

OHIO SCHOOL  
FACILITIES  
COMMISSION

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2010  
OHIO  
SCHOOL  
DESIGN  
MANUAL

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The Ohio School Facilities Commission is pleased to announce the 2010 Ohio School Design Manual (OSDM) update.

Each year the Commission revises the OSDM with support and valuable input from the design and construction community, school districts, state agencies and other interested parties. The result is a dynamic document that reinforces our commitment to high quality school facilities while maintaining flexibility and local control.

The manual is a cornerstone of the Commission's efforts to promote the 21<sup>st</sup> century learning environment, providing guidelines that serve the diverse needs of local school communities and their students. For our Design Professionals, the OSDM provides a wide selection of high quality materials and systems to serve the districts over the entire lifecycle of the building. This approach ensures that both the district and the taxpayers of Ohio achieve the maximum benefit from their investment.

Ohio continues to build on past design achievements that meet the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) for Schools. The LEED system is the national benchmark for high performance green buildings.

The OSFC acknowledges the difficult design and construction tasks that ultimately result in the buildings so critical to our Ohio communities and the new educational goals set by Governor Strickland. There is a necessary balance measured between the complexity and cost of 21<sup>st</sup> century structures and the sustainability and maintenance requirements to be born by local taxpayers for decades to come. The OSFC will be guided by best practices, mindful that what we build today must last.

We look forward to working with you to design and build exciting educational environments for Ohio school students.

Sincerely,

Ohio School Facilities Commission

Richard C. Murray  
Executive Director

## FOREWORD

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# OHIO SCHOOL DESIGN MANUAL

## Ohio School Facilities Commission

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- Clinical Health Care Services - 17
  - Training Restroom / Laundry Room
- Cosmetology - 20
  - Dispensary / Laundry Room / Facial Room / Manicure Room / Customer Toilet
- Criminal Justice - 14
  - Weight Room / Interrogation Room
- Culinary and Food Service Operations - 26
  - Restaurant / Dry Storage
- Dental Assistant - 29
  - X-Ray Room / Darkroom
- Diagnostic Pathway - 32
  - Exam Room
- Fire Fighter Training - 34
  - Weight Room
- Media Arts - 36
  - Media Arts Control Room/Edit / Vestibule
- Nurse Assisting - 17
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- Optometric Occupations - 39
  - Exam Room
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  - Training Restroom / Laundry Room
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- Practice Room
- Private Security – 14
- Weight Room / Interrogation Room
- Surgical Technology - 46
- Operating Room / Instrument Room / Scrub Room
- CT-P4-2 Related Classroom
- CT-P4-3 Office
- CT-P4-4 Storage Area
- CT-P4-5 Changing Room

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### **Program Type 5 – Table of Contents**

Spatial Relationship Diagram

Example

- CT-P5-1 Lab
  - Agribusiness and Production Systems - 8
  - Auto Specialization - 9
  - Brick, Block, and Cement Masonry - 10
  - Building and Property Maintenance - 11
  - Building Technology - 11
  - Custodial Services - 12
  - Electrical Trades - 13
  - Environmental Controls Technologies - 14
  - Heavy Equipment (Construction) - 15
  - Integrated Systems Technology - 16
  - Interior Design and Application - 17
  - Manufacturing Design and Development - 18
  - Manufacturing Operations - 18
  - Natural Resource Management - 19
  - Plumbing and Pipefitting - 20
  - Power Equipment Technology - 21
  - Power Transmission - 22
  - Procurement, Acquisition, Logistics, and Supply Chain Management - 7
  - Welding and Cutting - 23
- CT-P5-2 Related Classroom
- CT-P5-3 Office
- CT-P5-4 Storage Area
- CT-P5-5 Changing Room
- CT-P5-6 Tool Crib
- CT-P5-7 Reference Room
- CT-P5-8 Toilet Room

6316

### **Program Type 6 – Table of Contents**

Spatial Relationship Diagram

Example

- CT-P6-1 Lab
  - Agriculture/Industrial Equipment - 7
    - Engine Storage / Flammable Material Storage
  - Auto Collision Repair - 10
    - Auto Parts Storage
  - Auto Technology - 12
    - Engine Storage / Machine Room / Flammable Material Storage
  - Carpentry - 16
    - Finishing Room / Material Storage

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- Construction (2 clusters) - 19
  - Design/Build / Management / CAD Room
- Engineering Technology – 21
  - CAD Room
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  - Freezer / Cooler / Retail
- Horticulture - 27
  - Retail
- Medium/Heavy Truck Technician - 29
  - Engine Storage / Flammable Material Storage / Machine Room
- Precision Machining - 33
  - CNC Room / Inspection Room
- Wood Product Technologies - 36
  - Finishing Room / Material Storage
- CT-P6-2 Related Classroom
- CT-P6-3 Office
- CT-P6-4 Storage Area
- CT-P6-5 Changing Room
- CT-P6-6 Tool Crib
- CT-P6-7 Reference Room
- CT-P6-8 Toilet Room

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### **Program Type 7 – Table of Contents**

Spatial Relationship Diagram

Example

CT-P7-1 Lab

- Animal Science and Management – Equine - 11

- Stables

- Aviation Maintenance - 7

- Cleaning Room / Parts Storage / Hazardous Material Storage

CT-P7-2 Related Classroom

CT-P7-3 Office

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CT-P7-6 Tool Crib

CT-P7-7 Reference Room

CT-P7-8 Toilet Room

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<b>7100</b>	<b><i>Daylighting Considerations</i></b>
	<b><i>7100-1 Consider Human Factors</i></b>
	<b><i>7100-3 Consider the Energy Ramifications</i></b>
	<b><i>7100-9 Account for Site Constraints and Benefits</i></b>
	<b><i>7100-9 Select Well-Integrated Daylighting Strategies</i></b>
	<b><i>7100-14 Optimize the Most Appropriate Daylighting Strategies</i></b>
	<b><i>7100-31 Accurately Simulate Daylighting Performance</i></b>
	<b><i>7100-33 Verify and Modify Your Design Process</i></b>
<b>7200</b>	Green Spec – Energy Efficient Plug Loads
	7200-1 Commercial Food Service Equipment
	7200-2 Cabinets
	7200-3 Kitchen Ventilation Hood
	7200-4 Ice Machines
	7200-5 Computers and Servers
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	7200-9 Screens in Daylit Spaces
	7200-10 Digital Video Projector
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8112	Metal Panel On Concrete Masonry Wall
8113	Plant-Precast Concrete Insulated Sandwich Wall
8114	Metal Panel on Metal Framing
8115	Metal Panel on Metal Framing
8116	Exterior Wall/Roof Closure

#### Roofs

8120	Shingle Roof
8121	Shingle Roof System
8122	Metal Roof with Rigid Insulation
8123	Metal Roof with Rigid Insulation
8124	Built-up Roof
8125	Membrane Roof
8126	Recommended Roof Ridge
8127	Exterior Wall System
8128	Recommended Wall-Low Roof

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#### Structural

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8220	Design Criteria/Evaluation

#### Plumbing

8310	Design Criteria
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#### HVAC

8410	Systems Evaluation
8420	Design Criteria
8430	Systems Description

#### Technology

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#### Electrical

8600	Systems
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	<u>Plumbing</u>
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10010	Color Materials
10020	Loose Furnishings
10030	Food Service Equipment

### Chapter 10: Miscellaneous (Career-Technical)

10100	Loose Furnishings
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<b>PURPOSE</b>	The purpose of this Chapter is to provide the school district and the Design Professional with the guidelines and relationships for the Middle School spaces identified in Chapter 2: Bracketing.
<b>INTRODUCTION</b>	<p>This Chapter begins with an overall building diagram showing how the various areas of a school could be arranged. The diagram is meant only to demonstrate the relationships between various parts of the building.</p> <p>Along with the overall building diagram, there are various program area diagrams throughout this chapter which demonstrate how specific spaces may relate to each other within a particular program area.</p>
<b>NO SMOKING SIGNS</b>	As required by the Ohio Revised Code, post “No Smoking” signs at every entrance door into the building. If a door is for exit only, there is no need for a sign. Post the signs on entrance glass or other appropriate surface. Signs shall contain a telephone number for reporting violations. (866/559-6446)
<b>DIAGRAM</b>	Diagrams of the space have been developed to show how some of the features and loose furnishings may be organized. The space is not required to be designed in the configuration shown.
<b>PROGRAM ACTIVITIES</b>	Program activities indicate the type of activities that may occur in the space. These activities will vary from school district to school district depending on the educational program.
<b>SPATIAL RELATIONSHIPS</b>	Relationships of a particular room to other spaces and activities have been identified to assist the Design Professional in the design of the facility.
<b>ENVIRONMENTAL CONSIDERATIONS</b>	Environmental considerations are items that may affect the educational program. They are the basis of some the requirements of Finishes, Features, Plumbing, HVAC, Electrical, and Technology. 5% of floor area for natural light opening is a minimum and is considered to be the masonry or rough opening.
<b>FINISHES</b>	The finishes stated for the spaces have been developed based on the function of the room. The spaces adjacent to the room or a building system may change the finishes stated. For example, it may be necessary to change a gypsum wallboard partition to a concrete masonry wall as a result of the structural system.
<b>OPERABLE WINDOWS</b>	<b><i>Operable windows are optional in exterior window fenestration.</i></b>

## INTRODUCTION

## CHAPTER 5: MIDDLE SCHOOL

### LOOSE FURNISHINGS

Loose furnishings are to be funded by the Ohio School Facilities Commission. The loose furnishings requirements are to be coordinated with the district's educational program. As an example, some spaces may require tables with student chairs and other spaces may require student desks with chairs.

- \* The intent of the loose furnishings shown on the space plates is not necessarily to be all-inclusive of furniture options or mandate items which may not be needed in a particular district, but rather to provide a general concept of how a particular space could be laid out. Some items listed as loose furnishings could be provided as fixed casework and items listed as fixed casework, if appropriate, could be provided as loose furnishings depending on the building design and types of technology used. Construction and loose furnishings budgets should be coordinated appropriately.

### FEATURES

Features identified on the space plates are recommended for these rooms. These features include Fixed Items, Plumbing, Heating, Ventilating and Air Conditioning, Electrical, and Technology systems as well as Miscellaneous Items. Exact sizes of items may need to be modified slightly to interface with the exact size and proportions of the actual space.

Casework and Visual Display Boards should reflect the needs of the district's educational program. The intent of this list is not to mandate casework or visual display boards that may not be needed by a particular district, but rather to be used as a guideline for items that are generally used in this type of space. Some items listed as "fixed casework" could also be provided by mobile casework or loose furnishings if appropriate. Construction and loose furnishings budgets should then be adjusted appropriately.

### AREA

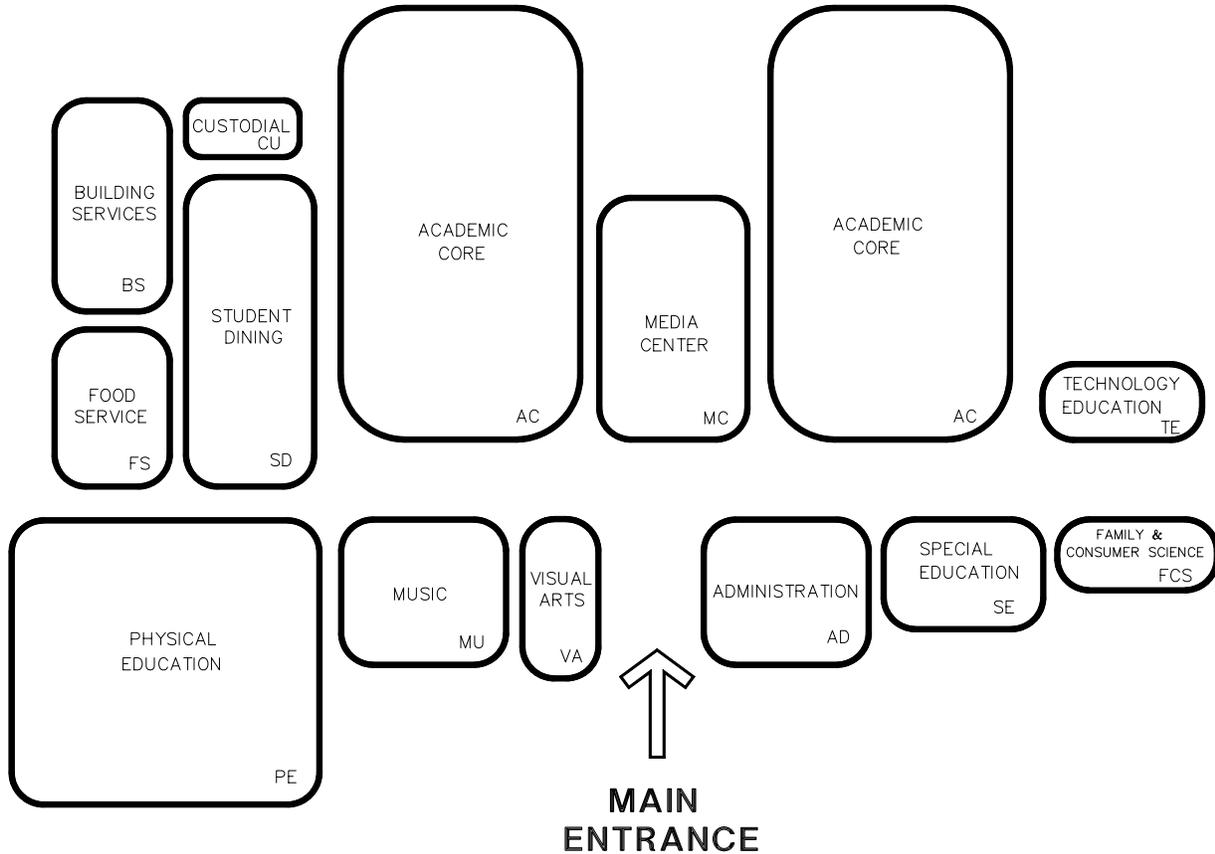
Square foot area given for the room is the necessary area. This area is given in net square feet – defined as the area within the walls of the room.

### TECHNOLOGY

The location of overhead projectors in ceilings of spaces where required shall be carefully determined in relation to the projection surface. Provide a data drop next to the overhead projector for network connection. See spec 274119. Provide additional A/V connections at teacher workstation to allow connection of computer outputs, etc., that interfaces with the projector. See spec 271543. **Optional to provide data drop in classrooms. For extended learning areas (ELA), access to the data network is required.**

### LIGHTING

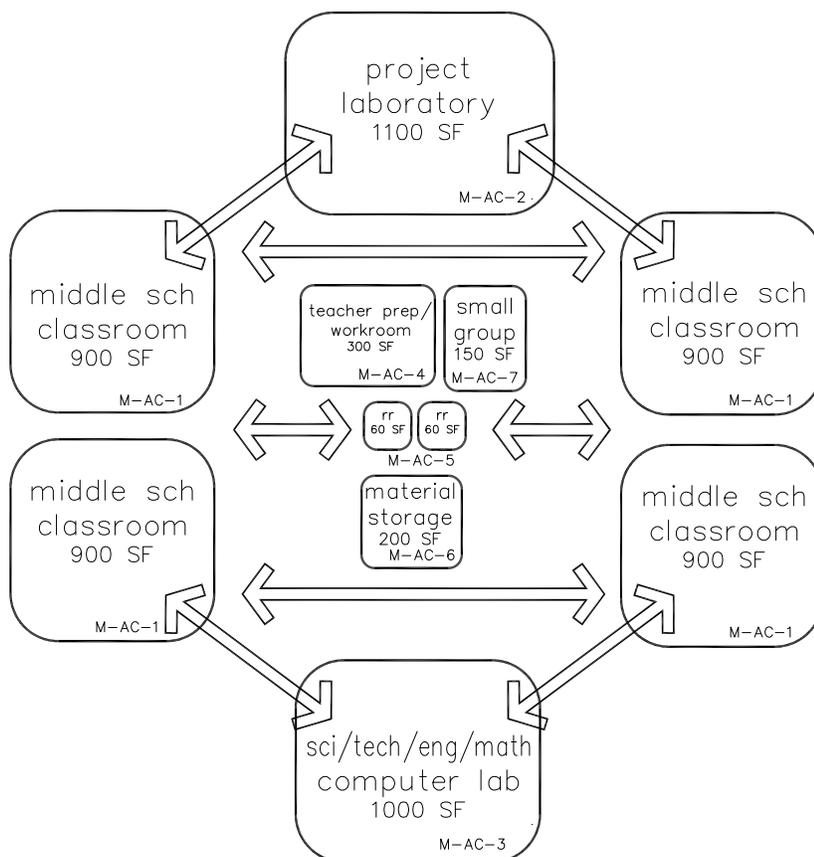
Interior lighting shall be controlled by occupancy sensors, automatic timed lighting controlled system or a combination of both to comply with ASHRAE 90.1. Exterior lighting shall be controlled by photosensor or astronomical time clock to comply with ASHRAE 90.1 to automatically turn lighting off when sufficient daylight is available.



## NOTES:

This is just one example of how the spaces in a middle school could be arranged. This is meant only to demonstrate the relationships between various spaces of the building.

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## NOTES:

This is an example of how the academic core spaces in a middle school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

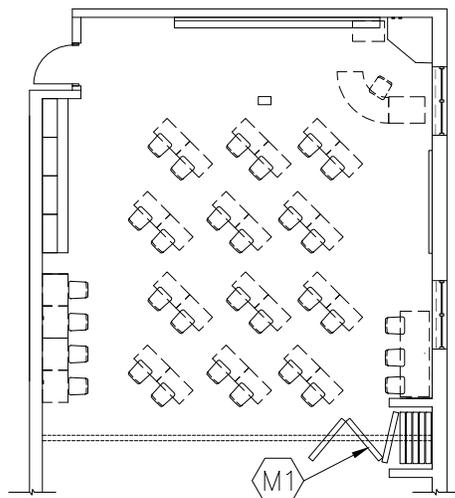
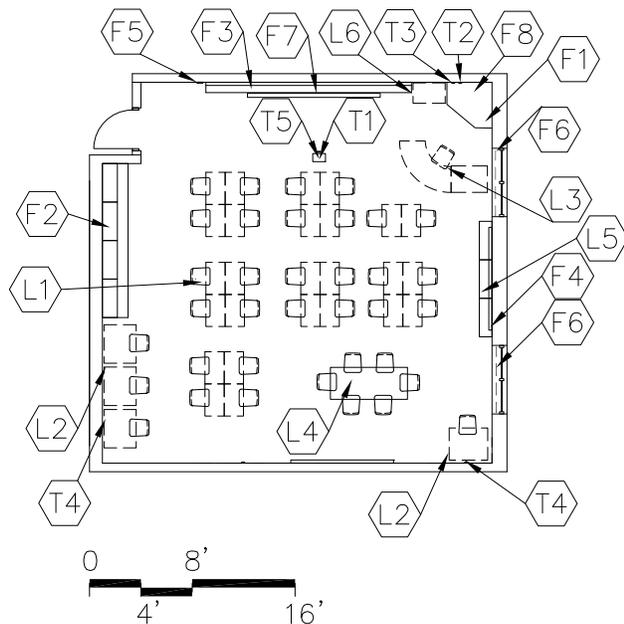
Following are the Academic Core space plates:

- M-AC-1 Middle School Classroom
- M-AC-2 Project Laboratory
- M-AC-3 *Sci/Tech/Eng/Math/Computer Lab***
- M-AC-4 Teacher Prep Area/Workroom
- M-AC-5 Individual Restroom
- M-AC-6 Instructional Material Storage
- M-AC-7 Small Group Room

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**MIDDLE SCHOOL CLASSROOM  
M-AC-1**

**CHAPTER 5: MIDDLE SCHOOL**



CLASSROOM WITH OPTIONAL OPERABLE WALL

**CAPACITY:** 25 students  
**SIZE:** 900 SF  
**ANCILLARY SPACES:**

**PROGRAM ACTIVITIES:**

- Serves the instructional programs for the following disciplines: language arts, social studies, and mathematics.
- Instructional program shall provide developmental experiences, improve communication skills, changes in social development and in-depth academic understandings.
- The methodology for delivery of programs will involve the traditional strategies, but will include interdisciplinary activities, a variety of groupings, team teaching, and learning and manipulative exercises.

**SPATIAL RELATIONSHIPS:**

- Classrooms should have easy and quick access to the media center, administrative services, physical education areas, and the arts.

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Natural light opening equal to minimum 5% of floor area, with an operable vent
- Environmental sound control - wall minimum STC 50  
ceiling minimum CAC 35, NRC **0.70**
- Flexibility of space

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.
2. Depending upon the educational program of the district, a tall wardrobe may be located in this classroom or could be placed in a teacher prep area/workroom.

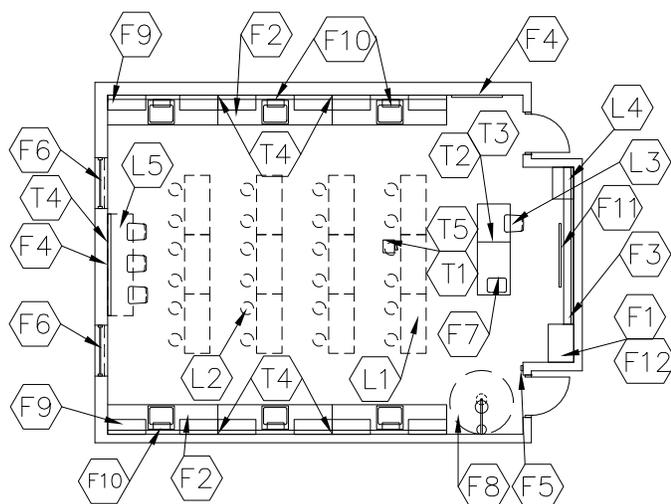
**MIDDLE SCHOOL CLASSROOM  
M-AC-1**

## CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet, <b>carpet tile</b>	096816	F1 2'-3' of tall wardrobe with file drawers	123550
Optional: linoleum, ET, sheet vinyl, or rubber	096500 096516 <b>096813</b>	F2 9'-12' of base & 12' of wall cabinets	123550
		F3 12'-16' of chalk/marker board	101100
		F4 10'-16' of tack board or tackable wall surface	101100
<u>Base:</u>		F5 Pencil sharpener support	062000
Resilient base	096500	F6 Windows with integral blinds	085113
		F7 Projection screen (optional)	115213
<u>Ceiling:</u>		F8 Technology support casework	123550
Suspended, acoustical	095113		
		<u>Fire Suppression:</u>	
<u>Walls:</u>		Fire suppression system	211000
Painted concrete masonry units	042000/099100	<u>Plumbing:</u>	
		N/A	
		<u>HVAC:</u>	
<u>LOOSE FURNISHINGS:</u>		Supply/return air system	Div. 23
L1 Student desks or tables and chairs		Independent temperature control	230923
L2 Computer workstation furniture		<u>Electrical:</u>	
L3 Teacher desk or workstation/computer support and chair		Fluorescent lighting	265100
L4 Activity table		Illumination level: See Table 8600-4	
L5 9' of low bookcases (fixed or mobile)		Multilevel switching	262726
L6 File cabinet		4 duplex receptacles	262726
Wastebasket		Double duplex receptacle adjacent to each data and video port	262726
Pencil sharpener		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port near teacher work station	271513
		T4 4 data ports (minimum) for student use	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T5 Overhead projector	274119
		<u>Electronic Safety and Security</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		M1 Operable partitions are optional between classrooms	102226

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Technology components may be placed in a separate small cabinet, or integrated in the other casework in the room.
3. **Where appropriate, some casework may be mobile to add flexibility and could become part of loose furnishings.**



CAPACITY: 24-28 students  
 SIZE: 1,100 SF  
 ANCILLARY SPACES:

## PROGRAM ACTIVITIES:

- Primary use of this laboratory will be science instruction and scientific discovery activities, but this laboratory may be used for instruction and hands-on experiences in other discipline areas, especially mathematics.
- Will serve multi-discipline groups of five classrooms.
- There will be lecture, experiment, discussion, and manipulation activities during each class session.

## SPATIAL RELATIONSHIPS:

- Easy and quick access to other academic areas.
- Easy access to large group restrooms, lockers, teacher prep/workroom, and instructional material storage.
- Adjacent to at least one academic classroom which has resources for mathematics instruction.
- Each room will have an area for preparation of materials by students and staff.
- Easy access to administrative services and related curriculum instructional areas.

## ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Natural light opening equal to minimum 5% of floor area, with an operable vent
- Environmental sound control - wall minimum STC 50  
ceiling minimum CAC 35, NRC **0.70**
- Acid- and stain-resistant work and floor surfaces

## NOTES:

1. Loose furnishings shown represent two of many possible arrangements.
2. Depending upon the educational program of the district, a tall wardrobe may be located in this laboratory or could be placed in a teacher prep area/workroom.
3. Option: Small, bay window-type, pre-manufactured greenhouse.  
No additional square footage allowed.
4. The layouts shown do not restrict or reflect the variety of arrangements available to the Design Professional.

**PROJECT LABORATORY  
M-AC-2**

CHAPTER 5: MIDDLE SCHOOL

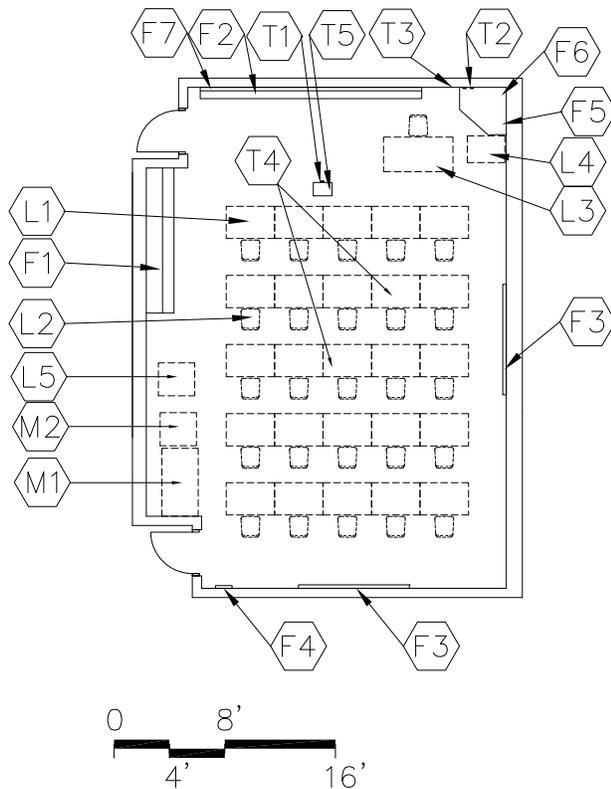
	Spec. Ref.#	FEATURES <sup>1</sup> :	Spec. Ref.#
<b>FINISHES<sup>1</sup>:</b>		<b>Fixed Items:</b>	
Flooring:		F1 3' of tall wardrobe with file drawers	123550
Vinyl sheet flooring, linoleum, rubber, <b>ET</b> , vinyl composition tile, <b>polished concrete</b> <b>finishing, or colored concrete</b> <b>finishing</b>	096516 096500 <b>033510</b> <b>033519</b>	F2 40'-58' lab station casework or loose cabinets with 6 sinks	123550
		F3 12'-16' of chalk/marker board	101100
		F4 10'-16' of tack board	101100
		F5 Pencil sharpener support	062000
		F6 Windows with integral blinds	085113
		F7 Demonstration table	123550
		F8 Emergency shower/eyewash(option)	123550
		F9 About 24' of wall cabinets	123550
Base:		F10 Towel dispensers (optional)	102813
Resilient base	096500	F11 Projection screen (optional)	115213
		F12 Technology support casework	123550
Ceiling:		<b>Fire Suppression:</b>	
Suspended, acoustical	095113	Fire suppression system	211000
		<b>Plumbing:</b>	
Walls:		Sinks	224000
Painted concrete masonry units	042000/099100	Plumbing connections	224000/221116/221119
		Emergency shower/eyewash Connection (optional)	224000
<b>LOOSE FURNISHINGS:</b>		Gas connections (optional)	226313
L1 Student work tables		Master shutoff for gas (optional)	226313
L2 Student stools/chairs		Compressed air connections(option)	221500
L3 Teacher desk or workstation/ computer support and chair		<b>HVAC:</b>	
L4 File cabinet		Supply/return air system	Div. 23
L5 Computer workstation furniture		Manually controlled exhaust air system	Div. 23
Wastebaskets		Independent temperature control	230923
Pencil sharpener		<b>Electrical:</b>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		4 duplex receptacles (optional)	262726
		Double duplex receptacle adjacent to each data and video port	262726
		Means of egress lighting per code	265100
		Emergency lighting	265100
		<b>Communications:</b>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port near teacher work station	271513
		T4 4 data ports (minimum) for student use	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T5 Overhead projector	274119
		<b>Electronic Safety and Security:</b>	
		Life safety devices per code	283111
		<b>Miscellaneous:</b>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Technology components may be placed in a separate small cabinet, or integrated in the other casework in the room.

**SCI/TECH/ENG/MATH/COMPUTER LAB**  
**M-AC-3**

**CHAPTER 5: MIDDLE SCHOOL**



CAPACITY: 25 students  
 SIZE: 1,000 SF

**PROGRAM ACTIVITIES:**

- Contains computer workstations for group instruction and individual work
- Activities include computer instruction, media production, and individual project work

**SPATIAL RELATIONSHIPS:**

- Near reading room/circulation
- Near media specialist office
- Near academic core classrooms

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting with an 80% visual comfort probability level
- Environmental sound control -  
 wall minimum STC 50  
 ceiling minimum CAC 35, NRC 0.70

**MISCELLANEOUS:**

- Due to the changing nature of technology, a computer lab is to be designed for flexibility of use.

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

**SCI/TECH/ENG/MATH/COMPUTER LAB  
M-AC-3**

## CHAPTER 5: MIDDLE SCHOOL

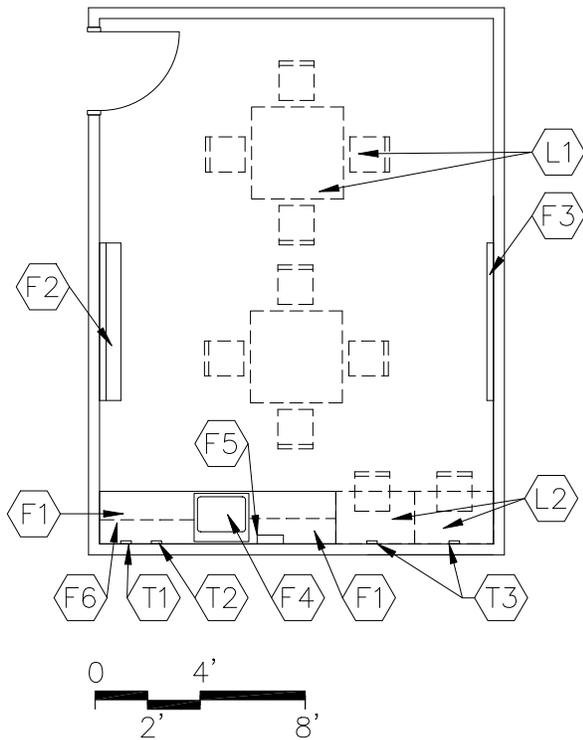
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet, carpet tile	096816	F1 4'-16' of base & wall cabinets	123550
	096813	F2 10'-16' of chalk/marker board	101100
<u>Base:</u>		F3 8'-12' of tack board	101100
Resilient base	096500	or tackable wall surface	
<u>Ceiling:</u>		F4 Pencil sharpener support	062000
Suspended, acoustical	095113	F5 3' of tall wardrobe with file drawers	123550
		F6 Technology support casework	123550
<u>Walls:</u>		F7 Projection screen (optional)	115213
Painted concrete masonry units	042000/099100	<u>Fire Suppression:</u>	
		Fire suppression system	211000
<u>LOOSE FURNISHINGS:</u>		<u>Plumbing:</u>	
L1 Computer workstation furniture		N/A	
(could be fixed)		<u>HVAC:</u>	
L2 Student chairs		Supply/return air system	Div. 23
L3 Teacher desk/computer support and chair		Independent temperature control	230923
L4 File cabinet		<u>Electrical:</u>	
L5 Printer / scanner stand		Fluorescent lighting with	
Wastebasket		parabolic lenses	265100
Pencil sharpener		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to	
		each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port near teacher workstation	271513
		T4 Classroom area network	
		(26 ports minimum)	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T5 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		The following items are to be funded by the	
		school district:	
		M1 Classroom area network file server	
		M2 Printer	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Technology components may be placed in a separate small cabinet, or integrated in the other casework in the room.

