Art), and Math (STEM or STEAM)
      2. Art-focused programs
      3. Science-focused programs
      4. Computer Labs
      5. Other specialty uses
6. **Accessibility:**
   a. All spaces open to students, the public, and staff shall be made accessible in conformance with ADA and other Codes.
7. **Corridors:**
   a. Corridors shall be of sufficient width to allow for comfortable passing of students and staff.

b. Provide areas for small groups: Pull-out stations, technology stations, reading areas, and other areas that can support the academic needs. These may be open areas or areas defined by furniture or built separations.

8. **Finishes:**
   a. Finishes should be designed to inspire and uplift the senses of the students, staff, and community.
   b. Consider the use of color and design to define space and uses.
9. **Cafeteria and Common Areas:**
   a. Should be designed for maximum flexibility and use.
10. **Designing for the future:**
   a. Future expansion
      1. All facilities shall be designed for future expansion to meet the full intended build-out of the facility.
   b. Future changes and flexibly
      1. All facilities shall be designed with flexibility in mind.
      2. Consider plan layouts that allow for full wings to be added without interruption to the core facility.
11. **Libraries and Media Resource Centers:**
   a. Main central library spaces should be re-considered. Consider the use of a centralized media area for student collaboration, staff and community meetings, and common resource materials.
   b. To supplement the centralized media area, utilize smaller, focused resource areas to accommodate reading needs of students of various ages and abilities, as well as interest-focused materials for art, music, math, science, etc.
   c. Areas should be well-lit and have sources of daylighting.
12. **Computers Rooms or Labs:**
   a. Teaching areas designed solely for computer labs are discouraged. Mobile technology allows for more flexibility in classrooms and other areas. If programs are focused on computer use and training, consider using Flexible and Multi-use Teaching Classrooms.
13. **Safety Design Guidance:**
   a. Main Public Entrance
      1. Securable entrance vestibule with transaction window and door into Admin Area.
   b. Building Interior:
      1. Coordinate with the District Project Manager
      2. Consider the use of color to differentiate various areas and zones in the building
   c. Exterior Doors:
      1. Locate exterior doors at easily monitored locations.
      2. Avoid door pairs requiring removable mullions except at key locations where required for the movement of large equipment or furniture.

d. Monitoring and Zoning

1. The building shall have zones established so that the building can have portions locked off and monitored separately while other zones are accessible and usable by the public.
2. Provide intrusion, surveillance, and access control equipment.
3. Provide exterior lighting at all areas adjacent to the building without creating shadowed areas that cannot be monitored.
4. Landscaping, fences, screen wall, etc. shall not provide places of concealment.

ADMINISTRATION

SPACE DESCRIPTION:

The administration area contains the administrative, clerical, and student counseling and discipline functions for the school. Administration is the primary contact point for all public interactions and is the center for management of the school. The main public entrance shall be easily recognizable and with direct line of sight from the visitor parking area. The main public entrance shall be secure and visible from the Main Office Area. General finishes are carpet and easily cleanable wall surfaces unless noted otherwise.

A. MAIN OFFICE AREA

1. General Office - Work Area and Waiting.
2. Principal's Office
3. Assistant Principal's Office
4. Finance Office
5. Attendance Office
6. General Multi-purpose Office

B. COUNSELING CENTER

1. Reception and Waiting
2. College and Career Center
3. Counselor Offices
4. Conference Room
5. Records

C. DEAN/STUDENT ADVISOR

1. Reception and Waiting
2. Dean/Student Advisor's Office
3. Student Workroom

D. OTHER

1. Security Office (SRO)
2. Campus Supervisor's Office
3. Satellite General Office

E. SUPPORT SPACES

1. Office Work Room
2. Mail Area
3. Attendance Conference Room
4. Conference Room
5. Records/Storage
6. Staff Lounge
7. Staff Toilets
8. Coat/Storage Closet

F. HEALTH SUITE

1. Health Suite
    - **a.** Health Office/Exam
    - **b.** Health Provider Office
    - **c.** Cot Area
    - **d.** ADA Toilet Room

DESIGN CRITERIA

A. MAIN OFFICE AREA

1. **General Office - Work Area and Waiting**
    - **a.** Location of the general office shall be directly adjacent to the primary public building entrance. The office will receive students, parents, and visitors and should serve to monitor access to the school. The general office should be easily accessible from all areas of the school building.
    - **b.** Provide a transaction window between the entry vestibule and the main administration office. Also provide a door directly from the entry vestibule into the general office for visitors to enter the general office after checking in at the transaction window.
    - **c.** Area for display and general information.
    - **d.** Component and modular furniture systems for work stations and reception counter. Provide minimum 20 lf of counter area suitable for use by students and adults.
    - **e.** Provide space for 2-4 secretary/clerical workers at desks, depending on size of school. File cabinets, wall space for fire and security alarm panel and other building system panels.
    - **f.** Provide a waiting area with seating for 12 to 16 people.
    - **g.** Flat screen monitor for posting of public announcements.
    - **h.** All offices shall have doors with vision lites.
    - **i.** Provide good visibility to the main corridor, main entrance/outside entry, and parking lot/drop-off.
    - **j.** Direct access to the workroom, attendance and financial offices.
2. **Principal's Office**

a. The principal's office should be conveniently located near the main office work area. The principal must be able to enter and leave the office without passing through the waiting area.
b. The principal's office should be adjacent to a conference room with locking connecting door.
c. Provide space for office furniture (desk, wardrobe, computer station and shelving).
d. Provide space for small conference table to seat 4 - 6.
e. 6 ft. marker board and 4 ft. tack board.
f. Within close proximity to the other Admin Offices.

3. **Assistant Principal's Office**
   a. Provide space for desk, wardrobe, files, shelving, and seating for 2 - 4 guests.
   b. 6 ft. marker board and 4 ft. tack board.
   c. Close proximity to the Principal's Office
4. **Finance Office**
   a. Provide space for two staff: desks, wardrobes, files, shelving, and seating for 2-4 guests.
   b. 6 ft. marker board and 4 ft. tack board.
   c. Concealed area for secured storage and a safe
   d. Consider direct access from the corridor for use by students and parents without having to enter through the main office area. A securable transaction counter may be incorporated.
   e. Direct access from the Main Waiting Area.
5. **Attendance Office**
   a. Provide a small sitting/waiting area with chairs and a table.
   b. Provide space for three staff: desks, wardrobes, files, and shelving.
   c. 8 ft. marker board and 8 ft. tack board.
   d. Direct access from the Main Waiting Area. Transaction window into an adjacent corridor for use by students and parents without having to enter through the main office area. Queuing space for 30 or 40 students in the corridor.
   e. Small, secure area for lost and found items.
6. **General Multi-purpose Office**
   a. Provide space for desk, task chair, and 3 visitor chairs.
   b. 6 ft. marker board and 4 ft. tack board.

B. COUNSELING CENTER

1. **Reception and Waiting**
   a. Separate area from Main Office Reception with a separate entrance near the school's primary entrance.
   b. The office will receive parents, staff, and students.
   c. Area for display and general information

d. Component and modular furniture systems for work stations and reception counter. Provide counter suitable for use by students and adults.
e. Provide space for 2 secretary/clerical workers at desks, depending on size of school. File cabinets.
f. Provide a waiting area with seating for 4 to 8 people.
g. All offices shall have doors with vision lights.

2. **College and Career Center**
   a. Direct access from the Reception/Waiting Area and a main corridor.
   b. Convenient access to a conference room.
   c. Four computer stations and 1 printer
   d. Space for five tables to seat up to 20 students
   e. 16 LF base cabinets and countertop
   f. 32 LF of shelving
   g. 16 LF of marker board area
   h. 16 LF of tack board area
   i. Interactive projector or large interactive monitor
3. **Counselor Offices**
   a. Provide space for desk, wardrobe, files, shelving, and seating for 2 people.
   b. 6 ft. marker board and 4 ft. tack board.
4. **Conference Room**
   a. Provide space for table to seat minimum 8 - 12 adults
   b. Accessed from Counseling Reception and Waiting Area. Conference room may be shared with General Office Area, but the area must be able to maintain privacy and discretion
   c. 6 ft. base cabinets and overhead cabinets with single compartment sink.
   d. 6 ft. marker board and 4 ft. tack board.
   e. Easily accessible to Counselors
   f. Interactive projector
5. **Records**
   a. Secured storage area for student records and testing materials

C. DEAN/STUDENT ADVISOR

1. **Reception and Waiting**
   a. Area for one receptionist
   b. Area for tables and chairs for students
   c. 6 ft. tackboard
2. **Dean/Student Advisor's Office**
   a. Directly adjacent to the reception and waiting area
   b. Provide space for desk, task chair, and 3 visitor chairs.
   c. 6 ft. marker board and 4 ft. tack board.
3. **Student Workroom**

a. Space for students who need individual supervision and counseling
b. Adjacent to Dean/Student Advisor's Office
c. Supervision window from Dean/Advisor's Office
d. Tables and chairs
e. 6 ft. marker board and 4 ft. tack board.

D. OTHER

1. Security Office

a. For the Security Resource Officer
b. Direct access from the Dean/Student Advisor Reception and Waiting Area
c. Direct access to a main corridor
d. Near main entrance to the school
e. Workstation components for a 30-inch high work counter and 18-inch wide undercounter cabinets
f. Five full-height lockers – 18-inches wide
g. Space for communications and multiple display monitors

2. Campus Supervisor's Office

a. Near Main Office and Security Office or may be located remotely in another area of the building
b. Direct access to a main corridor
c. Provide space for desk, task chair, and 3 visitor chairs.
d. 6 ft. marker board and 4 ft. tack board.

3. Satellite General Office

a. Locate near or within academic areas of the building.
b. Accessible by students
c. Provide space for desk, task chair, and 3 visitor chairs.
d. 6 ft. marker board and 4 ft. tack board.

E. SUPPORT SPACES

1. Office Workroom

a. Separate space or spaces that provide floor area for a large format business machine and worktables.
b. Total 24 linear feet of standard base cabinets, overhead cabinets, and countertop. 12 linear feet of base cabinet should be 30 inches deep.
c. Directly adjacent to the General Office Area and office supply storage.
d. Floor area for work tables and chairs
e. Separated from any areas accessed by the public
f. Lockable key cabinet
g. Provide separate access from other areas of the building without having staff travel through the waiting area.

h. Power, telephone, and data for business machine area and at perimeter of space

i. Finishes:

1. Floor: Hard surface flooring
2. Walls: Easily cleanable

2. Mail Area:

a. Provide an area for a minimum of 120 teacher and staff mail boxes, or 1 slot for every 15 students, whichever is greater, to accommodate all staff and teachers including itinerant specialists.

b. The mail boxes should be located so that they can be easily serviced by the General Office staff, but should be accessible to teachers without going through the General Office area.

c. Open bin type with mailbox slots: min 15" deep by 11' wide by 4" high

1. Open-shelf base cabinets with countertop below mail box slots for larger packages and storage
2. 4' by 8' tack board

3. Attendance Conference Room

a. Provide space for table to seat minimum 12-14 adults.

b. Near the Attendance Office

c. 6 ft. base cabinets and overhead cabinets

d. Interactive projector

e. 8 ft. markerboard and 6 ft. tackboard

f. Vision panel for observation of students.

4. Conference Rooms

a. Provide space for table to seat minimum 12-14 adults at the smaller conference room and minimum 16-20 adults at the larger conference room.

b. At least one Conference room should be accessible from Main Office Area and from the Principal's Office

c. 8 ft. base cabinets and overhead cabinets with single compartment sink and undercounter refrigerator

d. 8 ft. markerboard and 6 ft. tackboard

e. Provide data and power at one location for a short-throw interactive projector or interactive monitor.

5. Records/Storage:

a. This room will provide storage for materials used in the general office which are not accommodated by work room casework or which require extra security.

b. The store room should be convenient to the General Office.

c. 15 linear feet of base cabinets and overhead storage for supplies.

d. Floor area for file cabinets and other storage for student records.

6. Staff Lounge

a. General Description: This space is used for school teachers and staff to confer and work together. The area is often used as a lounge and "break room" for school employees.
b. Centrally located and easily accessible to staff toilets.
c. Provide cabinetry along one wall with at least 15 linear feet of full height storage cabinets. The balance of cabinetry should include 15 linear feet of base and wall cabinets with a single compartment sink with disposal. Countertop at dishwasher shall be standard 36-in high.
d. Standard size undercounter dishwasher
e. Standard size refrigerator with ice maker.
f. Provide space for loose tables and chairs to be arranged in different ways depending on the task or meeting taking place.
g. Floor space and electrical outlets for two vending machines.
h. 8 linear feet of tackboard.
i. Power, telephone, and data for copy/printer area and at perimeter of space(s)
j. Vision panel
k. Finishes:
1. Floor: Hard surface flooring
2. Walls: Easily cleanable

7. Staff Toilets:
a. Provide single-fixture ADA accessible toilets for staff use.
b. Toilets should be easily accessible from the Main Office, Staff Work/Meeting Room and should be convenient to the Principal and other workers stationed in the administration area.
c. Toilet rooms shall not be accessed directly off main circulation corridors.

8. Coat/Storage Closet
a. Provide a small closet for the storage of personal effects of office staff.
b. Locate in or near main office area.

F. HEALTH SUITE

1. Health Office/Exam
a. Care for ill, injured, or upset students
b. Management of chronic illnesses and associated medical interventions
c. Controlled distribution of student medications
d. Accessible from the general office area and easily accessible by students and parents through the general office control. Consider a separate monitored entrance directly from a corridor.
e. Floor area for two workstations, 4 file cabinets and seating for students.
f. Storage area for two folding wheel chairs.

g. Interior window or borrowed lites with blinds between Clinic and Administrative Support area for monitoring by administrative staff when the nurse is not available.

h. 8 LF of lockable base and overhead cabinets with countertop and single compartment sink. One 24d x 18w x 84h lockable wardrobe cabinet

i. Provide a full size refrigerator with freezer compartment and ice maker.

j. Clinic Finishes:

1. Floor: Hard surface flooring
2. Walls: Easily cleanable

k. The Toilet Room shall be directly accessible from the Clinic.

2. Health Provider Office

a. Locate near or within the health clinic.

b. Accessible by students

c. Provide space for 2 – 3 workstations, task chair, and 3 visitor chairs.

d. 6 ft. marker board and 4 ft. tack board.