## TEACHER PREP AREA/WORKROOM M-AC-4

### CHAPTER 5: MIDDLE SCHOOL



CAPACITY:  
SIZE:

6 - 8 teachers  
300 SF

#### PROGRAM ACTIVITIES:

- Teachers and other staff members hold team meetings and prepare for class
- Professional interaction should be encouraged to improve communication, professional development, and team building.

#### SPATIAL RELATIONSHIPS:

- Near academic core classrooms
- Near individual restroom
- Near instructional material storage

#### ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control -  
wall minimum STC 45  
ceiling minimum CAC 35, NRC 0.70

#### NOTES:

1. Loose furnishings shown represent one of many possible arrangements.
2. Depending upon the educational program of the district, a tall wardrobe may be located in this teacher prep area/workroom or could be placed in a classroom.

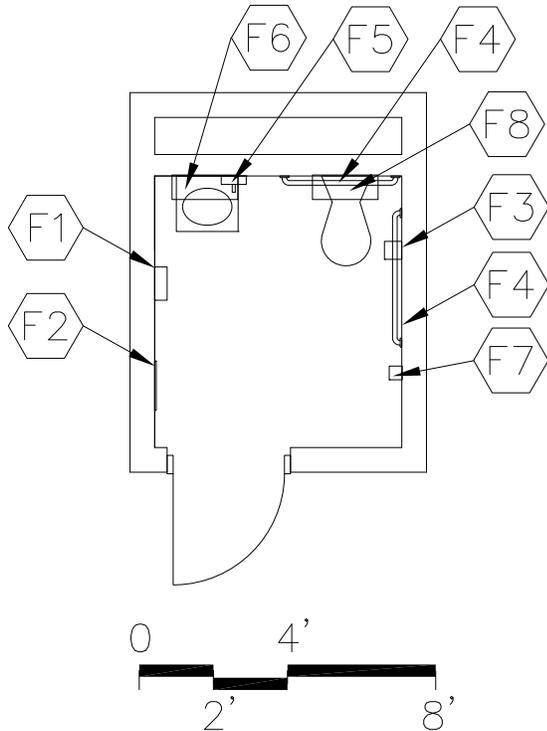
**TEACHER PREP AREA/WORKROOM  
M-AC-4**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet, ET, linoleum,	096816	F1 About 6' of base cabinets	123550
sheet vinyl, or rubber	096500	F2 6'-8' of chalk/marker board (option)	101100
	096516	F3 4'-8' of tack board	101100
		F4 3' sink base cabinet	123550
<u>Base:</u>		F5 Towel dispenser (optional)	102813
Resilient base	096500	F6 About 9' of wall cabinets	123550
<u>Ceiling:</u>		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression systems	211000
<u>Walls:</u>		<u>Plumbing:</u>	
Painted concrete masonry units		Sink	224000
	042000/099100	Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Tables and chairs		Supply/return air system	Div. 23
L2 Computer workstation furniture		Independent temperature control	230923
Wastebasket		<u>Electrical:</u>	
		Single-level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		3 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		Duplex receptacles for office equipment	262726
		Receptacle for copier (if applicable)	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 2 data ports near workstations	271513
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Copier by school district	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.



## PROGRAM ACTIVITIES:

- Personal and health needs for teachers, staff, and other individuals

## SPATIAL RELATIONSHIPS:

- Near academic core classrooms
- Near teacher prep area/workroom

## ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control -  
wall minimum STC 48  
ceiling minimum CAC 35, NRC 0.70
- Moisture- and stain-resistant finishes

CAPACITY:  
SIZE:

1 person  
**60 SF**

NOTES:

**INDIVIDUAL RESTROOM  
M-AC-5**

CHAPTER 5: MIDDLE SCHOOL

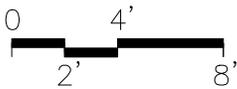
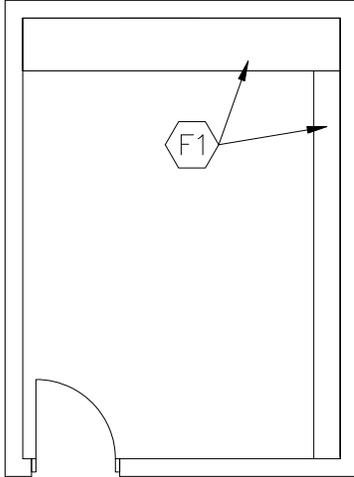
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, rubber, ET, or sheet vinyl	096516 096500	F1 Towel dispenser	102813 102813
Optional: Ceramic mosaic tile, porcelain tile, or resinous flooring	093000  096723	F2 24" x 60" mirror	102813
		F3 Toilet tissue holder	102813
		F4 36" and 42" grab bar	102813
		F5 Soap dispenser	102813
		F6 Shelf above sink (optional)	102813
<u>Base:</u>		F7 Coat hook	102813
Resilient base	096500	F8 Wall cabinet	
Optional: Ceramic mosaic tile, porcelain tile, resinous flooring or integral vinyl cove base	093000 096723	above toilet (optional)	102813
		<u>Fire Suppression:</u>	
		Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	Wall-mounted water closet	224000
		Wall-mounted lavatory	224000
<u>Walls:</u>		Plumbing connections	224000/221116/221119
Painted concrete masonry units	042000/099100		
		<u>HVAC:</u>	
<u>LOOSE FURNISHINGS:</u>		Exhaust air system	Div. 23
Wastebasket		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**INSTRUCTIONAL MATERIAL STORAGE**  
**M-AC-6**

CHAPTER 5: MIDDLE SCHOOL



**PROGRAM ACTIVITIES:**

- Storage of supplies, textbooks, and equipment

**SPATIAL RELATIONSHIPS:**

- Near teacher prep area/workroom

**ENVIRONMENTAL CONSIDERATIONS:**

N/A

CAPACITY:  
SIZE:

N/A  
200 SF

NOTES:

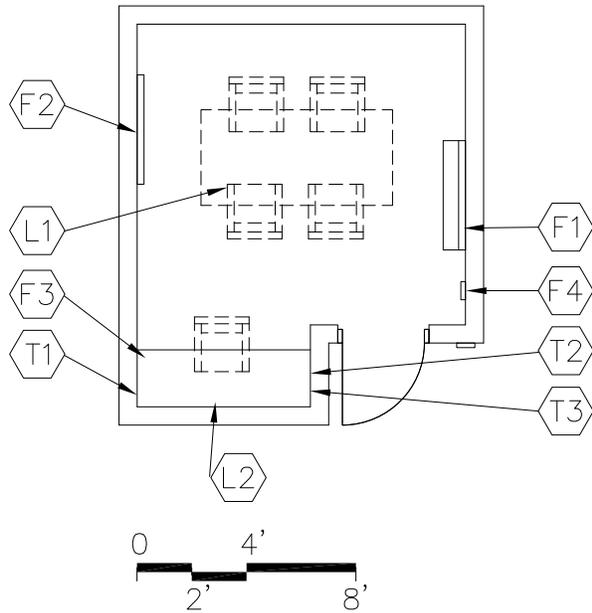
**INSTRUCTIONAL MATERIAL STORAGE  
M-AC-6**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Rubber	096500	F1 20'-30' of open shelving, depths may vary (fixed or loose)	123550
Base:		Option: mobile storage shelving	105626
Resilient base	096500	<u>Fire Suppression:</u>	
Ceiling:		Fire suppression system	211000
Suspended, acoustical	095113	<u>Plumbing:</u>	
Walls:		N/A	
Painted concrete masonry	042000/099100	<u>HVAC:</u>	
<u>LOOSE FURNISHINGS:</u>		To be determined by Design Professional	
N/A		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		N/A	
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.



CAPACITY:  
SIZE:

4 - 5 students  
150 SF

## PROGRAM ACTIVITIES:

- Student small group work
- Independent student work
- Small group meetings

## SPATIAL RELATIONSHIPS:

- Near academic core classrooms

## ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control -  
wall minimum STC 50  
ceiling minimum CAC 35, NRC 0.70

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.

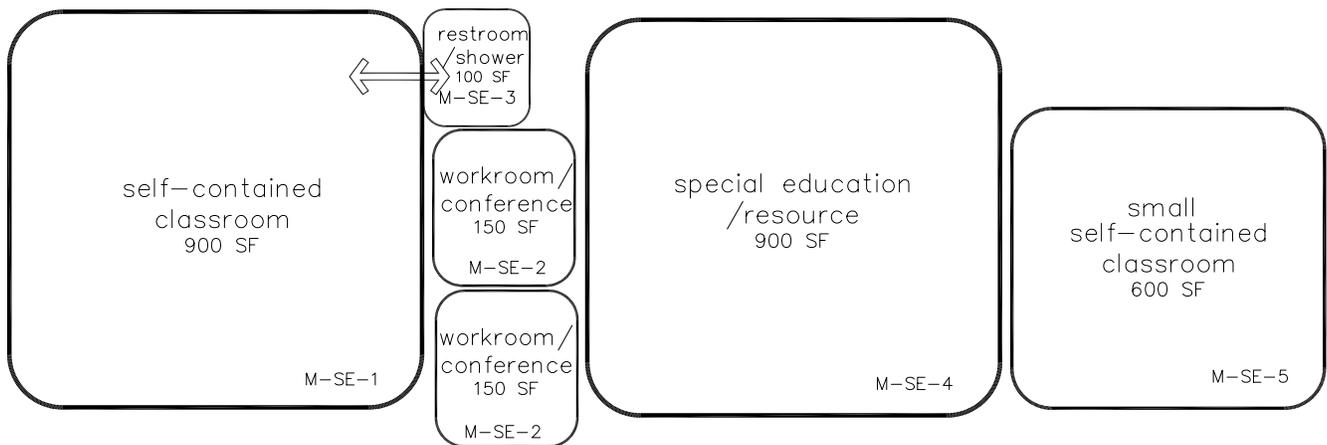
**SMALL GROUP ROOM  
M-AC-7**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet, carpet tile	096816	F1 4'-6' of chalk/marker board	101100
Optional: ET, sheet vinyl, linoleum, or rubber	096500 096516 096813	F2 4' of tack board	101100
		F3 4'-6' of work surface (optional)	123550
		F4 Pencil sharpener support	062000
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	N/A	
<u>Walls:</u>		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	Supply/return air system	Div. 23
		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 Work tables and chairs		Fluorescent lighting:	265100
L2 Computer furniture		Illumination level: See Table 8600-4	
Wastebasket		4 duplex receptacles	262726
Pencil sharpener		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port	271513/273113
		T3 1 data port	271513
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Interior windows (optional)	081113/088000

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.



## NOTES:

This is an example of how the special education spaces in a middle school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

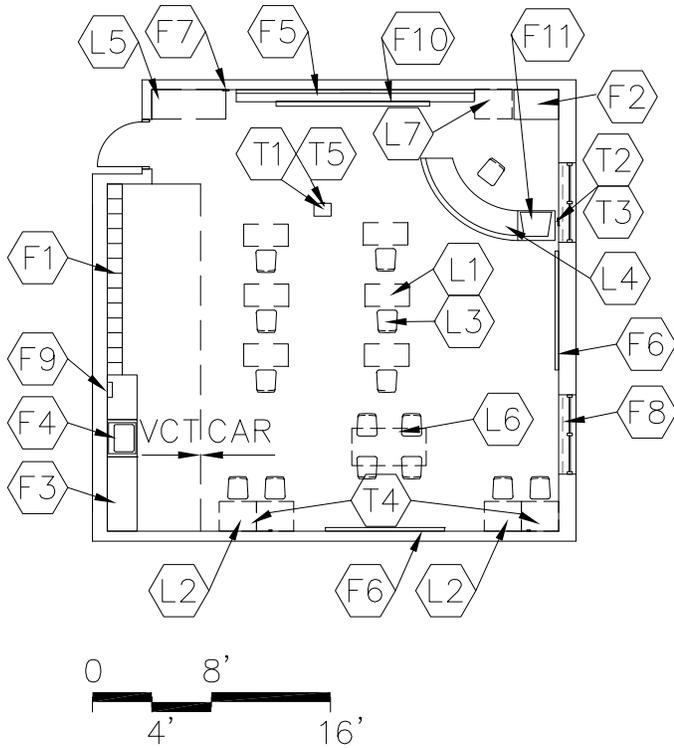
Following are the Special Education space plates:

- M-SE-1 Self-contained Classroom
- M-SE-2 Workroom/Conference
- M-SE-3 Restroom/Shower
- M-SE-4 Special Education/Resource
- M-SE-5 Small Self-contained Classroom

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## SELF-CONTAINED CLASSROOM M-SE-1

### CHAPTER 5: MIDDLE SCHOOL



CAPACITY: Based on disability.  
See Chapter 1, Section 1110.

SIZE: 900 SF

#### PROGRAM ACTIVITIES:

- Accommodates students who have special needs and are unable to be included in regular instructional program areas a majority of the school day.
- Activities include, but are not limited to: group and individual work to improve auditory, tactile, visual, kinesthetic and academic skills.

#### SPATIAL RELATIONSHIPS:

- Near academic core classrooms
- Adjacent to special education restroom/shower

#### ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Natural light opening equal to 5% minimum of floor area, with an operable vent
- Environmental sound control -  
wall minimum STC 50  
ceiling minimum CAC 35, NRC **0.70**
- Resilient and stain-resistant floor covering
- Special consideration for wheelchair access and physical accessibility needs (ADA)

#### NOTES:

1. Loose furnishings shown represent one of many possible arrangements.
2. Depending upon the educational program of the district, a tall wardrobe may be located in this classroom or could be placed in a workroom/conference area.
3. See Chapter 1, page 1110-16 for specific areas needed for each disability.

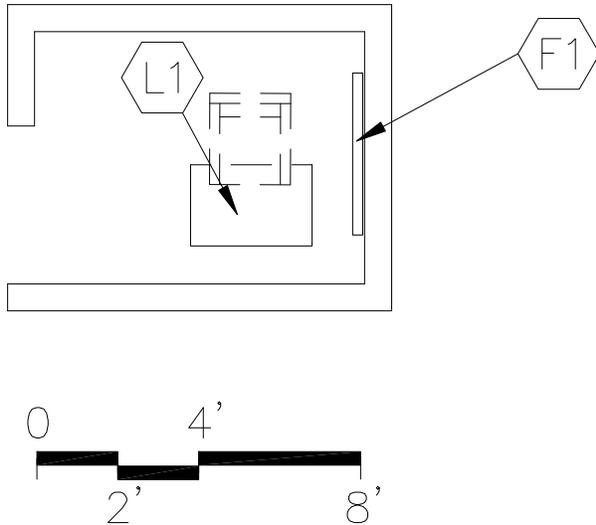
**SELF-CONTAINED CLASSROOM  
M-SE-1**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Combination carpet, <b>carpet tile</b> , with resilient options	096816 096500	F1 Open casework – coats and personal items with wall cabinets above	123550 123550
Optional: All ET, sheet vinyl, linoleum, or rubber	096516 <b>096813</b>	F2 3' of tall wardrobe w/file drawers	123550
		F3 8'-10' of base & wall cabinets	123550
		F4 3' sink base cabinet	123550
		F5 12'-16' of chalk/marker board	101100
		F6 12'-16' of tack board or tackable wall surface or combination	101100
<u>Base:</u>		F7 Pencil sharpener support	062000
Resilient base	096500	F8 Windows with integral blinds	085113
		F9 Towel dispenser (optional)	102813
<u>Ceiling:</u>		F10 Projection screen (optional)	115213
Suspended, acoustical	095113	F11 Technology support casework	123550
		<u>Fire Suppression:</u>	
<u>Walls:</u>		Fire suppression system	211000
Painted concrete masonry units	042000/099100	<u>Plumbing:</u>	
		Sink with drinking fountain	224000
		Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Student desks/tables		Supply/return air system	Div. 23
L2 Computer workstation furniture		Independent temperature control	230923
L3 Student chairs		<u>Electrical:</u>	
L4 Teacher workstations/computer support and chair		Fluorescent lighting	265100
L5 8'-10' of low bookcases (fixed or mobile)		Illumination level: See Table 8600-4	
L6 Reading table		Multilevel switching	262726
L7 File cabinet		4 duplex receptacles	262726
Wastebasket		Double duplex receptacle adjacent to each data and video port	262726
Pencil sharpener		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port near teacher workstation	271513
		T4 4 data ports (minimum) for student use	271513
		Clock	275313
		Sound reinforcement system	275127
		Central sound system	275123
		T5 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Technology components may be placed in a separate small cabinet, or integrated in the other casework in the room.

**PROGRAM ACTIVITIES:**

- Could be used for emotionally disturbed or other students requiring a quiet individual area.
- Preparation and storage of instructional materials and equipment.

**SPATIAL RELATIONSHIPS:**

- Close proximity to academic classrooms
- Integral part of self-contained classroom or special education/resource room

**ENVIRONMENTAL CONSIDERATIONS:**

- Dimmed lighting
- Environmental sound control  
wall minimum **STC 45**  
ceiling minimum **CAC 35, NRC 0.70**

**CAPACITY:** 1 - 2 persons  
**SIZE:** 150 SF

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.
2. Walls floor to ceiling and an open area for ½ of the fourth wall.
3. See Chapter 1, page 1110-16 for specific areas needed for each disability.

**WORKROOM/CONFERENCE****M-SE-2 (Quiet Area)**

CHAPTER 5: MIDDLE SCHOOL

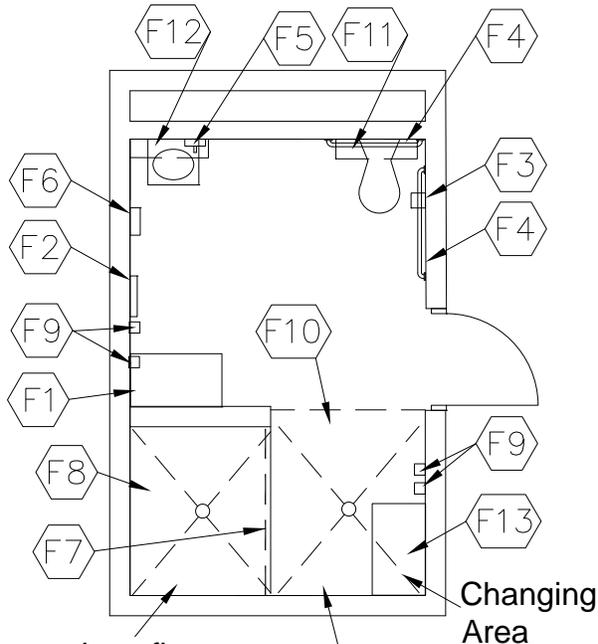
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet, <b>carpet tile</b> , ET, linoleum, or sheet vinyl	096816 096500 096516 <b>096813</b>	F1 4' of tack board (optional)	101100
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	N/A	
<u>Walls:</u>		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	Supply/return air system	Div. 23
		Independent temperature control	230923
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 Student desk and chair		Dimmable lighting	262726
Wastebasket		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		Clock (optional)	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Interior window with blinds (optional)	081113/088000

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**RESTROOM/SHOWER  
M-SE-3**

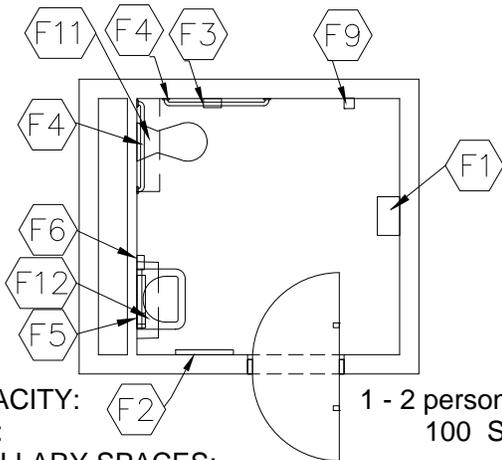
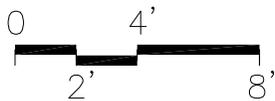
**CHAPTER 5: MIDDLE SCHOOL**



Shower-slope floor;  
no raised threshold;  
5' x 5' for two people

Drying Area;  
5' x 5' sloped floor

Changing Area



CAPACITY:  
SIZE:  
ANCILLARY SPACES:

1 - 2 persons  
100 SF

**PROGRAM ACTIVITIES:**

- Changing area
- Toilet / shower needs

**SPATIAL RELATIONSHIPS:**

- Next to self-contained classroom

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control -  
wall minimum STC 48  
ceiling minimum CAC 35, NRC 0.70
- Moisture- and stain-resistant finishes
- Special consideration for wheelchair access  
and physical accessibility needs (ADA)

**NOTES:**

1. See Chapter 1, page 1110-16 for specific areas needed for each disability.

**RESTROOM/SHOWER**  
**M-SE-3**

CHAPTER 5: MIDDLE SCHOOL

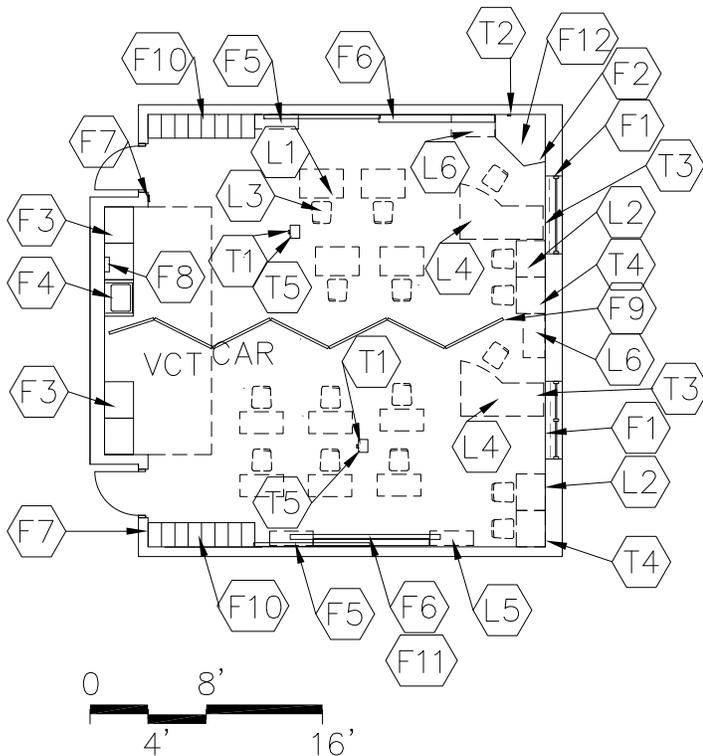
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Restroom: Linoleum, <b>ET</b> , vinyl	096516	F1 Base cabinets	123550
Sheet, rubber sheet flooring	096500	F2 24" x 60" mirror	102813
Shower: Ceramic mosaic tile, or porcelain tile,	093000	F3 Toilet tissue holder	102813
		F4 36" and 42" grab bar	102813
		F5 Soap dispenser	102813
		F6 Towel dispenser	102813
<u>Base:</u>		F7 Shower curtain and rod	102813
Restroom: Resilient base, or	096500	F8 ADA shower accessories	102813
integral vinyl cove base		F9 (2) towel hooks	102813
Shower: Ceramic mosaic tile base, porcelain tile, or integral vinyl cove base	093000	F10 Cubicle curtain	102813
		F11 8" deep wall cabinet above toilet	102813
		F12 Shelf (optional)	102813
<u>Ceiling:</u>		<b>F13 Changing station</b>	<b>123550</b>
Restroom: Suspended, acoustical	095113		
Shower: Painted portland cement plaster or	092400/099100	<u>Fire Suppression:</u>	
interior finish system	092513	Fire suppression system	283111
<u>Walls:</u>		<u>Plumbing:</u>	
Epoxy painted concrete masonry units	042000/099100	Wall-mounted water closet	224000
or ceramic wall tile in shower	093000	Wall-mounted lavatory	224000
and latex paint in restroom	099100	ADA shower controls and head	224000
		Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
Wastebasket		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Refer to ADAAG 4.21 for grab bar and control locations.

**SPECIAL EDUCATION/RESOURCE  
M-SE-4**

**CHAPTER 5: MIDDLE SCHOOL**



**CAPACITY:** Based on disability.  
See Chapter 1, Section 1110.  
**SIZE:** 900 SF

**PROGRAM ACTIVITIES:**

- Accommodates students who have special needs with cognitive disability, hearing impairment, visual impairment, emotional disturbance, orthopedic impairment, autism, brain injury, learning-deaf-blindness disabilities.
- Variety of special services such as one-on-one instruction and small group instruction.
- Activities include, but are not limited to: group discussions, demonstrations, music activities, life skills, coping skills, speech, and visual and hearing support services.

**SPATIAL RELATIONSHIPS:**

- Near academic core classrooms
- The space will be used to accommodate the specific IEP requirements of each student

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Natural light opening equal to minimum 5% of floor area, with an operable vent
- Environmental sound control –  
wall minimum STC 50  
ceiling minimum CAC 35, NRC **0.70**

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.
2. Depending upon the educational program of the district, a tall wardrobe may be located in this room or could be placed in a workroom/conference area.
3. See Chapter 1, page 1110-16 for specific areas needed for each disability.

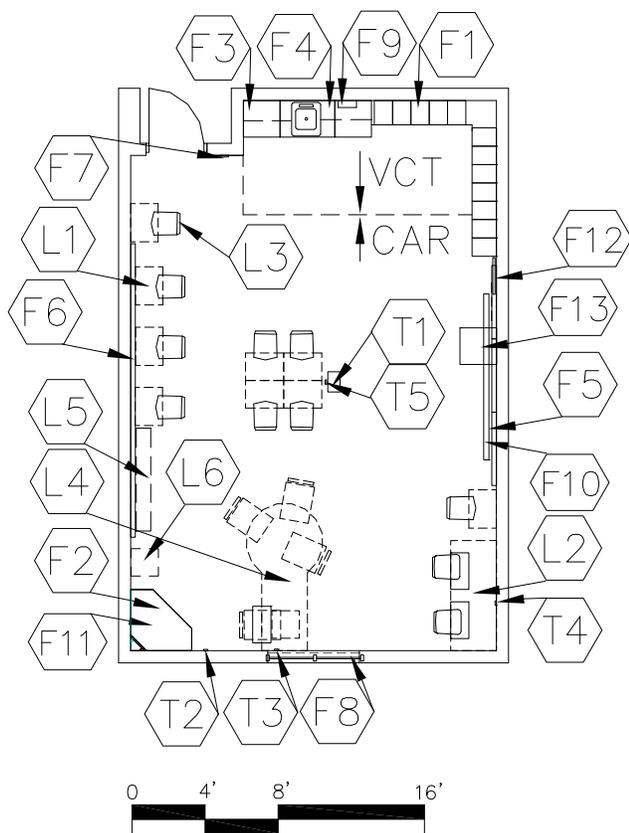
**SPECIAL EDUCATION/RESOURCE  
M-SE-4**

## CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Combination carpet, <b>carpet tile</b>	096816	F1 Windows with integral blinds	085113
with resilient options	096500	F2 3' of tall wardrobe with file drawers	123550
Option: All ET, sheet vinyl,	096516	F3 8'-12' of base cabinets	123550
linoleum, or rubber	<b>096813</b>	F4 3' sink base cabinet	123550
		F5 10'-16' of chalk/marker board	101100
		F6 10'-16' of tack board	101100
		or tackable wall surface or combination	
<u>Base:</u>		F7 Pencil sharpener support	062000
Resilient base	096500	F8 Towel dispenser (optional)	102813
		F9 Operable partition (optional)	102226
<u>Ceiling:</u>		F10 Open casework coats and personal	
Suspended, acoustical	095113	storage w/wall cabinets above	123550
		F11 Projection screen (optional)	115213
<u>Walls:</u>		F12 Technology support casework	123550
Painted concrete masonry units	042000/099100	F13 Mirror (optional)	102813
		F14 Mobile storage cabinet (optional)	123550
<u>LOOSE FURNISHINGS:</u>		<u>Fire Suppression:</u>	
L1 Student desks/tables		Fire suppression system	211000
L2 Computer workstation furniture		<u>Plumbing:</u>	
L3 Student chairs		Sink	224000
L4 Teacher desk /computer support and chair		Plumbing connections	224000/221116/221119
L5 Mobile bookcases or storage unit		<u>HVAC:</u>	
L6 File cabinet		Supply/return air system	Div. 23
Wastebasket		Independent temp control	230923
Pencil sharpener		<u>Electrical:</u>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to	
		each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port	
		near each teacher workstation	271513
		T4 4 data ports (minimum) for student use	271513
		Clock	275313
		Sound reinforcement system	275127
		Central sound system	275123
		T5 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Technology components may be placed in a separate small cabinet, or integrated in the other casework in the room.



CAPACITY: Based on disability.  
See Chapter 1, Section 1110.

SIZE: 600 SF

**PROGRAM ACTIVITIES:**

- Can accommodate students with cognitive, hearing, speech, language, emotional, orthopedic, autistic, brain injury, learning, deaf, and blindness. Services to include occupational, physical, and speech therapy.
- Accommodates students who have special needs and are unable to be included in regular instructional program areas.
- Activities include, but are not limited to: group discussions, demonstrations, music activities, listening skills, presentations, art and science projects, and small group activities.

**SPATIAL RELATIONSHIPS:**

- Distributed throughout academic core areas.

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Natural light opening equal to minimum 5% of floor area, with an operable vent
- Environmental sound control -  
wall minimum STC 50  
ceiling minimum CAC 35, NRC **0.70**
- Resilient and stain-resistant floor covering
- Special consideration for wheelchair access and physical accessibility needs (ADA)

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.
2. Depending upon the educational program of the district, a tall wardrobe may be located in this classroom or could be placed in a workroom/conference area.
3. See Chapter 1, page 1110-16, for specific areas needed for each disability.