3. Cot Area

a. Minimum 4 cots.

b. Cots shall have privacy curtains

c. Administrative staff must be able to monitor the cot area when the nurse is not available.

d. Power located at each cot

e. Cot Area Finishes:

1. Floor: Hard surface flooring
2. Walls: Easily cleanable

4. ADA Toilet Room

a. Toilet and wall-hung lavatory

b. Flush-mounted hose bib.

c. Handheld shower mounted on wall with floor drain

d. Flip-down ADA shower seat

e. Clinic-type shower curtain at shower area

f. Area for changing table: 30”d x 60”l x 36” h. with wall receptacle

g. Finishes:

1. Floor: porcelain tile with base
2. Walls: Full height ceramic tile all walls.

INSTRUCTIONAL AREAS

SPACE DESCRIPTION:

The high school concept focuses on ensuring that all students gain the necessary advanced and critical thinking skills to be fully prepared for success. The Instructional areas are designed to support the core academic subjects of Math, Social Sciences and History, English, Language Arts, and supporting electives. The arrangement of the various programs should support flexibility and should be arranged within the building so that programs are grouped for efficiency and by department. Spaces should be designed to allow for teachers and students to work together in a student-centered environment to achieve the academic goals for each student. Teaching and Planning Areas should be associated with each major program and subject matter. Utilization of small academic learning communities enhances those goals by creating smaller, more personalized learning environments.

As much as possible, avoid long travel distances between classrooms and the core facility areas of the school. Design for multiple teaching options within each space. Special Education is meant to be an integral part of the academic and social experience and consideration should be given to the placement of the various special education programs throughout the school.

Programs will vary between schools. With specific variations required for each school, this section is built around each learning community/department including twelve (12) classrooms, one (1) multi-purpose/flex classroom, one (1) student study space, one (1) resource intervention room, and one (1) teacher work/planning room.

A. GENERAL CLASSROOMS

1. General Classrooms
2. Multi-Purpose/Flex Classroom
3. Student Study Space
4. Resource/Intervention Rooms
5. Teacher Work/Planning Rooms

B. SCIENCE SUITE

1. Chemistry/Biology Classroom
2. Earth Sciences/Physics Classroom
3. Science Prep Room
4. Science Storage Room
5. Science Staff Workroom

C. BUSINESS CENTER

1. Business Classroom
2. Student Store and Storage
3. Student Publications Classroom
4. Staff Workroom/Office
5. Media Production Studio

D. LECTURE HALL

1. Lecture Classroom

E. SUPPORT SPACES FOR INSTRUCTIONAL AREAS

1. Staff Toilets
2. Instructional Materials Storage

F. SPECIAL EDUCATION

1. Classroom
2. Severe Needs Classroom
3. Resource Room/Testing/Storage
4. Office
5. Conference Room
6. Workroom
7. Toilet Room

DESIGN CRITERIA

A. GENERAL CLASSROOMS

1. GENERAL CLASSROOMS

a. General

1. Classrooms shall be grouped into programmed departments and teaching areas within close proximity to Science Rooms and Instructional Support Spaces.
2. Group classrooms by prospective grade levels and programs.
3. All doors shall have vision lites or sidelites.

b. Minimum 10'-0" ceiling height.

c. Specialties and equipment:

1. Provide data and power station for a teaching station at two locations within each room. Locate at opposite corners of the room.
2. Provide data and power at the main teaching wall for short-throw interactive projector.
3. Provide 12 linear feet of marker boards on main teaching wall and 8 linear feet of marker boards on a secondary wall with a 12" high tackable surface above the marker boards. Provide core-insert map rails full length of marker board with clips at 1 per 18" of rail length.
4. Provide 16 linear feet of tack boards.

d. Finishes:

1. Floor finishes: Carpet.
2. Walls: Easily cleanable

e. Cabinetry and Casework

1. Provide cabinetry along one wall of the classrooms which includes the following:
   - **i.** 12 linear feet of base cabinet (24" deep) with countertop.

ii. Provide a 36" wide, full height cabinet with teacher's wardrobe on one side and storage on the other.
iii. Provide wall cabinets above all base cabinets.
iv. Each cabinet door must be equipped with keyed lock.
v. Consider the use of mobile casework units instead of built-ins

2. MULTI-PURPOSE/FLEX CLASSROOM

a. Multi-Purpose/Flex Classrooms

1. General
   i. For use as S.T.E.M., S.T.E.A.M., Computer and Language Labs, Fabrication and Robotics, etc. based on agreed upon programs for a particular school or courses of study.
   ii. These classrooms should be designed for maximum flexibility to implement special programs.
   iii. These spaces should have additional infrastructure, including additional data, power, and water.
2. These spaces may be used as standard classrooms, so it is important that they also conform to the general requirements of a standard classroom space.
3. Minimum 10'-0" ceiling height.
4. Finishes:
   i. Floor finishes: Carpeting, unless initial program use requires hard surface flooring. If carpeted, provide a minimum of 5' of hard surface flooring in front of the sink cabinets. Optional walk-off carpeting at sinks in lieu of hard surface
   ii. Walls: Easily cleanable.

3. STUDENT STUDY SPACE

a. Small rooms for group study and project development.
1. Student Study Space should be distributed throughout the school and should be within or convenient to the general classroom areas.
2. Visual access for supervision.

b. Table and chairs

c. Specialties and Accessories
1. Provide an 8 ft. marker board and 8 ft. tackboard.
2. Provide a wardrobe cabinet with project storage (36" wide) capability.
3. Power and data with short-throw interactive projector

d. Finishes:
1. Floor finishes: Carpet.
2. Walls: Easily cleanable

4. RESOURCE/INTERVENTION ROOMS

a. General

1. Resource rooms are small classrooms which are generally used for special program instruction, tutoring, seminars, etc.
2. Resource rooms should be distributed throughout the school and should be within or convenient to the general classroom areas.

b. Specialties and Accessories

1. Provide an 8 ft. marker board.
2. Provide a teacher's wardrobe cabinet with storage (36" wide).

c. Finishes:

1. Floor finishes: Carpet.
2. Walls: Easily cleanable

5. TEACHER WORK/PLANNING ROOMS

a. General

1. The teacher work/planning room is a multi-functional space for offices, staff planning, and supplies storage.
2. Locate rooms for easy access from the classrooms or area(s) being served.
3. Group by departments and by program.
4. Exterior windows
5. Workstation components for office furniture

b. Specialties and Accessories

1. Provide 8 LF of full height storage cabinets, 24" deep
2. Provide 8 LF feet of base and overhead cabinets with single stainless steel sink with disposal and area for full size refrigerator.
3. Provide space for 8 to 12 teachers work stations.
4. The room should be laid out to allow for small work tables to be set in open areas of the room
5. Provide a total of 8 LF of markerboard and 12 LF of tack board.

c. Finishes:

1. Floor finishes: Carpet.
2. Walls: Easily cleanable

B. SCIENCE SUITE

1. CHEMISTRY/BIOLOGY CLASSROOM

a. General

1. Provide laboratory-oriented programs with perimeter utilities, project work surfaces and an open area in the center of the rooms for student tables and projects.

2. To maximize utilization and flexibility, the classroom should be designed for a combination laboratory and classrooms.
3. Instruction encompasses lecture, discussion, multi-media, hands-on, and computerized virtual experimentation with instruction in life science and physical science.
4. Student Tables: Two-to-four person tables with solid chemical-resistant epoxy tops.
5. Instructor Station: Epoxy top demonstration table
6. The laboratory design shall allow student tables to be oriented toward a teaching station with good visual access to the teaching wall and instructor.
7. Locking door hardware with a common key is required for all spaces in the Science Suite
8. Locate windows to allow adequate controlled daylighting.

b.Specialties and Equipment:

1. Provide data and power station for a teaching station at two locations within each room. Locate at opposite corners of the room.
2. Provide data and power at one location for short-throw interactive projector.
3. Provide 12 linear feet of marker boards with a 12" high tackable surface above the marker board. Provide cork-insert map rails full length of marker board with clips at 1 per 18" of rail length.
4. Provide total 12 linear feet of tack boards
5. Fire extinguisher and cabinet
6. Emergency shower with acid-resistant floor drain.
7. Goggle storage cabinet with UV sanitizer. May be incorporated into other storage.
8. Wall-mounted first aid kit
9. Wall-mounted apron rack
10. Wall-mounted fire blanket

c. Finishes:

1. Flooring shall be hard surface flooring or sealed concrete.
2. Minimum 10'-0" ceiling height.

d.Cabinetry and Casework:

1. Provide for eight (8) student stations and one (1) instruction/demo station.
2. Continuous locking 30-inch deep base cabinets with solid epoxy top chemical-resistant countertops along walls. All student utilities shall be provided at these cabinets. Fixed island or peninsula type configurations are prohibited.

3. Eight (8) double gas turrets in perimeter casework. Locate one double gas turret at each student work station.
4. Eight (8) acid resistant epoxy sinks with gooseneck faucets and paddle handles:
    i. Interior sink dimensions: 28" l x 16" w x 7-1/2" d.
    ii. Locate faucets on side of sinks.
    iii. One sink shall be ADA accessible
    iv. All plumbing piping to be acid resistant to the under-sink acid neutralization tanks.
5. Continuous series of electrical receptacles or electrical plug mold above countertops.
6. Locate the following on the walls above the base cabinets:
    i. Alternating sections of tackboards, open bookshelves, and locking glass door wall cabinets with adjustable shelves.
7. Locking microscope cabinet for storage of 32 microscopes.
8. Area for laptop re-charging cart
9. One fixed teaching/demonstration station with one double gas turret and acid resistant sink. Include electrical power and dedicated overhead exhaust.
10. Gas and power EPO at room exit.

2. EARTH SCIENCES/PHYSICS CLASSROOM

a. General

1. Provide general purpose laboratory-oriented programs with perimeter utilities, project work surfaces and an open area in the center of the rooms for student tables and projects.
2. No fixed islands or peninsula work stations. Student tables can be relocated to form peninsula-type workstations at perimeter casework.
3. To maximize utilization and flexibility, the classroom should be designed for a combination laboratory and classroom.
4. Instruction encompasses lecture, discussion, multi-media, hands-on, and computerized virtual experimentation with instruction in life science and physical science.
5. Two-to-four person chemical-resistant laminate top tables.
6. The laboratory design shall allow student tables to be oriented toward a teaching station with good visual access to the teaching wall and instructor.
7. Locking door hardware with a common key is required for all spaces in the Science Suite
8. Locate windows to allow adequate controlled daylighting.

b. Specialties and Equipment:

1. Provide data and power station for a teaching station at two locations within each room. Locate at opposite corners of the room.
2. Provide data and power at one location for short-throw interactive projector.
3. Provide 12 linear feet of marker boards with a 12" high tackable surface above the marker board. Provide cork-insert map rails full length of marker board with clips at 1 per 18" of rail length.
4. Provide total 12 linear feet of tack boards
5. Fire extinguisher and cabinet
6. Eye wash unit with acid-resistant drain.
7. Two ceiling hooks from building structure
8. Black-out shades
9. Wall-mounted first aid kit
10. Wall-mounted apron rack
11. Wall-mounted fire blanket

c. Finishes:

1. Flooring shall be hard surface flooring or sealed concrete.
2. Minimum 10'-0" ceiling height.

d. Cabinetry and Casework:

1. Provide for eight (8) student stations and one (1) instruction/demo station.
2. Continuous locking 30-inch deep base cabinets with solid epoxy top chemical-resistant countertops along walls. Chemical-resistant laminate may be considered. All student utilities shall be provided at these cabinets. Fixed island or peninsula type configurations are prohibited.
3. Eight (8) stainless steel sinks with gooseneck faucets and paddle handles:
    i. Interior sink dimensions: 28" l x 16" w x 7-1/2" d.
    ii. One sink shall be ADA accessible
    iii. Emergency eyewash at one sink
4. Continuous series of electrical receptacles or electrical plug mold above countertops.
5. Locate the following on the walls above the base cabinets:
    i. Alternating sections of tackboards, open bookshelves, and locking glass door wall cabinets with adjustable shelves.
6. Locking microscope cabinet for storage of 32 microscopes.
7. Area for laptop re-charging cart
8. One teaching/demonstration station with one double gas turret and acid resistant sink. Include electrical power and dedicated overhead exhaust.
9. Floor drain

10. Four (4) power drop cords/receptacles at ceiling

3. SCIENCE PREP ROOM

a. General:

1. Combination preparation/workroom.
2. A common Science Prep Room should be shared between at least two Science Rooms.
3. Provide large interior windows between the prep room and the lab for visual supervision of the laboratories.
4. Self-locking and self-closing door hardware.
5. Directly adjacent to each Science Laboratory with a connecting door.

b. Specialties, Equipment, and Accessories:

1. Provide full size residential undercounter dishwasher and full size residential refrigerator with ice maker.
2. Chemistry and Biology only: Residential electric range and hood with direct exhaust to the exterior.
3. Fire extinguisher and cabinet
4. Wall-mounted fire blanket

c. Cabinetry and Casework:

1. Base cabinets with acid-resistant tops that support Chemistry and Biology and chemical-resistant tops at other locations.
    i. Minimum of five linear feet base and wall cabinets for each lab served. Lockable glass doors on overhead cabinets
    ii. Countertop at dishwasher shall be standard 36-in high.
2. Flat files for science posters
3. Area for countertop autoclave and other appliances
4. Min. 16 LF of open shelving for each lab served
5. Undercounter or floor space for six (6) rolling project carts

d. Other:

1. Master electrical and gas controls switch for the laboratory.
2. Continuous electrical plug mold above countertops
3. Provide one gas jet near back splash on base cabinet.
4. Provide one sink (acid-resistant at Chemistry and Biology) with gooseneck faucet and hot and cold water in a base cabinet. The sink size should be 28 inches long by 16 inches wide by 7 inches deep.
5. Provide emergency eye-wash on sink
6. Wall-mounted first aid kit
7. At Chemistry and Biology only: Provide mechanically vented pass thru countertop Fume Hood between the prep room wall and the lab.
8. Acid resistant floor drain at Chemistry and Biology.

e. Finishes:

1. Flooring shall be hard surface flooring or sealed concrete.

4. SCIENCE STORAGE ROOM

a. General:

1. General storage for science equipment and instruments.
2. Self-locking and self-closing door hardware.
3. In close proximity to all Science Prep Rooms and directly adjacent to and accessed from at least one Science Prep Room in the Chemistry/Biology area.

b. Specialties and Accessories:

1. One fire resistant storage cabinet with flame arrestor with minimum dimensions of 36 inches high by 36 inches wide by 24 inches deep.
2. One non-corroding acid cabinet with minimum dimensions of 36 inches high by 36 inches wide by 18 inches deep to store acids below eye level. Integral exhaust to the building exterior.
3. Provide fire extinguisher at the room exit door.

c. Cabinetry and Casework:

1. Provide a total of 100 linear feet of full height adjustable shelving divided equally between 18 inches deep and 24 inches deep. One third of shelving shall be within locking cabinets.

d. Other:

1. Acid resistant floor drain.
2. Special Room Ventilation Requirements

e. Finishes:

1. Flooring shall be hard surface flooring or sealed concrete

5. SCIENCE STAFF WORKROOM

a. General

1. The teacher work/planning room is a multi-functional space for offices, staff planning, and supplies storage.
2. Locate rooms for easy access from the science classrooms or area(s) being served.
3. Exterior windows

b. Specialties and Accessories

1. Provide 8 linear feet of full height storage cabinets, 24” deep
2. Provide 8 linear feet of base cabinets at 34” counter height.
3. Provide space for 8 to 12 teachers work stations.
4. The room should be laid out to allow for small work tables to be set in open areas of the room
5. Provide a total of 8 LF of markerboard and 12 LF of tack board.

c. Finishes:

1. Floor finishes: Carpet.
2. Walls: Easily cleanable

C. BUSINESS CENTER

1. BUSINESS CLASSROOM

a. Same as General Classrooms

1. Classrooms shall be grouped into programmed departments and teaching areas within close proximity to other programs within the Business Center.

b. Minimum 10'-0" ceiling height.

c. Specialties and equipment:

1. Provide data and power station for a teaching station at two locations within each room. Locate at opposite corners of the room.
2. Provide data and power at one location for short-throw interactive projector.
3. Provide 12 linear feet of marker boards on main teaching wall and 8 linear feet of marker boards on a secondary wall with a 12" high tackable surface above the marker boards. Provide core-insert map rails full length of marker board with clips at 1 per 18" of rail length.
4. Provide 16 linear feet of tack boards.

d. Finishes:

1. Floor finishes: Carpet.
2. Walls: Easily cleanable

e. Cabinetry and Casework

1. Provide cabinetry along one wall of the classrooms which includes the following:
   - **i.** 12 linear feet of base cabinet (24" deep) with countertop at 34" height.
   - **ii.** Provide a 36" wide, full height cabinet with teacher's wardrobe on one side and storage on the other.
   - **iii.** Provide wall cabinets above all base cabinets.
   - iv. Each cabinet door must be equipped with keyed lock.