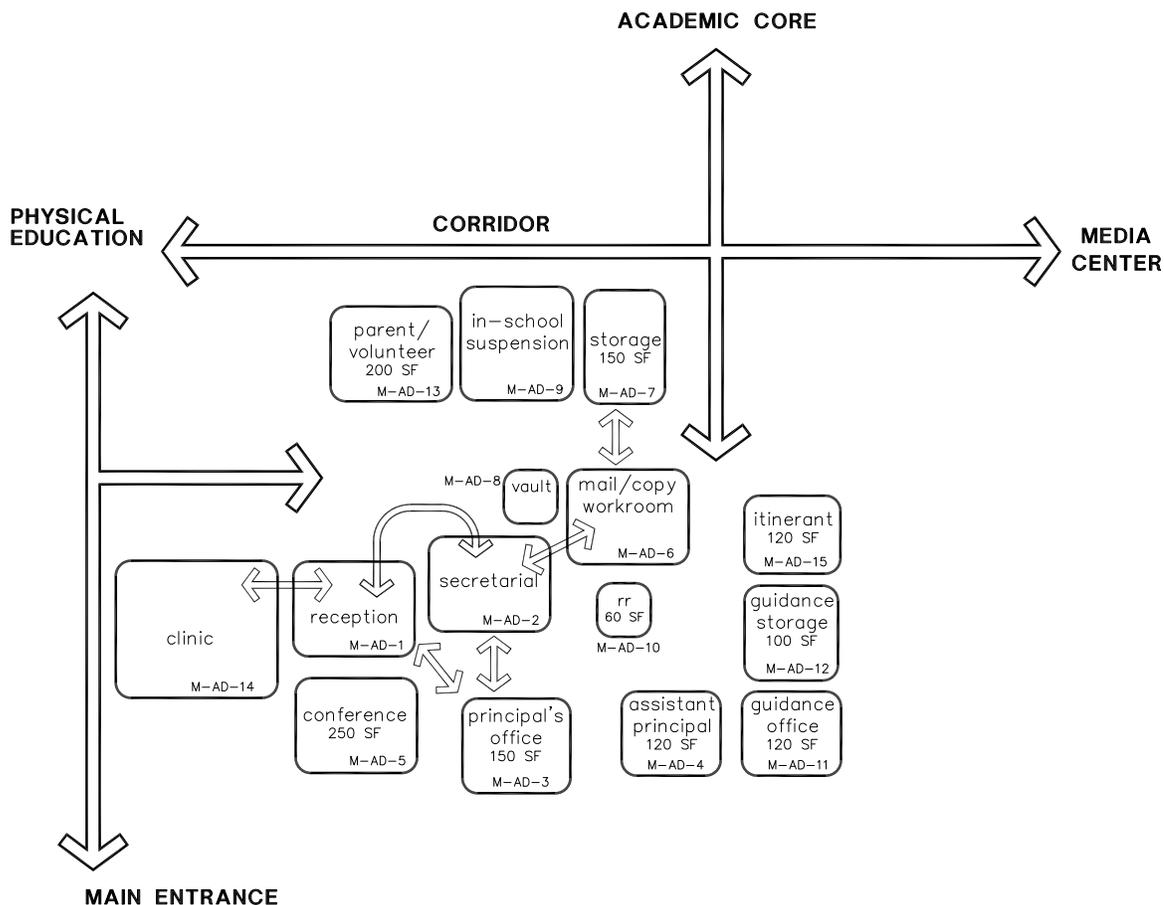
**SMALL SELF-CONTAINED CLASSROOM****M-SE-5** (Special Education)

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Combination carpet, <b>carpet tile</b> , with resilient options	096816 096516	F1 Open casework – coats and personal items with wall cabinets above	123550 123550
Option: All ET, sheet vinyl, linoleum or rubber	096500 <b>096813</b>	F2 3' of tall wardrobe w/file drawers	123550
		F3 About 6' of base & wall cabinets	123550
		F4 3' sink base cabinet	123550
		F5 10'-12' of chalk/marker board	101100
		F6 10'-16' of tack board or tackable wall surface or combination	101100
<u>Base:</u>		F7 Pencil sharpener support	062000
Resilient base	096500	F8 Windows with integral blinds	085113
		F9 Towel dispenser (optional)	102813
<u>Ceiling:</u>		F10 Projection screen (optional)	115213
Suspended, acoustical	095113	F11 Technology support casework	123550
		F12 Mirror (optional)	102813
<u>Walls:</u>		F13 Mobile storage cabinet (optional)	123550
Painted concrete masonry units	042000/099100	<u>Fire Suppression:</u>	
		Fire suppression system	211000
<u>LOOSE FURNISHINGS:</u>		<u>Plumbing:</u>	
L1 Student desks/tables		Sink with drinking fountain	224000
L2 Computer workstation furniture		Plumbing connections	224000/221116/221119
L3 Student chairs			
L4 Teacher workstations/computer support and chair		<u>HVAC:</u>	
L5 6' of low bookcases (fixed or mobile)		Supply/return air system	Div. 23
Wastebasket		Independent temperature control	230923
Pencil sharpener		<u>Electrical:</u>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port near teacher workstation	271513
		T4 2 data ports (minimum) for student use	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T5 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety device pre code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Technology components may be placed in a separate small cabinet, or integrated in the other casework in the room.



## NOTES:

This is an example of how the administrative spaces in a middle school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Administrative space plates:

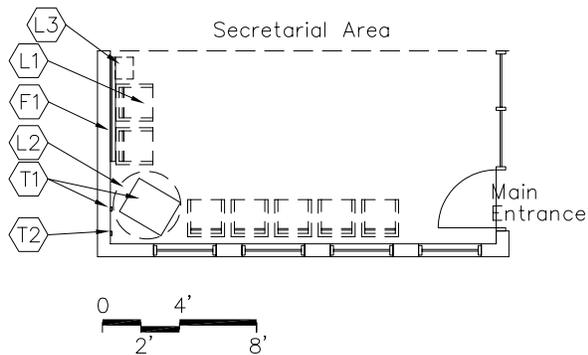
M-AD-1	Reception Area
M-AD-2	Secretarial Area
M-AD-3	Principal's Office
M-AD-4	Assistant Principal's Office
M-AD-5	Conference Room
M-AD-6	Mail/Work/Copy Room
M-AD-7	Administrative Storage
M-AD-8	Vault/Records Storage
M-AD-9	In-school Suspension
M-AD-10	Restroom
M-AD-11	Guidance Counselor's Office
M-AD-12	Guidance Records/Storage
M-AD-13	Parent/Volunteer Room
M-AD-14	Health Clinic (includes restroom)
M-AD-15	Itinerant Personnel Office

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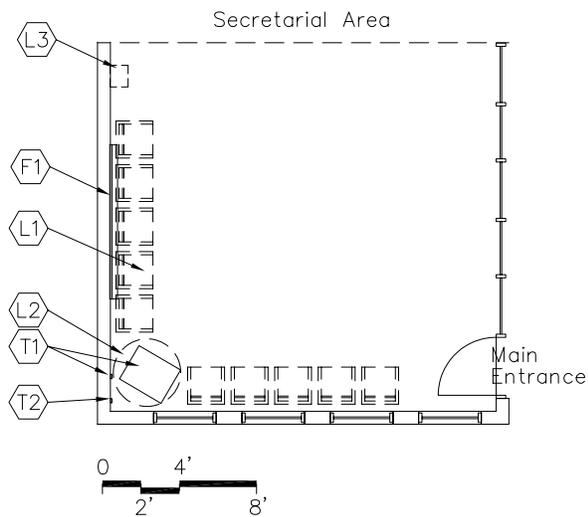
## RECEPTION AREA M-AD-1

### CHAPTER 5: MIDDLE SCHOOL

200 SF



400 SF



CAPACITY: 6 - 8 or 8 - 10 visitors  
 SIZE: 200 - 400 SF  
 ANCILLARY SPACES: Secretarial Area  
 M-AD-2

#### PROGRAM ACTIVITIES:

- Serves as the main entry to the building
- Visitors may wait or are directed to other areas of the building.

#### SPATIAL RELATIONSHIPS:

- Access to all areas of the building
- Open to secretarial area
- Near principal's office
- Near main entrance to the building
- Visual access to main entrance of the building

#### ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control -  
 wall minimum STC 40  
 ceiling minimum CAC 35, NRC **0.70**
- Audio and visual control from secretarial area

#### NOTES:

1. Loose furnishings shown represent one of many possible arrangements.

**RECEPTION AREA  
M-AD-1**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or</i> Carpet Tile	096816 <b>096813</b>	F1 Tack board or tackable wall surface (optional)	101100
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Suspended, acoustical	095113	N/A	
Walls:		<u>HVAC:</u>	
Painted gypsum wallboard over metal studs	<b>092116/099100</b>	Supply/return air system	Div. 23
<u>LOOSE FURNISHINGS:</u>		Independent temperature control	230923
L1 Visitor chairs		<u>Electrical:</u>	
L2 End table		Single level switching	262726
L3 Racks for forms (optional)		Fluorescent lighting	265100
Wastebasket		Illumination level: See Table 8600-4	
		2 duplex receptacles	262726
		Double duplex receptacle adjacent to video port	262726
		Means of egress lighting per code	265100
		<u>Communications:</u>	
		T1 1 video port, monitor, and brackets	271533/271543/274119
		T2 1 voice port and phone	271513/273113
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Interior windows	081113/088000

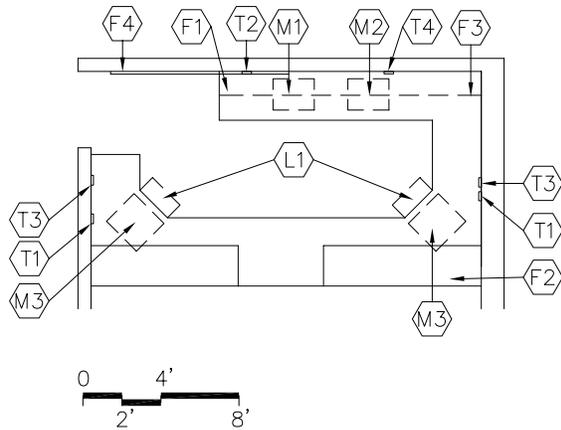
NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

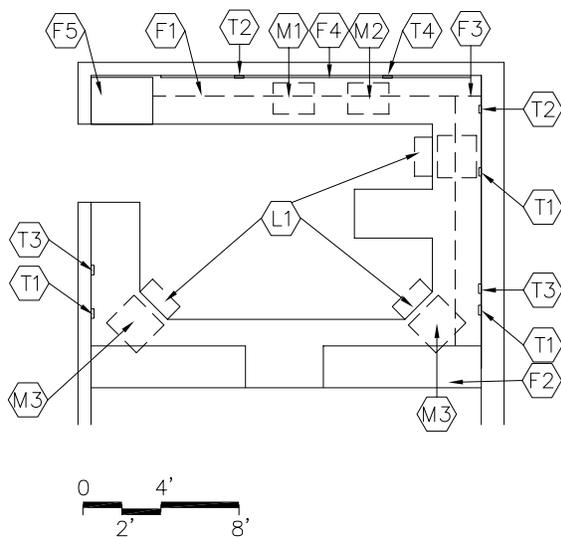
**SECRETARIAL AREA**  
**M-AD-2**

CHAPTER 5: MIDDLE SCHOOL

200 SF ADA Compliant Approach



400 SF ADA Compliant Approach



CAPACITY: 1 - 2 or 2 - 3 staff  
 SIZE: 200 - 400 SF  
 ANCILLARY SPACES: Reception Area  
 M-AD-1

PROGRAM ACTIVITIES:

- Conduct administrative support duties, and receive and direct visitors

SPATIAL RELATIONSHIPS:

- Easy access to all areas of the building
- Open to reception area
- Near principal's office
- Near main entrance to the building
- Visual access to main entrance of the building

ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control -  
 wall minimum STC 40  
 ceiling minimum CAC 35, NRC **0.70**
- Audio and visual control of reception area

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.

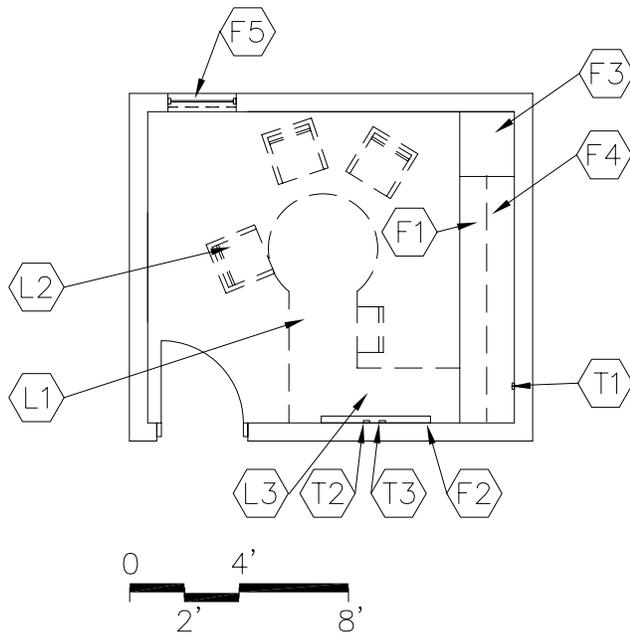
**SECRETARIAL AREA  
M-AD-2**

## CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items<sup>2</sup>:</u>	
Carpet <i>or</i> Carpet Tile	096816 <b>096813</b>	F1 24' - 60' of work surface with file drawers	123550
Base:		F2 42" high counter top with portion of counter 34" high or lower	123550
Resilient base	096500	F3 16'-24' of wall cabinets for forms, supplies, books, and manuals	123550
Ceiling:		F4 Tackable wall surface (optional)	101100
Suspended, acoustical	095113	F5 Tall cabinet for coats (optional)	123550
Walls:		<u>Fire Suppression:</u>	
Painted gypsum wallboard over metal studs	<b>092116/099100</b>	Fire suppression system	211000
<u>LOOSE FURNISHINGS:</u>		<u>Plumbing:</u>	
L1 Secretarial chairs		N/A	
Wastebasket		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Temperature control with reception area (coupled with similarly loaded adjacent spaces)	230923
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		3 duplex receptacles	262726
		Double duplex receptacle adjacent to each data port	262726
		Emergency lighting	265100
		<u>Communications:</u>	
		T1 1 voice port and phone at each secretarial workstation	271513/273113
		T2 1 fax port	271513/273113
		T3 1 data port at each secretarial workstation	271513
		T4 1 data port for printer	271513
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
<u>Miscellaneous:</u>			
The following items are to be funded by the school district:			
M1 Fax machine			
M2 Printer			
M3 Computer/typewriter			

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Ranges shown illustrate quantities for the smallest and largest possible room size.



## PROGRAM ACTIVITIES:

- Instructional and administrative leader of the building
- One-on-one conferences with parents, small group meetings, and coordination of administrative tasks

## SPATIAL RELATIONSHIPS:

- Near reception area
- Near secretarial area
- Easy access to school circulation areas
- Near main entrance to the building
- Near conference room

## ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control -  
wall minimum STC **45**  
ceiling minimum CAC 35, NRC **0.70**

CAPACITY: 1 - 4 persons  
SIZE: 150 SF

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.

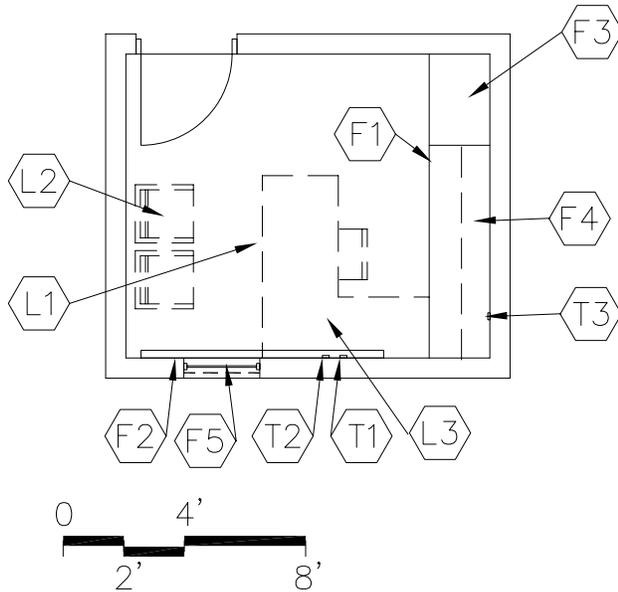
**PRINCIPAL'S OFFICE  
M-AD-3**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or Carpet Tile</i>	096816 <b>096813</b>	F1 Work surface with file drawers	123550
Base:		F2 4' of tack board or tackable wall surface	101100
Resilient base	096500	F3 2' of tall wardrobe (optional)	123550
Ceiling:		F4 Wall cabinets above work surface	123550
Suspended, acoustical	095113	<b>F5 Window with integral blinds</b>	<b>085113</b>
Walls:		<u>Fire Suppression:</u>	
Painted gypsum wallboard over metal studs	<b>092116/099100</b>	Fire suppression system	211000
<u>LOOSE FURNISHINGS:</u>		<u>Plumbing:</u>	
L1 Desk and chair		N/A	
L2 Visitor chairs		<u>HVAC:</u>	
L3 Computer desk return		Supply/return air system	Div. 23
Wastebasket		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port near workstation	271513
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references. Optional: moveable cabinets
2. Fixed casework and loose furnishings can also be all fixed casework or all loose furnishings.



## PROGRAM ACTIVITIES:

- To assist principal in administrative tasks
- One-on-one conferences with parents and coordination of administrative tasks

## SPATIAL RELATIONSHIPS:

- Near reception area
- Near secretarial area
- Direct access to school circulation areas
- Near main entrance to the building
- Near or accessible to principal's office
- Near conference room

## ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control -  
wall minimum STC **45**  
ceiling minimum CAC 35, NRC **0.70**

CAPACITY: 1 - 3 persons  
SIZE: 120 SF

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.

**ASSISTANT PRINCIPAL'S OFFICE  
M-AD-4**

CHAPTER 5: MIDDLE SCHOOL

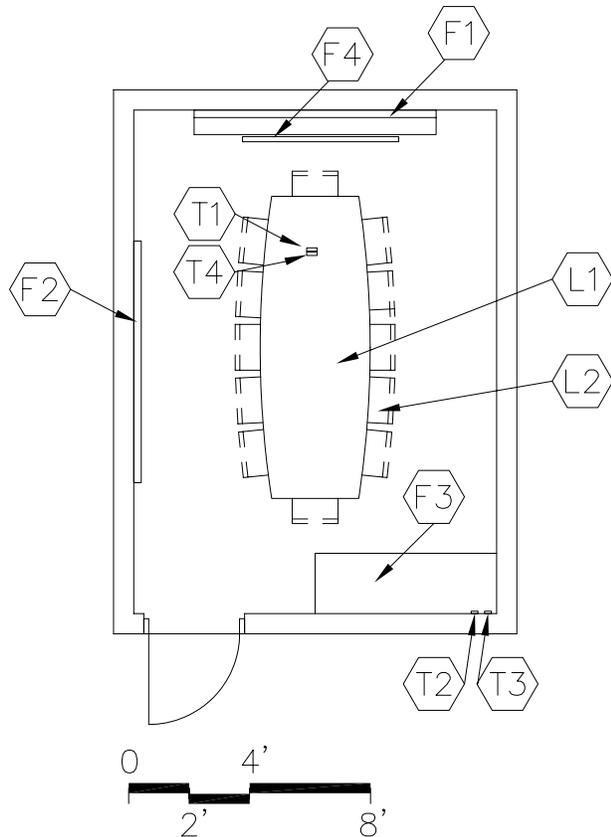
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or Carpet Tile</i>	096816 <b>096813</b>	F1 Work surface with file drawers	123550
Base:		F2 4' of tack board or tackable wall surface	101100
Resilient base	096500	F3 2' of tall wardrobe	123550
Ceiling:		F4 Wall cabinets above work surface	123550
Suspended, acoustical	095113	<b>F5 Window with integral blinds</b>	<b>085113</b>
Walls:		<u>Fire Suppression:</u>	
Painted gypsum wallboard over metal studs	<b>092116/099100</b>	Fire suppression system	211000
<u>LOOSE FURNISHINGS:</u>		<u>Plumbing:</u>	
L1 Desk and chair		N/A	
L2 Visitor chairs		<u>HVAC:</u>	
L3 Computer desk return		Supply/return air system	Div. 23
Wastebasket		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references. Optional: moveable cabinets
2. Fixed casework and loose furnishings can also be all fixed casework or all loose furnishings.

## CONFERENCE ROOM M-AD-5

### CHAPTER 5: MIDDLE SCHOOL



#### PROGRAM ACTIVITIES:

- Conferences with staff, students, parents, and other community groups

#### SPATIAL RELATIONSHIPS:

- Near principal's office
- Near assistant principal's office
- Near reception area
- Near secretarial area

#### ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control -  
wall minimum STC **45**  
ceiling minimum CAC 35, NRC **0.70**
- **Optional – window with integral blind**

CAPACITY: 12 – 15 persons  
SIZE: 250 SF

#### NOTES:

1. Loose furnishings shown represent one of many possible arrangements.

**CONFERENCE ROOM  
M-AD-5**

CHAPTER 5: MIDDLE SCHOOL

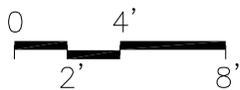
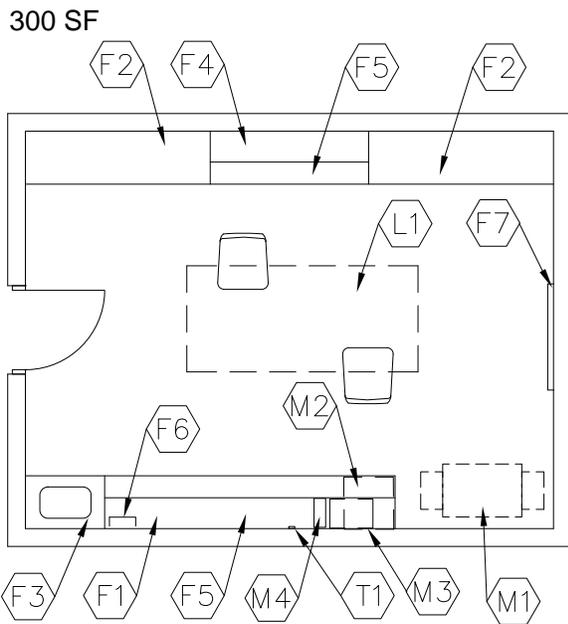
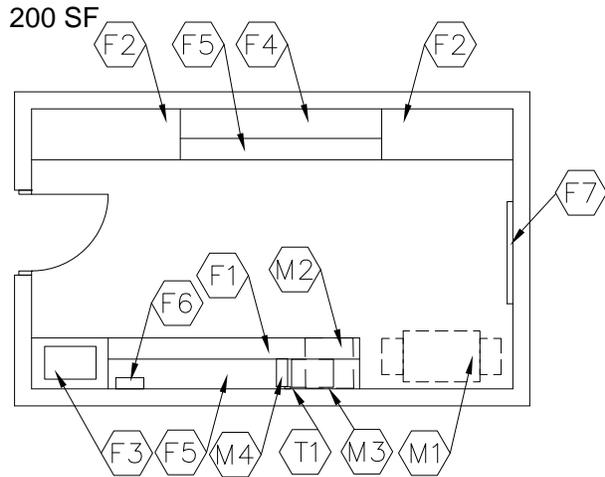
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		Fixed Items:	
Carpet <i>or Carpet Tile</i>	096816 <b>096813</b>	F1 About 8' of chalk/marker board	101100
		F2 About 8' of tack board or tackable wall surface	101100
Base:		F3 4'-6' of base cabinets (optional)	123550
Resilient base	096500	F4 Projection screen (optional)	115213
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted gypsum wallboard over metal studs	<b>092116/099100</b>	N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Conference table		Supply/return air system	Div. 23
L2 Chairs		Independent temperature control	230923
Wastebasket		<u>Electrical:</u>	
		Multilevel switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		3 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port	271513
		Clock	275313
		Central sound system	275123
		T4 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Fixed casework and loose furnishings can also be all fixed casework or all loose furnishings.

**MAIL/WORK/COPY ROOM  
M-AD-6**

**CHAPTER 5: MIDDLE SCHOOL**



CAPACITY: N/A  
 SIZE: 200 - 300 SF

**PROGRAM ACTIVITIES:**

- Distribution area for preparation/copying of mail and materials.
- Staff receives messages and obtains supplies.

**SPATIAL RELATIONSHIPS:**

- Near secretarial area

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control -  
 wall minimum STC 40  
 ceiling minimum CAC 35, NRC **0.70**

**NOTES:**

1. The mail cubicles can be either on the wall or through the wall.

**MAIL/WORK/COPY ROOM**  
**M-AD-6**

CHAPTER 5: MIDDLE SCHOOL

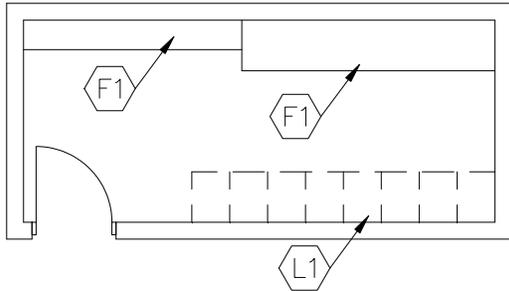
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
<b>Rubber</b>	096500	F1 About 10' of base & wall cabinets	123550
Base:		F2 8'-12' of tall storage cabinets	123550
Resilient base	096500	or about 32' maximum of a combination storage cabinets	
Ceiling:		F3 3' sink base cabinet	123550
Suspended, acoustical	095113	F4 Mail cubicles for all staff	123200
Walls:		F5 10'-12' of wall cabinets	123550
Painted gypsum wallboard over metal studs	092116/099100	F6 Towel dispenser (optional)	102813
		F7 4' tack board (optional)	101100
<u>LOOSE FURNISHINGS:</u>		<u>Fire Suppression:</u>	
L1 Work table and chairs		Fire suppression system	211000
(applicable in 300 SF space only)		<u>Plumbing:</u>	
Wastebasket		Sink	224000
		Plumbing connections	224000/221116/221119
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		3 - 5 duplex receptacles	262726
		Receptacle for copier	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		The following item is to be funded by the school district:	
		M1 Copier	
		M2 Undercounter refrigerator	
		M3 Microwave	
		M4 Coffee maker	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**ADMINISTRATIVE STORAGE  
M-AD-7**

CHAPTER 5: MIDDLE SCHOOL



CAPACITY:  
SIZE:

N/A  
150 SF

**PROGRAM ACTIVITIES:**

- Supplies, books, records, forms, and equipment storage

**SPATIAL RELATIONSHIPS:**

- Near mail/work/copy room
- Near vault/records storage

**ENVIRONMENTAL CONSIDERATIONS:**

N/A

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

**ADMINISTRATIVE STORAGE**  
**M-AD-7**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
<b>Rubber</b>	096500	F1 10'-20' of open shelving, depth may vary	123550
Base:		Option: mobile storage shelving	105626
Resilient base	096500		
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted gypsum wallboard over metal studs	092116/099100	N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 File cabinets		To be determined by Design Professional Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		N/A	
		<u>Miscellaneous:</u>	
		N/A	

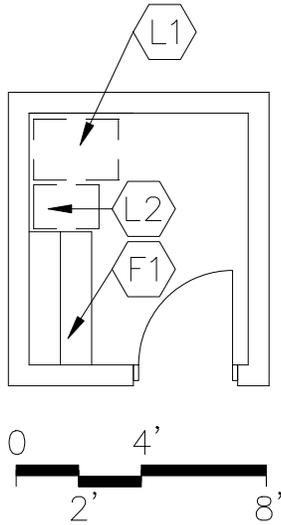
NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**VAULT/RECORDS STORAGE  
M-AD-8**

**CHAPTER 5: MIDDLE SCHOOL**

50 SF



**PROGRAM ACTIVITIES:**

- Storage of records and security files in a secure area

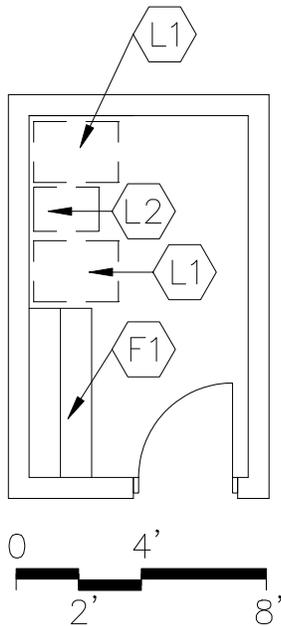
**SPATIAL RELATIONSHIPS:**

- Access to guidance area
- Access to secretarial personnel

**ENVIRONMENTAL CONSIDERATIONS:**

N/A

80 SF



**CAPACITY:**  
**SIZE:**

N/A  
50 - 80 SF

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

**VAULT/RECORDS STORAGE**  
**M-AD-8**

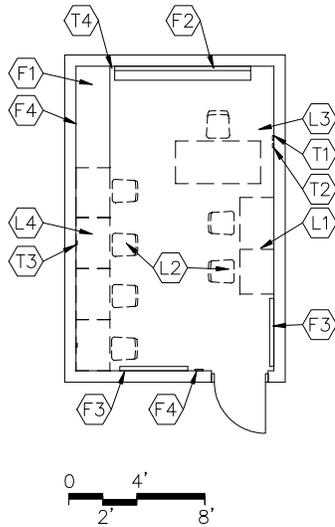
CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
<b>Rubber</b>	096500	F1 3'-6' of open shelving, (depth may vary)(fixed or loose)	123550
Base:		Option: mobile storage shelving	105626
Resilient base	096500	<u>Fire Suppression:</u>	
Ceiling:		Fire suppression system	211000
Rated 2-hour construction	---	<u>Plumbing:</u>	
Walls:		N/A	
Rated 2-hour construction		<u>HVAC:</u>	
Painted concrete masonry units or	042000/099100	To be determined by Design Professional	
Painted gypsum wallboard over metal		<u>Electrical:</u>	
studs	092116/099100	Single level switching	262726
<u>LOOSE FURNISHINGS:</u>		Fluorescent lighting	265100
L1 File cabinet		Illumination level: See Table 8600-4	
L2 Safe (loose or fixed)		1 duplex receptacle	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		N/A	
		<u>Miscellaneous:</u>	
		Wall, ceiling, and door construction to have a 2-hour fire rating	

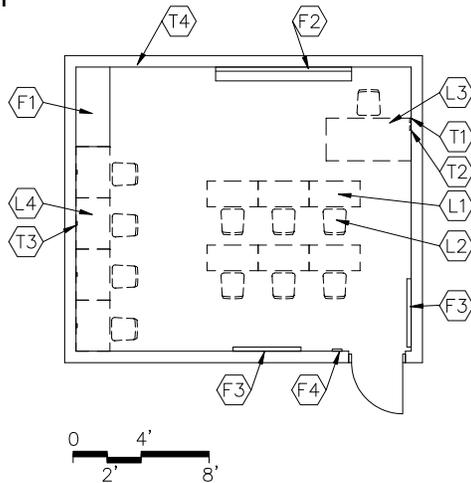
NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

200 SF



325 SF



CAPACITY: 5 - 8 students  
 SIZE: 200 - 325 SF

**PROGRAM ACTIVITIES:**

- Instructional area for students who require time away from the normal classroom due to behavioral problems

**SPATIAL RELATIONSHIPS:**

- Near principal's office
- Near secretarial area

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control -  
     wall minimum **STC 45**  
     ceiling minimum **CAC 35, NRC 0.70**
- **Optional – window with integral blind**

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

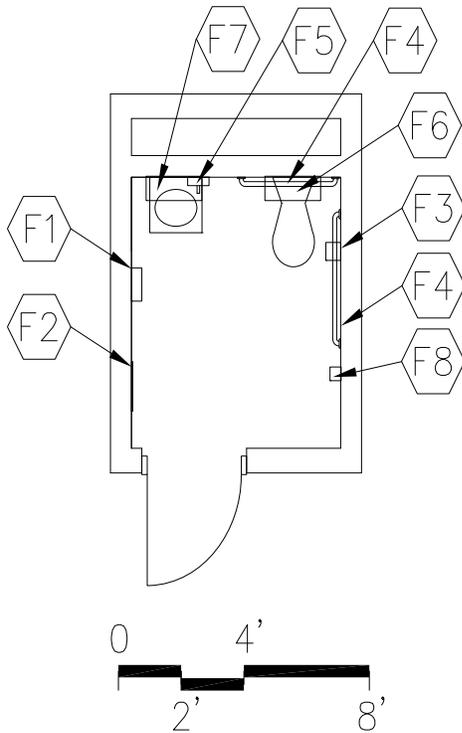
**IN-SCHOOL SUSPENSION  
M-AD-9**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet, <b>carpet tile</b> , ET, linoleum, rubber, or sheet vinyl	096816 096500 096516 <b>096813</b>	F1 3'-4' of base cabinets (optional) F2 6'-8' of chalk/marker board F3 4'-8' of tack board F4 Pencil sharpener support	123550 101100 101100 062000
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	N/A	
<u>Walls:</u>		<u>HVAC:</u>	
Painted concrete masonry units	042000/092113	Supply/return air system Independent temperature control	Div. 23 230923
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 Student carrels and/or desks		Single level switching	262726
L2 Student chairs		Fluorescent lighting	265100
L3 Teacher workstation and chair		Illumination level: See Table 8600-4	
L4 Computer workstation furniture		4 duplex receptacles	262726
Wastebasket		Double duplex receptacle adjacent to each data and video port	262726
Pencil sharpener		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near teacher workstation	271513
		T3 2 data ports (minimum) for student use	271513
		T4 1 video port	271533/271543
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**PROGRAM ACTIVITIES:**