2. STUDENT STORE AND STORAGE

a. General

1. Locate directly off Commons Area in a main corridor near afterschool programs and activities.
2. May be combined with Gymnasium and Auditorium concessions and ticket sales.
3. Standard door access from area being served.
4. No food prep. Pre-packaged food only.

b. Specialties and Equipment

1. Motorized overhead solid countertop door
2. Reach-in refrigerator and freezer
3. Handwashing sink
4. Data drops and power at points of sale
5. Overhead menu and product board
6. General power for countertop equipment

c. Cabinetry and Casework

1. Provide 8 linear feet of base cabinet (30" deep) with countertop at 34" height.
2. Transaction countertop with display area
3. Each cabinet door must be equipped with keyed lock.
4. Open shelving for dry goods storage

d. Finishes:

1. Floor finishes: hard surface flooring or sealed concrete.
2. Walls: Easily cleanable

3. STUDENT PUBLICATIONS CLASSROOM

a. Same as General Classrooms

1. Classrooms shall be grouped into programmed departments and teaching areas within close proximity to other programs within the Business Center.
2. Adjacent or direct access to:
   i. Library Media Center
   ii. Graphics Art Studio/2D Art
   iii. Media Broadcast Studio

b. Minimum 10'-0" ceiling height.

c. Additional Requirements similar to a Flex/Multi-Purpose Classroom

1. Classroom should be designed for maximum flexibility.
2. Space should have additional infrastructure, including additional data and power.

d. Cabinetry and Casework

1. Provide cabinetry along two walls of the classroom which includes the following:
   i. 12 LF of base cabinet (24" deep) with countertop. Provide one general purpose sink with gooseneck faucet.
   ii. Provide two 36-inch wide full height wardrobe cabinet storage with shelves.
   iii. Provide wall cabinets above all base cabinets.
   iv. Each cabinet door must be equipped with keyed lock.
   v. Provide open shelving with 100 lf of shelving

e. Finishes:

1. Floor finishes: Carpeting
2. Walls: Easily cleanable

f. Specialties and equipment:

1. Provide data and power station for a teaching station at two locations within each room. Locate at opposite corners of the room.
2. Provide data and power at one location for short-throw interactive projector.
3. Provide 12 linear feet of marker boards on teaching wall and 8 linear feet of marker boards on a secondary wall with a 12" high tackable surface above the marker boards. Provide core-insert map rails full length of marker board with clips at 1 per 18" of rail length.
4. Provide 16 linear feet of tack boards.

4. STAFF WORKROOM/OFFICE

a. General

1. Directly adjacent to the Business and Student Publications Classrooms

b. Specialties and Accessories

1. Provide space for 2 to 4 teachers work stations.
2. Provide 8 linear feet of marker board a total of 12 linear feet of tack board.

c. Finishes:

1. Floor finishes: Carpet.
2. Walls: Easily cleanable

5. MEDIA PRODUCTION STUDIO

a. General

1. Two room configuration
   i. Control Room
   ii. Recording/Broadcast Studio
2. Acoustically isolate rooms from adjacent spaces
3. Vision panel between Control Room and Studio
4. Small opening in wall below Control Room countertop to run cables between rooms
5. Direct connection through door access from Control Room to Studio.
6. No direct access from Corridor into Studio

b. Control Room

1. Cabinets and Casework
   i. Countertop for computer and mixing equipment
2. Specialties and Equipment
   i. Provide space for 2 – 4 students to sit at control countertop

ii. Provide floor space for equipment racks and cable
iii. Dimmable room lighting
iv. Special acoustical treatment for recording

c. Recording/Broadcast Studio

1. Dimmable room lighting
2. Light bar at ceiling for overhead studio lighting
3. Vertical wall racks for side lighting
4. Floor area for tripod lights and cameras
5. Area for studio desk and backdrops

d. Finishes:

1. Floor finishes: Carpet.
2. Walls: Easily cleanable with acoustical sound-deadening treatment

D. LECTURE HALL

1. LECTURE CLASSROOM

a. General

1. Near main building entrance or Commons Area
2. No windows to the building exterior
3. No access from the building exterior
4. Built-in tiered floor is acceptable; level floor preferred.
i. ADA access required

b. Specialties and equipment:

1. Provide data and power station for a teaching station at two locations within each room. Locate on both sides of the teaching area just off center from the projection and display area.
2. Provide data and power at rear of space for projector area.
3. Provide 12 LF marker boards on teaching wall. Provide core-insert map rails full length of marker board with clips at 1 per 18" of rail length.
4. Provide two-8 linear feet tack boards.
5. Ceiling mounted motorized projection screen at teaching wall
6. Dimmable lighting with controls on teaching wall

c. Other

1. Moveable lectern with A/V and projector controls

d. Cabinetry and Casework

1. If tiered floor: Continuous fixed student desk tops
2. No fixed seating

e. Finishes:

1. Floor finishes: Carpet.
2. Walls: Easily cleanable

E. SUPPORT SPACES FOR INSTRUCTIONAL AREAS

1. STAFF TOILETS

a. General

1. ADA single-fixture toilet rooms. Locate staff toilet rooms so they do not open into main circulation corridors.
2. Distribute staff toilets throughout the building with convenient access from instructional areas.
3. Walls shall be ceramic tile.
4. Floors shall be porcelain ceramic tile with floor drains.
5. Provide hose bib.

2. INSTRUCTIONAL MATERIALS STORAGE

a. General

1. Instructional Materials Storage is intended for shared use by a group of classroom teachers, aids, etc. The room will store books, science kits, and other classroom instructional materials, and may be divided by grade levels or Core Instruction specialties.
2. Design for perimeter shelving
3. Distribute storage rooms throughout the building for convenient access from the classrooms being served.

F. SPECIAL EDUCATION

1. CLASSROOMS

a. Provide classrooms for use as special education rooms.

1. Classrooms shall be either grouped into a core area or distributed within the classroom cores team areas.
2. Provide floor area for special needs equipment.

b. Minimum 10’-0” ceiling height.

c. Specialties and equipment:

1. Provide data and power station for a teaching station at two locations within each room. Locate at opposite corners of the room.
2. Provide data and power at one location for interactive short-throw interactive projector.
3. Provide 12 linear feet of marker boards with a 12” high tackable surface above the marker board. Provide core-insert map rails full length of marker board with clips at 1 per 18” of rail length.
4. Provide 16 linear feet of tack boards.

d. Finishes:

1. Floor finishes: Approx. 2/3 Carpeting and 1/3 Hard surface flooring.
2. Walls: Easily cleanable

e. Cabinetry and Casework

1. Provide cabinetry along one wall of the classrooms which includes the following:
    i. 12 linear feet of base cabinet (24" deep) with countertop at 34" height. Include a single compartment sink with gooseneck faucet.
    ii. Provide a 36" wide, full height cabinet with teacher's wardrobe on one side and storage on the other.
    iii. Provide wall cabinets above all base cabinets.
    iv. Each cabinet door must be equipped with keyed lock.

2. SEVERE NEEDS CLASSROOM

a. Large classroom with additional facilities internal to the classroom area.
1. Classroom shall be located within Special Education area or within a core team teaching area.
2. Locate classroom for convenient access from main building entrance.
3. Provide areas within space for physical therapy equipment and other special needs support materials and devices.

b. Minimum 10'-0" ceiling height.

c. Specialties and equipment:
1. Provide data and power station for a teaching station at two locations within each room. Locate at opposite corners of the room.
2. Provide data and power at one location for interactive short-throw interactive projector.
3. Provide 12 linear feet of marker boards with a 12" high tackable surface above the marker board. Provide core-insert map rails full length of marker board with clips at 1 per 18" of rail length.
4. Provide 16 linear feet of tack boards.
5. Overhead ceiling hook connected to structure from which to suspend physical therapy apparatus on a case-by-case basis if requested by the District Special Education Department.

d. Finishes:
1. Floor finishes: Approx. 2/3 Carpeting and 1/3 Hard surface flooring.
2. Walls: Easily cleanable

e. Cabinetry and Casework
1. Provide cabinetry along one wall of the classrooms which includes the following:
    i. 12 linear feet of base cabinet (24" deep) with countertop at 34" height. Include a single compartment sink with gooseneck faucet.
    ii. Provide a 36" wide, full height cabinet with teacher's wardrobe on one side and storage on the other.

iii. Provide wall cabinets above all base cabinets.
iv. Each cabinet door must be equipped with keyed lock.
v. Provide a small kitchenette area with undercounter dishwasher, full size refrigerator, and full size range with exhaust hood. Provide 36" high countertop at range and dishwasher section.

3. RESOURCE ROOM/OFFICE/TESTING

a. Provide room for use to support the Severe Needs Classroom.
b. Provide areas for storage, office desks, and testing.
c. Equipment and furnishings for Special Ed resource rooms shall be the same as standard resource rooms.
d. Finishes:
1. Flooring shall have carpeting.
2. Provide a minimum of 5' of hard flooring surface or walk-off carpet in front of the sink cabinets.
3. Minimum 10'-0" ceiling height

e. Specialties, Equipment and Casework.
1. One markerboard, 6 linear feet with cork-insert map rails full length of markerboards with clips (one per 18" of board length) and on flag holder per room.
2. Provide a 36" wide, full height cabinet with teacher's wardrobe on one side and storage on the other.
3. 8 linear feet of base cabinet (30" deep) with countertop at 34" height. Include a single compartment sink with gooseneck faucet.
i. Provide wall cabinets above all base cabinets.
ii. Each cabinet door must be equipped with keyed lock.

4. STORAGE

a. Separate or shared space serving both staff areas and classrooms
b. Cabinets and Casework
1. Two 84" high x 24" wide x 24" deep locking cabinets with adjustable shelving for instructional materials and storage
2. Three sections of adjustable shelving units 4'-0 wide x 5 shelves high x 18" deep
3. Floor area for storage of larger items

c. Ares and infrastructure for clothes washer and dryer

5. OFFICE

a. General
1. Directly adjacent to the Special Education Classrooms

b. Specialties and Accessories
1. Provide space for 2 to 3 teachers work stations.

2. Provide 8 linear feet of marker board a total of 12 linear feet of tack board.

c. Finishes:

1. Floor finishes: Carpet.
2. Walls: Easily cleanable

6. CONFERENCE ROOM

a. Provide space for table to seat minimum 2 - 8 adults.

b. Area for short-throw interactive projector or interactive monitor.

c. Directly adjacent to the Special Education Classrooms with access directly from classrooms and a corridor.

d. Finishes:

1. Floor finishes: Carpet.
2. Walls: Easily cleanable

7. WORKROOM

a. Total 24 linear feet of standard base cabinets, overhead cabinets, and countertop. 12 linear feet of base cabinet should be 30 inches deep. Single bowl stainless steel sink.

b. Directly adjacent to the Offices and Conference Rooms.

c. Floor area for work tables and chairs

d. Power, telephone, and data for business machine area and at perimeter of space

e. Finishes:

1. Floor: Hard surface flooring
2. Walls: Easily cleanable

8. TOILET ROOM

a. Toilet and wall-hung lavatory

b. Provide enough space for two adults assisting a disabled student.

c. Flush-mounted hose bib.

d. Handheld shower mounted on wall with floor drain. Individual shower stalls or compartments are prohibited.

e. Flip-down ADA shower seat

f. Clinic-type shower curtain at shower area

g. Area for changing table: 30”d x 60”l x 36” h. with available wall receptacle

h. Finishes:

1. Floor: porcelain tile with base
2. Walls: Full height ceramic tile all walls.

CORE INSTRUCTIONAL

SPACE DESCRIPTION:

Core spaces are elective instructional spaces designed to support and supplement core teaching concepts through art, music, performance, and other programs. These Core Spaces should be located within individual designed suites. Spaces should be designed to allow for teachers and students to work together in a student-centered environment to achieve the creative and academic goals for each student. Consider resource areas for independent learning opportunities as part of the design. Design for multiple teaching options within each space.

The High School Core Instructional Programs are experiential and exploration programs with hands-on experience.

A. ART SUITE

1. Studio Classroom (3-D Media)
2. Studio Classroom (2-D Media)
3. Graphics Classroom
4. Kiln Room
5. Storage Room
6. Kiln Area - Exterior
7. Teacher Work Area
8. Art Courtyard - Exterior

B. MUSIC SUITE

1. Classroom (General Music/Instrumental)
2. Classroom (Vocal)
3. Practice Rooms
4. Large Practice/Ensemble Room
5. Instrument and Equipment Storage
6. Music Library
7. General Uniform/Robe Storage
8. Office/Work Area

C. LIBRARY/MEDIA

1. Reading, Instructional, and Stack Area
2. Seminar Rooms
3. Workroom/Office/Storage

D. FABRICATION AND TECHNOLOGY CENTER

1. Technology Lab
2. Classroom
3. Manufacturing Fabrication Room
4. Resource/Materials Room
5. Staff Office/Work Area

E. FAMILY AND CONSUMER SCIENCES

1. Food Preparation Classroom
2. Pantry Storage
3. Multi-Use Classroom
4. Staff Workroom/Office

DESIGN CRITERIA

A. ART SUITE

1. Art Classroom – 3-D Media

a. General

1. Classroom finishes should consist of highly durable and easily cleaned materials. Sealed concrete floors are appropriate.
2. Locate Art Classroom with direct access to the outside for delivery of art materials and to extend the program to the building exterior.
3. Instructional and studio space for ceramics, fiber arts, sculpture, and other activities.
4. Open structure ceiling. Minimum 10 ft. A.F.F. to bottom of structure.
5. Ceiling mounted electric drop-cords.
6. Natural north light with daylighting control is preferred in the studio area

b. Specialties and Equipment:

1. Provide data and power for a teaching station at two locations within each room. Locate at opposite corners of the room.
2. Provide data and power at one location for interactive short-throw projector.
3. Provide 12 LF of marker boards with a 12” high tackable surface above the marker board. Provide cork-insert map rails full length of marker board with clips at 1 per 18” of rail length.
3. Provide 16 LF of tack boards.
4. Area to re-charge a laptop cart.
5. Isolated countertop spray booth with exhaust system. May be combined with 2-D Art.
6. Ceiling mounted drop power/receptacle cords at pottery wheels and student work tables

c. Casework:

1. One lockable teacher’s wardrobe with storage (36” wide by 24” deep by 84” high). Four full height lockable storage cabinets (36” wide by 24” deep by 84” high)
2. Provide two scullery-type stainless steel sinks with double compartment and integral drain boards at each end. 8’-0” l. x 24” d. with 28” rim height and two 20”x24”x14”d. sinks with 6” backsplash. Hot and cold single lever swing-type gooseneck faucets. Drain to plaster traps- 2”drain line required. One ADA sink

3. Provide 2 base cabinet paper drawer sections with minimum inside drawer dimensions of 29” by 43”.
4. Provide one 18-inch wide drawer unit with 5 drawers.
5. 24 LF lockable base cabinets with adjustable shelves.
6. Provide open wall cabinets above countertop.
7. Provide storage for 60 drawing boards (maximum dimension of 24” X 36”). 30-inch deep cabinet.
8. 100 individual 1 cubic foot volume open cubbies for student projects
9. Provide a safety eyewash station.
10. Provide floor drains with plaster trap.
11. Lockable illuminated display case viewed from corridor side.

d. Provide fire-resistant horizontal surface area and wall protection for a table-top glass kiln. Preferred location is within Kiln Room.

e. Provide a clay drying cabinet

f. Plan for additional floor space to store wet clay, drying racks, slab roller, hand extruders, pottery wheels, etc.

g. Isolated area for pugmill.

h. Unistrut-type grid in center of room for hanging or art and track lighting.

i. Trench floor drain with plaster trap at pottery wheels.

j. Area for lockable clay boxes

k. Furniture:

1. Area for eight (8) 42”x60” general art tables with stools

l. Jewelry Area

1. Four (4) Soldering Stations
    a. Torch compartments at each station with fireproof surfaces and separation baffles
    b. Lighting and dedicated direct venting at each station
2. Centrifugal Casting Area
    a. Standard soldering station design with 4-ft x 3 ft. deep counter next to casting machine for one enameling kiln and one burnout kiln.
3. Lapidary Area
    a. Counter 4-ft x 2-ft deep with storage trays and bins
    b. Power for polishing and buffing equipment
    c. Direct venting
    d. Countertop faucet and drain connection to sink
4. Casework
    a. Base cabinet and countertop with adjustable shelves and lockable drawers and doors for jewelry materials storage
    b. Jewelry Display Case
    c. Wall storage cabinets
    d. Tool Cabinets
    e. Fifty 12”x12”x12” lockers
    f. Area for countertop air compressor
5. Other
    a. Provide a safety eyewash station and stainless steel sink for handwashing and general use.

b. Manifold System
    i. To provide oxygen and acetylene to stations
    ii. Freestanding tank area with restraints
    iii. Acetylene supply piping to stations must run under the front of solder stations
    iv. Oxygen must run through oxygen clean copper pipe with silver solder
    v. Gas torches with stands/brackets at each station
    vi. Task lighting
    vii. Electrical outlets below countertop level at stations
    viii. Power drop cords/receptacles for power tools at work stations.

6. Furniture
    a. 48”x36” jewelry table with vice

2. Art Classroom – 2-D Media

a. General

1. Classroom finishes should consist of highly durable and easily cleaned materials. Polished and sealed concrete floors.
2. Locate Art Classroom with direct access to the outside for delivery of art materials and to expand program to the building exterior.
3. Instructional and studio space for drawing, painting, printing, digital photography, and other similar activities.
4. Open structure ceiling. Minimum 10 ft. A.F.F. to bottom of structure.
5. Natural north light with daylighting control is preferred in the studio area

c. Specialties and Equipment:

1. Provide data and power for a teaching station at two locations within each room. Locate at opposite corners of the room.
2. Provide data and power at one location for short-throw interactive projector.
3. Provide 12 linear feet of marker boards with a 12” high tackable surface above the marker board. Provide cork-insert map rails full length of marker board with clips at 1 per 18” of rail length.
4. Provide 16 linear feet of tack boards.
5. Area to re-charge a laptop cart
6. Floor drains with plaster traps
7. Isolated countertop spray booth with exhaust system. May be combined with 3-D Art.
8. Ceiling mounted drop power/receptacle cords at student work areas

d. Casework:

1. One teacher’s wardrobe with storage (36” wide by 24” deep by 84” high). Four full height storage cabinets (36” wide by 30” deep by 84” high)
2. Provide 20 LF of countertop work surface along two walls with 30-inch base cabinets below. Mix of large flat file type drawers with adjustable shelves.

3. Provide one (1) scullery-type stainless steel sink with double compartment and integral drain boards at each end. 8'-0" l. x 24" d. with 28" rim height and two 20"x24"x14"d. sinks with 6" backsplash. Hot and cold single lever swing-type gooseneck faucets. Drain to plaster traps-2"drain line required. One ADA sink
4. Provide 4 base cabinet paper drawer sections with minimum inside drawer dimensions of 29" by 43".
5. Provide one drawer unit (30" wide +/-) with 5 drawers.
6. Other base cabinets to be standard, adjustable shelf base cabinets.
7. Provide open wall cabinets above countertop.
8. Provide storage for 180 drawing boards (maximum dimension of 24" X 36"). Drawing boards should be stored in 30" deep cabinet.
9. Two levels of 12 LF of slot storage: 48" h x 3" w x 34" d.
10. 12 LF of flat shelf storage: 84" h x 36" d.
11. Provide a safety eyewash station.

e. Unistrut-type grid in center of room for hanging or art and track lighting.

f. Furniture:

7. Eight (8) 42"x60" general art tables
8. Floor area for painting and drawing easels.
9. Floor area for large printing press and other floor mounted equipment

3. Graphics Classroom

a. General

1. For use as digital photography, graphics, and media studio.
2. These spaces should have additional infrastructure, including additional data and power for desktop computers.
3. These spaces may be used as standard classrooms, so it is important that they conform to the general requirements of a standard classroom space.
4. Minimum 10'-0" ceiling height.
5. Secured area for data storage servers.

b. Cabinets

1. One teacher's wardrobe with storage (36" wide by 24" deep by 84" high).
2. Provide countertop work surface along two walls with base cabinets below.
3. Provide 4 base cabinet paper drawer sections with minimum inside drawer dimensions of 29" by 43".
4. Provide two drawer units (24" wide +/-) with 5 drawers.
5. Other base cabinets to be standard, adjustable shelf base cabinets.
6. Provide open wall cabinets above countertop.
7. Floor and countertop area for printers and copiers. Large format printer area.

c. Finishes:

1. Floor finishes: Carpeting.
2. Walls: Easily cleanable.

4. Kiln Room

a. Locate adjacent to 3-D Art Studio

b. Materials Storage Room should be located for ease of stocking materials from outside delivery.
c. Flooring: Sealed concrete.
d. Provide 24"d x 36"w x84" h metal shelving. Adjustable shelving of various sizes and depths located along perimeter walls.
e. Area for mobile green ware storage racks
f. Provide area for two (2) electric kilns with Down-Draft Ventilation Systems.
g. Area for glaze formulation and mixing with dry chemical bins
h. Floor drain with plaster trap

5. **Storage Room**
   a. General purpose storage room with wall mounted shelving and open floor area.
   b. Locate between 3D and 2D art rooms with access from each
   c. Locate for ease of stocking materials from outside delivery.
   d. Sealed concrete floor
   e. Acid-resistant storage cabinet and flammables cabinet
6. **Kiln Area – Exterior**
   a. Natural gas-fired kiln shall be located in this area.
   b. Open air circulation with at least two open sides. Full height chain link fencing or other fencing to enclose area.
   c. Accessible directly from interior kiln room with exit from enclosed area directly to the exterior.
7. **Teacher Work Area**
   a. Visual access into both Art Rooms at all times
   b. Place between the two Art Rooms for access into each classroom space.
   c. Floor should be sealed concrete.
   d. Space for desks, shelves, and files for two staff.
   e. 4 LF markerboard and 4 LF tackboard

B. MUSIC SUITE

1. **Classroom (General Music/Instrumental)**
   a. General
      1. Large group instruction
      2. Locate near the Auditorium Stage
      3. Part of the larger Music Suite
      4. Floor shall be flat without slope or permanent tier and risers
      5. Space shall accommodate students seated on both the floor and portable risers.
      6. Provide oversized door into room. Min. 42-inch single door, 36-inch single door with operable fixed leaf, or 3 ft. double doors with removable mullion. Consider overhead door to move larger instruments and equipment between spaces
      7. Separate or shared overhead door access to an exterior loading area
      8. Area to store portable risers
      9. Minimize exterior windows
      10. Acoustics
          a. Acoustically controlled and isolated

b. Acoustical treatment is required, including lower frequency absorption/dispersion materials
c. Avoid reflective parallel surfaces
d. Ceiling treatment should alternate reflective and adsorbent surfaces
e. Minimum ceiling structure height: 16 feet.

b. Finishes
1. Provide acoustical wall and ceiling treatment. Open structure or suspended ceiling.
2. Carpet
3. Hard surface flooring or walk-off carpet at sinks

c. Storage Cabinets and Casework
1. Provide lockable instrument storage cabinets of various sizes capable of storage of musical instruments. May be located outside the space in separate designated areas or corridors
   a. 60 LF of 30"d x 84"h cabinets with adjustable shelving and lockable doors and 20 LF of 24"d x 84"h cabinets with adjustable shelving and lockable doors.
2. One 36"w x 84"h wardrobe storage-half shelves and half coat storage.
3. Provide 10 linear feet of base cabinet with deep single compartment sink with gooseneck faucet.
4. Provide wall cabinets above the base cabinets, but not directly above sink.
5. Floor area for lockable cabinet for recording and sound amplification equipment.

d. Accessories
1. Provide a drinking fountain with bottle filler station.
2. Two markerboards, 8 linear feet each.
   a. Mount markerboards adjacent to each other on the teaching wall. One markerboard shall have factory-applied ruled music staff lines. Cork-insert map rails full length of markerboards with clip (one per 18" of board length) and one flag holder per room.
   b. Provide total 16 linear feet of tackboard surface.
3. Additional power receptacles in room to support electronic instruments
4. Portable risers

e. Special Equipment
1. Room planning must accommodate the following equipment:
   a. Baby grand piano or studio piano.
   b. Portable P.A. system.
   c. Provide data and power for a teaching station at two locations within each room. Locate at opposite corners of the room.
   d. Provide data and power at one location for interactive short-throw projector.
   e. Provide accommodations for hanging microphones for recording

2. Classroom (Vocal)

a. General
1. Large group instruction
2. Locate near the Auditorium Stage
3. Part of the larger Music Suite
4. Floor shall be flat without slope or permanent tier and risers
5. Provide oversized door into room. Min. 42-inch single door, 36-inch single door with operable fixed leaf, or 3 ft. double doors with removable mullion.
6. Area to store portable risers
7. Minimize exterior windows
8. Acoustics
    - **f.** Acoustically controlled and isolated
    - **g.** Acoustical treatment is required, including lower frequency absorption/dispersion materials
    - **h.** Avoid reflective parallel surfaces
    - **i.** Ceiling treatment should alternate reflective and adsorbent surfaces
    - **j.** Minimum ceiling structure height: 16 feet.

b. Finishes
1. Provide acoustical wall and ceiling treatment. Open structure of suspended ceiling.
2. Carpet
3. Hard surface flooring or walk-off carpet at sinks

c. Storage Cabinets and Casework
1. One teacher's wardrobe with storage (36" wide by 24" deep by 84" high). Four full height storage cabinets (36" wide by 30" deep by 84" high)
2. Provide 10 linear feet of base cabinet with single compartment sink with gooseneck faucet.
3. Provide wall cabinets above the base cabinets, but not directly above sink.
4. Lockable cabinet for recording and sound amplification equipment.

d. Accessories
1. Provide a drinking fountain with bottle filler station.
2. Two markerboards, 8 linear feet each.
    - **a.** Mount markerboards adjacent to each other on the teaching wall. One markerboard shall have factory-applied ruled music staff lines. Cork-insert map rails full length of markerboards with clip (one per 18" of board length) and one flag holder per room.
    - **b.** Provide total 16 linear feet of tackboard surface.
3. Additional power receptacles in room to support electronic instruments
4. Portable risers

e. Special Equipment
1. Room planning must accommodate the following equipment:
    - **a.** Baby grand piano or studio piano.
    - **b.** Portable P.A. system.

c. Provide data and power for a teaching station at two locations within each room. Locate at opposite corners of the room.
d. Provide data and power at one location for interactive short-throw projector.
e. Provide accommodations for hanging microphones for recording

3. **Practice Rooms**
   a. General
      1. Sound isolated enclosures of multiple sizes to be occupied by an instructor plus 1 – 6 students with instruments
      2. Prefabricated/modular units are prohibited
      3. Sound isolation and view lite are required.
      4. Data and electrical to support recording and electric powered instruments.
4. **Large Practice/Ensemble Room**
   a. General
      1. Small group practice area for up to 12 students with instruments and one instructor
      2. Sound isolation and view lite are required
      3. Data and electrical to support recording and electric powered instruments.
      4. One 4'x8' markerboard with 4'x4' tackboard
5. **Instrument and Equipment Storage**
   a. General
      1. Locate between Voice Classroom and Instrumental Music Classroom
      2. Provide a storeroom for securing large instruments and sound equipment.
      3. Provide storage and open shelving for a variety of instrument and equipment types.
6. Provide oversized door into room. Min. 42-inch single door, 36-inch single door with operable fixed leaf, or 3 ft. double doors with removable mullion. **Music Library**
   a. Storage for sheet music and file cabinets
7. **General Uniform/Robe Storage**
   a. Rack-type storage, both fixed and mobile, for choir robes, marching band uniforms and hats, and formal performance attire.
   b. Partial shelving storage for clothing accessories and repair equipment
8. **Office/Work Area**
   a. General
      1. Space for two instructors
      2. View lites for visual supervision of adjacent instructional areas
      3. 6-ft Markerboard
      4. No fixed casework
   b. Furnishings
      1. Modular systems furniture
      2. Include wardrobe cabinet
      3. Space for file cabinets
      4. Space for bookcases for reference material