- Personal and health needs for teachers and staff
- Restroom facilities for clinic

**SPATIAL RELATIONSHIPS:**

- Located in the administrative area

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control -  
wall minimum STC 48  
ceiling minimum CAC 35, NRC 0.70
- Moisture- and stain-resistant finishes

**CAPACITY:**  
**SIZE:**

1 person  
**60 SF**

**NOTES:**

**RESTROOM  
M-AD-10**

## CHAPTER 5: MIDDLE SCHOOL

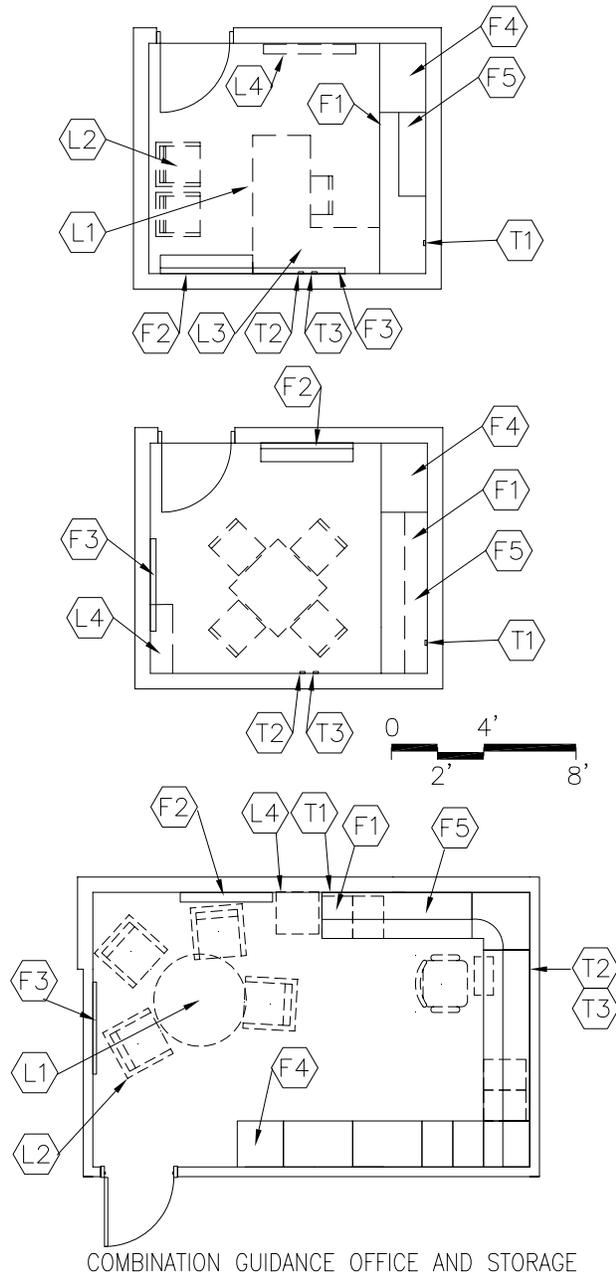
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
<b>ET</b> , linoleum, rubber, or sheet vinyl	096516	F1 Towel dispenser	102813
	096500	F2 24" x 60" mirror	102813
Optional: ceramic mosaic tile,	093000	F3 Toilet tissue holder	102813
porcelain tile, or	096723	F4 36" and 42" grab bar	102813
resinous flooring		F5 Soap dispenser	102813
		F6 8" deep wall cabinet above toilet for supplies (optional)	102813
<u>Base:</u>		F7 Stainless steel shelf (optional)	102813
Resilient base	096500	F8 Coat hook	102813
Optional: ceramic mosaic tile,	093000		
porcelain tile, resinous flooring,	096723		
or integral vinyl cove base		<u>Fire Suppression:</u>	
		Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	Wall-mounted water closet	224000
		Wall-mounted lavatory	224000
<u>Walls:</u>		Plumbing connections	224000/221116/221119
Painted concrete masonry units	042000/099100		
Optional: moisture & abuse-resistant	092116/099100	<u>HVAC:</u>	
gypsum wall board		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
Wastebasket		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**GUIDANCE COUNSELOR'S OFFICE**  
**M-AD-11**

**CHAPTER 5: MIDDLE SCHOOL**



**CAPACITY:**  
**SIZE:**

1 - 3 persons  
120 SF

**PROGRAM ACTIVITIES:**

- Guidance counselor to do individual work and provide assistance to students
- One-on-one conferences with parents and coordination of administrative tasks
- Could be combined with guidance records/storage

**SPATIAL RELATIONSHIPS:**

- Near guidance/records storage
- Near reception area
- Near secretarial area
- Access to school circulation areas

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control -  
wall minimum **STC 45**  
ceiling minimum **CAC 35, NRC 0.70**
- **Optional – window with integral blind**

**NOTES:**

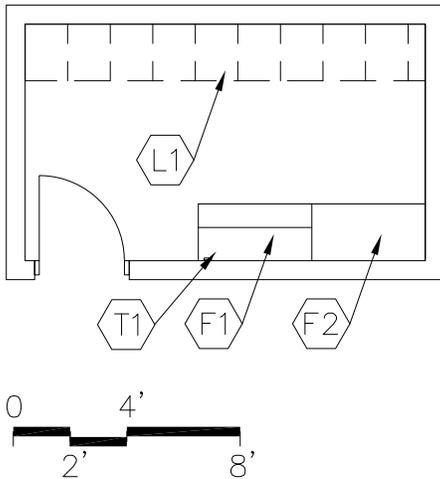
1. Loose furnishings shown represent one of many possible arrangements.

**GUIDANCE COUNSELOR'S OFFICE  
M-AD-11**
**CHAPTER 5: MIDDLE SCHOOL**

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>			
Carpet <i>or Carpet Tile</i>	096816 <b>096813</b>	<u>Fixed Items:</u>	
		F1 Work surface with file drawers	123550
		F2 4' of chalk/marker board (optional)	101100
		F3 4' of tack board	101100
		or tackable wall surface	
<u>Base:</u>		F4 Tall wardrobe	123550
Resilient base	096500	F5 Wall cabinets	123550
<u>Ceiling:</u>		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
<u>Walls:</u>		<u>Plumbing:</u>	
Painted gypsum wallboard over metal studs	<b>092116/099100</b>	N/A	
<u>LOOSE FURNISHINGS:</u>			
L1 Desk or table, with chair		<u>HVAC:</u>	
L2 Visitor chairs		Supply/return air system	Div. 23
L3 Computer desk return		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
L4 Bookcase (fixed or loose) Wastebasket		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port near workstation	271513
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references. Optional: moveable cabinets
2. Fixed casework and loose furnishings can also be all fixed casework or all loose furnishings.



## PROGRAM ACTIVITIES:

- Storage of supplies, files, and equipment in a secure area

## SPATIAL RELATIONSHIPS:

- Near guidance counselor's office
- Could be combined with guidance counselor's office

## ENVIRONMENTAL CONSIDERATIONS:

N/A

CAPACITY:  
SIZE:

N/A  
100 SF

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.

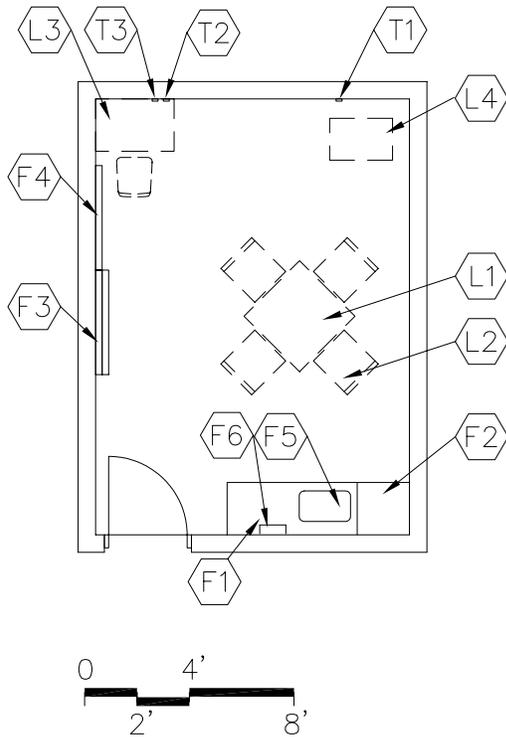
**GUIDANCE RECORDS/STORAGE  
M-AD-12**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
<b>Rubber</b>	096500	F1 3'-6' of base and wall cabinets	123550
Base:		F2 3'-4' of tall storage cabinets	123550
Resilient base	096500	Option: mobile storage shelving	105626
Ceiling:		<u>Fire Suppression:</u>	
Rated 2-hour construction	---	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Rated 2-hour construction		N/A	
Painted gypsum wallboard over metal studs or	092116/099100	<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	To be determined by Design Professional	
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 File cabinets		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		T1 1 data port (optional)	271513
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Wall, ceiling, and door construction to have a 2-hour fire rating	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.



## PROGRAM ACTIVITIES:

- After school meetings, community, and small group meetings

## SPATIAL RELATIONSHIPS:

- Near administrative area

## ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control -  
wall minimum STC **45**  
ceiling minimum CAC 35, NRC **0.70**
- **Optional – window with integral blind**

CAPACITY: 2 - 8 persons  
SIZE: 200 SF

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.

**PARENT/VOLUNTEER ROOM  
M-AD-13**

CHAPTER 5: MIDDLE SCHOOL

	Spec. Ref.#		Spec. Ref.#
<b><u>FINISHES<sup>1</sup>:</u></b>		<b><u>FEATURES<sup>1</sup>:</u></b>	
<b>Flooring:</b>		<b><u>Fixed Items:</u></b>	
Carpet <i>or</i> Carpet Tile	096816 <b>096813</b>	F1 About 3' of base cabinets	123550
<b>Base:</b>		F2 2' of tall wardrobe	123550
Resilient base	096500	F3 4' of chalk/marker board (optional)	101100
<b>Ceiling:</b>		F4 4' of tack board or tackable wall surface	101100
Suspended, acoustical	095113	F5 3' Sink base cabinet	123550
<b>Walls:</b>		F6 Towel dispenser	102813
Painted gypsum wallboard over metal studs	<b>092116/099100</b>	<b><u>Fire Suppression:</u></b>	
<b><u>LOOSE FURNISHINGS:</u></b>		Fire suppression system	211000
L1 Table		<b><u>Plumbing:</u></b>	
L2 Chairs		Sink	224000
L3 Computer workstation furniture		Plumbing connections	224000/221116/221119
L4 Monitor cart		<b><u>HVAC:</u></b>	
Wastebasket		Supply/return air system	Div. 23
		Independent temperature control	230923
		<i>(coupled with similarly loaded     adjacent spaces)</i>	
		<b><u>Electrical:</u></b>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<b><u>Communications:</u></b>	
		T1 1 video port and video display device	271533/271543/274119
		T2 1 voice port and phone	271513/273113
		T3 1 data port near workstation	271513
		Clock	275313
		Central sound system	275123
		<b><u>Electronic Safety and Security:</u></b>	
		Life safety devices per code	283111
		<b><u>Miscellaneous:</u></b>	
		N/A	

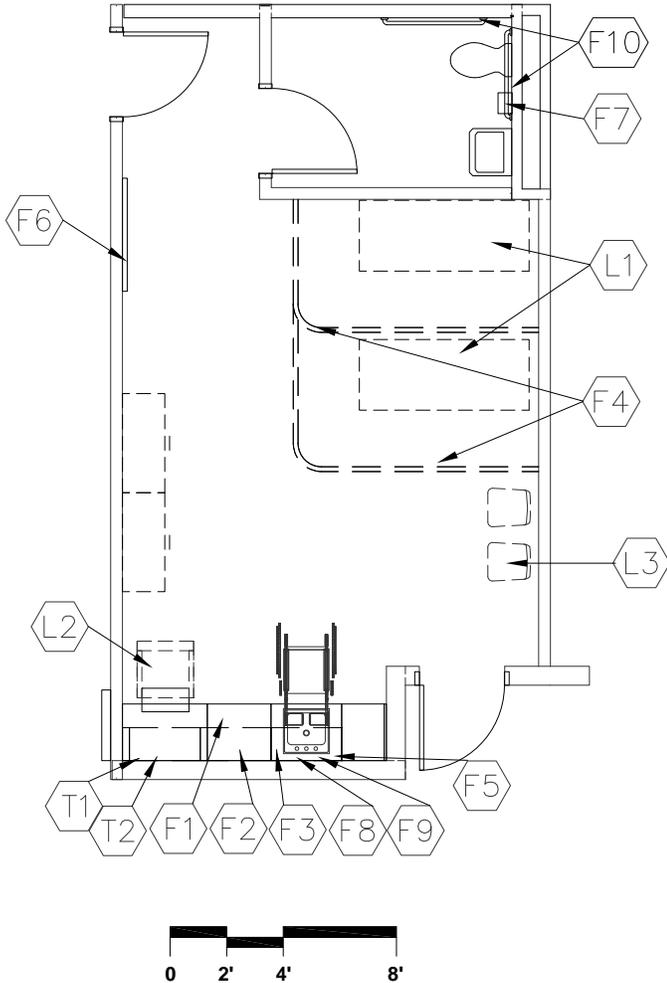
**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**HEALTH CLINIC (includes restroom)**  
**M-AD-14**

CHAPTER 5: MIDDLE SCHOOL

450 SF



CAPACITY: **2 - 3 patients**  
 SIZE: **Clinic.....240 - 390 SF**  
           **Restroom.....60 SF**  
 ANCILLARY SPACES: **Secretarial Area**  
                                   **M-AD-2**

**PROGRAM ACTIVITIES:**

- Treatment of minor injuries, administration of medication, and conduction of hearing or vision tests

**SPATIAL RELATIONSHIPS:**

- Near reception area
- Adjacent to individual restroom
- **Near special education shower**

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control - wall minimum STC 48  
ceiling minimum CAC 35, NRC 0.70
- Stain-resistant floor covering

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

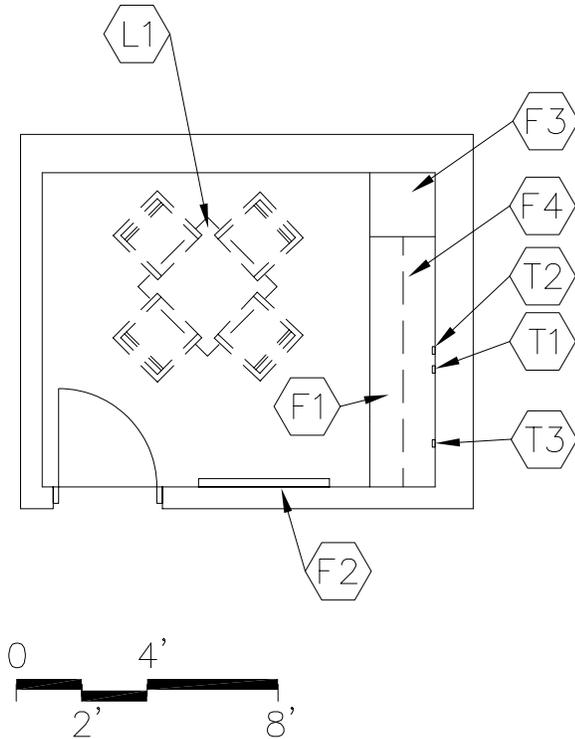
**HEALTH CLINIC (includes restroom)****M-AD-14**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES</u> <sup>1</sup> :	Spec. Ref.#	<u>FEATURES</u> <sup>1</sup> :	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Linoleum, rubber, ET	096516	F1 4'-9' of base cabinets	123550
vinyl, or	096500	F2 3' sink base cabinet	123550
resinous flooring	096723	F3 4'-9' of wall cabinets, lockable	123550
Base:		F4 Cubicle curtain and track	102123
Resilient base, resinous flooring,	096500	F5 Towel dispenser	102813
or integral vinyl cover base	096730	F6 4' of tack board	101100
Ceiling:		F7 Sanitary napkin dispenser/disposal	102813
Suspended, acoustical	095113	F8 Soap dispenser	102813
Walls:		F9 24" x 60" mirror	102813
Painted gypsum wallboard		F10 36" and 42" grab bars	102813
over metal studs	092116/099100	<u>Fire Suppression:</u>	
<u>LOOSE FURNISHINGS:</u>		Fire suppression system	211000
L1 Cots		<u>Plumbing:</u>	
L2 Desk and chair		<b>Wall-mounted water closet</b>	<b>224000</b>
L3 Chairs		<b>Wall-mounted lavatory</b>	<b>224000</b>
Wastebasket		Sink - with goose neck	224000
<u>EQUIPMENT</u>		Plumbing connections	224000/221116/221119
E1 Refrigerator with ice making capabilities		<u>HVAC:</u>	
<u>Miscellaneous:</u>		Supply/return air system	Div. 23
N/A		Independent temperature control	230923
		Exhaust directly to exterior	
		<u>Electrical:</u>	
		Single level switching with dimmer	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		2 duplex receptacles	262726
		Double duplex receptacle adjacent to each data port	262726
		Receptacle for refrigerator	262726
		Emergency lighting	265100
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near workstation	271523
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.



APACITY:  
SIZE:

1 - 3 persons  
120 SF

**PROGRAM ACTIVITIES:**

- Office and work area for specialists such as psychologist, reading specialist, etc., who regularly spend a portion of their schedule at one of several schools

**SPATIAL RELATIONSHIPS:**

- Near reception area
- Near secretarial area
- Direct access to school circulation areas
- Near main entrance to the building
- Near or accessible to principal's office and guidance counselor's office

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control -  
wall minimum **STC 45**  
ceiling minimum **CAC 35, NRC 0.70**
- **Optional – window with integral blind**

**NOTES:**

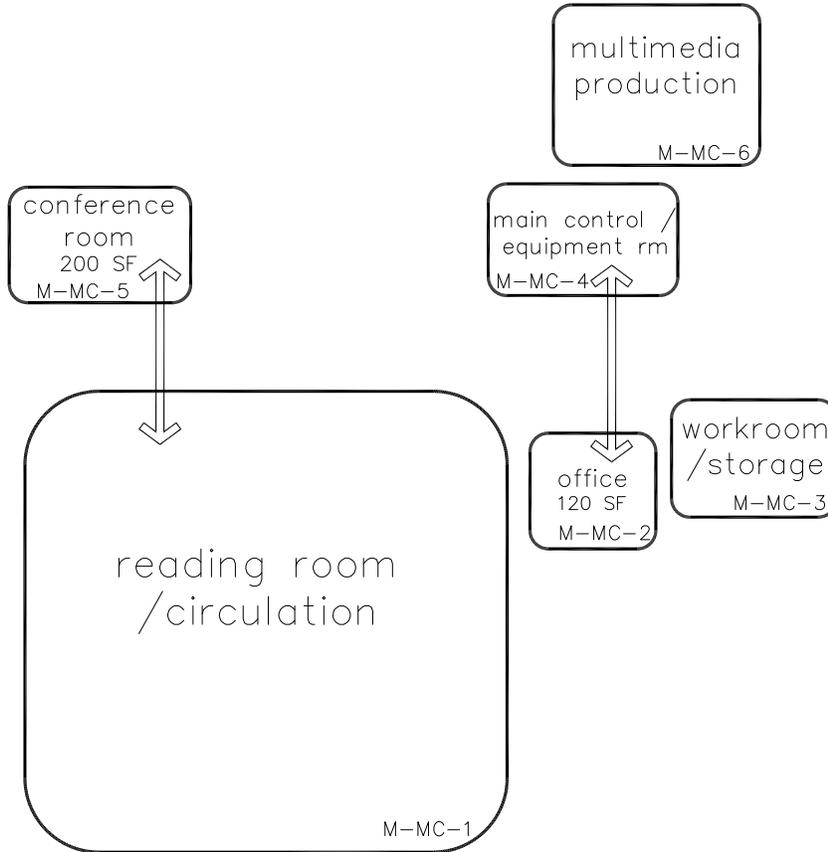
1. Loose furnishings shown represent one of many possible arrangements.

**ITINERANT PERSONNEL OFFICE  
M-AD-15**
**CHAPTER 5: MIDDLE SCHOOL**

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet <i>or</i> Carpet Tile	096816 <b>096813</b>	F1 Work surface with file drawers(optional)	123550
		F2 4' of tack board or tackable wall surface	101100
Base:		F3 2' of tall wardrobe (optional)	123550
Resilient base	096500	F4 Wall cabinets	123550
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted gypsum wallboard over metal studs	<b>092116/099100</b>	N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Table and chairs		Supply/return air system	Div. 23
Wastebasket		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references. Optional: moveable cabinets
2. Fixed casework and loose furnishings can also be all fixed casework or all loose furnishings.



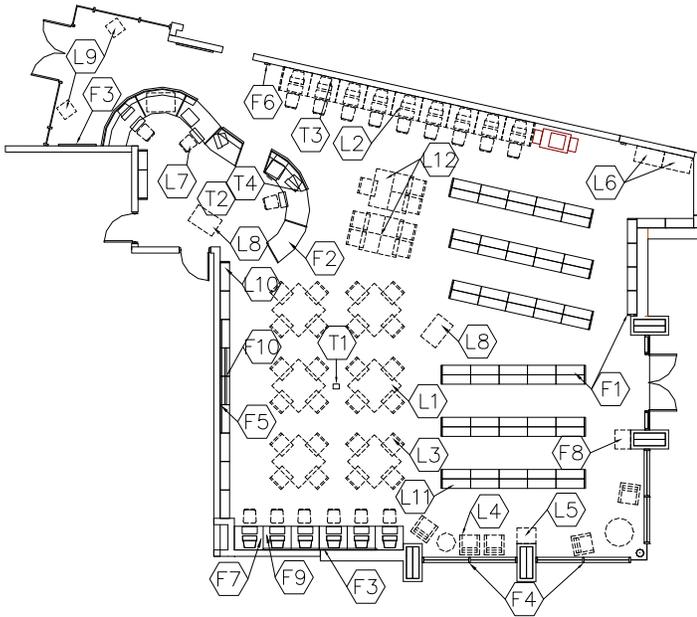
## NOTES:

This is an example of how the media center spaces in a middle school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Media Center space plates:

- M-MC-1 Reading Room/Circulation
- M-MC-2 Media Specialist Office
- M-MC-3 Workroom/Storage
- M-MC-4 Main Control / Equipment Room
- M-MC-5 Conference Room
- M-MC-6 Multimedia Production Room

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CAPACITY: 10% of student capacity  
 SIZE: 10% of student capacity multiplied  
 by 35 SF per student

## PROGRAM ACTIVITIES:

- Information laboratory that serves the instructional needs of the entire school.
- Recreational reading, research, accessing information, using technology, storing, cataloging, and reproduction of materials and information.
- Individual, small group, and class reading and researching.

## SPATIAL RELATIONSHIPS:

- Centrally located and accessible to all areas of the facility
- Locate with access to academic core classrooms
- Easy access to public parking

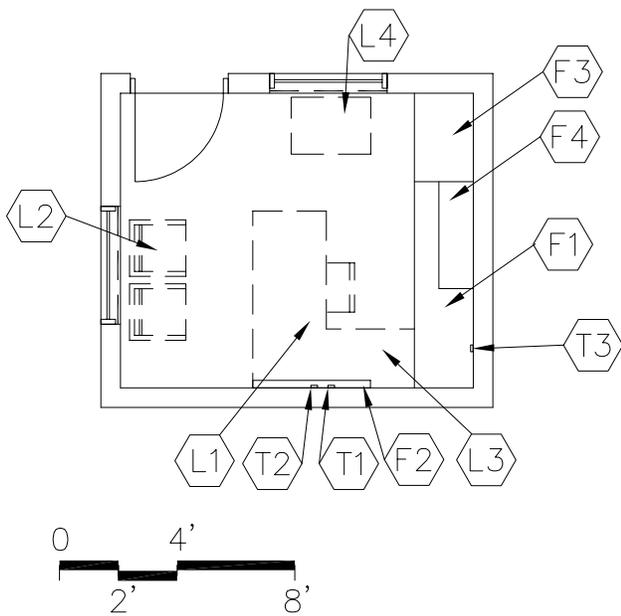
## ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Natural light opening with an operable vent
- Environmental sound control -  
 wall minimum STC 50  
 ceiling minimum CAC 35, NRC **0.70**
- Visual awareness of space to students and staff through transparency to corridor

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.





## PROGRAM ACTIVITIES:

- Media specialist to conduct duties

## SPATIAL RELATIONSHIPS:

- Near reading room/circulation area
- Near workroom/storage
- Could be part of the media center reading room

## ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control -  
wall minimum STC **45**  
ceiling minimum CAC 35, NRC **0.70**

CAPACITY: 1 - 3 persons  
SIZE: 120 SF

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.

**MEDIA SPECIALIST OFFICE  
M-MC-2**

## CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet <i>or Carpet Tile</i>	096816 <b>096813</b>	F1 Work surface with file drawers	123550
		F2 4' of tack board or tackable wall surface	101100
<u>Base:</u>		F3 2' of tall wardrobe	123550
Resilient base	096500	F4 Wall cabinets	123550
<u>Ceiling:</u>		F5 Bookcases (optional)	123550
Suspended, acoustical	095113		
<u>Walls:</u>		<u>Fire Suppression:</u>	
Painted concrete masonry units		Fire suppression system	211000
	<b>042000/099100</b>	<u>Plumbing:</u>	
		N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Desk and chair		Supply/return air system	Div. 23
L2 Visitor chairs		Independent temperature control (coupled with similarly loaded adjacent spaces)	230923
L3 Computer desk return			
L4 File cabinet		<u>Electrical:</u>	
Wastebasket		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Interior window	081113/088000

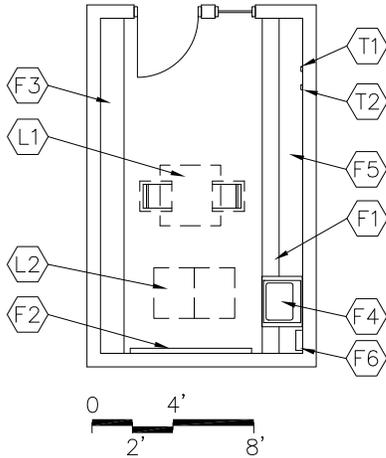
NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references. Optional: moveable cabinets
2. Fixed casework and loose furnishings can either be all fixed casework or all loose furnishings.

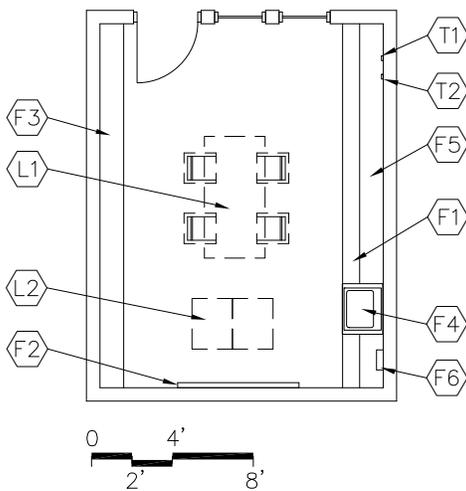
**WORKROOM/STORAGE**  
**M-MC-3**

CHAPTER 5: MIDDLE SCHOOL

150 SF



250 SF



CAPACITY: 1 - 3 staff  
SIZE: 150 - 250 SF

**PROGRAM ACTIVITIES:**

- Receiving, processing, and repairing media material

**SPATIAL RELATIONSHIPS:**

- Near reading room/circulation
- Near media specialist office

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control -  
wall minimum **STC 45**  
ceiling minimum **CAC 35, NRC 0.70**
- Visual access to reading room/circulation

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

**WORKROOM/STORAGE****M-MC-3**

CHAPTER 5: MIDDLE SCHOOL

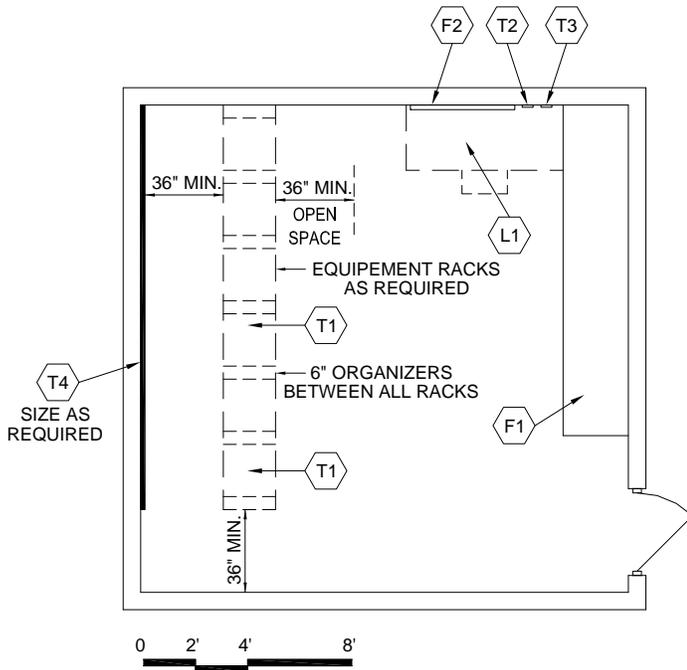
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items<sup>2</sup>:</u>	
<b>Rubber</b>	096500	F1 12' - 15' of base cabinets	123550
		F2 4'-8' of tack board	101100
<u>Base:</u>		F3 10' - 18' of bookcases (optional)	123550
Resilient base	096500	F4 3' sink base cabinet	123550
		F5 8' - 19' of wall cabinets	123550
<u>Ceiling:</u>		F6 Towel dispenser	102813
Suspended, acoustical	095113		
		<u>Fire Suppression:</u>	
<u>Walls:</u>		Fire suppression system	211000
Painted concrete masonry units	042000/099100		
		<u>Plumbing:</u>	
		Sink	224000
		Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>			
L1 Table and chairs			
L2 Book trucks			
Wastebasket			
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		3 duplex receptacles (minimum)	262726
		Double duplex receptacle adjacent to each data port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port	271513
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Interior window	081113/088000

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Ranges shown indicate quantities for the smallest and largest possible room size.

MAIN CONTROL / EQUIPMENT ROOM  
M-MC-4

## CHAPTER 5: MIDDLE SCHOOL



CAPACITY:  
SIZE:

N/A  
300 SF

## PROGRAM ACTIVITIES:

- Collection and distribution hub for the voice, video, and data networks within the facility
- Contains racks for distribution equipment

## SPATIAL RELATIONSHIPS:

- Near the center of the building *to minimize the number of Telecommunication Rooms (TR)*

## ENVIRONMENTAL CONSIDERATIONS:

- Ventilation and cooling of heat-generating electronic equipment

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.

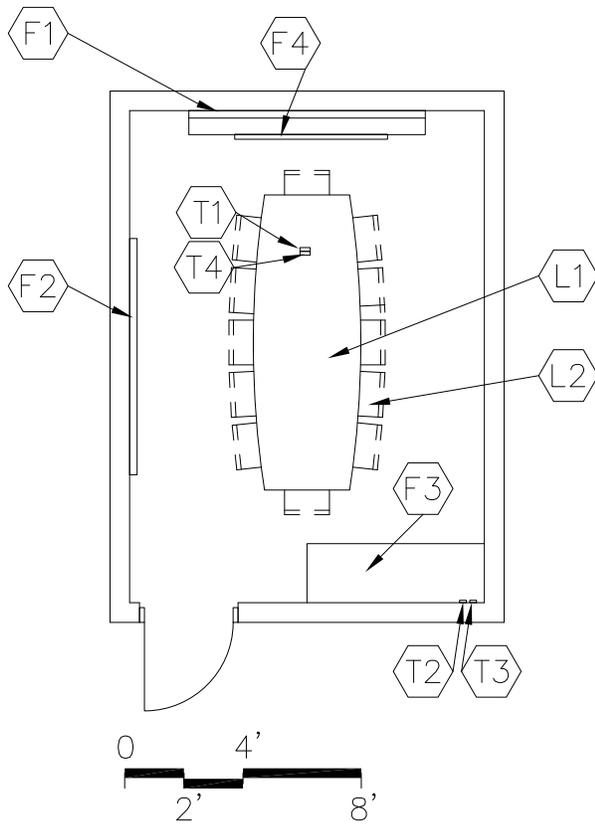
**MAIN CONTROL / EQUIPMENT ROOM**  
**M-MC-4**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
ET or sheet vinyl	096500	F1 8'-16' of open shelving, depths may vary (fixed or loose)	123550
Base:		F2 4' of tack board (optional)	101100
Resilient base	096500	<u>Fire Suppression:</u>	
Ceiling:		Fire suppression system	211000
Suspended, acoustical	095113	<u>Plumbing:</u>	
Walls:		N/A	
Painted concrete masonry units	042000/099100	<u>HVAC:</u>	
<u>LOOSE FURNISHINGS:</u>		Independent, packaged system	Div. 23
L1 Desk and chair		<u>Electrical:</u>	
Wastebasket		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		3 duplex receptacles	262726
		Duplex receptacle for electronic systems	262726
		Telecommunications Grounding	270526/260526
		<u>Communications:</u>	
		T1 Technology Equipment	
		Central sound system	275123
		Telephone wiring	271313/271513
		Integrated telephone system	273113
		Video wiring	271333/271533/271543
		Digital on demand delivery system	274125
		Local area network wiring	271513/271323
		Local area network electronics	272100
		Grounding & Infrastructure Equipment	270526/271100
		T2 1 voice port and phone	271513/273113
		T3 1 data port near workstation	271513
		T4 1/4" plywood back board	271313
		<u>Electrical Safety and Security:</u>	
		Life safety devices per code	283111
		Security system	281300/281600/282300
		<u>Miscellaneous:</u>	
		Provide distribution equipment with an equipment electrical ground.	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.



## PROGRAM ACTIVITIES:

- Used primarily by students for group projects

## SPATIAL RELATIONSHIPS:

- Near reading room/circulation

## ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control -  
wall minimum STC 45  
ceiling minimum CAC 35, NRC 0.70
- Optional – window with integral blind

CAPACITY: 8 - 12 persons  
 SIZE: 200 - 310 SF

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.

**CONFERENCE ROOM  
M-MC-5**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#	
<u>Flooring:</u>				
Carpet or Carpet Tile	096816	F1 8'-10' of chalk/marker board	101100	
	096813	F2 6'-8' of tack board or tackable wall surface	101100	
<u>Base:</u>				
Resilient base	096500	F3 4'-6' of base cabinets (optional) (fixed or mobile)	123550	
<u>Ceiling:</u>				
Suspended, acoustical	095113	F4 Projection screen (optional)	115213	
<u>Walls:</u>				
Painted concrete masonry units	042000/099100	<u>Fire Suppression:</u> Fire suppression system	211000	
<u>Plumbing:</u> N/A				
<u>LOOSE FURNISHINGS:</u>				
L1 Conference table		<u>HVAC:</u> Supply/return air system	Div. 23	
L2 Chairs		Independent temperature control	230923	
Wastebasket		<u>Electrical:</u> Multilevel switching	262726	
		Fluorescent lighting	265100	
		Illumination level: See Table 8600-4		
		3 duplex receptacles	262726	
		Double duplex receptacle adjacent to each data and video port	262726	
<u>Communications:</u>				
		T1 1 video port	271533/271543	
		T2 1 voice port and phone	271513/273113	
		T3 1 data port	271513	
		T4 Overhead projector	274119	
		Central sound system	275123	
		Clock	275313	
<u>Electronic Safety and Security:</u> Life safety devices per code				283111
<u>Miscellaneous:</u> N/A				

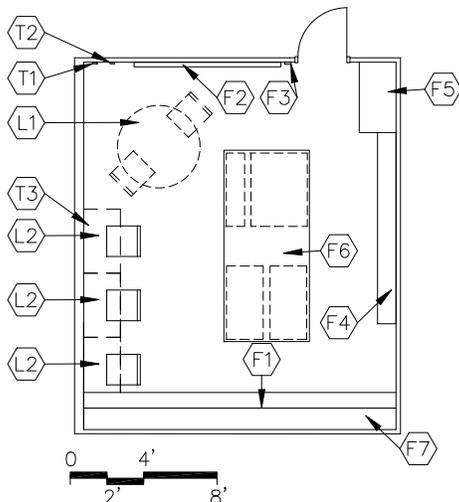
**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Fixed equipment or loose furnishings can be also all fixed equipment or all loose furnishings.

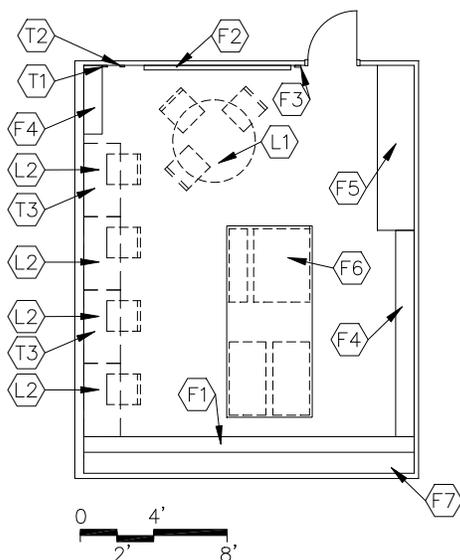
## MULTIMEDIA PRODUCTION ROOM M-MC-6

### CHAPTER 5: MIDDLE SCHOOL

300 SF



400 SF



CAPACITY:

2 - 7 persons

SIZE:

300 - 400 SF

ANCILLARY SPACES:

#### PROGRAM ACTIVITIES:

- Production of a variety of media
- Individual student project work and student instruction
- Putting together student project presentations in media such as PowerPoint, video, reports, 3D models, etc.

#### SPATIAL RELATIONSHIPS:

- Near workroom/storage
- Near media center

#### ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control –  
wall minimum STC 50  
ceiling minimum CAC 35, NRC 0.70

#### NOTES:

1. Loose furnishings shown represent one of many possible arrangements.
2. This space could be an area inside the media center.

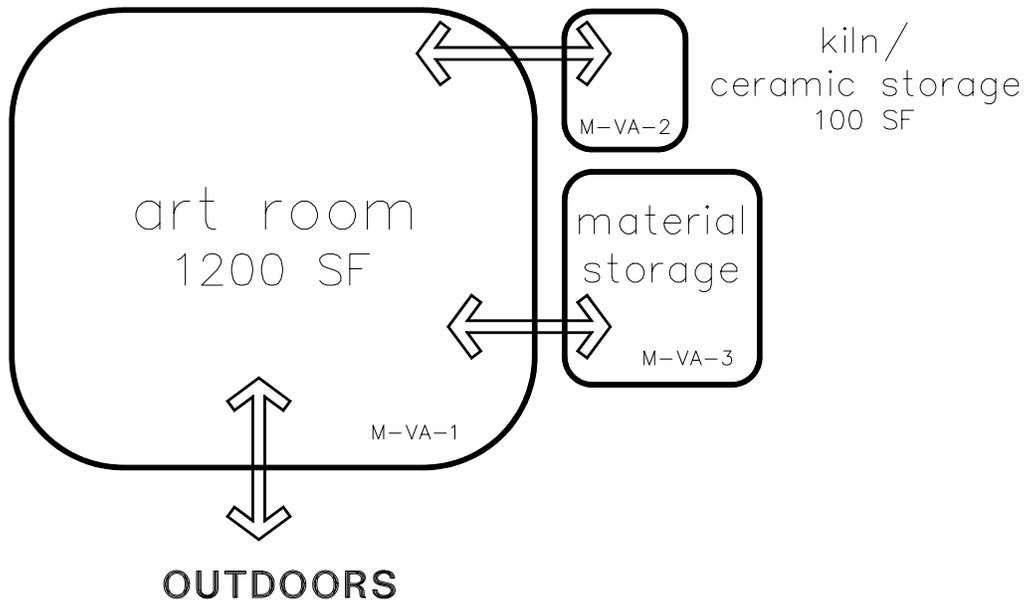
**MULTIMEDIA PRODUCTION ROOM**  
**M-MC-6**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items<sup>3</sup>:</u>	
linoleum, ET, sheet vinyl, or rubber	096516 096500	F1 6'-18' of base cabinets with different types of storage	123550 101100
<u>Base:</u>		F2 4'-8' of tack board	101100
Resilient base	096500	F3 Pencil sharpener support (optional)	062000
<u>Ceiling:</u>		F4 4' - 16' of tall bookcases	123550
Suspended, acoustical	095113	F5 3' - 9' of tall cabinets	123550
<u>Walls:</u>		F6 Work surface	123550
Painted concrete masonry units	042000/099100	F7 6'-18' of wall cabinets	123550
		F8 Technology support casework (if applicable)	123550
<u>LOOSE FURNISHINGS:</u>		<u>Fire Suppression:</u>	
L1 Tables and chairs/stools		Fire suppression system	211000
L2 Computer workstation furniture		<u>Plumbing:</u>	
Wastebasket		N/A	
Pencil sharpener (optional)		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		Multilevel switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 video port and video display device	271533/271543/274119
		T2 1 voice port and phone	271513/273113
		T3 4 data ports	271513
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Interior windows for supervision (optional)	081113/088000
		The following items to be provided by the school district: copier, scanner, printers, binders, and laminators.	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Ranges shown indicate quantities for the smallest and largest possible room size.



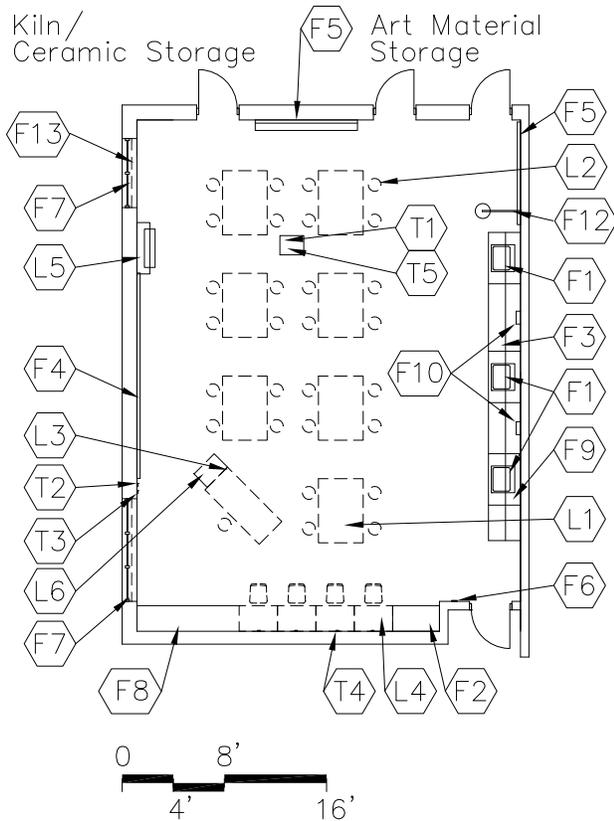
## NOTE:

This is an example of how the visual arts spaces in a middle school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Visual Art space plates:

- M-VA-1 Art Room
- M-VA-2 Kiln/Ceramic Storage
- M-VA-3 Art Material Storage

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CAPACITY:	28 students
SIZE:	1,200 SF
ANCILLARY SPACES:	Kiln/Ceramic Storage M-VA-2
	Art Material Storage M-VA-3

## PROGRAM ACTIVITIES:

- Art students will work on a variety of two and three-dimensional art projects. Projects will include drawing and painting, computer graphics, sculpture and model making, collage, fiber arts, and ceramics.

## SPATIAL RELATIONSHIPS:

- Near academic core classrooms
- Direct access to outdoors **or access through corridor**

## ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Natural lighting opening equal to minimum 5% of floor area, with an operable vent
- Environmental sound control -  
wall minimum STC 50  
ceiling minimum CAC 35, NRC **0.70**
- Stain-resistant floor covering

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.

**ART ROOM**  
**M-VA-1**

## CHAPTER 5: MIDDLE SCHOOL

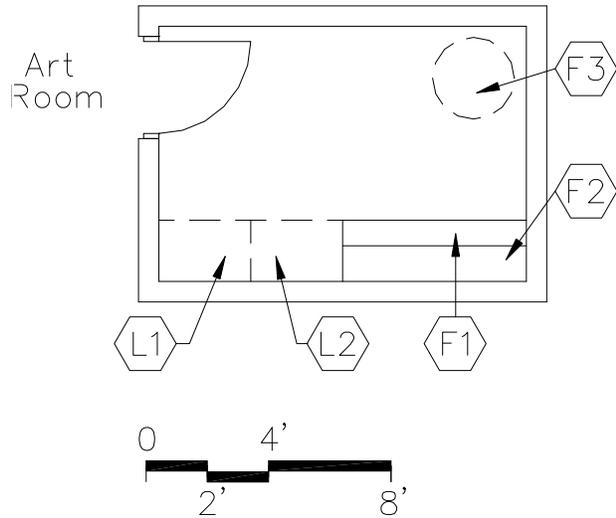
	Spec. Ref.#		Spec. Ref.#
<b><u>FINISHES<sup>1</sup>:</u></b>		<b><u>FEATURES<sup>1</sup>:</u></b>	
<b><u>Flooring:</u></b>		<b><u>Fixed Items:</u></b>	
ET, sheet vinyl, rubber,	096500	F1 3'-4' sink base cabinet,	123550
polished concrete finishing,	033510	or several wash fountains	
colored concrete finishing	033519	F2 3' of tall wardrobe with file drawers	123550
		F3 10'-12' of base cabinets	123550
		F4 12'-16' of tack board	101100
		or tackable wall surface	
<b><u>Base:</u></b>		F5 12'-16' of chalk/marker board	101100
Resilient base	096500	F6 Pencil sharpener support	062000
		F7 6'-10' of tall storage cabinets	123550
<b><u>Ceiling:</u></b>		F8 10'-12' of wall cabinets	123550
Suspended, acoustical	095113	F9 Towel dispenser (optional)	102813
		F10 Projection screen (optional)	115213
<b><u>Walls:</u></b>		F11 Technology support casework	123550
Painted concrete masonry units	042000/099100	F12 Emergency eyewash (recommended)	224000
		F13 Windows with integral blinds	085113
		<b><u>Fire Suppression:</u></b>	
<b><u>LOOSE FURNISHINGS:</u></b>		Fire suppression system	211000
L1 Student work tables		<b><u>Plumbing:</u></b>	
L2 Student chairs or stools		Sinks with solids interceptor	224000
L3 Teacher desk and chair/stool and teacher		Emergency eyewash connections	224500
computer support		Plumbing connections	224000/221116/221119
L4 Computer workstation furniture		<b><u>HVAC:</u></b>	
L5 Desk height file cabinet		Supply/return air system	Div. 23
Wastebasket		Independent temperature control	230923
Pencil sharpener		Manually controlled general exhaust	Div. 23
<b><u>EQUIPMENT:</u></b>		<b><u>Electrical:</u></b>	
E1 Drying rack		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Multilevel switching	262726
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to	
		each data and video port	262726
		Track lighting	265100
		Means of egress lighting per code	265100
		Emergency lighting per code	265100
		<b><u>Communications:</u></b>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 1 data port	
		near teacher workstation	271513
		T4 4 data ports (minimum)	
		for student use	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T5 Overhead projector	274119
		<b><u>Electronic Safety and Security:</u></b>	
		Life safety devices per code	283111

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**KILN/CERAMIC STORAGE**  
**M-VA-2**

CHAPTER 5: MIDDLE SCHOOL



**PROGRAM ACTIVITIES:**

- Firing of art projects in ceramics and pottery by the teacher

**SPATIAL RELATIONSHIPS:**

- Adjacent to art room
- Near art material storage

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Ventilation controlled by a thermostat

CAPACITY:	N/A
SIZE:	100 SF
ANCILLARY SPACES:	Art Room M-VA-1

NOTES:

**KILN/CERAMIC STORAGE**  
**M-VA-2**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
<b>Polished concrete finishing or</b>	<b>033510</b>	F1 3'-6' of base cabinets	123550
<b>colored concrete finishing</b>	<b>033519</b>	F2 3'-6' of wall cabinets	123550
		F3 Kiln	119200
Base:		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Suspended, acoustical	095113	N/A	
Walls:		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	Temperature controlled exhaust	Div. 23
		Ventilation for kiln	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 3' of tall dry storage units (total)		Single level switching	262726
L2 3' of tall damp storage units (total)		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
L1 and L2 could be fixed casework.		1 duplex receptacle	262726
		Electrical connection for kiln	262726
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

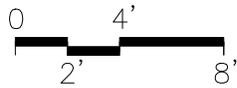
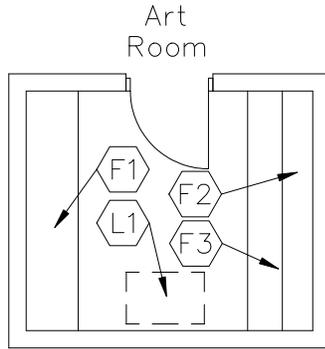
NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

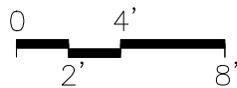
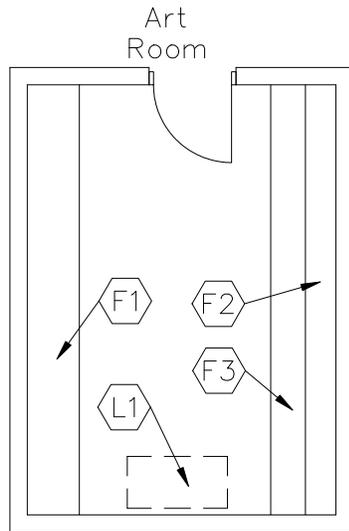
**ART MATERIAL STORAGE  
M-VA-3**

CHAPTER 5: MIDDLE SCHOOL

100 SF



200 SF



**PROGRAM ACTIVITIES:**

- Storage of art supplies and materials

**SPATIAL RELATIONSHIPS:**

- Adjacent to art room

**ENVIRONMENTAL CONSIDERATIONS:**

- Stain-resistant floor covering

CAPACITY: N/A  
 SIZE: 100 - 200 SF  
 ANCILLARY SPACES: Art Room  
 M-VA-1

NOTES:

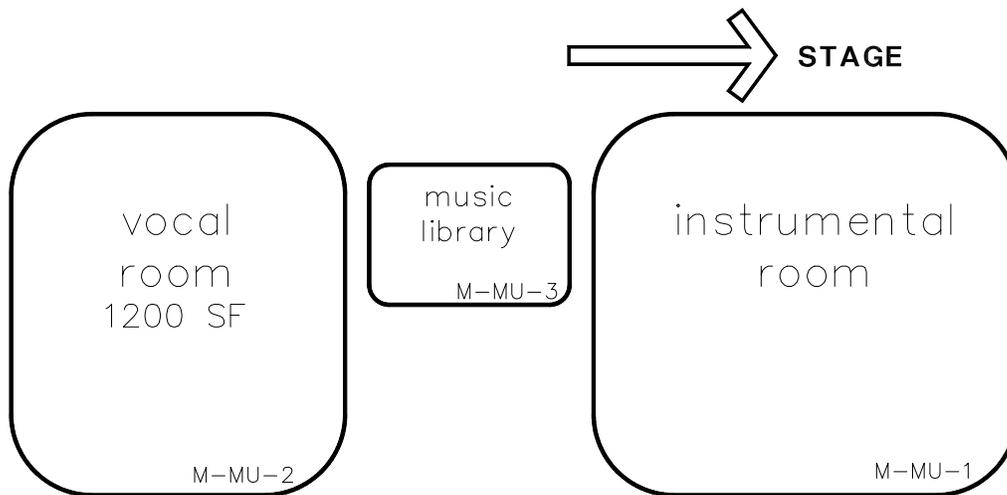
**ART MATERIAL STORAGE****M-VA-3**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items<sup>2</sup>:</u>	
ET, sheet vinyl,	096500	F1 8' - 14' tall storage cabinets	123550
polished concrete finishing,	033510	F2 8' - 14' base cabinets,	123550
colored concrete finishing	033519	(depth for school's need)	123550
		F3 8' - 14' wall cabinets	123550
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical	095113	N/A	
<u>Walls:</u>		<u>HVAC:</u>	
Painted concrete masonry units	042000/099100	Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 Mobile materials cart		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Duplex receptacle above base cabinet	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		N/A	
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Ranges shown indicate quantities for the smallest and largest possible room size.



## NOTES:

This is an example of how the music spaces in a middle school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Music space plates:

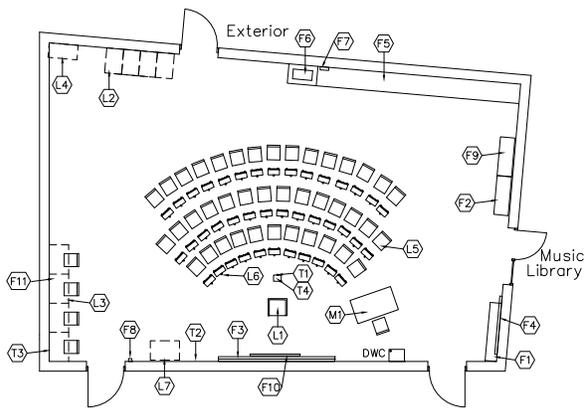
- M-MU-1 Instrumental Room
- M-MU-2 Vocal Room
- M-MU-3 Music Library

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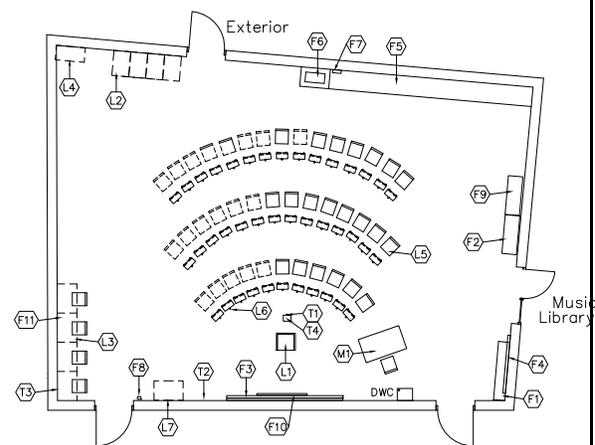
**INSTRUMENTAL ROOM  
M-MU-1**

CHAPTER 5: MIDDLE SCHOOL

1400 SF



1600 SF



CAPACITY: District to dictate program  
 SIZE: 1,400 - 1,600 SF  
 ANCILLARY SPACES: Music Library  
 M-MU-3

**PROGRAM ACTIVITIES:**

- House all of the instrumental music activities
- Practice area for individuals, small groups, class-size groups, and the entire school band
- Practice and performance type presentations
- Storage of band instruments

**SPATIAL RELATIONSHIPS:**

- Grouped with other noise producing activities
- Access to parking
- Direct access to outdoors
- Near vocal room
- Near the stage in the student dining area

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control - wall minimum STC 60 ceiling minimum CAC 35, NRC 0.70
- Large doors
- Ceiling heights: preferred 12'-16' (12' minimum)
- Acoustical requirements as determined by final configuration and other factors of the space.

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

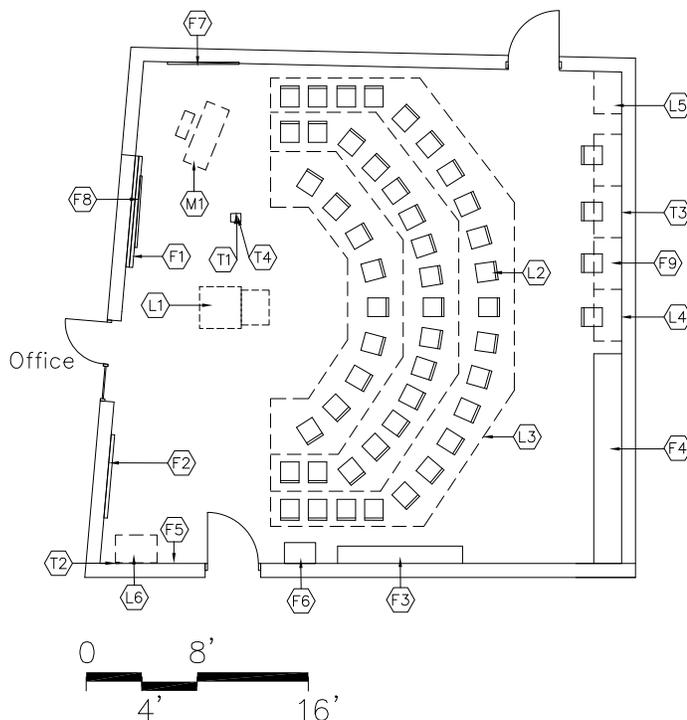
**INSTRUMENTAL ROOM**  
**M-MU-1**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<b>Flooring:</b>		<b>Fixed Items:</b>	
Carpet, <b>carpet tile</b>	096816	F1 4'-8' of bookshelves	123550
Optional: linoleum, rubber, ET, sheet vinyl	096516 096500 <b>096813</b>	F2 About 4' of tall cabinets	123550
		F3 8'-12' of chalk/marker board (staff lines optional)	101100
		F4 4'-16' of tack board	101100
		F5 Miscellaneous instrument storage cabinets	123550
<b>Base:</b>		F6 3' sink base cabinet	123550
Resilient base	096500	F7 Towel dispenser	102813
		F8 Pencil sharpener support	062000
<b>Ceiling:</b>		F9 Stereo cabinet (optional)	123550
Suspended, acoustical	095113	F10 Projection screen (optional)	115213
		F11 Technology support casework	123550
<b>Walls:</b>		<b>Fire Suppression:</b>	
Painted concrete masonry units	042000/099100	Fire suppression system	211000
Acoustical wall treatment (varies with geometry of room)	098000	<b>Plumbing:</b>	
Absorptive 25%, reflective 25%, diffusive 50%		Drinking water cooler	224000
		Sink	224000
		Plumbing connections	224000/221116/221119
<b>LOOSE FURNISHINGS:</b>		<b>HVAC:</b>	
L1 Conducting podium		Supply/return air system	Div. 23
L2 Mobile percussion instrument storage cabinet		Independent temp control	230923
L3 Computer workstation furniture		<b>Electrical:</b>	
L4 Mobile sheet music cabinet		Fluorescent lighting	265100
L5 Music chairs		Illumination level: See Table 8600-4	
L6 Music stands		Multilevel switching	262726
L7 Teacher workstation		4 duplex receptacles	262726
Wastebasket		Double duplex receptacle adjacent to each data and video port	262726
Pencil sharpener		Emergency lighting	265100
		Telecommunications Grounding	270526/260526
		<b>Communications:</b>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 4 data ports (minimum) for student use	271513
		Clock	275313
		Middle School music sound system	275125
		Central sound system	275123
		T4 Overhead projector	274119
		<b>Electronic Safety and Security:</b>	
		Life safety devices per code	283111
<b>Miscellaneous:</b>			
Doors are to have acoustic trim accessories.			
The following item is to be funded by the school district:			
M1 Piano			

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Sink and cabinet could be in instrument storage room.



**PROGRAM ACTIVITIES:**

- Houses all of the vocal music activities
- Practice area for individuals and groups of students, as well as an instructional area
- Serves the general music activities

**SPATIAL RELATIONSHIPS:**

- Grouped with other noise producing type activities
- Near instrumental room
- Access to parking area
- Near the stage

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control - wall minimum STC 60 ceiling minimum CAC 35, NRC 0.70
- Large doors
- High ceilings
- Acoustical requirements as determined by final configuration and other factors of the space.

CAPACITY: 40 students  
 SIZE: 1,200 SF  
 ANCILLARY SPACES: Music Library  
 M-MU-3

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

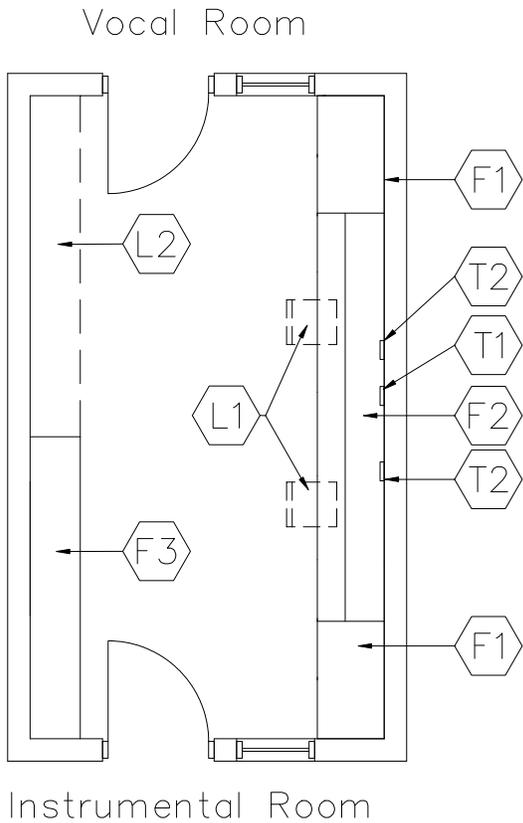
**VOCAL ROOM  
M-MU-2**

## CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Carpet, <b>carpet tile</b> ,	096816	F1 8'-12' of chalk/marker board	
linoleum, ET, sheet vinyl,	096516	(staff lines optional)	101100
or rubber	096500	F2 4'-16' of tack board	101100
	<b>096813</b>	F3 4'-9' of bookcases	123550
(Determined by district program needs)		F4 3'-10' of tall cabinets	123550
		F5 Pencil sharpener support	062000
<u>Base:</u>		F6 Stereo cabinet (optional)	123550
Resilient base	096500	F7 Mirrors on wall (optional)	102813
		F8 Projection screen (optional)	115213
<u>Ceiling:</u>		F9 Technology support casework	123550
Suspended, acoustical	095113		
		<u>Fire Suppression:</u>	
<u>Walls:</u>		Fire suppression system	211000
Painted concrete masonry units		<u>Plumbing:</u>	
	042000/099100	N/A	
Acoustical wall treatment		<u>HVAC:</u>	
(varies with geometry of room)	098000	Supply/return air system	Div. 23
		Independent temperature control	230923
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 Conducting podium		Fluorescent lighting	265100
L2 Music chairs and caddies		Illumination level: See Table 8600-4	
L3 Portable risers		Multilevel switching	262726
L4 Computer workstation furniture		4 duplex receptacles	262726
L5 Mobile music storage cabinet		Double duplex receptacle adjacent to	
L6 Teacher computer workstation		each data and video port	262726
Wastebasket		Means of egress lighting per code	265100
Pencil sharpener		Emergency lighting per code	265100
		Telecommunications Grounding	270526/260526
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 4 data ports	271513
		Clock	275313
		Middle School music sound system	275125
		Central sound system	275123
		T4 Overhead projector	274119
<u>Miscellaneous:</u>		<u>Electronic Safety and Security:</u>	
Doors are to have acoustic trim accessories.		Life safety devices per code	283111
The following item is to be funded by the school district:			
M1 Piano			

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Technology components may be placed in a separate small cabinet, or integrated in the other casework in the room.



CAPACITY: 2 teachers  
 SIZE: 200 SF  
 ANCILLARY SPACES: Instrumental Room  
 M-MU-1  
 Vocal Room  
 M-MU-2

PROGRAM ACTIVITIES:

- Office for both instrumental and vocal music teachers
- Library for printed music, tapes, etc.