C. LIBRARY/MEDIA

1. Reading, Instructional, and Stack Area

a. General

1. The library holds the schools learning materials, provides access to computers and internet services and provides instruction in use of these resources.
2. The main room in the library contains various functional areas which can be arranged in a number of different ways. The areas generally are open to one another and are defined only by their furnishings and equipment.
3. Entry, Stack Area, Small Group Area, Instructional Group Area, Reading Area, and Circulation Desk should be designed as an open area with overlapping use. Areas may be divided by shelving and furniture.
4. Finishes
    a. Minimum ceiling height: 12'-0"
    b. Carpet

b. Entry

1. Entry should be visible from the circulation desk.
2. Entry should be from a main corridor or lobby.
3. Provide pair of doors for main entrance into library.
4. Provide infrastructure for security detection equipment.
5. Display case with lighting visible from the corridor and library.

c. Stack Area

1. The stack area contains the shelving for books and other material which are on open display in the library. Stack shelving must be capable of holding the appropriate number of volumes.
    a. Shelving may be distributed within the stack area and at other areas in the facility. The majority of the collection should be in perimeter shelving.
    b. If other areas in the facility are utilized, provide mobile carts, book bins, and shelving.
2. Interior shelving should be low mobile units where higher shelves would interfere with supervision.
3. Wall shelving should maximize space with heights up to, but not exceeding, 72".
4. The stack area may be consolidated into one part of the main room or may be divided by reading areas, etc.
5. Provide room in the student area for two copiers for student use and to support publishing which may be done from any workstation.

d. Small Group Area

1. The small group area is intended for small group activities, teaching, and presentations.
2. Locate the area away from high activity portions of the library.
3. Provide video outlet within sightline of circulation desk.
4. Provide flat screen monitor with wireless access.

e. Instructional Group Area

1. The instructional group area should be designed to provide instruction for larger groups of students, staff, and community members.
2. Provide an area for seating a minimum of 32 persons at tables.
3. Provide one (1) interactive short-throw projector. Provide an 8ft. long markerboard.
4. Locate the area away from quiet areas so that instruction will not interfere with reading or other quiet activities. Maintain sightline from circulation desk.

f. Reading Area(s)

1. The reading area(s) may be consolidated into a single area or may occur at various locations within the main room or facility. Maintain sightlines from circulation desk.
2. Furnishing will primarily be tables and chairs, but easily movable couches and easy chairs may also be used.

g. Circulation Desk

1. The circulation desk is the control center for the library.
2. The circulation desk must be located for visual supervision of all of the areas in the main room and should have a good visual and physical relation to the library entrance.
3. The circulation desk must accommodate computer work stations as well as catalog index computers. Provide wiring and coordination.
4. Provide a workstation modular circulation desk containing:
    a. Book drop (with depressible book truck).
    b. Two attendant stations (w/computer connections)
    c. Integrated Storage
5. Provide 10 to 12 LF of modular workstation work surface countertops behind the circulation desk. Provide at least 2 knee space locations. Provide wall cabinets above the countertop where possible.

h. Online Reference Catalog and Technology Access Areas

1. Provide space for modular countertops at multiple locations.

2. Seminar Rooms

a. For use by small groups of students with or without an instructor.

b. Seminar rooms should be convenient to the library entrance and should have windows for supervision.

c. Provide one (1) interactive short-throw projector. Provide one 8 ft. markerboard and 8 LF tackboard.

3. Workroom/Office/Storage

a. The library workroom/office/storage is occupied by the Media Specialist who supervises the library operations and services.

b. Locate the workroom/office/storage with windows for supervision of as much of the library as possible.

c. Locate the office directly adjacent to the Circulation desk.

1. Workstation modular furniture
2. Space for file cabinets

d. The library storage is intended to store miscellaneous books and equipment related to the library operations. Shelving will be 24" deep with access to each side.

e. Provide empty floor space for storage of equipment on carts and for large format printer/copier.

f. 12 LF of countertop and base cabinets with single bowl stainless steel sink and goose neck faucet.

D. FABRICATION AND TECHNOLOGY CENTER

1. Technology Lab

a. CAD and design lab. Room with partial open area in support of desktop technology. Desktop computers and multi-use workstations.

b. For use as design for production programs such as robotics, prototype fabrication, and other engineered projects that do not require special ventilation.

c. All areas of the Classroom Lab shall be easily monitored from the Staff Office/Work Area.

d. Minimum 12'-0" exposed structure ceiling height.

e. Ceiling drop cords and receptacles

f. 8 LF markerboard and 8 LF tackboard

g. Provide data and power at one location for interactive short throw projector

h. One power receptacle and data drop every 8 LF on wall or continuous plug mold. Locate 42" A.F.F.

i. Near Resource and Materials Room

j. One demonstration table with stainless steel sink and goose neck faucet

k. Finishes

1. Floor finishes: Sealed concrete.
2. Walls: Easily cleanable.

2. Classroom

a. General

1. For use as S.T.E.M., S.T.E.A.M., Computer and Language Labs, Fabrication and Robotics, etc. based on agreed upon programs for a particular school or courses of study.
2. These classrooms should be designed for maximum flexibility to implement special programs.
3. These spaces should have additional infrastructure, including additional data, power, and water.

b. Conform to the general requirements of a standard classroom space.

c. Finishes:

1. Minimum 10'-0" ceiling height.
    a. Floor finishes: Carpeting, unless initial program use requires hard surface flooring. If carpeted, provide a minimum of 5' of hard surface flooring in front of the sink cabinets. Optional walk-off carpeting at sinks in lieu of hard surface
2. Walls: Easily cleanable.

3. Manufacturing Fabrication Room

a. General

1. For use as a project fabrication area for larger or other projects that require special ventilation and floor- or table-mounted power tools with dust collection requirements.
2. Adjacent to the Technology Lab.
3. All areas of the Fabrication Room shall be visible from the Staff Office/Work Area and convenient to the Classroom
4. Direct access to an exterior fabrication yard with service access
5. One power receptacle and data drop every 8 LF on wall or continuous plug mold. Locate 42" A.F.F.
6. Consider an 'air lock' vestibule with doors separating Fabrication Room from the rest of the building to reduce transfer of dust, etc.
7. Floor drains with plaster traps

b. Finishes

1. Flooring: Sealed Concrete, exposed structure, and CMU walls
2. Ceiling drop cords and receptacles

c. Accessories and Casework

1. 16 LF markerboard and 8 LF tackboard
2. Dust Collection System
3. Areas for workbenches, floor-mounted saws, lathes, routers, planers, etc. Area for power tool stations
4. Countertop paint spray booth with integral ventilation
5. Perimeter project storage and fabrication

a. Provide 24 LF countertop with base and overhead cabinets. Stainless steel sink with goose neck faucet. Power above countertop. Eye-wash at sink
b. 36”w x 84”h x 24”d open storage shelving units. Total 18 LF for project storage
c. Vertical wood and supply storage racks

4. **Resource/Materials Room**
   - **a.** Area for power tool and other tools storage and checkout. Area to store woodworking and metal working supplies
   - **b.** Perimeter adjustable heavy-duty shelving
   - **c.** Lockable cage area for selected tool storage and security
   - **d.** Directly accessible from the Manufacturing Fabrication Room and located for visual monitoring from the Staff Office/Work Area.
   - **e.** Lockable acid-resistant cabinet and flammables cabinet with ventilation
   - **f.** Wall mounted First Aid kit
5. **Staff Office/Work Area**
   - **a.** General
     1. Space for two instructors
     2. View lites for visual supervision of adjacent instructional areas
     3. 8 LF markerboard and 6 LF tackboard
   - **b.** Furnishings
     5. Modular systems furniture
     6. Include wardrobe cabinet
     7. Space for file cabinets
     8. Space for bookcases for reference material

E. FAMILY AND CONSUMER SCIENCES

1. **Food Preparation Classroom**
   - **a.** General
     1. Multi-functional instruction, including classroom instruction, demonstration, small group, and individual hands-on activities.
     2. Domestic and small scale catering food preparation, nutrition, hospitality, and management.
     3. Open instruction/demonstration area
     4. Student kitchen stations
        - **a.** Locate so students can observe demonstration area
     5. Demonstration area
        - **a.** Conveniently located for student observation
     6. Area for reference/cookbook shelving
   - **b.** Finishes
     1. Hard surface flooring
     2. Ceramic wall tile at demonstration area and student stations
   - **c.** Storage Cabinets and Casework

1. Demonstration Area
    a. Fixed island demonstration table
    b. Rear wall countertop and base and wall-mounted cabinets
    c. Ceiling mounted tilting mirror or video camera feed into video monitors
    d. Space for a small group of students to participate in demonstrations
    e. 36-inch high demonstration countertop with single-compartment stainless steel sink with goose-neck faucet and garbage disposal. 34-inch high area for ADA
2. Student Kitchen Stations
    a. Six 'U' or 'L' configured kitchen stations at perimeter walls. One station shall be ADA accessible. Free-standing islands are prohibited.
    b. Residential kitchen configurations for use by 4-5 students at one time.
    c. 36-inch high countertop, base and peninsula cabinets with drawers. 34-inch high at ADA
    d. Single-compartment stainless steel sink with goose-neck faucet with garbage disposal
    e. Overhead cabinets along walls.

d. Accessories
1. Soap and paper towel dispensers at each kitchen station
2. Allow for future mounting of camera above demonstration area for display and recording of demonstrations.
3. Display monitors for use during demonstrations

e. Special Equipment and Appliances
1. Standard size residential appliances at each student kitchen station
    a. Electric smooth-top cooking range with oven
    b. Built-in over-the-range microwave oven vented to the building exterior
2. Standard size residential appliances at demonstration station
    a. Electric smooth-top cooktop with wall oven
    b. Built-in microwave oven on back wall vented to the building exterior
    c. Two large refrigerators with ice makers
    d. Two built-in undercounter dishwashers
3. Above-counter electrical outlets at all stations

2. Pantry Storage

a. Room to store cookware, serving ware, dry goods, small appliances, and other supplies

b. Adjustable perimeter shelving with open floor area

c. Area for clothes washer and dryer

3. Multi-Use Classroom

a. General

1. Classroom to support multiple curriculum options such as clothing, fashion, sewing, interior design, family and child studies, and other
2. These classrooms should be designed for maximum flexibility to implement special programs.
3. These spaces should have additional infrastructure, including additional data, power, and water. Provide sink with goose neck faucet
4. These spaces may be used as standard classrooms, so it is important that they also conform to the general requirements of a standard classroom space.
5. Minimum 10'-0" ceiling height.
6. Finishes:
   - **a.** Floor finishes: Carpeting, unless initial program use requires hard surface flooring. If carpeted, provide a minimum of 5' of hard surface flooring in front of the sink cabinets. Optional walk-off carpeting at sinks in lieu of hard surface
   - **b.** Walls: Easily cleanable.

4. Staff Workroom/Office

c. General

4. Space for two instructors
5. View lites for visual supervision of adjacent instructional areas
6. 6-ft Markerboard
7. No fixed casework

d. Furnishings

1. Modular systems furniture
2. Include wardrobe cabinet
3. Space for file cabinets
4. Space for bookcases for reference materials

FOOD SERVICE

SPACE DESCRIPTION:

The Cafeteria/Commons Area serves as a multifunctional space for dining, community meetings, and may accommodate school gatherings, social events, and performances. The area will receive students for meals on a scheduled basis and will serve as a gathering space at other times. Maximum flexibility shall be considered within this space. Consideration should be given to make the Commons Area the student center of the campus.

The Kitchen design must be coordinated closely with the district's Food & Nutrition Services Department. Equipment lists shall be provided to the designer designating type, function, quantity, size,

utility requirements, and contractual responsibility for each piece of equipment. All surfaces in the kitchen are to be non-porous materials that are easily cleaned and comply with local health authority requirements.

A. CAFETERIA/COMMONS

1. Kitchen and Support

a. Serving
b. Dish Return
c. Food Preparation Area
d. Dishwashing Area
e. Dry Food Storage
f. Walk-in Freezer/Refrigerator
g. Food Service Office
h. Food Service Toilet
i. Food Service Laundry Room
j. Receiving Area

2. Seating/Commons Area

a. Seating and Dining Area

3. Chair and Table Storage

4. Special Program Storage

DESIGN CRITERIA

A. CAFETERIA/COMMONS

1. KITCHEN AND SUPPORT

a. General

1. Coordinate Kitchen layout, design, and construction with Jefferson County School District R-1 Food and Nutrition Services Department.
2. The kitchen may be a preparation/cooking kitchen for area elementary schools
3. Directly accessible from the exterior loading and delivery area.
4. Each kitchen should be designed to serve approximately 1/3 of the student population at any one time.
5. Finishes
    a. Non-absorbent, easily cleanable walls and floors. Fiberglass Reinforced Panels (FRP) are not allowed. Ceramic wall tile or glazed block is preferred.
    b. Provide 60” high heavy gauge stainless steel corner guards on all exposed corners in kitchen areas
    c. Slip-resistant quarry tile floors
    d. Floor grout should be a dark color
    e. Recessed slab may be required at walk-in freezers and refrigerators.

b.Serving

1. The serving area is where students pickup their food. Serving is equipped with hot food tables, cold food tables, and flat table areas.
2. Floor drains are not to be located in the serving area unless required by code.
3. Circulation
    a. Flow: Corridor to queue to food serving to table seating to tray return to outdoors
    b. Entrance should be directly to the kitchen serving line from the main corridor.
    c. Dish return circulation should not cross the serving line.
    d. Consider Grab-and-Go concept with approval of District Project Manager.
4. Provide adequate number of serving lines in coordination with the number of students to be served. Multiple serving lines or grab-and-go are required.
5. The serving lines will terminate at point-of-scale computer stations, which are connected to the Kitchen Office and the central food service server.
    a. Provide power and data at point-of-sale stations.
6. Minimum of 4 serving lines plus a snack bar area. The serving line can be within the kitchen area with an “in” door and an “out” door. The preference is to have full height doors opening into the cafeteria seating area. Overhead coiling doors may be considered based on organization of serving lines.
7. The serving line should be positioned to allow for students to line up waiting for their turn to be served.
8. Serving line and the cafeteria entrance should be positioned for good traffic flow and should avoid cross-traffic.
9. Provide area for point-of-sale stations.
10. Use of color in this area is encouraged.

c. Dish Return

1. The dish return is the area where students return their dirty dishes for washing. The dish return area can be either within the kitchen and accessible by a door or coiling counter door, or an area within the seating area where trash and trays are collected.

d.Food Preparation Area

1. The food preparation area is where the food is cooked or heated in preparation for being served.
2. Locate the food preparation area with direct relationships to the Serving Area, Dry Food Storage, and the Walk-in Freeze/Refrigerator.
3. Finishes and Plumbing:

a. Provide quarry tile flooring with 6" base throughout the area.
b. Provide floor sinks and floor drains as need and required by Health Code.
c. All Faucets for kitchen hand sinks are to be manually operated by hand or foot controls.
d. Floor sinks should be set level with the floor. Floor drains should have a slope-to-drain.