SPATIAL RELATIONSHIPS:

- Adjacent to both the instrumental room and vocal room

ENVIRONMENTAL CONSIDERATIONS:

- Interior windows to vocal room and instrumental room
- Environmental sound control  
 walls minimum **STC 45**  
 ceiling minimum **CAC 35, NRC 0.70**

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.

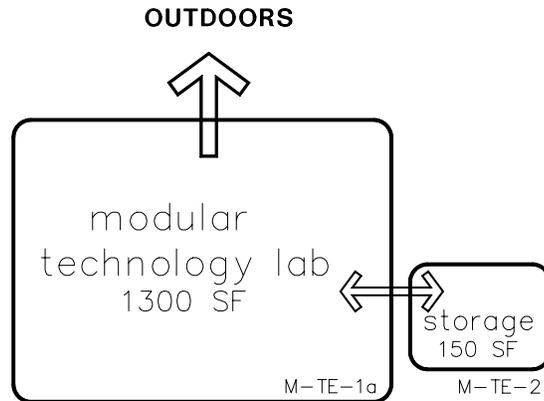
**MUSIC LIBRARY**  
**M-MU-3**

## CHAPTER 5: MIDDLE SCHOOL

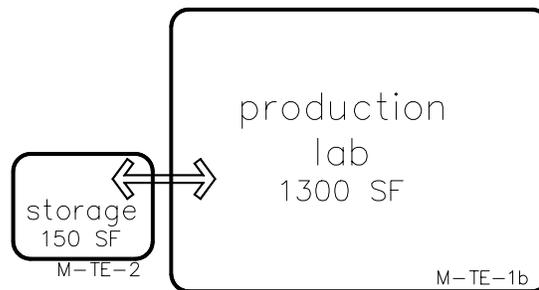
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Carpet, <b>carpet tile</b>	096816 <b>096813</b>	F1 (2), 2'-3' of tall wardrobes	123550
		F2 24' of work surface with file drawers and wall cabinets	123550
Base:		F3 8'-16' of tall storage cabinets or shelving	123550
Resilient base	096500	Option: mobile storage shelving	105626
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted concrete masonry units	042000/099100	N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Chairs		Independent temperature control	230923
L2 Files		Supply/return air system	Div. 23
Wastebasket		<u>Electrical:</u>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		3 duplex receptacles	262726
		Double duplex receptacle adjacent to data port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near each workstation	271513
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety device per code	283111
		<u>Miscellaneous:</u>	
		Interior windows (optional)	081113/088000

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.



**OR**

**NOTE:**

This is an example of how the technology education spaces in a middle school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

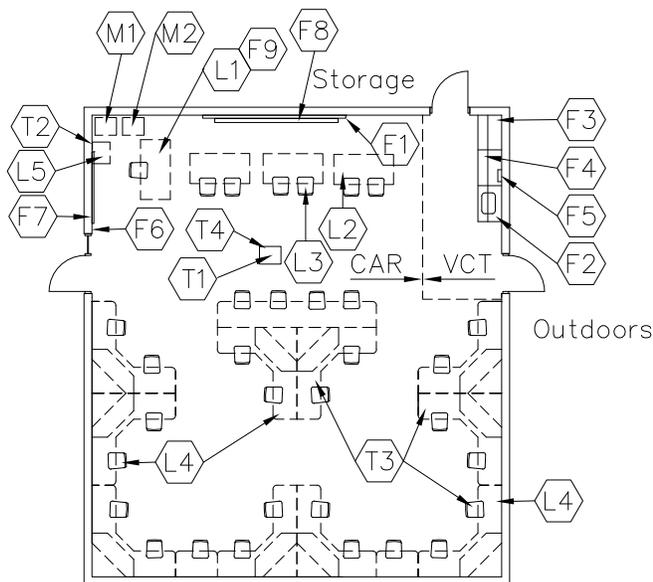
Following are the Technology Education space plates:

- M-TE-1a    Modular Technology Lab
- M-TE-1b    Production Lab
- M-TE-2    Storage

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**MODULAR TECHNOLOGY LAB  
M-TE-1a**

**CHAPTER 5: MIDDLE SCHOOL**



CAPACITY: 25 students  
 SIZE: 1,300 SF  
 ANCILLARY SPACES: M-TE-2  
 Storage

**PROGRAM ACTIVITIES:**

- Program accommodates groups of 2 or 3 students working with separate computerized modules in various technical areas that could include robotics, electronics, thermodynamics, research and design, and desktop publishing.
- This curriculum may be integrated with the science and math programs.
- Activity will introduce students to problem solving activities.
- A variety of hands-on activities/experiments which could include automation, wind tunnels, flight technology, digital imaging, and meteorology.

**SPATIAL RELATIONSHIPS:**

- Grouped with other noise producing type activities
- Access to driveway and parking
- Direct access to outdoors **or access through corridor**
- Adjacent to storage room

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting with 80% visual comfort probability level
- Environmental sound control - wall minimum STC 50  
ceiling minimum CAC 35, NRC **0.70**
- **Optional – window with integral blind**

**NOTES:**

1. Loose furnishings represent one of many possible arrangements.

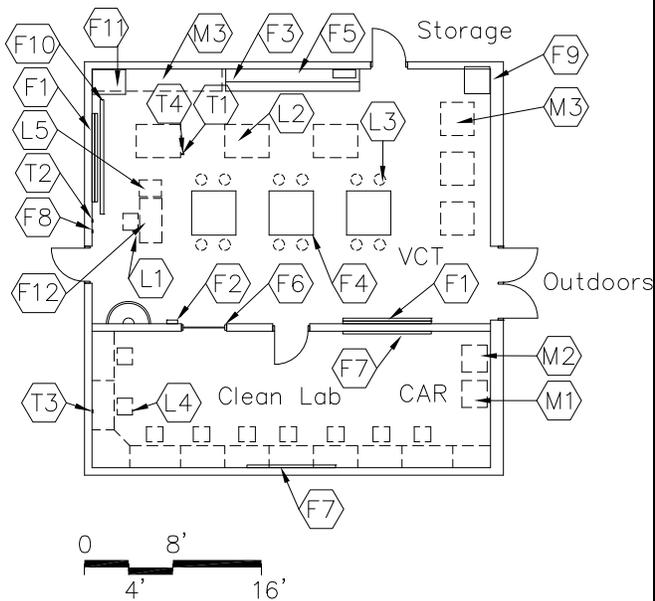
**MODULAR TECHNOLOGY LAB  
M-TE-1a**

## CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, ET,	096500	F1 10'-16' of chalk/marker board	101100
rubber, sheet vinyl,	096516	F2 3' sink base cabinet	123550
carpet, <b>carpet tile</b>	096816	F3 About 9' of wall cabinets	123550
	<b>096813</b>	F4 About 9' of base cabinet with heavy duty counter top	123550
<u>Base:</u>		F5 Towel dispenser	102813
Resilient base	096500	F6 Pencil sharpener support	062000
<u>Ceiling:</u>		F7 8'-10' of tack board	101100
Suspended, acoustical	095113	F8 Projection screen (optional)	115213
		F9 Technology support casework	123550
<u>Walls:</u>		<u>Fire Suppression:</u>	
Painted concrete masonry units		Fire suppression system	211000
	042000/099100	<u>Plumbing:</u>	
		Sink	224000
		Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Teacher desk/computer support and chair		Supply/return air system	Div. 23
L2 Tables with heavy duty tops		Independent temp control	230923
L3 Student stools/chairs		<u>Electrical:</u>	
L4 Computer technology workstation with chairs		Fluorescent lighting with parabolic lenses	265100
L5 File cabinet		Illumination level: See Table 8600-4	
Wastebaskets		Multilevel switching	262726
Pencil sharpener		8 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		Means of egress lighting per code	265100
		Emergency lighting per code	265100
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 Classroom area network (25 data ports minimum)	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T4 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
<u>Miscellaneous:</u>			
The following items are to be provided by the school district:			
M1 Classroom area network file server			
M2 Printer			

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Technology components may be placed in a separate small cabinet, or integrated in the other casework in the room.



CAPACITY: 25 students  
 SIZE: 1,300 SF  
 ANCILLARY SPACES: M-TE-2  
 Storage

**PROGRAM ACTIVITIES:**

- Space for instruction in developing skills in use of tools, materials, and processes to apply knowledge of planning and design to actual fabrication of projects

**SPATIAL RELATIONSHIPS:**

- Grouped with other noise producing type activities
- Access to driveway and parking
- Direct access to outdoors **or access through corridor**
- Adjacent to storage room

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control - wall minimum STC 50  
ceiling minimum CAC 35, NRC **0.70**
- Resilient floor covering
- **Optional – window with integral blind**

**NOTES:**

1. Loose furnishings represent one of many possible arrangements.

**PRODUCTION LAB  
M-TE-1b**

CHAPTER 5: MIDDLE SCHOOL

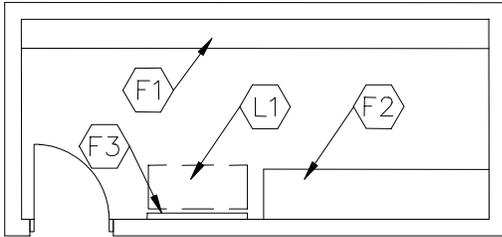
<u>FINISHES<sup>1</sup>:</u>	<u>Spec. Ref.#</u>	<u>FEATURES<sup>1</sup>:</u>	<u>Spec. Ref.#</u>
<u>Fixed Items:</u>			
Flooring:		F1 8'-16' of chalk/marker board	101100
Linoleum, rubber	096516	F2 Towel dispenser	102813
Carpet, <b>carpet tile</b>	096500	F3 8'-12' of wall cabinets	123550
	096816	F4 Workbench and locker base	123550
	<b>096813</b>	F5 About 12' of heavy duty counter top at 36" high with knee space	123550
Base:		F6 Interior window	081113/088000
Resilient base	096500	F7 4'-12' of tack board	101100
		F8 Pencil sharpener support	062000
Ceiling:		F9 Tool cabinet (optional)	
Painted, exposed structure	095113	F10 Projection screen (optional)	115213
		F11 Tall wardrobe	123550
Walls:		F12 Technology support casework	123550
Painted concrete masonry units	042000/099100		
		<u>Fire Suppression:</u>	
		Fire suppression system	211000
		<u>Plumbing:</u>	
		Wash fountain	224000
		Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Teacher desk and chair		Supply/return air system	Div. 23
L2 Tables with heavy duty tops		Independent temperature control	230923
L3 Student stools		Localized dust collection system as necessary	233513
L4 Computer technology workstation with chairs		<u>Electrical:</u>	
L5 File cabinet		Fluorescent lighting	265100
Wastebasket		Illumination level: See Table 8600-4	
Waste receptacle		Multilevel switching in computer area	262726
Pencil sharpener		8 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
		Means of egress lighting per code	265100
		Emergency lighting per code	265100
		Electrical power for shop equipment	262726
		Master shut-off for power equipment	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 Classroom area network (10 data ports minimum)	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T4 Overhead projector	274119
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
<u>Miscellaneous:</u>			
The following items are to be funded by the school district:			
M1 Classroom area network file server			
M2 Printer			
M3 Shop equipment with localized dust collection as necessary			

**NOTES:**

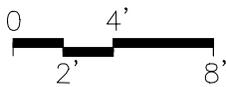
1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Technology components may be placed in a separate small cabinet, or integrated in the other casework in the room.

**STORAGE**  
**M-TE-2**

**CHAPTER 5: MIDDLE SCHOOL**



Modular Technology Lab  
Production Lab



**PROGRAM ACTIVITIES:**

- Houses equipment, instructional aids, and materials used in the technology education activities

**SPATIAL RELATIONSHIPS:**

- Adjacent to the modular technology lab or production lab
- Access to service drive

**ENVIRONMENTAL CONSIDERATIONS:**

N/A

CAPACITY: N/A  
 SIZE: 150 SF  
 ANCILLARY SPACES: Modular Technology Lab  
 M-TE-1a  
 or Production Lab  
 M-TE-1b

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

**STORAGE**  
**M-TE-2**

CHAPTER 5: MIDDLE SCHOOL

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES<sup>1</sup>:</u>		<u>FEATURES<sup>1</sup>:</u>	
Flooring:		<u>Fixed Items:</u>	
Sealed concrete	033000	F1 10'-20' of open shelving, depths may vary (fixed or loose)	123550
Base:		F2 About 9' of tall cabinets (total)	123550
Resilient base	096500	F3 4' of pegboard (total) (optional)	102813
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted concrete masonry units	<b>042000/099100</b>	N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Mobile tool cart		To be determined by Design Professional Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		N/A	
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.



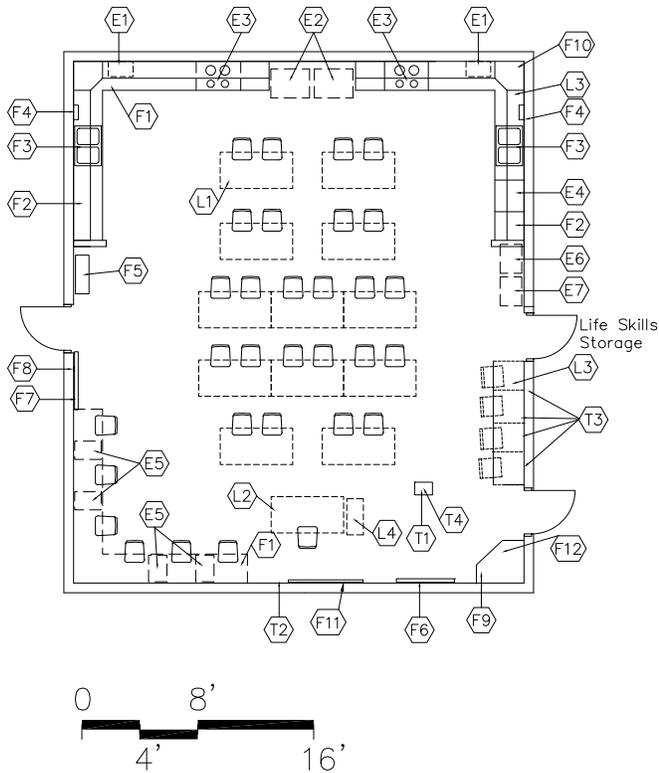
## NOTES:

This is an example of how the family and consumer science spaces in a middle school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Family and Consumer Science space plates:

- M-FCS-1 Life Skills Lab
- M-FCS-1 Life Skills Storage

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CAPACITY: 24 students  
 SIZE: 1,100 SF  
 ANCILLARY SPACES: Life Skills Storage  
 M-FCS-2

**PROGRAM ACTIVITIES:**

- Houses the facilities for the home economics programs, family living program, and consumer science programs
- Activities will include hands-on activities, demonstrations, and lectures.

**SPATIAL RELATIONSHIPS:**

- Grouped with support service programs
- Adjacent to storage

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control -  
   wall minimum STC 50  
   ceiling minimum CAC 35, NRC **0.70**
- Resilient floor covering

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

**LIFE SKILLS LAB  
M-FCS-1**

## CHAPTER 5: MIDDLE SCHOOL

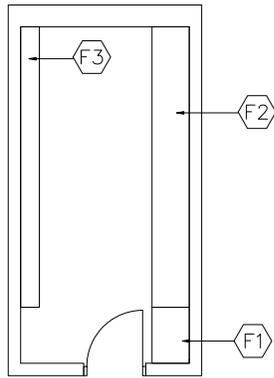
	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>FINISHES<sup>1</sup>:</u>		<u>Fixed Items:</u>	
Flooring:		F1 Base cabinets	123550
Linoleum,	096500	F2 Wall cabinets	123550
ET, sheet vinyl, or rubber	096516	F3 Double bowl sink base cabinet	123550
		F4 Towel dispensers (optional)	102813
Base:		F5 3'-8' of bookcases	123550
Resilient base	096500	F6 8'-12' of chalk/marker board	101100
		F7 4'-8' of tack board	101100
Ceiling:		F8 Pencil sharpener support	062000
Suspended, acoustical	095113	F9 3' of tall wardrobe with file drawers	123550
		F10 3' tall cabinet (optional)	123550
Walls:		F11 Projection screen (optional)	115213
Painted concrete masonry units		F12 Technology support casework	123550
	042000/099100		
		<u>Fire Suppression:</u>	
		Fire suppression system	211000
<u>LOOSE FURNISHINGS:</u>		<u>Plumbing:</u>	
L1 Tables and chairs		Double sinks	224000
L2 Teacher desk/computer support and chair		Plumbing connections	224000/221116/221119
L3 Computer workstation furniture		Garbage disposal (optional)	224000
L4 File cabinet		Washer connections	224000
Wastebaskets		<u>HVAC:</u>	
Pencil sharpener		Supply/return air system	Div. 23
		Manually operated exhaust system	Div. 23
<u>EQUIPMENT:</u>		Independent temp control	230923
E1 Microwaves		Dryer vent system	Div. 23
E2 Refrigerators		<u>Electrical:</u>	
E3 Ranges and ovens		Fluorescent lighting	265100
E4 Dishwasher		Illumination level: See Table 8600-4	
E5 Sewing machines		Multilevel switching	262726
E6 Washer		4 duplex receptacles	262726
E7 Dryer		Double duplex receptacle adjacent to	
		each data and video port	262726
		Receptacles for refrigerators, microwaves,	
		ranges, dishwashers, and	
		sewing machines	262726
		Means of egress lighting per code	265100
		Emergency lighting per code	265100
		Washer and dryer connections	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		T3 4 data ports for student use	271513
		Clock	275313
		Central sound system	275123
		Sound reinforcement system	275127
		T4 Overhead projector	274119
<u>Electronic Safety and Security:</u>			
Life safety devices per code	283111		

**NOTES:**

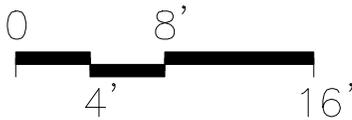
1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Technology components may be placed in a separate small cabinet, or integrated in the other casework in the room.

**LIFE SKILLS STORAGE  
M-FCS-2**

CHAPTER 5: MIDDLE SCHOOL



Life Skills Lab



CAPACITY:	N/A
SIZE:	100 SF
ANCILLARY SPACES:	M-FCS-1 Life Skills Lab

**PROGRAM ACTIVITIES:**

- Storage of materials, supplies, and equipment used in the delivery of the family and consumer science program

**SPATIAL RELATIONSHIPS:**

- Adjacent to life skills lab

**ENVIRONMENTAL CONSIDERATIONS:**

- Resilient floor covering

NOTES:

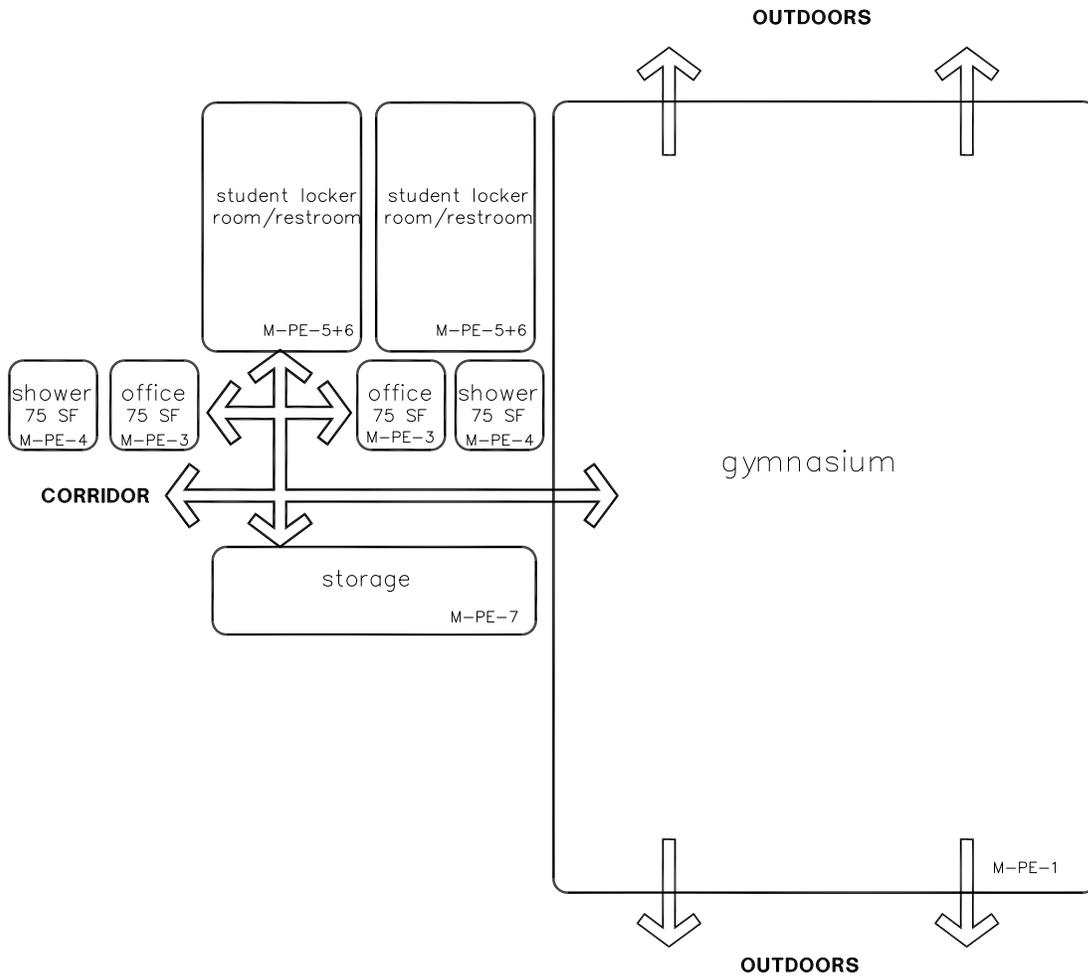
**LIFE SKILLS STORAGE**  
**M-FCS-2**

CHAPTER 5: MIDDLE SCHOOL

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES<sup>1</sup>:</u>		<u>FEATURES<sup>1</sup>:</u>	
Flooring:		<u>Fixed Items:</u>	
<b>Rubber</b>	096500	F1 3' of tall wardrobe (optional)	123550
Base:		F2 10'-15' of tall cabinets, or base and wall cabinets	123550
Resilient base	096500	F3 10'-15' of open tall cabinets	123550
Ceiling:		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Painted concrete masonry units	042000/099100	N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
N/A		To be determined by Design Professional	
		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		N/A	
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Fixed equipment and loose furniture can also be all fixed equipment or all loose equipment.



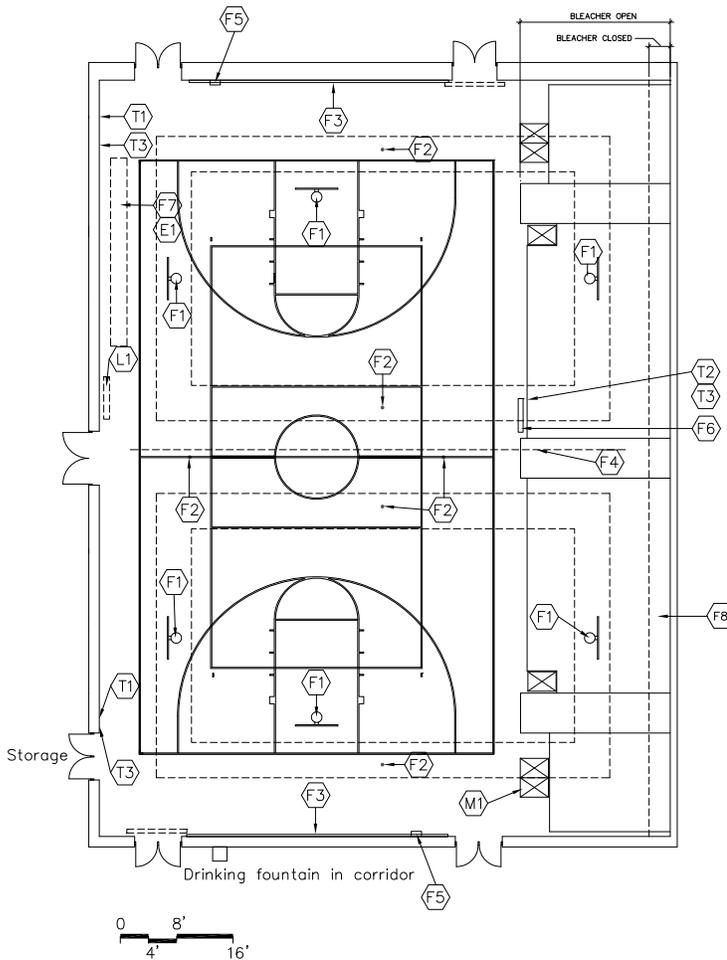
## NOTES:

This is an example of how the physical education spaces in a middle school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Physical Education space plates:

- M-PE-1 Gymnasium
- M-PE-2 Auxiliary Gymnasium**
- M-PE-3 P.E./Athletic Office
- M-PE-4 Staff Shower
- M-PE-5 Student Locker Room
- M-PE-6 Student Restroom/Shower
- M-PE-7 Physical Education Storage

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**CHAPTER 5: MIDDLE SCHOOL**


Please see page 5109-5 for an enlargement of this diagram.

CAPACITY: 25 - 60 students  
 SIZE: 7,000 - **12,000 SF**  
 ANCILLARY SPACES:  
 Physical Education Storage  
 M-PE-7

**PROGRAM ACTIVITIES:**

- P. E. students will practice and participate in exercise, sports activities, intramural events, and physical fitness.
- Student assemblies
- Community use

**SPATIAL RELATIONSHIPS:**

- Direct access to outdoors
- Near student dining

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Adequate sound control/acoustics
- Clear height of 23' from floor to nearest obstruction
- Environmental sound control - wall minimum STC 60

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

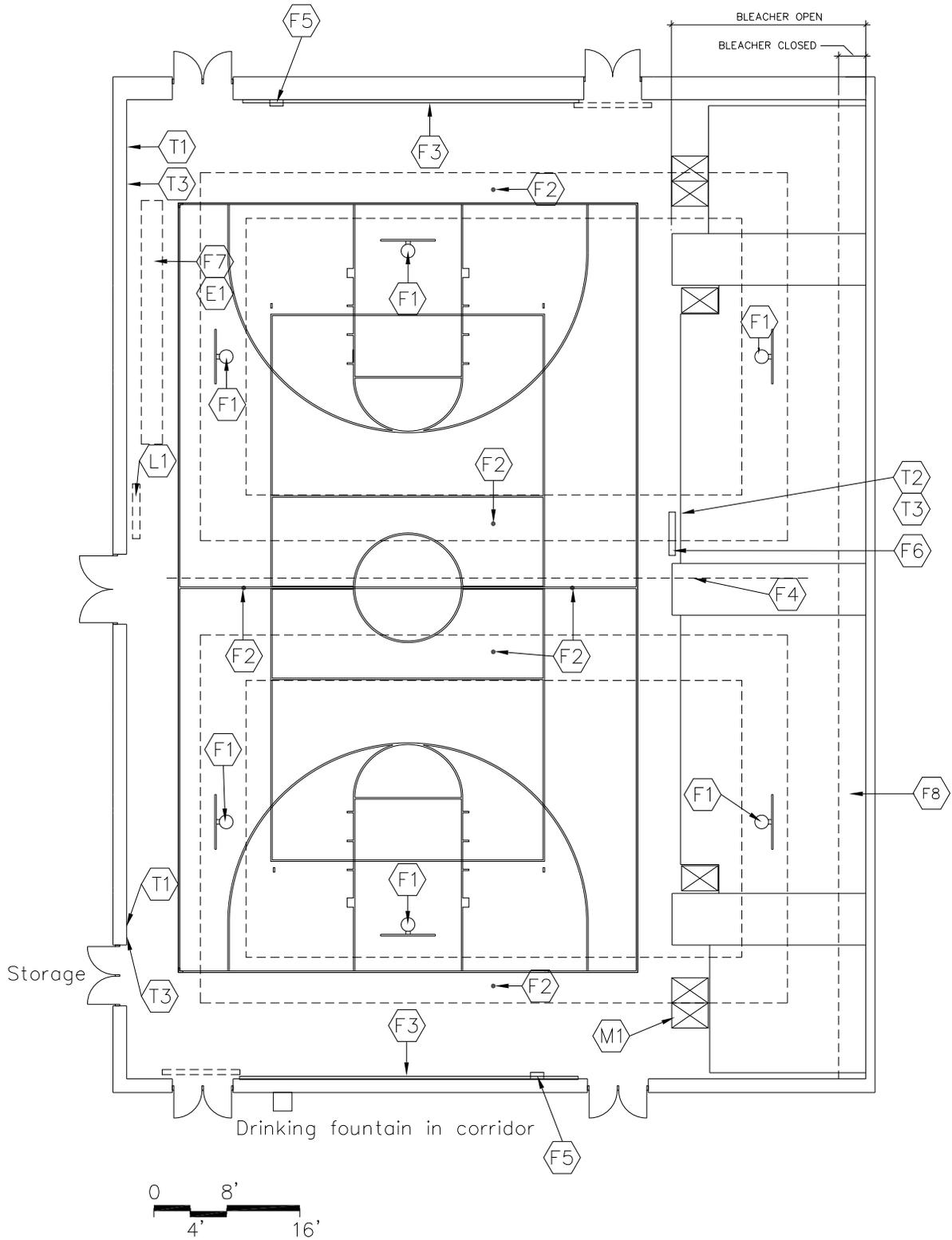
**GYMNASIUM**  
**M-PE-1**

## CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Wood flooring or	096466	F1 Basketball backstops, glass, adjustable height	116623
Fluid-applied athletic flooring	096766	F2 Volleyball sleeves and standards on a cart	116623
<u>Base:</u>		F3 Safety wall wainscot (see note 2)	116623
Ventilated resilient base	096466	F4 Divider gym curtain	116623
<u>Ceiling:</u>		F5 Chin-up bar (optional)	116623
Painted exposed structure	099100	F6 Scorer table	126600
<u>Walls:</u>		F7 Wrestling mat hoist (optional)	116623
Painted	099100	F8 Telescoping bleachers	126600
Sound absorbing concrete masonry units or abuse-resistant acoustical wall treatment	042000 098000	<u>Fire Suppression:</u>	
		Fire suppression system	211000
		<u>Plumbing:</u>	
		<b>Drinking fountain</b> <b>directly outside the entrance</b>	<b>224000</b>
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Portable chalkboard		Supply/return air system	Div. 23
		Independent temp control	230923
		<u>Electrical:</u>	
		Multi-level switching	262726
		High intensity discharge lighting or fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		8 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		Emergency lighting per code	265100
		Means of egress lighting per code	265100
		Electrical connections to P.E. equipment where necessary	262726
		Scoreboard (control outlets in the face of bleachers)	116643
		Telecommunications Grounding	270526/260526
		<u>Communications::</u>	
		T1 2 video ports, 1 monitor with cart	271533/271543/274119
		T2 1 voice port	271513/273113
		T3 3 data port	271513
		Clocks with wire guards	275313
		Central sound system	275123
		Gymnasium sound system	275124
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
<u>Miscellaneous:</u>			
M1 Handicapped seating			
Court markings (minimum)			
74' x 50' main basketball court,			
2 cross courts to fit			
Regulation volleyball courts			
Provide wire guards on light fixtures and wall-mounted electrical devices.			
<u>EQUIPMENT:</u>			
E1 Wrestling mat			

NOTES:

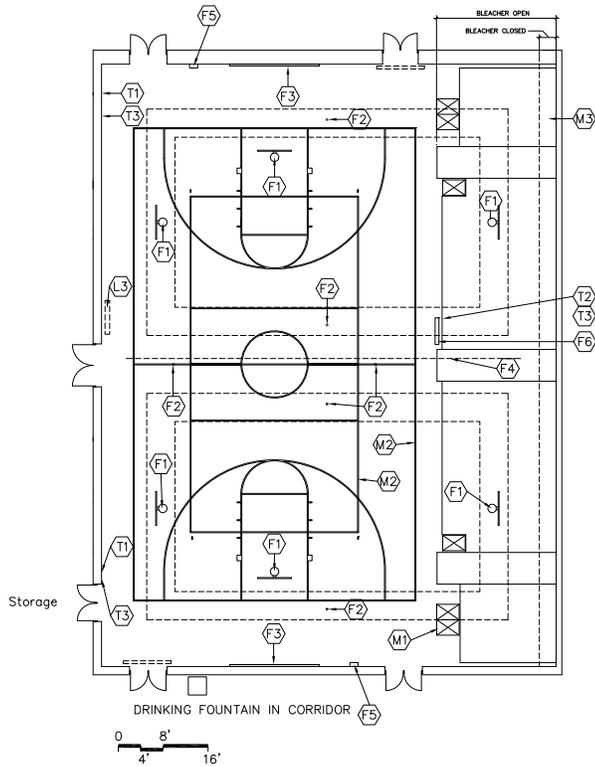
1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Extend safety wall wainscot 5 feet beyond side game lines at both ends of main basketball court.



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## AUXILIARY GYMNASIUM M-PE-2

### CHAPTER 5: MIDDLE SCHOOL



Please see page 5109-9 for an enlargement of this diagram.

CAPACITY: 25 - 60 students  
 SIZE: 5,000 – 6,500 SF  
 ANCILLARY SPACES:

#### PROGRAM ACTIVITIES:

- Physical education classes, interscholastic athletic competition and practice during non-school hours
- Community use

#### SPATIAL RELATIONSHIPS:

- Near P.E./athletic offices
- Convenient access to outside
- Near student locker rooms

#### ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Adequate sound control/acoustics
- Clear height of 23' from floor to nearest obstruction
- Environmental sound control - wall minimum STC 60

#### NOTES:

1. Loose furnishings shown represent two of many possible arrangements.

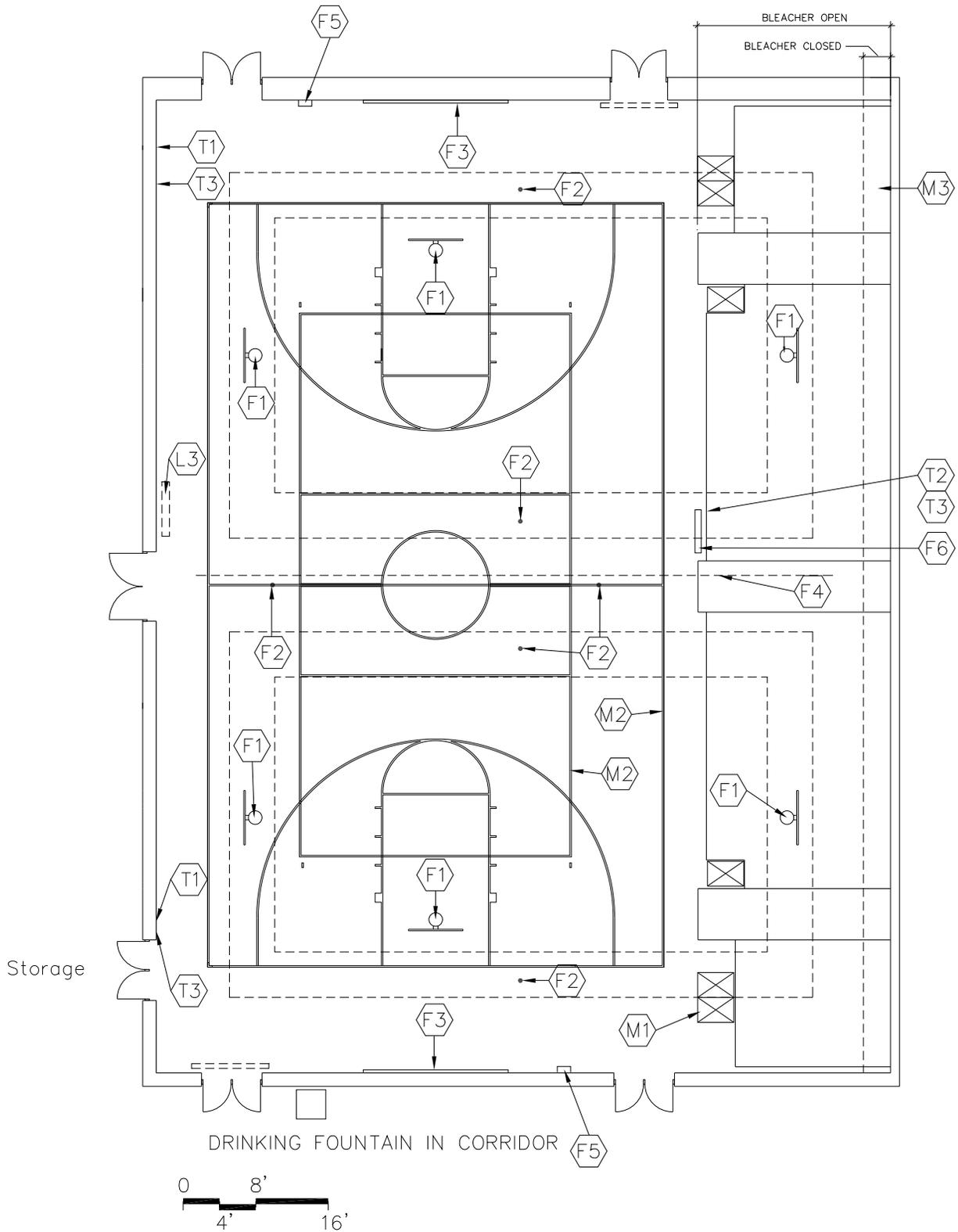
**AUXILIARY GYMNASIUM  
M-PE-2**

## CHAPTER 5: MIDDLE SCHOOL

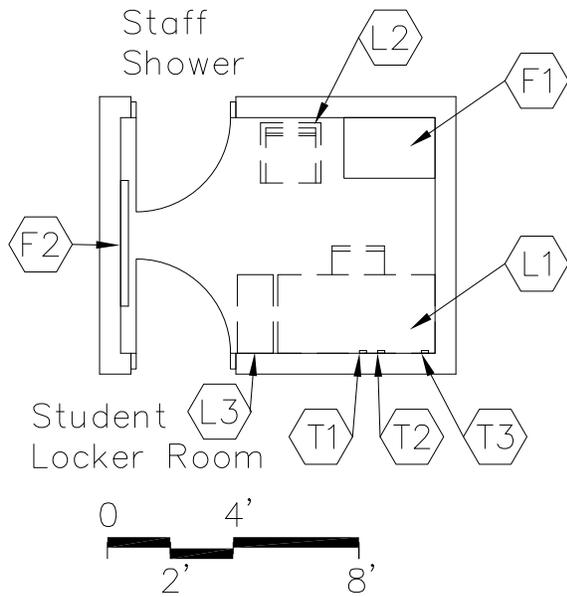
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Wood flooring	096466	F1 6 basketball backstops, glass	116623
		F2 Volleyball sleeves and standards on a cart	116623
Base:		F3 Safety wall wainscot	116623
Ventilated resilient base	096466	F4 Divider gym curtain	116623
		F5 Chin-up bar (optional)	116623
Ceiling:		F6 Scorer's table (could be part of bleachers)	126600
Painted exposed structure	099100		
Walls:		<u>Fire Suppression:</u>	
Painted	099100	Fire suppression system	211000
Sound absorbing concrete masonry units on 2 walls or	042000	<u>Plumbing:</u>	
abuse-resistant acoustical wall treatment		Drinking fountain directly outside the entrance	224000
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Portable chalkboard		Supply/return air system	Div. 23
		Independent temperature control	230923
		<u>Electrical:</u>	
		Multi-level switching	262726
		High intensity discharge lighting or fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		8 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		Emergency lighting per code	265100
		Means of egress lighting per code	265100
		Electrical connections to P.E. equipment where necessary	262726
		Scoreboard (control outlets in the face of bleachers)	116643
		Telecommunications Grounding	270526/260526
<u>Miscellaneous:</u>		<u>Communications:</u>	
M1 Handicapped seating		T1 2 video ports, 1 monitor with cart	271533/271543/274119
M2 Court markings (minimum)			
74' x 50' main basketball court,		T2 1 voice port	271513/273113
2 cross courts to fit		T3 2 data port	271513
Regulation volleyball courts		Clocks with wire guards	275313
Provide wire guards on light fixtures and wall- mounted electrical devices.		Central sound system	275123
The following item is to be funded by the school district:		Gymnasium sound system	275124
M3 Telescoping stands		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.



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**PROGRAM ACTIVITIES:**

- Teacher office for planning, grading, conferences, and scheduling

**SPATIAL RELATIONSHIPS:**

- Near gymnasium
- Adjacent to student locker rooms
- Adjacent to staff shower

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control -  
wall minimum STC 45  
ceiling minimum CAC 35, NRC 0.70

**CAPACITY:** 1 teacher  
**SIZE:** 75 SF  
**ANCILLARY SPACES:** Student Locker Room  
 M-PE-5  
 Staff Shower  
 M-PE-4

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

**P.E./ATHLETIC OFFICE**  
**M-PE-3**

## CHAPTER 5: MIDDLE SCHOOL

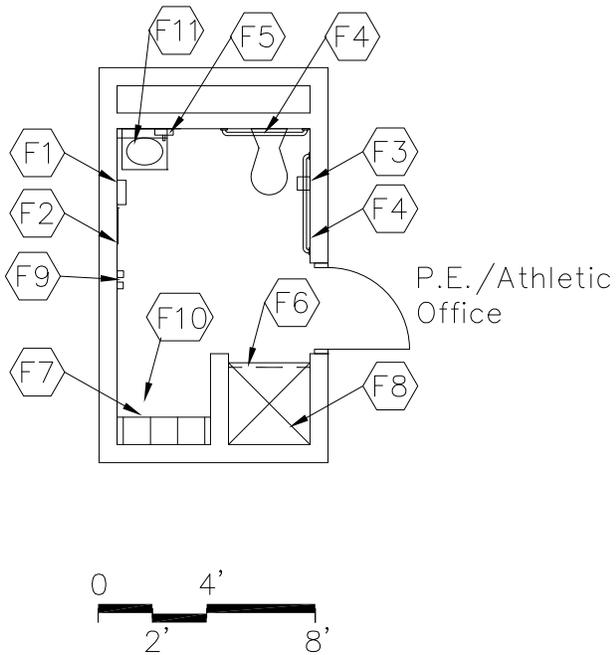
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum,	096516	F1 2' of tall wardrobe	123550
ET, sheet vinyl, or rubber	096500	F2 4' of tack board	101100
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Acoustical, suspended	095113	N/A	
<u>Walls:</u>		<u>HVAC:</u>	
Painted concrete masonry units		Supply/return air system	Div. 23
	042000/099100	Independent temp control (coupled with similarly loaded adjacent spaces)	230923
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 Teacher desk and chair		Single level switching	262726
L2 Visitor chair		Fluorescent lighting	265100
L3 File cabinet		Illumination level: See Table 8600-4	
Wastebasket		4 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		T2 1 data port near teacher workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Interior window (optional)	081113/088000

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**STAFF SHOWER  
M-PE-4**

CHAPTER 5: MIDDLE SCHOOL



**PROGRAM ACTIVITIES:**

- Personal and health care needs for physical education teacher

**SPATIAL RELATIONSHIPS:**

- Adjacent to P.E./athletic office

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control - walls minimum STC 48 ceiling minimum CAC 35, NRC 0.70
- Moisture- and stain-resistant finishes

CAPACITY: 1 person  
 SIZE: 75 SF  
 ANCILLARY SPACES: P.E./Athletic Office  
 M-PE-3

NOTES:

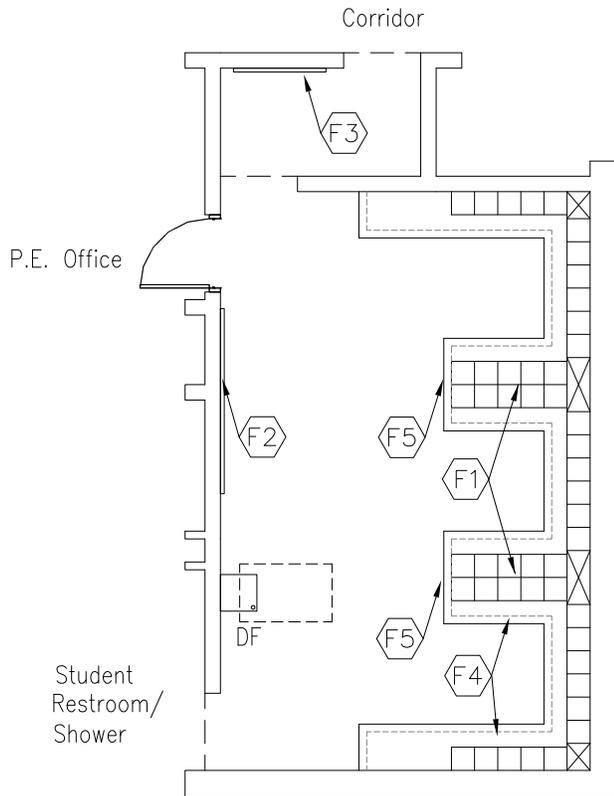
**STAFF SHOWER**  
**M-PE-4**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Restroom: linoleum, ET, rubber	096516	F1 Towel dispenser	102813
ceramic mosaic tile,	096500	F2 24" x 60" mirror	102813
sheet vinyl, resinous flooring,	096723	F3 Toilet tissue holder	102813
Shower: Ceramic mosaic tile,	093000	F4 36" and 42" grab bar	102813
porcelain tile, or resinous flooring		F5 Soap dispenser	102813
		F6 Shower curtain and rod	102813
<u>Base:</u>		F7 3 athletic lockers	105113
Restroom: Resilient base,	096500	F8 ADA Shower accessories	102813
resinous flooring, or	096723	F9 Towel hooks	102813
integral vinyl cove base	093000	F10 Built-in bench (optional)	102813
Shower: Ceramic mosaic tile base,		F11 Mirror over sink with shelf (optional)	102813
porcelain tile base, resinous flooring,			
or integral vinyl cove base		<u>Fire Suppression:</u>	
		Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Restroom: Suspended, acoustical	095113	Wall-mounted water closet	224000
Shower: Painted portland cement plaster	092400/099100	Wall-mounted lavatory	224000
or interior finish system	092513	ADA shower controls and head	224000
		Plumbing connections	224000/221116/221119
<u>Walls:</u>		<u>HVAC:</u>	
Epoxy painted concrete masonry units	042000/099100	Exhaust air system	Div. 23
or ceramic wall tile in shower and	093000	Supplemental heat as required	Div. 23
latex paint in restroom	099100		
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
Wastebasket		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.



CAPACITY: 25 - 30 students

SIZE: 600 - **900 SF**

ANCILLARY SPACES:  
 Student Restroom/Shower  
 M-PE-6  
 P.E./Athletic Office  
 M-PE-3

**PROGRAM ACTIVITIES:**

- Students change from their regular clothes into clothes appropriate for physical education
- Storage for personal items while students are attending physical education class

**SPATIAL RELATIONSHIPS:**

- Adjacent to student restroom/shower
- Near both gymnasium and outdoor area
- Located on gymnasium level
- Adjacent to P.E./athletic office

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control -  
 wall minimum STC 48  
 ceiling minimum CAC 35, NRC 0.70

**NOTES:**

**STUDENT LOCKER ROOM**  
**M-PE-5**

CHAPTER 5: MIDDLE SCHOOL

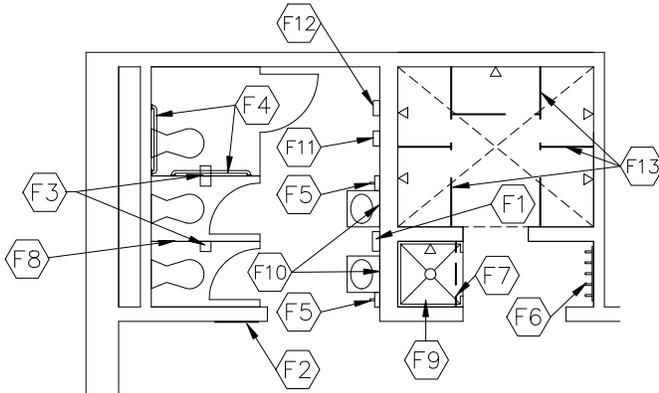
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<b>Flooring:</b>		<b><u>Fixed Items:</u></b>	
Sheet vinyl, rubber, rubber tile, or resinous flooring	096500 096723	F1 Athletic lockers	105113
		F2 4'-8' of chalk/marker board	101100
		F3 4'-8' of tack board	101100
<b>Base:</b>		F4 Locker benches (fixed or loose)	062000
Resilient base or resinous flooring	096500 096723	F5 Mirrors (optional)	102813
		<b><u>Fire Suppression:</u></b>	
<b>Ceiling:</b>		Fire suppression system	211000
Suspended, acoustical with high-impact hold-down clips	095113	<b><u>Plumbing:</u></b>	
Option: Exposed painted pre-cast units	099100	Drinking fountain	224000
		<b><u>HVAC:</u></b>	
<b>Walls:</b>		Supply air system	Div. 23
Painted concrete masonry units	042000/099100	Exhaust air system	Div. 23
		Independent temperature control	230923
<b><u>LOOSE FURNISHINGS:</u></b>		<b><u>Electrical:</u></b>	
Wastebaskets		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		2 duplex receptacles	262726
		Emergency lighting	265100
		Means of egress per code	265100
		<b><u>Communications:</u></b>	
		Clock	275313
		Central sound system	275123
		<b><u>Electronic Safety and Security:</u></b>	
		Life safety devices per code	283111
		<b><u>Miscellaneous:</u></b>	
		N/A	

**NOTES:**

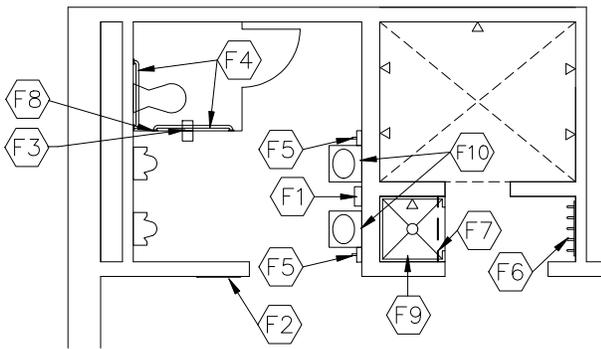
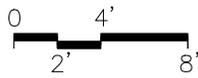
1. Finishes/Features: Refer to Chapter 9 for specification references.

**STUDENT RESTROOM/SHOWER  
M-PE-6**

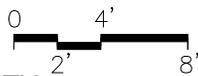
**CHAPTER 5: MIDDLE SCHOOL**



Female Student Locker Room



Male Student Locker Room



CAPACITY: 5 students  
 SIZE: 250 SF  
 ANCILLARY SPACES: Student Locker Room  
 M-PE-5

**PROGRAM ACTIVITIES:**

- Serves as separate shower and restroom areas for males and females in the physical education and athletic programs
- Community adults and children may also use this facility after hours

**SPATIAL RELATIONSHIPS:**

- Adjacent to student locker room
- Direct access to both gymnasium and outdoor area

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control - wall minimum STC 48  
ceiling minimum CAC 35, NRC 0.70
- Moisture- and stain-resistant finishes

NOTES:

**STUDENT RESTROOM/SHOWER**  
**M-PE-6**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Restroom: Sheet vinyl, rubber flooring or resinous flooring	096500	F1 Towel dispensers	102813
Shower: Ceramic mosaic tile, porcelain tile, or resinous flooring	096723 093000	F2 24" by 60" mirror	102813
		F3 Toilet tissue holders	102813
		F4 36" and 42" grab bars	102813
		F5 Soap dispensers	102813
		F6 Towel hooks	102813
<u>Base:</u>		F7 Shower curtain and rod	102813
Restroom: Resilient base, resinous flooring, or integral vinyl cove base	096500 096723 093000	F8 Toilet partitions	102813
Shower: Ceramic mosaic tile base, porcelain tile base, resinous flooring, or integral vinyl cove base		F9 ADA shower accessories	102813
		F10 16" x 24" mirrors with shelves	102813
		F11 Sanitary product dispenser <sup>2</sup>	102813
		F12 Sanitary product receptacles <sup>2</sup>	102813
		F13 Modesty shower partitions <sup>2</sup>	102113
<u>Ceiling:</u>		<u>Fire Suppression:</u>	
Restroom: Suspended, acoustical with high-impact, hold-down clips	095113	Fire suppression system	211000
Shower: Painted portland cement plaster or interior finish system	092400/099100 092513	<u>Plumbing:</u>	
		Wall-mounted water closets	224000
		Wall-mounted lavatories or wash fountains	224000
		Wall-mounted urinals	224000
		ADA shower controls and head	224000
		Shower fixtures	224000
		Plumbing connections	24000/221116/221119
<u>Walls:</u>		<u>HVAC:</u>	
Epoxy-painted concrete masonry units or ceramic wall tile in showers and latex paint in restroom	042000/099100 093000 099100	Supply/return air system	Div. 23
		Exhaust air system	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
Wastebaskets		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Single level switching	262726
		1 duplex receptacle	262726
		Emergency lighting	265100
		Means of egress lighting per code	265100
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

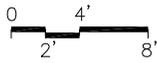
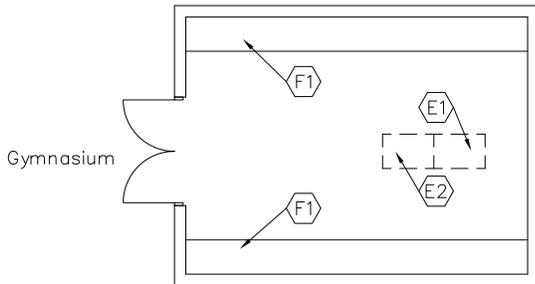
**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Toilet accessories and shower partitions for female locker rooms.
3. Optional: electric hand dryers

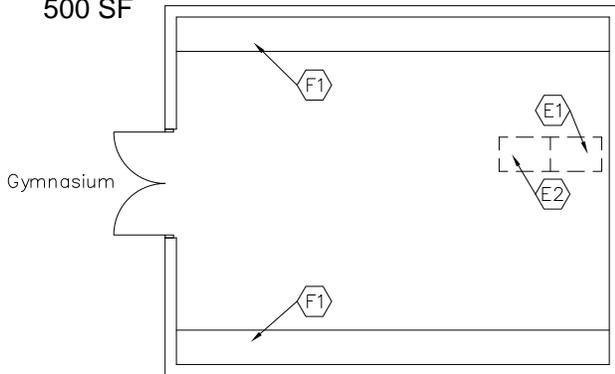
**PHYSICAL EDUCATION STORAGE  
M-PE-7**

**CHAPTER 5: MIDDLE SCHOOL**

300 SF



500 SF



**PROGRAM ACTIVITIES:**

- Storage for physical education equipment

**SPATIAL RELATIONSHIPS:**

- Adjacent to gymnasium
- Near P.E./athletic office

**ENVIRONMENTAL CONSIDERATIONS:**

N/A

CAPACITY: N/A  
 SIZE: 300 - 500 SF  
 ANCILLARY SPACES: Gymnasium  
 M-PE-1

**NOTES:**

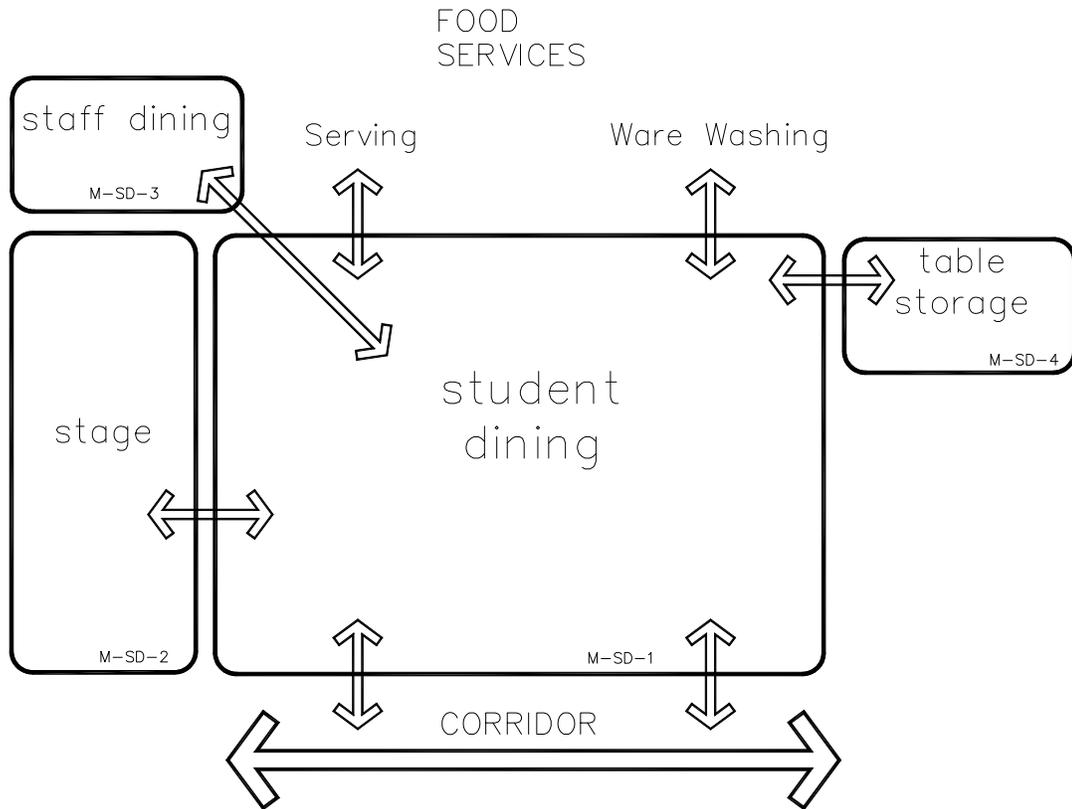
**PHYSICAL EDUCATION STORAGE**  
**M-PE-7**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items<sup>2</sup>:</u>	
Cure and seal concrete	033000	F1 20' – 48' of open shelving, depths may vary (fixed or loose)	123550
Base:		<u>Fire Suppression:</u>	
No base		Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure		N/A	
Option: Rated gypsum wallboard	092116	<u>HVAC:</u>	
Walls:		Exhaust air system	Div. 23
Unpainted concrete masonry units	042000	Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
<u>EQUIPMENT:</u>		Fluorescent lighting	265100
E1 Tumbling mats on carts		Illumination level: See Table 8600-4	
E2 Ball carts		1 duplex receptacle	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		N/A	
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Ranges shown indicate quantities for the largest and smallest possible room size.



## NOTES:

This is an example of how the student dining spaces in a middle school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

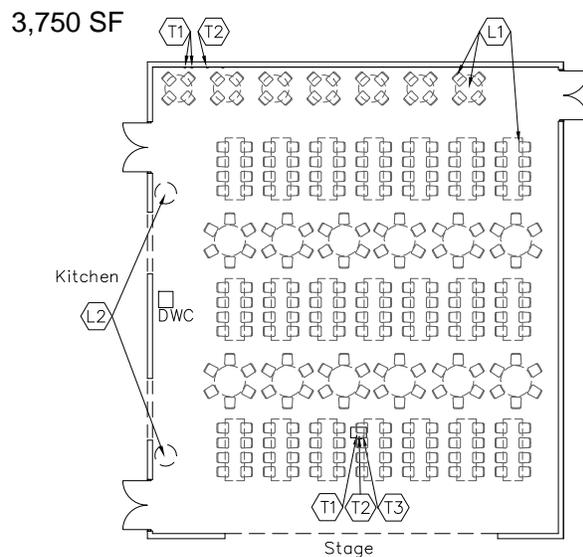
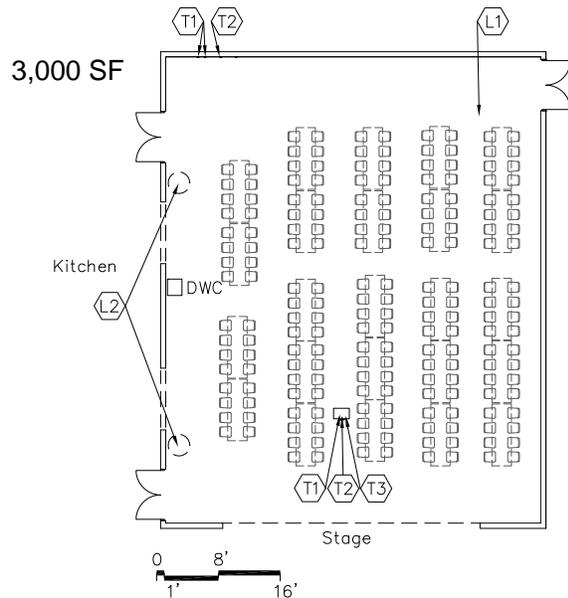
Following are the Student Dining space plates:

- M-SD-1 Student Dining
- M-SD-2 Stage
- M-SD-3 Staff Dining
- M-SD-4 Table Storage
- M-SD-5 Family Restroom**

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## STUDENT DINING M-SD-1

### CHAPTER 5: MIDDLE SCHOOL



**CAPACITY:** 1/3 of the student capacity  
**SIZE:** Student capacity divided by 3,  
 multiplied by 15 SF per student  
 3,000 SF minimum  
**ANCILLARY SPACES:** Stage, M-SD-2  
 Kitchen, M-FS-1

#### PROGRAM ACTIVITIES:

- Space for student dining and assembly-type programs

#### SPATIAL RELATIONSHIPS:

- Adjacent to kitchen
- Near staff dining
- Adjacent to stage

#### ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Stain-resistant floor covering
- Environmental sound control  
wall minimum STC **60**

#### MISCELLANEOUS:

- Based on 3 serving periods, the size of the dining area is computed by dividing the student capacity by 3, then multiplying by 15 SF per student. The minimum size of a dining space is 3,000 SF.
- Natural lighting

#### NOTES:

1. Loose furnishings shown represent one of many possible arrangements.

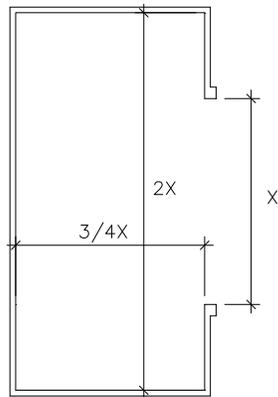
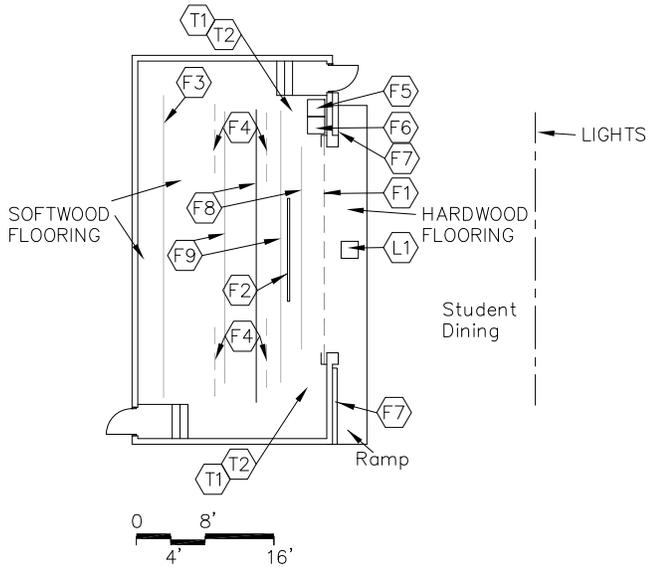
**STUDENT DINING  
M-SD-1**

## CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, rubber, <b>ET</b> , sheet	096500	N/A	
vinyl, porcelain tile, terrazzo	096516		
tile, <b>polished concrete</b>	093000	<u>Fire Suppression:</u>	
<b>finishing, or colored</b>	096616	Fire suppression system	211000
<b>finishing</b>	<b>033510</b>		
	<b>033519</b>	<u>Plumbing:</u>	
		Drinking water cooler	224000
<u>Base:</u>		<u>HVAC:</u>	
Resilient base	096500	Supply/return air system	Div. 23
Optional: porcelain tile base	093000	Independent temp ctrl	230923
<u>Ceiling:</u>		<u>Electrical:</u>	
Suspended, acoustical	095113	Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
<u>Walls:</u>		Multilevel switching	262726
Painted concrete masonry units	042000/099100	8 duplex receptacles	262726
		Double duplex receptacle adjacent to	
Acoustical wall treatment	098000	each data and video port	262726
and diffusers		Means of egress lighting per code	265100
		Emergency lighting	265100
<u>LOOSE FURNISHINGS:</u>		Telecommunications Grounding	270526/260526
L1 Tables and chairs or long tables with		<u>Communications:</u>	
attached stools		T1 2 video ports	271533/271543
L2 Large waste receptacles		T2 2 data ports	271513
Folding or high density stack chairs		Clock	275313
for large assembly use		Student dining/cafeteria sound system <sup>2</sup>	275122
Carts for chairs		Central sound system	275123
Recycling bins		T3 Overhead projector	274119
Note: Cafeteria tables with attached stools shall		<u>Electronic Safety and Security:</u>	
be securely anchored to walls when not in use or		Life safety devices per code	283111
be kept in secure storage area when not in use.		<u>Miscellaneous:</u>	
		Windows with integral blinds or	081113
		windows with shading devices	/088000
		(optional)	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Student dining sound system is to be used in conjunction with the stage.