4. Food Preparation Equipment and Tables should be on locking casters for ease of cleaning.
5. Food Preparation Equipment shall conform to the District's current preparation concepts and philosophy.
6. Provide hand wash sinks as required by Health Codes.

e. Dishwashing Area

1. The dishwashing area is where soiled trays are washed as well as the pots and pans and other tools of food preparation.

f. Dry Food Storage

1. The Dry Food Storage room is where canned goods and other packaged materials are stored.
2. Provide perimeter shelving and dunnage racks.
3. Locate Dry Food Storage near the Receiving Area.

g. Walk-in Freezer/Refrigerator

1. Locate the walk-ins near the Receiving Area and convenient to the Preparation Area.
2. Walk-ins are to be provided with air-cooled condensers located on the roof.

h. Food Service Office

1. The Food Service Office is where the manager performs clerical work and conducts the routine business of the Kitchen.
2. Provide a modular work surface with double file drawers.
3. Floor space for file cabinet.
4. Food Service lockers (15" two tier) may be located within the Food Service Office or in another convenient location (adjacent to the Food Service Toilet).
5. Locate the Food Service Office with direct connection to the Food Service Toilet.
6. Provide easily accessible data and power outlets to accommodate the Point-of-Sale computer on a cart.
7. Provide window between office and food preparation. Vision panel in door.

i. Food Service Toilet

1. Single occupant, ADA accessible, with toilet and wall-hung lavatory for use by Kitchen staff.
2. Provide convenient access to lockers, or locate lockers within the toilet room.
3. Room shall not be accessed directly from the Food Preparation area.
4. The toilet can be accessed through the food service office.

j. Food Service Laundry Room

1. The laundry room is for the washing of cleaning cloths, etc. and also contains a mop basin and provides for storage of cleaning supplies.
2. Provide area and infrastructure for clothes washer and dryer.
3. Provide a floor mounted mop sink with mop holder and shelf.
    a. Provide space for storage shelving to hold cleaning supplies.

k. Receiving Area

1. The receiving area is where food products are received and where refuse is removed from the Food Service area.
2. The receiving must have direct access to the service drive with vehicle access.
3. The receiving area may be within the kitchen area or may be a separate room
4. Provide 4-ft wide door with vision lite. Provide doorbell or other signaling devices at door for controlled access to receiving area
5. Receiving should have convenient access to Dry Food Storage and refrigerated storage equipment.
6. Allow for space within the receiving area for small recycle bins, etc.

2. SEATING/COMMONS AREA

a. Seating and Dining Area

1. General
    a. The Commons Area must be designed to accommodate multiple functions, including lunch, student socializing, rehearsal space, indoor group activities, large and small group meetings and conferences, independent club and organization functions, and potential support and activity space for intermissions in Gymnasium and Auditorium events.
    b. The seating area shall have a flat floor.
    c. The seating area must have direct relationships to the serving line and chair/table storage.
    d. Consider a large area with smaller gathering/socializing areas.
    e. The seating area should be configured for good visual site lines.
    f. The seating area should be in close proximity to the exterior.

g. Direct access from a main corridor and possibly from the main school entrance.
h. Locate Dining/Seating to allow for direct outside entrance to the area for after-hours use.
i. Include an area for a coffee shop and snacks counter
j. Provide exterior windows and daylighting.
k. Provide acoustical attenuation.
l. Provide drinking fountain with bottle fill station.
m. Accommodate approximately 33% of the student population for lunch.
n. Directly adjacent to Kitchen and lunch queuing lines
o. Near or adjacent to Main Gymnasium and Auditorium
p. Locate near public and student restrooms

2. Finishes:
a. Floor: Hard surface flooring or stained, sealed concrete
b. Walls: Abuse-resistant and easily cleanable.
c. Minimum 15'-0" high ceilings. Provide acoustical treatment or acoustical roof deck for open structure and exposed deck construction.

3. Technology:
a. Public Address System.
b. Television and video monitors

4. Other: A large motorized projection screen

3. CHAIR AND TABLE STORAGE

a. The chair and table storage area is for the storage of cafeteria tables when not in use as well as storage for additional loose chairs required for assembly seating in the area.
b. Chair and table storage may be in one location or may be divided into separate areas. Locate storage to allow for the setup or breakdown of the Dining/Seating or general seating areas separately without interference with ongoing activities in the other area.
c. Locate Chair/ Table Storage with direct access to the Seating Area

4. SPECIAL PROGRAM STORAGE

a. Separate storage room for internal activity storage
b. Perimeter adjustable storage shelving

PERFORMING ARTS

SPACE DESCRIPTION:

The auditorium is utilized for a wide variety of school and public activities. The auditorium is a unique area that must be configured to allow multiple uses to the greatest extent possible. In addition to serving as the primary public performance space, it must also be suitable for assemblies, theater, films, special speakers and large group meetings, instruction, and testing. Flexibility should be inherent in all systems to allow optimum utilization for both educational and performance purposes. Sound, light, acoustics, finishes, and stage apparatus are appropriate for semi-professional instruction and production, but not legitimate/commercial theatre. Locate in the public area of the school, directly accessible to the exterior or main entrance lobby. The Student Commons/Cafeteria area can serve as the auditorium lobby, utilizing the food service infrastructure for concessions. The auditorium entry vestibule should be located adjacent to the ticket office and the student commons area

A. AUDITORIUM

1. Seating Area
2. Stage
3. Orchestra Pit
4. Control Booth
5. Dressing Rooms
6. Toilet Rooms
7. Stagecraft and Storage
8. Drama Classroom
9. Staff Office
10. Green Room

DESIGN CRITERIA

1. SEATING AREA

a. General

1. Total seating capacity shall be 1/3 of the designed student population or a minimum of 500, whichever is greater.
2. Unobstructed sightlines and audibility are required from all seats.
3. Provide floor space for sound and lighting control board that does not obstruct sightlines of the audience
4. Slope floor as appropriate.
5. Provide for direct access from the audience seating area onto the stage, plus include ADA access directly from the audience without the use of a lift.

b. Lighting

1. Variable house light levels

2. Capability of providing illumination levels for testing and other classroom instruction
3. Easy access to lighting for maintenance
4. House lights should be controllable between the back stage area, sound and lighting control board located in the seating area, and the Control Booth
5. Overhead catwalks concealed form the audience

c. Finishes

1. Acoustically designed for performances anticipated. Acoustical ceiling and wall treatment with a mix of hard surface areas.
2. Carpeted aisles. Polished and sealed concrete for seating areas

2. STAGE

a. General

1. Dressing Rooms, Toilet Rooms, Stagecraft and Storage, and Green Room shall be located directly adjacent to back-stage access.
2. 30'-0" minimum depth and 50'-0" minimum proscenium opening width.
3. Provide a full proscenium curtain, valances, tormenters and back-drop curtains and scenery panels. Allow for arrangement of curtains in different ways.
4. Large access doors for large musical instruments and stagecraft scenes
5. Provide access from the back of the stage to a secure corridor or other route which enables performers to enter the stage without being seen by the audience.

b. Floor Finishes

1. Tongue & groove hardwood - painted black

c. Other

1. Lighting control board
2. Provide a Public Address System independent from the building Public Address
3. Fly lofts are prohibited
4. Design for stage safety netting

3. ORCHESTRA PIT

a. Located and centered in the front of the stage and below sightlines

b. ADA accessible

c. Design with removable pre-fabricated stage-level cover stage extension/thrust

d. Orchestra pit safety net for when the pit is open

4. CONTROL BOOTH

a. The Control Booth houses the projection room and observation deck in the rear of the auditorium space.
b. Control of Lighting and Sound Control
c. Openings facing the stage shall have operable windows
d. Access to catwalks

5. DRESSING ROOMS

a. General
1. One for each sex.
2. Changing area with area for wardrobe rack
3. Minimum 12 LF of standing/stool height counter along one wall with continuous countertop, 2 sinks and lighting, with section for ADA height.
4. Full length mirrors and countertop mirrors with lighting
5. Locate directly adjacent to back-stage access and green room
6. Hard surface flooring

6. TOILET ROOMS

a. One for each sex
b. Single fixture ADA Accessible
c. Locate within, or directly adjacent to, Dressing Rooms

7. STAGECRAFT AND STORAGE

a. Locate adjacent to stage with direct access to back- or side-stage
b. Overhead door for large props.
c. Separate areas for fabrication, assembly, and storage
d. Sealed concrete floor
e. The locations of door openings shall not interfere with performances
f. Properly design balcony storage is acceptable
g. One stainless steel multi-bowl scullery sink for paints and cleanup with plaster trap
h. Storage shelving
i. Fire-rated paint and solvents storage cabinet vented to the exterior.
j. Direct access to an exterior loading area

8. DRAMA CLASSROOM

a. Standard classroom near the performance area
b. Comply with standards for General Classrooms

9. STAFF OFFICE

a. Located near Stage and Prep Rooms with capability of observation for the Stagecraft area.
b. Space for two workstations and file cabinets

c. Hard surface flooring

10. GREEN ROOM

a. Prep area for stage access
b. Open space with areas for furniture
c. 8' markerboard and 6' tackboard
d. May be used as a small seminar/conference room when not used as part of performances
e. Area for TV monitor to watch performances
f. Hard surface flooring

PHYSICAL EDUCATION

SPACE DESCRIPTION

Physical Education spaces are utilized for the delivery of physical education programs and competitive sports. Physical Education includes interior and exterior spaces, playgrounds and play fields. Comply with requirements, recommendations, and dimensions of the Colorado High School Sports Activities Association (CHSSAA).

The physical education area should be organized so that the various parts are in optimum relation to each other and are so located that the noise inherent in physical education activities does not interfere with academic activities within the school.

The gymnasium complex shall have direct access to outside activity areas without crossing vehicular traffic or service drives. Students will normally assemble in the gymnasium complex for class and will move from this location to the exterior for those programs conducted outside.

The gymnasium may be used after hours for organized school and public programs. Informal leagues may use the gym for practice and games. Exterior access for public, after-school access to the gym should be provided without compromising security for the remainder of the building. Locate parking lots for easy access into the Gymnasium Complex.

Play fields should be easily accessed from the Gymnasium Complex by concrete or asphalt paths. Accommodation of students with disabilities and/or limited physical abilities shall be designed into all areas.

A. PHYSICAL EDUCATION

1. Gymnasium Complex

a. Main Gymnasium
b. Auxiliary Gymnasium
c. P.E. Teacher Office
d. Athletic Coaches Office
e. P.E. and Athletic Coaches Toilet Room
f. P.E. Equipment Storage
g. Athletic Equipment Storage
h. Exterior Equipment Storage
i. P.E. Boys Toilet/Locker Room

j. P.E. Girls Toilet Locker Room
k. Athletic Boys Toilet/Locker Room
l. Athletic Girls Toilet/ Locker Room
m. Weight Room
n. Wrestling Room
o. Training Room/Laundry
p. Ticket Booth
q. Concessions Booth
r. Fitness/Aerobics Room

2. **Exterior Courts**
   a. Basketball Courts
   b. Tennis Courts
3. **Athletic Fields**
   a. Football and Track
   b. Baseball
   c. Softball
   d. Soccer
   e. Multi-Use

DESIGN CRITERIA

A. PHYSICAL EDUCATION

1. GYMNASIUM COMPLEX

a. Main Gymnasium

1. Court Striping:
   a. Provide full size regulation main basketball court: Min. court size of 84’ x 50’.
   b. Provide two full size regulation cross courts with backboards.
   c. Regulation Size Volleyball: Provide volleyball in-floor anchors for two cross-court nets and one main-court net
   d. Align courts to allow for telescoping bleacher areas for main court observation
   e. Maintain functional clearances between court sidelines and seating.
   f. Minimum 25 feet clearance to overhead structure
2. Sound Amplification System
3. Design for future traversing wall
4. Finishes
   a. Tongue and groove maple wood flooring. Design floor substrate to accommodate bleacher stacking and rolling area.
   b. Acoustical roof decking and sound-absorbing masonry with high-performance finishes
   c. Protect all accessories and devices from damage
5. Equipment and Accessories:

a. Provide padding at walls behind all basketball goals.
b. Two 8 linear feet marker board without trays – one for each half-court.
c. Provide electrical powered telescoping bleachers to seat 120% of the designed student population.
d. Design for future safety suspension systems for Gymnastics
e. Gym divider curtain.
f. Scoreboard: Provide two scoreboards capable of dual and individual operation with central console locations
g. Locate control table as part of bleacher system with capability of being placed independent of the bleachers
h. Climbing Ropes
i. Wall mounted arm ladder
j. Wall mounted adjustable chinning bar
k. Motorized basketball backstops: minimum of six (6) electrically operated, glass swing-up basketball backboards
l. Batting cages on pulley system with floor protection
m. Wrestling mat hoist

6. Windows
a. High windows for daylighting should be considered. Protect openings and provide appropriate glazing or other transparent or semi-transparent material to eliminate glare and to provide maximum safety.

7. Other
a. Provide 400 square feet of display cases for trophy and award display outside gymnasium at main gym access or in corridors leading to the gymnasium.
i. Five feet (5') high x 16" deep with space above for photos and plaque awards
ii. May be recessed or surface mounted
b. Recessed drinking fountain and bottle filler stations
c. Lights controlled from a keyed switching bank

b. Auxiliary Gymnasium

1. Court Striping:
a. Provide full size regulation main basketball court: Min. court size of 84' x 50'.
b. Provide two partial- size cross courts with backboards.
c. Regulation Size Volleyball: Provide volleyball in-floor anchors for two cross-court nets and one main-court net
d. Gymnastic equipment floor inserts
e. Align courts to allow for bleacher area to observe main court
f. Maintain functional clearances between court sidelines and seating.
g. Minimum 25 feet clearance to overhead structure

2. Sound Amplification System
3. Design for future traversing wall (Max. 8ft. high)
4. Finishes
    a. Tongue and groove maple wood flooring. Design floor substrate to accommodate bleacher stacking and rolling area.
    b. Acoustical roof decking and sound-absorbing masonry with high-performance finishes
    c. Protect all accessories and devices from damage
5. Equipment and Accessories:
    a. Provide padding at walls behind all basketball goals.
    b. Two 8 linear feet marker board without trays – one for each half-court.
    c. Provide electrical power on wall at bleacher area to scorekeepers table and to accommodate motorized bleachers.
    d. Bleachers one side to seat 200.
    e. Design for future safety suspension systems for Gymnastics
    f. Gym divider curtain.
    g. Scoreboard: Provide one scoreboard with infrastructure for a second scoreboard.
    h. Climbing Ropes
    i. Wall mounted arm ladder
    j. Wall mounted adjustable chinning bar
    k. Motorized basketball backstops: two (2) electrically operated, glass swing-up basketball backboards. Side backstops fixed
    l. Wrestling mat hoist
6. Windows
    a. High windows for daylighting should be considered. Protect openings and provide appropriate glazing or other transparent or semi-transparent material to eliminate glare and to provide maximum safety.
7. Other
    a. Recessed drinking fountain and bottle filler stations
    b. Lights controlled from a keyed switching bank

c. P.E. Teacher Office

1. May be combined with the Athletic Coaches Office
2. Provide two offices for the physical education instructor(s). The offices shall be accessible from the gym and should be located near the main gym entrance.
3. Provide a window between the office and the gymnasium of the court area.
4. Locate near entrances to locker areas for observation and monitoring of locker room entrances.
5. Finishes:
    a. Hard surface flooring or sealed concrete flooring and easily cleanable walls
6. Ten full height staff lockers
7. 4’-0” x 6’-0” markerboard and 4’-0” x 4’-0” tackboard

d. Athletic Coaches Office

1. May be combined with the P.E. Teacher Offices
2. Provide two offices for athletic coaches
3. Direct supervision of the locker rooms with convenient access to the main gymnasium and exterior fields
4. Direct access into respective student locker rooms
5. Twenty full height staff lockers
6. Two 4'-0" x 6'-0" markerboards and two 4'-0" x 4'-0" tackboards
7. Finishes:
    a. Hard surface flooring or sealed concrete flooring and easily cleanable walls

e. P.E. and Athletic Coaches Toilet Room

1. Provide two single ADA toilet room with single ADA shower stall accessed directly from toilet room. Floor drain
2. Access directly from P.E. Teachers' Offices and Athletic Coaches Offices and convenient to staff lockers.
3. Finishes:
    a. Sealed concrete floor

f. P.E. Equipment Storage

1. Gym storage for general P.E. equipment
2. Storage shelving (24" deep) along 2 walls in the room.
3. Open floor area should be planned for storage of large equipment.
4. Easy access to outside play areas and gymnasiums.
5. Storage for stacking chairs – may be separate from equipment storage.
6. Finishes:
    a. Sealed concrete floor

g. Athletic Equipment Storage

1. Area for specific athletic equipment storage
2. Area divided by floor-to-ceiling chain link dividers and gates with hasps for padlocks
3. Direct access to building exterior and convenient access to gymnasiums
4. Double doors
5. Finishes:
    a. Sealed concrete floor

h. Exterior Equipment Storage

1. Storage for outdoor P.E. and Athletic equipment
2. Door pair with removable mullion or overhead manual coiling door – Min. 6'-0" w x 7'-0" h opening
3. Open and unobstructed floor area
4. May be attached to the main building or located near outdoor athletic fields, courts, and play areas
5. Locate near the main exterior student access from the Gymnasium to the outdoor activity areas.
6. Level threshold for rolling equipment.
7. If located remotely from the main building, provide general electrical power and data/phone line for security system.

i. P.E. Boys and Girls Toilet/Locker Rooms

1. General
- **a.** Provide separate areas for male and female students.
- **b.** Adjacent to the Athletic Locker Room area.
- **c.** Configure the entrances for visual privacy when doors are open. Provide doors to each entrance.

2. Finishes:
- **a.** Flooring: Sealed concrete
- **b.** Walls: Concrete masonry block with high performance coating. Ceramic tile at wet areas.
- **c.** Ceiling: Gypsum board ceiling, 10'-0" minimum height.

3. Locker Areas:
- **a.** Locker Areas: Each locker area should be one large room for ease of visual supervision
  - i. Arrange lockers in a manner to avoid visual blind spots.
  - ii. P.E. Lockers:
    1. Combination of two-tier 15"w x 15"d x 36"h vented lockers and four-tier 12"w x 15"d x 18"h vented
    2. 33% of designed student population
    3. Intersperse lockers for ease of access
  - iii. Free-standing bench seating or seating provided on locker bases designed as seating. Include accessible seating and lockers.
  - iv. Accessories:
    1. Wall mounted electric hand dryers with adjustable nozzles for use as hair dryers
    2. Four 2'-6" w x 4'-0" h non-breakable wall mounted mirrors with stainless steel frames
- **b.** Drinking fountains with bottle fillers
- **c.** Flush-mounted hose bib

4. Toilet Rooms
- **a.** May be shared with the Athletic Locker Room.
- **b.** For use by students only (no public use)
- **c.** Multiple-occupant, ADA accessible, with toilets, urinals as appropriate and wall-hung lavatories.
- **d.** Floor drain and flush-mounted hose bib.
- **e.** Sealed concrete floor

j. Athletic Boys and Girls Toilet/Locker Room

1. General
- **a.** Provide separate Locker/Shower/Toilet areas for male and female students.
- **b.** Adjacent to the P.E. Locker Rooms
- **c.** Configure the entrances for visual privacy when doors are open. Provide doors to each entrance.

2. Finishes:

a. Flooring: Sealed concrete
b. Walls: Concrete masonry block with high performance coating. Ceramic tile at wet areas.
c. Ceiling: Gypsum board ceiling, 10'-0" minimum height.

3. Locker Areas:
a. Locker Areas: Each locker area should be one large room for ease of visual supervision
i. Arrange lockers in a manner to avoid visual blind spots.
ii. Athletic Lockers
1. Two-tier 24"w x 18"d x 36"h vented lockers
2. 15% of designed student population
3. Intersperse lockers for ease of access
iii. Football Lockers
1. 100 full-height 24"w x 18"d x 72"h vented lockers
iv. Intersperse lockers for ease of access
v. Free-standing bench seating or seating provided on locker bases designed as seating. Include accessible seating and lockers.
vi. Accessories:
3. Wall mounted electric hand dryers with adjustable nozzles for use as hair dryers
4. Four 2'-6" w x 4'-0" h non-breakable wall mounted mirrors with stainless steel frames
b. Drinking fountains with bottle fillers
c. Flush-mounted hose bib

4. Showers
a. Located in the Locker Area and adjacent to the Toilet Room.
b. Provide a visual barrier wall to separate the shower areas from the locker room.
c. 10 single, private shower stalls including shower rod and curtain
d. Provide one ADA accessible shower stall.
e. Preset tempered water supply to showers.
f. Floor drain outside showers. Sealed concrete floors
g. Screened Changing Area

5. Toilet Rooms
a. For use by athletic participants only (no public use)
b. Multiple-occupant, ADA accessible, with toilets, urinals as appropriate and wall-hung lavatories.
c. Floor drain and flush-mounted hose bib.
d. Sealed concrete floor

k. Weight Room
1. Adjacent and conveniently accessible to the Main Gymnasium, Wrestling, and Fitness/Aerobics Room
2. Interlocking rubber flooring on sealed concrete
3. Floor-to-ceiling mirrors on one wall
4. CMU walls

5. Minimum ceiling height of 10’-0”
6. Protective walls mats as needed
7. Electrical: Recessed power and data receptacles
8. Drinking fountain with bottle filler
9. Integral sound system

l. Wrestling Room

1. Adjacent and conveniently accessible to the Main Gymnasium, Weight Room, and Fitness/Aerobics Room
2. Moveable mats on sealed concrete floor
3. CMU walls
4. Protective mats on walls adjacent to wrestling mats
5. Drinking fountain with bottle filler in recessed area or available directly outside space
6. Recessed power and data outlets
7. Integral sound system
8. Minimum ceiling height of 10’-0”

m. Training Room/Laundry

1. Area for therapy equipment and common to both athletic locker rooms. Dry and wet areas.
2. Hard surface flooring or sealed concrete
3. Open floor area with floor drain
4. Plumbing for therapy whirlpools, sink and ice machine. All therapy equipment placed against walls
5. Cabinets and Casework
    a. Eight linear feet of base with countertop and overhead wall cabinets with single bowl stainless steel sink with goose neck faucet
    b. First Aid supplies storage
    c. Lockable doors and drawers
6. Area for commercial laundry equipment for laundering of towels

n. Ticket Booth

1. Preferred single location to be used for both Athletic events and Auditorium performances.
2. Centrally or conveniently located for after-school events
3. May be part of the Student Store

o. Concessions Booth

1. May be part of the Student Store
    a. General
        i. Locate directly off Commons Area in a main corridor near afterschool programs and activities.
        ii. May be combined with Gymnasium and Auditorium concessions and ticket sales.
        iii. Standard door access from area being served.
        iv. No food prep. Pre-packaged food only.
    b. Specialties and Equipment
        i. Motorized overhead solid countertop door

ii. Reach-in refrigerator and freezer
iii. Handwashing sink
iv. Data drops and power at points of sale
v. Overhead menu and product board
vi. General power for countertop equipment
vii. Cabinetry and Casework
1. Provide 8 linear feet of base cabinet (30" deep) with countertop at 34" height.
2. Transaction countertop with display area
3. Each cabinet door must be equipped with keyed lock.
4. Open shelving for dry goods storage

c. Finishes:
i. Floor finishes: Hard surface flooring or sealed concrete.
ii. Walls: Easily cleanable

p. Fitness/Aerobics Room

1. General
a. Room for aerobics and other physical fitness programs
b. Flooring: Wood flooring
c. Interior window(s) providing visual supervision from the Teacher's Office
d. Minimum 12'-0" ceiling height
e. Near to and accessible from the Gymnasium
f. Equipment and Accessories:
i. 8'-0" h x 12'-0"w non-breakable wall mounted mirror or series of mirrors.
g. Double doors to facilitate movement of large pieces of equipment and apparatus.

2. EXTERIOR COURTS

a. Basketball Courts

1. General Requirements:
a. Provide 3 full size asphalt basketball courts.
b. Hard surface play areas are used for physical education classes as well as being available for free play during lunch and free periods.
c. Accommodation of students with disabilities and/or limited physical ability shall be designed into all areas.
d. These areas may also be used before and after school as a gathering place for students. Exterior areas are available for use by the general public during non-school hours
e. Locate away from baseball and softball areas

b. Tennis Courts

1. General Requirements

a. Provide a single grouping of 4 post-tensioned concrete tennis courts
b. North-south orientation
c. Posts with concealed take-up mechanism. Fabric nets
d. Completely fenced with access gates and one larger service gate. 12'-0" high fencing with vinyl fabric wins screen in high wind areas.
e. Locate away from baseball and softball areas
f. Area for small bleacher section (20'x10')
g. Area for benches and shade structure

3. ATHLETIC FIELDS

a. General

1. Locate physical education and athletic fields to be directly accessible to both the gymnasium and student parking areas.
2. Design to minimize errant balls landing on Exterior Courts, neighboring property, parking lots, building roofs and glazed areas.
3. Group backstops for ease in supervision.
4. ADA Accessible
5. Comply with design guidelines from the National Federation of State High School Associations and Colorado High School Activities Associations (CHSAA)
6. One playfield, football or multi-use, should incorporate artificial turf

b. Football and Track

1. Football Field
a. Provide one football field
b. Preferred orientation is north-south
c. Striped for both football and soccer
d. Football/soccer goal combination posts only
e. Scoreboard
f. Concrete paved areas for fixed bleachers to accommodate the designed capacity of the school
g. Provide empty electrical conduit for future field lighting

2. Running Track
a. Four Hundred meter layout with minimum of 6 lanes based on site area available. 8 lanes at the straight sprint section
b. All-weather track surface with concrete curbs and scuppers
c. Post-tensioned concrete

3. Field Events
a. Pole Vault: Paved runway with fiberglass planting pit with removable cover. Asphalt pad to receive foam "landing pit".
b. Long/Triple Jump: Two or one end-to-end asphalt runway with edged landing strip and take-off boards.

c. High Jump: Area specifically marked with radius approach pad.
d. Discus: Locate outside of and adjacent to track area. Sixty degree throwing sector with concrete throwing pad. Provide safety screen.
e. Shot Put: Locate outside of and adjacent to track area. Square concrete pad, safety area and screen, with fiberglass stop board.

c. Baseball

1. One grass infield with skinned base paths
2. Recommended orientation of northeast or northwest axis with home plate in SE or SW corner
3. 325 feet foul lines
4. 375 feet center field
5. Backstop: 30'-0" high x 20'-0" wide with 20'-0" x 10'– 0' high wings, located 45'-0" from home plate. Power outlet for pitching machine. Wing extensions: 100' long x 10' high
6. Outfield perimeter fence 8'-0" high with top protection pad
7. Foul line poles and fence gates are required for players and mowers.
8. Scoreboard: Rough-in conduit only
9. Covered grade level dugouts: 8'w x 40'l. Chain link construction with full-height foul ball fence in front of dugout. Include electrical power.
10. Two lane chain link batting and pitching cages with power.
11. Concrete pads for future fixed bleachers.

d. Softball

1. One girl's fast pitch field
2. Skinned infield
3. Backstop: 20'-0" wide x 18'-0" high with 10'-0" wings, located 20'-0" from home plate
4. 200'-0" outfield fence arc
5. Scoreboard: Rough-in conduit only
6. Covered grade level dugouts: 8'w x 40'l. Chain link construction with full-height foul ball fence in front of dugout. Include electrical power.
7. Concrete pads for future fixed bleachers

e. Soccer

1. One regulation size soccer field
2. Preferred orientation: North-South
3. Portable soccer goals
4. Scoreboard: Rough-in conduit only

f. Multi-Use

1. If there is sufficient site area, provide one additional regulation soccer field. Size and proportion that site can accommodate but minimum size of 150'-0" x 200'-0".

2. Portable soccer goals

EXTERIOR BUILDINGS

SPACE DESCRIPTION

Exterior buildings support other site programs such as Athletics and Site Maintenance Equipment.

A. EXTERIOR BUILDINGS

1. **Press Box, Concessions/Tickets**
2. **Athletic Storage**
3. **Site Maintenance Equipment Storage**

DESIGN CRITERIA

Locate the various support spaces at appropriate locations and adjacencies within the building for efficient maintenance and utility usage.

1. **PRESS BOX, CONCESSIONS/TICKETS**
   - **a.** Shared facility located between baseball and softball fields
   - **b.** Two level design with security shutters and exterior doors
   - **c.** Press Area (Upper Level):
     1. Public Address System console area
     2. Scoreboard controls
     3. Exterior access
     4. Open air opening with security shutter
     5. Power and data
   - **d.** Concessions/Tickets
     1. Open air transaction area with security shutter
     2. May consider separate ticket transaction opening
     3. Open Shelving for dry goods storage
     4. Area for ice chests
     5. Counter area for small appliances
     6. No food preparation, pre-prepared packaged food only
     7. Separate lockable access door
     8. Power and data
   - **e.** Sheltered Area for Portable Toilets
     1. Designated area with semi-private screens and concrete slab for placement of Portable Toilets
     2. Locate for ease of access by portable toilet vendors

2. **ATHLETIC STORAGE**
   - **a.** Locate one building near football field/track and one building near baseball/softball
   - **b.** CMU Construction
   - **c.** Manual 8’w x 7’h overhead coiling door with one standard access door
   - **d.** Electrical for general power and light

3. **SITE MAINTENANCE EQUIPMENT STORAGE**
   - **a.** Outdoor Storage is required for the storage of fuel powered maintenance equipment such as lawn mowers, snow blowers, etc.
   - **b.** The area may be in an independent building or part of the primary school building.
   - **c.** The Outdoor Facility Storage area shall open only to the outdoors and must be separated from the remainder of the building by a two-hour fire separation**.**
   - **d.** Provide a double door opening to accommodate the movement of riding mowers, etc.
   - **e.** Door threshold should be level.
   - **f.** Locate equipment storage with vehicle access from service drive or other truck accessible area.

SUPPORT AREAS

SPACE DESCRIPTION

Support areas are those spaces which are required for the building to function properly. They provide for circulation, physical comfort and provide the necessary spaces for maintenance and operations.

A. SUPPORT AREAS

1. **Facility Maintenance Center**
   - **a.** Facility Manager's Office
   - **b.** Toilet Room /Locker Area
   - **c.** Custodial Staff Meeting/Break Room
   - **d.** Chemical and Supply Storage
   - **e.** Recycling/Trash/Receiving/Dock
   - **f.** Laundry Room
   - **g.** Custodial Closets and Storage
2. **Utilities and Infrastructure**
   - **a.** MDF Room
   - **b.** IDF Rooms
   - **c.** Mechanical Room
   - **d.** Main Electrical Room
   - **e.** Electrical Closets
3. **Corridors and Circulation**
4. **Student, Staff, and Public Toilets**
   - **a.** Toilet Rooms

DESIGN CRITERIA

Locate the various support spaces at appropriate locations and adjacencies within the building for efficient maintenance and utility usage.

1. **Facility Maintenance Center**
   - **a. Facility Manager's Office**
     - **1.** General
       - i. The Facility Manager's Office should be located near the primary service entrance of the building.

ii. The office will contain the building security control panel and the Facility Manager must be able to enter the building and make his way to the office in sufficient time to disarm the security system before the alarm is initiated.
iii. Where compatible with other building planning considerations, the Facility Manager's office should be centrally located in the building.

2. Furniture and Accessories
i. Area for two workstations
ii. Shelving and filing cabinets
iii. Areas for small conference table for seating of six staff

b. Toilet Room / Locker Area
1. Single ADA Toilet Room
2. Area for 5 full height lockers

c. Custodial Staff Meeting/Break Room
1. Area for up to 10 staff members to meet.
2. 8 LF Countertop with base and overhead cabinets with sink and area for refrigerator.

d. Chemical and Supply Storage
1. The storage room should be located for direct access to the receiving room with indirect access to the exterior of the building.
2. Provide a minimum 42-inch wide single door or double 36-inch doors
3. Provide 24" deep shelving to 84" A.F.F. multiple shelving units to store cleaning and other supplies
4. Open floor area(s) for larger cleaning equipment storage
5. Floor drain
6. Mop sink

e. Recycling/Trash/Receiving/Dock
1. For the collection of materials scheduled for recycling and for materials designated to be taken to a landfill. Temporary holding space until recycling and trash can be moved outdoors.
2. Provide outdoor enclosure to screen recycle/trash area from view. Gates are prohibited.
3. Receiving:
i. The receiving room should be located for direct access to the primary building service access with direct access to the exterior of the building.
ii. Provide a minimum 42-inch wide door access from the exterior of the building and between the receiving room and a primary building corridor. Double 36-inch doors are acceptable.
iii. The receiving room should have easy access to a building elevator, if provided.

f. Laundry Room
1. Area for general custodial laundering of cleaning materials
2. Residential type appliances

g. Custodial Closets and Storage
1. Custodial closets shall be located at convenient points throughout the building for efficient cleaning operations without moving materials and equipment over

long distances. Custodial closets should be located as near as possible to areas requiring frequent cleaning such as student toilet rooms.

2. Closets must contain:
    i. A 3 feet square floor-mounted mop sink with an impervious wall treatment surrounding.
    ii. Mop rack and shelf
    iii. Space for storage of cleaning materials and supplies in steel shelving units.
        1. Minimum locations (near or within):
            a. Gymnasium
            b. Kitchen
            c. Cafeteria
            d. Instructional Areas

2. Utilities And Infrastructure

a. General

1. Provide adequate floor space for both mechanical and electrical rooms. Rooms must be of adequate size to facilitate maintenance of equipment and movement of personnel during normal maintenance procedures. Consider the requirement to pull heating/cooling coils and/or fan shafts from equipment.
2. Floors should be constructed at grade level. The main mechanical rooms should be accessible by driveway for trucks delivering supplies and equipment.
3. Concrete floor finish. Painted walls are not required. Exposed overhead structure is preferred.
4. Direct exterior access from main mechanical rooms should be through a set of double doors. The door opening size must permit passage of the largest piece of equipment and equipment maintenance items. Building access must also be provided from an internal corridor.
5. Exterior acoustically-attenuated enclosures for chiller units and generator
6. Acoustical isolation from adjacent rooms and areas is a critical consideration in the location and design of mechanical and electrical rooms.
7. All building systems should be concealed in public areas, classrooms and finished spaces.
8. Vertical ladders with safety accessories and hoist must provide access to roof equipment. Avoid ships ladders/alternating stairs for roof access.

3. Corridors And Circulation

a. General

1. Design and material selections should provide corridors that are durable, easily maintainable, attractive and non-institutional in appearance. The corridor layout should provide direct, simple and logical pathways throughout the building.
2. Design corridor systems to allow for direct visual security monitoring with minimal cameras. Within the corridor system, provide lockable security separations to isolate building wings and other areas that may be used after hours by the public such as the gymnasium, cafeteria, music room, and library.

3. For security purposes, provide swinging separation doors with magnetic hold-open devices if doors also serve as fire doors or manual hold-open devices if doors are not fire rated. Coiling or folding corridor security gates are prohibited.
4. Utilize widened corridor areas for extension of teaching and study space.
5. Corridor view windows into classrooms are not recommended for security reasons but door sidelites may be used. Corridor transom windows with sill height of 7'-4" above finished floor are acceptable.
6. Minimum Corridor width is 8 ft., unless otherwise approved. Main circulation corridors shall be a minimum of 16 ft. wide.
7. Vestibules: Air lock type vestibules are required at high use building entrances. Walk off carpeting in vestibules and mats at corridors directly inside the vestibules.
8. Finishes
   i. Sealed and polished concrete or hard surface flooring. Carpeting at selected corridors within classroom suites.
   ii. Acoustical treatment may be necessary to minimize reverberation. Minimum ceiling height for corridors is 10'-0" A.F.F.
9. Accessories and Casework:
   i. Academic Lockers
      a. Preferred on one side of corridors only or grouped in locker vestibules or areas.
   ii. General-purpose lighted display cases in the main lobby, art area and near the gymnasium
   iii. Approximately 250 square feet of tack boards should be provided at three or four prominent locations in the main corridor.
   iv. Provide two rows of tack strips on selected corridor walls. Mount tack strips at approximately 54" and 72" above the floor.
10. Comply with district camera and security standards for quantity and location of cameras and general layout and design of corridors

4. Student, Staff, and Public Toilets

a. Space Description

1. Core Area Public Toilet Rooms

i. Locate near the gymnasium, cafeteria and administration/counseling areas.
ii. All walls shall be ceramic tile or painted concrete block.
iii. Floors are required to be porcelain ceramic tile with floor drains.
iv. Provide hose bibs
v. Provide ADA accessible toilet rooms. Hand washing areas shall be a part of, and within, each toilet room.

2. Instructional Area Student Toilet Rooms

i. The design should be configured with an entrance passage without door, configured for visual privacy, rather than an entrance door.
ii. Provide acoustical separation from the instructional suite.

iii. Walls to 84 inches high behind all plumbing fixtures shall be painted concrete block or ceramic tile.
iv. Floors are required to be porcelain ceramic tile with floor drains.
v. Provide hose bibs.
vi. Provide ADA accessible toilet rooms. Hand washing areas shall be a part of, and within, each toilet room.

3. Staff Toilet Rooms
i. Distribute staff toilet rooms throughout the building and easily accessible from instructional areas.
ii. Walls shall be ceramic tile or painted block.
iii. Floors are to be of porcelain ceramic tile with floor drains.
iv. Provide hose bib.

4. Drinking Fountains
i. Quantities should be determined by building code requirements.
ii. Locate at least one electric water cooler near gymnasium, cafeteria and administration/counseling areas. Locate instructional area drinking fountains near student toilet rooms.
iii. Drinking fountains which are located in corridors or other areas of high pedestrian activity shall be mounted in an ADA compliant recess. Flooring to be hard surface flooring at drinking fountains.
iv. Provide bottle filler stations near the gymnasium and cafeteria and at other located as noted in this Ed Spec.

SITE DEVELOPMENT STANDARDS

DESIGN CRITERIA:

Preferable site components include land that is almost flat but with positive drainage, a large amount of non-major highway road frontage or corner site, and a location which abuts a neighborhood park. The site should be close to utilities and centered within the District boundary area and shall not be in a flood plain or over a mining area. The geology and soils must be acceptable to the District Facilities Management Department and to the office of the State Geologist.

GENERAL SITE REQUIREMENTS

A. Optimum Site Size:
1. Suburban Site: Fifty (50) useable acres.

B. Sustainability:
1. In as much as it is feasible, site development should incorporate sustainable design concepts and techniques.
2. Utilize passive solar design elements, such as minimizing north side entrances and large glass expanses, and incorporate shading features into the building configuration.

C. Joint-Use:
1. Selection of sites adjacent to the following features should be considered:

a. Public open space
b. Public parks
c. Public facilities, such as libraries or recreational facilities
d. Community or neighborhood focal points

D. The following land areas should not be included in the calculation of usable acreage:

1. Drainage ways, detention ponds, or wetlands
2. Slopes greater than 5 percent
3. Intrusive easements or rights-of-way
4. Space requirements may be adjusted based on an analysis of joint-use facilities, parking, and play fields.

E. General Site Requirements:

1. Develop site contours such that building exits are on grade.
2. All site amenities, including but not limited to, athletic fields, parking lots, pedestrian walks, and building entries shall have barrier-free accessibility in compliance with the ADA.
3. Minimize concealed exterior building areas with limited public view to enhance visual security.
4. Design buildings and grounds to provide maximum safety and visual observation for all site components.
5. Design the site as an amenity to the surrounding neighborhood.
6. Develop a site plan that minimizes the impact of the overall site. Minimize cut and fill work, if possible.
7. Develop the overall site to promote positive drainage
8. Provide off street loading and circulation space for buses separate from the auto loop.
9. Provide bicycle parking and automobile parking spaces with vehicle circulation for staff, students, and visitors. Provide accessible parking complying with current accessibility codes. Parking lots shall be designed to avoid traffic conflicts with pedestrians, bicycles and buses.
10. Provide service and delivery drives with turnaround space to serve the kitchen, custodial facilities, and play fields. A trash area to house trash containers and recycled material containers is required near the kitchen.
11. Trash compactor trucks and recycled material trucks driving up to the containers require a curb-less concrete pad with minimum elevation change. Minimize traffic conflicts between delivery vehicles and pedestrians, bicycles, buses and autos.
12. Design convenient paths and sidewalks from all building exits to fire refuge areas, parking lots, bicycle enclosures, and service areas and play pads. Avoid conflicts between vehicles and bicycles.

F. Site Improvements:

1. When required by governing agencies, storm drainage and erosion studies are required. Protect headwalls by appropriate plantings or other safety devices.
2. Water discharge over sidewalks is prohibited. Provide necessary site drainage improvements as required by the design concept. Where quantities of water are discharged to earth surfaces, provide erosion control structures. Direct water to storm drains where possible.
3. Orient and design playgrounds, parking lots, sidewalks, service drives, etc., to easily shed water and to not accumulate winter ice. Provide low areas for snow piles that will

include an area drain. Avoid snow pile areas that are uphill from walks and parking areas.

4. Avoid retaining walls or other site features which would complicate maintenance and/or create fall hazards. Where retaining walls cannot be avoided, tops of walls must be fenced.
5. Avoid service and delivery conflict with playgrounds and playground access from building.
6. An automatic underground irrigation system is required for turf grass play fields, lawns and planted areas.
7. Low maintenance landscape materials with simple, non-extensive, and non-complicated designs. Drought resistant plant materials are encouraged. Plant materials and site furniture should be able to withstand normal site use by students and located as appropriate for the design intent.
8. Vandal resistant building and site materials are required.
9. Provide chain link fencing.
10. The design should incorporate into the site plan a flagpole, benches for informal seating in patios and at main entrances, and fire and weather resistant fixed trash receptacles at main building entrances, patios and gathering areas.
11. Provide sturdy chain link, masonry or concrete enclosures for meters, transformers, etc. Provide chain link tops for all utility enclosures.
12. Provide an exterior area for a diesel generator.
13. Exterior building identification, street address, and direction and traffic control signage is required.
14. Design parking and drive areas to allow for stockpiling of snow during snow plowing efforts.

G. Vehicle Circulation and Parking:

1. Buses:
    - **a.** Minimize pedestrian, bicycle, and vehicle intersections
    - **b.** Separate bus loading/unloading area from parent/visitor loading/unloading.
    - **c.** Bus vehicle drop-off/pick-up circulation shall be counter-clockwise in direction.
    - **d.** Isolate service vehicle access and parking from student, parent, and bus traffic and parking.
    - **e.** Paved walks and pathways are required to connect all building exits with exterior fire refuge areas, parking lots, service areas, game courts, site pedestrian access points, bicycle enclosures, if provided, and along street frontages.
    - **f.** Pedestrian access from the Cafeteria/Commons and Gymnasium to outdoor activity areas should not cross vehicle areas, service areas, or mechanical rooms.
2. Automobiles
    - **a.** Unless otherwise directed by the District Project Manager, provide automobile parking spaces and vehicle circulation as required by the shape of the site, main entrance location, side entrances, and after-hour entrances. Provide ADA spaces.
    - **b.** Emergency Vehicle
        1. Coordinate with the local Fire Prevention Bureau and other authorities having jurisdiction for locations and types of access drives required.
    - **c.** Vehicle parking

1. Preferred configuration: 90 deg.
2. Visitor Spaces: Minimum of 20 spaces.
3. Student Parking: Minimum of 50% of the designed student population.
4. Staff Parking: Min of 100 spaces. Separate from student parking.
5. Locate parking for convenience to the main entrance and playfields.

3. Bicycle pad and enclosure

a. Paved, fenced enclosure with bike racks for fifty (50) bicycles.

b. Locate to maximize visual supervision and safety.

H. Temporary Classroom/Expansion Areas:

1. General Requirements:

a. Design for future expansion of the facility.

1. Design for 20% of additional student enrollment

b. Temporary Classroom Modulars

1. Design exterior site area(s) for possible future standard-sized modular classroom buildings and cottages.
2. Plan for one (1) temporary classroom for each 200 students of permanent design capacity.
3. Rough-in conduits and utilities to five feet outside building
4. Locate to facilitate transport and placement with minimal site disruption.
5. Locate to minimize distances to main building and comply with minimum travel distances to interior toilet rooms.
6. Design the area to minimize visual impact on adjacent properties.
7. Provide provisions for future underground utilities that would extend from the main school building to the classroom buildings.