**Proportions are recommended – not mandatory.**

ASPECT RATIO OF STAGE

CAPACITY: NA  
 SIZE: x = proscenium opening  
 see diagram for dimensions  
 ANCILLARY SPACES: Student Dining  
 M-SD-1

**PROGRAM ACTIVITIES:**

- Serves as the assembly type programs, performances, and presentations for students and adults

**SPATIAL RELATIONSHIPS:**

- Open to student dining area

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Area should be raised slightly above student dining area floor
- Provide handicapped accessibility

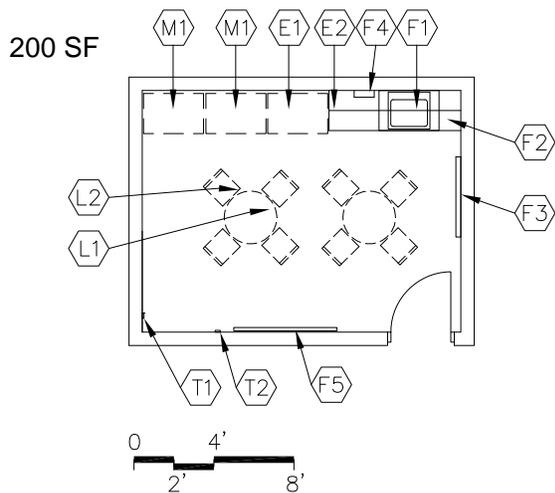
NOTES:

**STAGE  
M-SD-2**
**CHAPTER 5: MIDDLE SCHOOL**

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Wood flooring, dark finish	096400	F1 Front curtain, track, and valance or grand border	116143
Stairs: carpet, rubber, or wood		F2 Projection screen	116143
Base:		F3 Rear curtain	116143
Ventilated resilient base	096400	F4 Leg curtains, tracks, and/or pivots	116143
Ceiling:		F5 Sound control console receptacle	275122
Painted, exposed structure	099100	F6 Lighting control console receptacle	265100
Walls:		F7 Pipe handrail	055000
Painted concrete masonry units	<b>042000</b> /099100	F8 Light pipe	116143
		F9 Border curtains	116143
<u>LOOSE FURNISHINGS:</u>		<u>Fire Suppression:</u>	
L1 Podium		Fire suppression system	211000
		<u>Plumbing:</u>	
		N/A	
		<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Temperature control with student dining space	230923
		<u>Electrical:</u>	
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Single level switching	262726
		2 duplex receptacles	262726
		Double duplex receptacle adjacent to each data and video port	262726
		Emergency lighting	265100
		Telecommunications Grounding	270526/260526
		<u>Communications:</u>	
		T1 2 video ports (1 on each side of the proscenium opening)	271533/271543/274119
		T2 2 data ports (1 on each side of the proscenium opening)	271513
		Student dining/cafeteria sound system <sup>2</sup>	275122
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Student dining sound system is to be used in conjunction with student dining area.
3. Provide a reflective strip on floor at edge of stage.

**STAFF DINING**  
**M-SD-3**
**CHAPTER 5: MIDDLE SCHOOL**

**PROGRAM ACTIVITIES:**

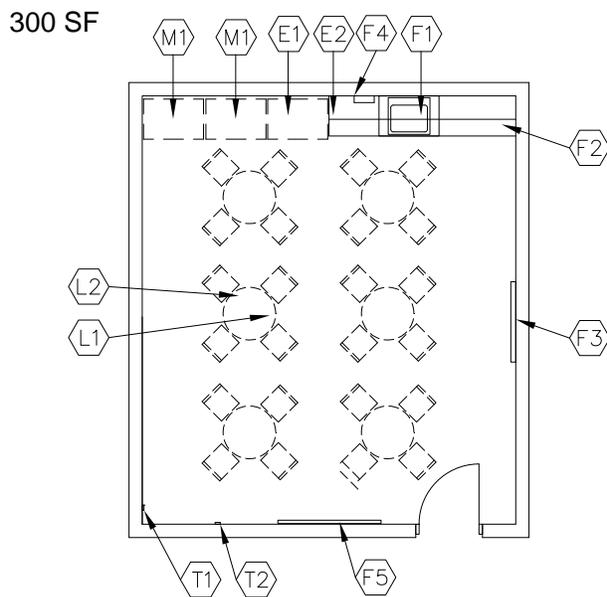
- Space for staff dining

**SPATIAL RELATIONSHIPS:**

- Near student dining
- Near food services

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control -  
walls minimum STC 50  
ceiling minimum CAC 35, NRC 0.70



**CAPACITY:** 8 – 24 staff  
**SIZE:** 200 – **400 SF**  
**ANCILLARY SPACES:** Student Dining  
 M-SD-1

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

**STAFF DINING**  
**M-SD-3**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, ET, sheet vinyl,	096500	F1 3' sink base cabinet with	123550
rubber, porcelain tile,	096516	wall cabinet above	
	093000	F2 About 8' of base and wall cabinets	123550
		F3 4' of tack board	101100
<u>Base:</u>		F4 Towel dispenser	102813
Resilient base	096500	F5 4'-6' marker board (optional)	101100
Optional: porcelain tile	093000		
		<u>Fire Suppression:</u>	
<u>Ceiling:</u>		Fire suppression system	211000
Suspended, acoustical	095113		
		<u>Plumbing:</u>	
<u>Walls:</u>		Sink	224000
Painted, concrete masonry units		Plumbing connections	
	042000/099100		224000/221116/221119
		<u>HVAC:</u>	
<u>LOOSE FURNISHINGS:</u>		Supply/return air system	Div. 23
L1 Tables		Independent temperature	
L2 Chairs		control	230923
Waste receptacle			
		<u>Electrical:</u>	
<u>EQUIPMENT:</u>		Single level switching	262726
E1 Refrigerator (could be fixed equipment)		Fluorescent lighting	265100
E2 Microwave		Illumination level: See Table 8600-4	
Waste receptacle		4 duplex receptacles	262726
		Double duplex receptacle adjacent to	
		each video port	262726
		Receptacles for vending machines,	
		refrigerator, and microwave	262726
		<u>Communications:</u>	
		T1 1 video port	271533/271543
		T2 1 voice port and phone	271513/273113
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		The following items are to be funded by the	
		school district:	
		M1 Vending machines	

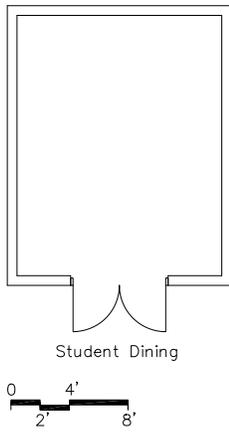
**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

**TABLE STORAGE  
M-SD-4**

CHAPTER 5: MIDDLE SCHOOL

250 SF



**PROGRAM ACTIVITIES:**

- Storage for tables and chairs

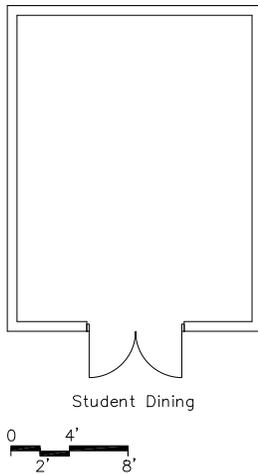
**SPATIAL RELATIONSHIPS:**

- Adjacent to student dining
- Near food services

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting

300 SF



CAPACITY: N/A  
 SIZE: 250 - 300 SF  
 ANCILLARY SPACES: Student Dining  
 M-SD-1

NOTES:

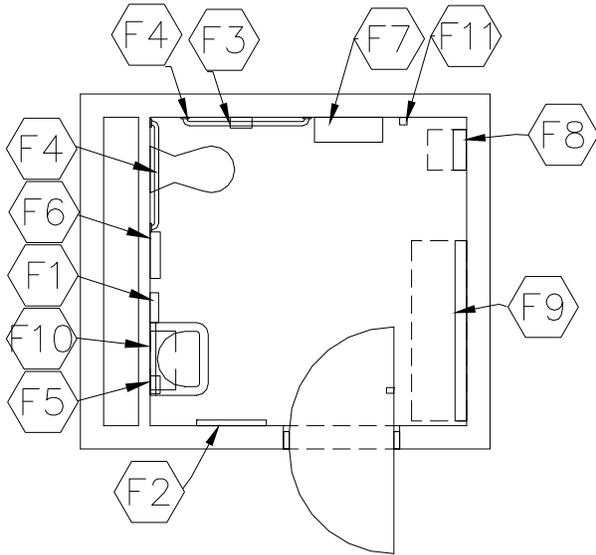
**TABLE STORAGE  
M-SD-4**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
<b>Cure and seal</b> concrete	033000	N/A	
Base:		<u>Fire Suppression:</u>	
No base		Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure		N/A	
Option: Rated gypsum wallboard	092116	<u>HVAC:</u>	
Walls:		Exhaust air system	Div. 23
Unpainted concrete masonry units	042000	Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:::</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		N/A	
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.



## PROGRAM ACTIVITIES:

- Personal, health, and handicap needs for all building occupants

## SPATIAL RELATIONSHIPS:

- Located where best accessible to all building occupants **and the public**

## ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control -  
wall minimum STC 48  
ceiling minimum CAC 35, NRC 0.70
- Moisture- and stain-resistant finishes

CAPACITY:  
SIZE:

2 people  
80 SF

NOTES:

**FAMILY RESTROOM**  
**M-SD-5**

CHAPTER 5: MIDDLE SCHOOL

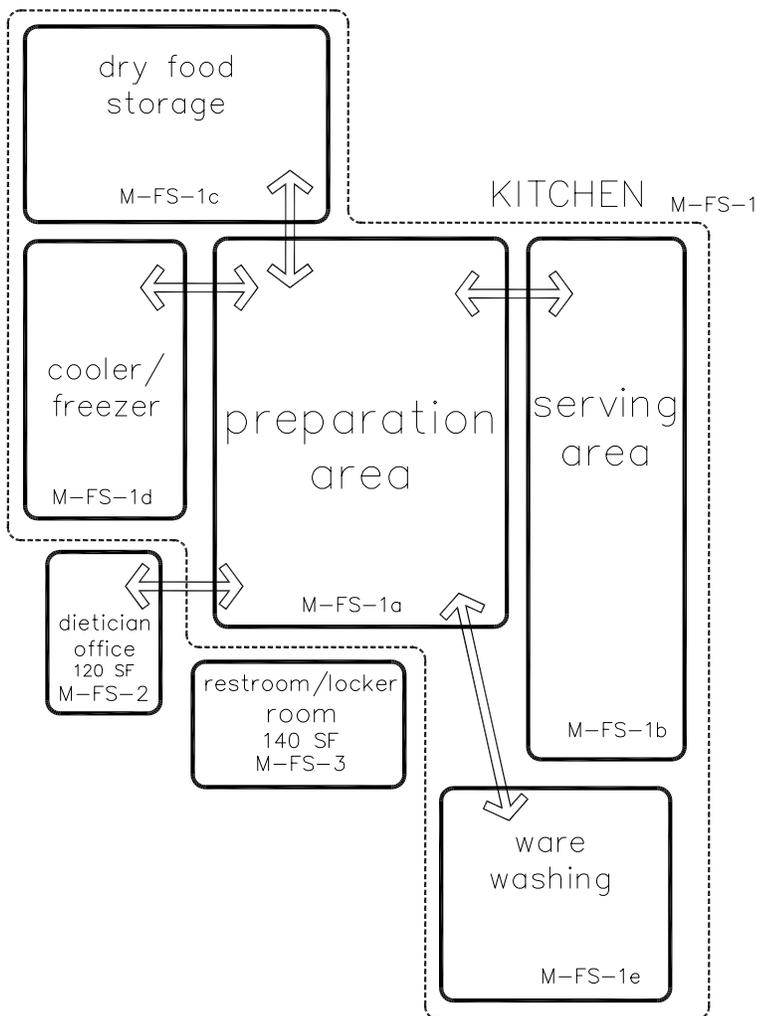
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, rubber, ET,	096516	F1 Towel dispenser	102813
sheet vinyl, ceramic mosaic tile	096500	F2 24" x 60" mirror	102813
Optional: <b>Ceramic mosaic tile</b> ,	093000	F3 Toilet tissue holder	102813
porcelain tile, or	096723	F4 36" and 42" grab bar	102813
resinous flooring		F5 Soap dispenser	102813
		F6 Sanitary napkin dispenser/disposal	102813
<u>Base:</u>		F7 Folding utility shelf	102813
Resilient base	096500	F8 Mounted child seat	102813
Optional: Ceramic mosaic tile,	093000	F9 Adult/child changing station	102813
porcelain tile, resinous flooring	096723	F10 16" x 24" mirror with shelf	102813
flooring, or integral vinyl cove base		F11 Coat hooks	102813
		<u>Fire Suppression:</u>	
<u>Ceiling:</u>		Fire suppression system	211000
Suspended, acoustical	095113		
		<u>Plumbing:</u>	
<u>Walls:</u>		Wall-mounted water closet	224000
Painted concrete masonry units	042000/099100	Wall-mounted lavatory	224000
		Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
Wastebasket		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

## FOOD SERVICE SPACES M-FS

### CHAPTER 5: MIDDLE SCHOOL



#### NOTES:

This is an example of how the food service spaces in a middle school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Food Service space plates:

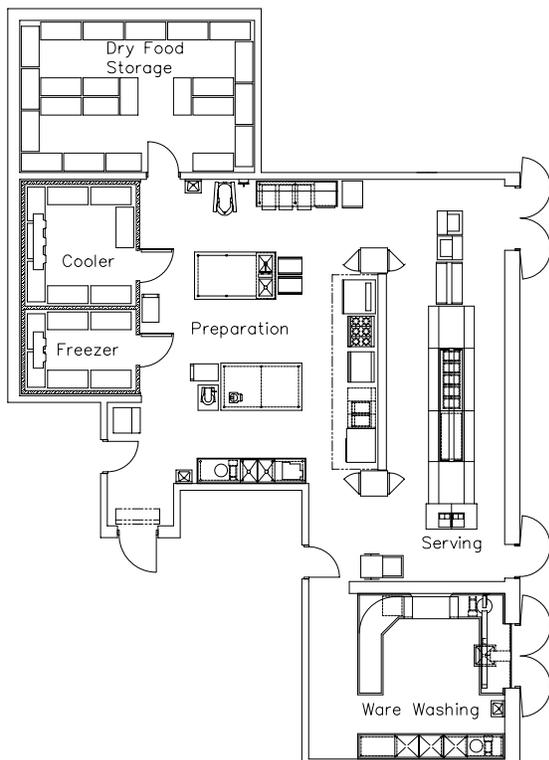
M-FS-0	Warming Kitchen
M-FS-1	Kitchen
M-FS-1a	Preparation Area
M-FS-1b	Serving Area
M-FS-1c	Dry Food Storage
M-FS-1d	Cooler/Freezer
M-FS-1e	Ware Washing
M-FS-2	Dietician Office
M-FS-3	<b>Restroom/Locker Room</b>

## KITCHEN M-FS-1

This space consists of various areas:

Preparation Area  
Serving Area  
Dry Food Storage  
Cooler/Freezer  
Ware Washing

A space plate follows for each of these areas.



CAPACITY: 3 – 10 persons

SIZE: Student capacity multiplied by 3.5 SF  
per student

ANCILLARY SPACES: Student Dining  
M-SD-1  
Loading/Receiving Area  
M-BS-9

### PROGRAM ACTIVITIES:

- Space for the planning, ordering, preparation, and serving of the meals, and for providing meals for the students and staff

### SPATIAL RELATIONSHIPS:

- Adjacent to student dining
- Near staff dining
- Near table storage
- Adjacent to loading/receiving area

### ENVIRONMENTAL CONSIDERATIONS:

- Compliance with State Board of Health requirements

### MISCELLANEOUS:

- The sizing of the kitchen area assumes:  
Type "A" meal service only at 80% of the student capacity and 3, 30-minute serving periods.

### NOTES:

This kitchen layout is to be used only for a central kitchen operation.

## WARMING KITCHEN M-FS-0

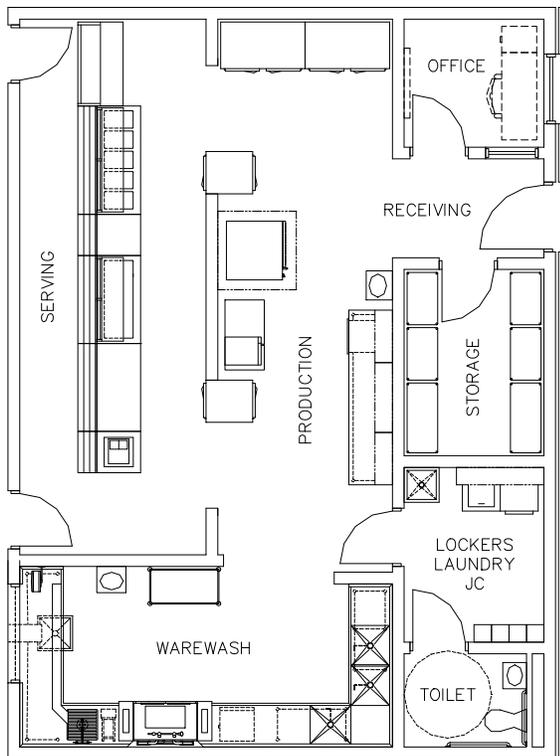
### CHAPTER 5: MIDDLE SCHOOL

This space consists of various areas:

Production Area	25%
Serving Area	35%
Warewash	25%
Storage	10%
Receiving	5%

Additional areas to be added:

Office	75 SF
Toilet	50 SF
Lockers/Laundry/Janitorial Closet	125 SF



CAPACITY:	3 - 7 persons
SIZE:	Student capacity multiplied by 2.0 SF per student
ANCILLARY SPACES:	Student Dining M-SD-1 Loading/Receiving Area M-BS-1

#### PROGRAM ACTIVITIES:

- Space for receiving, organizing, and serving of the meals prepared in the central kitchen.

#### SPATIAL RELATIONSHIPS:

- Adjacent to student dining
- Near staff dining
- Near table storage
- Adjacent to loading/receiving area

#### ENVIRONMENTAL CONSIDERATIONS:

- Compliance with State Board of Health requirements

#### MISCELLANEOUS:

- Kitchen area must be located adjacent to exterior loading dock area to receive transported food from central kitchen.

#### NOTES:

**WARMING KITCHEN**  
**M-FS-0**

CHAPTER 5: MIDDLE SCHOOL

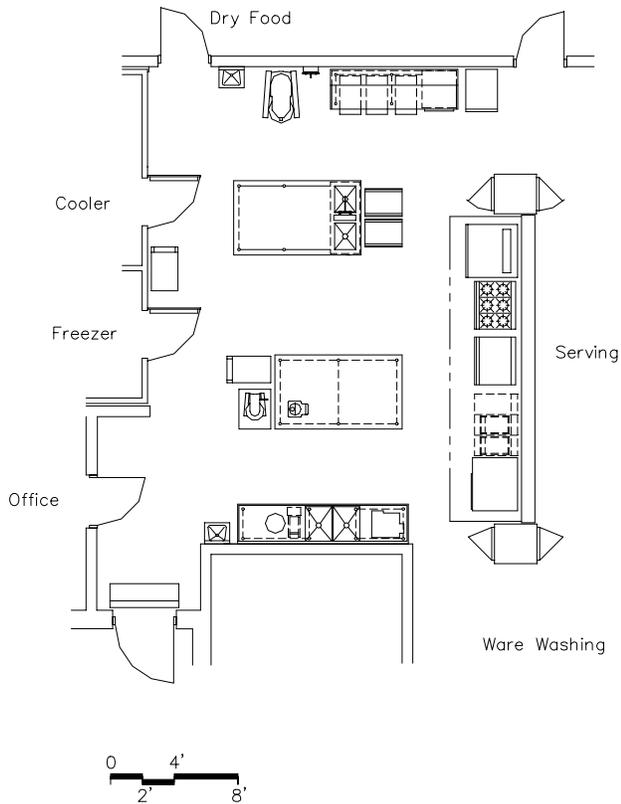
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Quarry tile	093000	Food service equipment	114000
Base:		<u>Fire Suppression:</u>	
Quarry tile base	093000	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Cleanable, suspended, acoustical	095113	Connections to food service eqpt.	224000
Walls:		Plumbing connections	224000/221116/221119
Epoxy-painted concrete masonry units	042000/0991000	Hand washing lavatory	224000
Option: Ceramic wall tile	093000	Gas connection	226313
or latex paint	099100	<u>HVAC:</u>	
<u>LOOSE FURNISHINGS:</u>		Supply/return air system	Div. 23
N/A		Independent temp control	230923
		Kitchen canopy exhaust system	233800
		<u>Electrical:</u>	
		Dual level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		10 duplex receptacles	262726
		<b>Duplex receptacle at</b>	<b>262726</b>
		<b>each cash register</b>	
		Emergency lighting	265100
		Connections to food service eqpt.	262726
		Means of egress lighting per code	265100
		<u>Communications:</u>	
		1 voice port and phone	271513/273113
		1 data port at cash register(s)	271513
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references and refer to Chapter 10 for a list of possible food service equipment.

## KITCHEN - Preparation Area M-FS-1a

### CHAPTER 5: MIDDLE SCHOOL



#### PROGRAM ACTIVITIES:

- Space and equipment for the preparation of food for students and staff

#### SPATIAL RELATIONSHIPS:

- Adjacent to the serving area
- Near the cooler/freezer
- Near the dry food storage

#### ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Proper ventilation of space to remove cooking odors
- Cleanable building surfaces

**CAPACITY:** 3 – 10 persons  
**SIZE:** Based on 36% of the kitchen area  
**ANCILLARY SPACES:** Part of the kitchen

#### NOTES:

1. This is an example of a preparation area. Food service equipment will vary from school district to school district.

**KITCHEN - Preparation Area**  
**M-FS-1a**

CHAPTER 5: MIDDLE SCHOOL

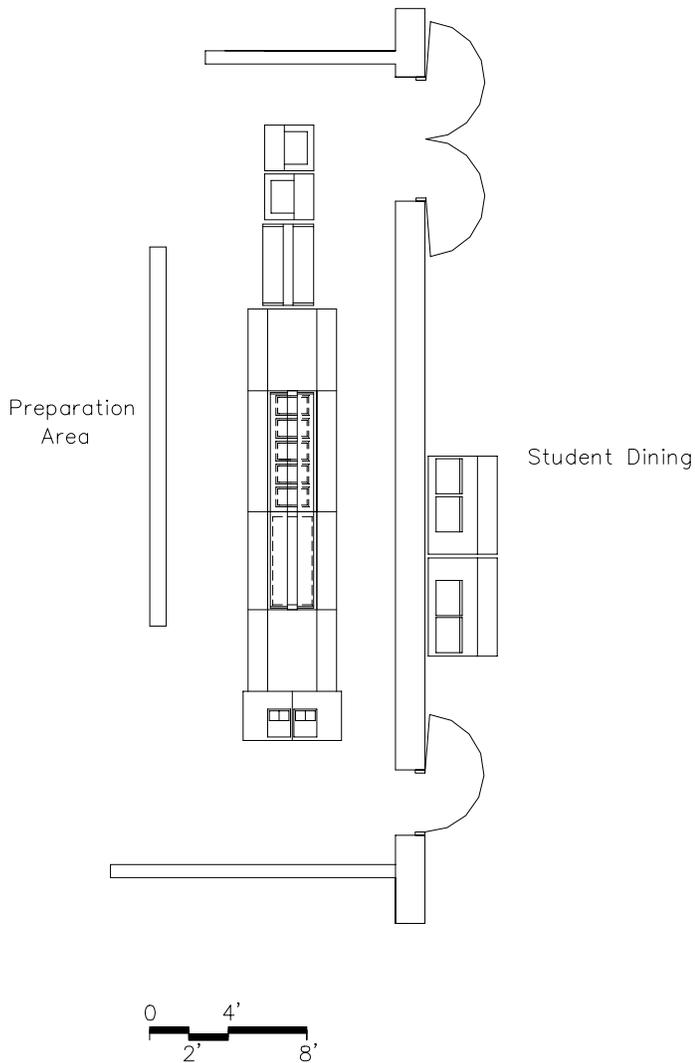
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Quarry tile	093000	Food service equipment	114000
Base:		<u>Fire Suppression:</u>	
Quarry tile base	093000	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Cleanable, suspended, acoustical	095113	Connections to food service equipment	224000
Walls:		Plumbing connections	224000/221116/221119
Epoxy-painted concrete masonry units	<b>042000</b> /099100	Hand washing lavatory	224000
Option: Ceramic wall tile	093000	Gas connections	226313
or latex paint	099100	<u>HVAC:</u>	
<u>LOOSE FURNISHINGS:</u>		Supply/return air system	Div. 23
N/A		Independent temperature control	230923
		Kitchen canopy exhaust system	233800
		<u>Electrical:</u>	
		Dual level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Emergency lighting	265100
		Connections to food service equipment	262726
		Means of egress lighting per code	265100
		<u>Communications:</u>	
		1 voice port and phone	271513/273113
		Clock	275313
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	238111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references and refer to Chapter 10 for a list of possible food service equipment.

**KITCHEN - Serving Area**  
**M-FS-1b**

CHAPTER 5: MIDDLE SCHOOL



**PROGRAM ACTIVITIES:**

- Space for serving of food

**SPATIAL RELATIONSHIPS:**

- Adjacent to student dining
- Adjacent to preparation area

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Cleanable building services

**CAPACITY:** N/A  
**SIZE:** Based on 34% of the kitchen area  
**ANCILLARY SPACES:** Part of the kitchen

**NOTES:**

1. This is an example of a serving area. Food service equipment will vary from school district to school district.

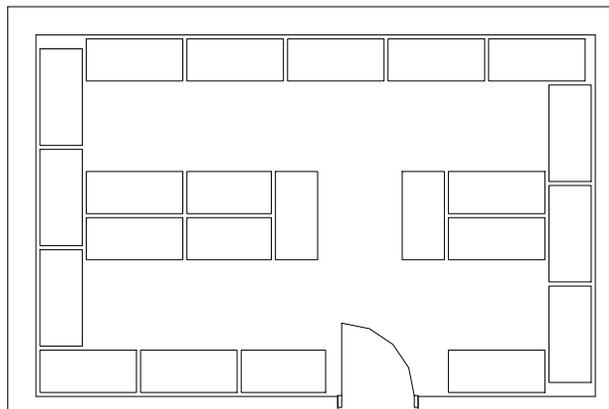
**KITCHEN - Serving Area**  
**M-FS-1b**

CHAPTER 5: MIDDLE SCHOOL

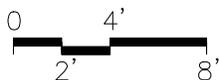
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Quarry tile	093000	Food service equipment	114000
Optional: porcelain tile	093000		
<u>Base:</u>		<u>Fire Suppression:</u>	
Quarry tile base	093000	Fire suppression system	211000
Optional: porcelain tile base	093000		
<u>Ceiling:</u>		<u>Plumbing:</u>	
Cleanable, suspended, acoustical	095113	Connections to food service equipment	224000
<u>Walls:</u>		<u>HVAC:</u>	
Epoxy-painted concrete masonry units	<b>042000</b> /099100	Supply/return air system	Div. 23
Option: Ceramic wall tile	093000		
or latex paint	099100	<u>Electrical:</u>	
<u>LOOSE FURNISHINGS:</u>		Dual level switching	262726
N/A		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Connections to food service equipment	262726
		Emergency lighting	265100
		Means of egress lighting per code	265100
		Duplex receptacle at each cash register	262726
		<u>Communications:</u>	
		Data port(s) at cash register(s)	271513
		Clock	275313
		Central sound system	275123
		1 Voice port and phone	271513/273113
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references and refer to Chapter 10 for a list of possible food service equipment.



Preparation Area



CAPACITY: N/A  
 SIZE: Based on 11% of the kitchen area  
 ANCILLARY SPACES: Part of the kitchen

**PROGRAM ACTIVITIES:**

- Lockable space to store dry food products and government commodities for 15 to 30 days

**SPATIAL RELATIONSHIPS:**

- Near the food preparation area
- Access to the loading/receiving area

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Continuous conditioning of air
- Cleanable building surfaces

**NOTES:**

1. This is an example of a dry food storage area. Food service equipment will vary from school district to school district.

**KITCHEN - Dry Food Storage**  
**M-FS-1c**

CHAPTER 5: MIDDLE SCHOOL

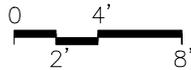
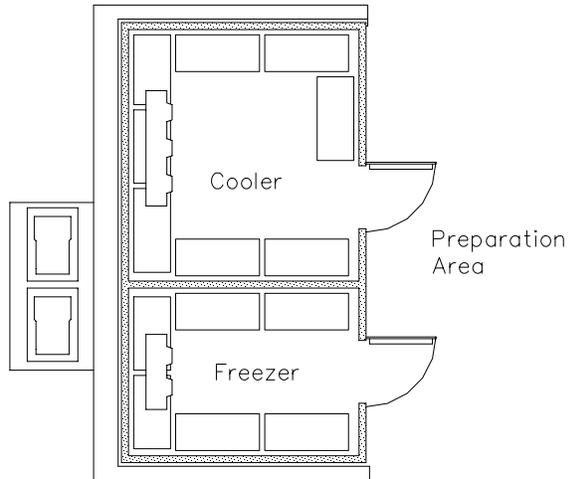
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, <b>ET</b> , or sheet vinyl	096500	Food service equipment	114000
Option: Quarry tile	093000		
	096516		
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base	096500	Fire suppression system	211000
Option: Quarry tile	093000		
<u>Ceiling:</u>		<u>Plumbing:</u>	
Cleanable, suspended, acoustical	095113	N/A	
<u>Walls:</u>		<u>HVAC:</u>	
Epoxy-painted concrete masonry units	042000/099100	Exhaust air system	Div. 23
Option: Ceramic wall tile	093000	Supply/return air system	Div. 23
or latex paint	099100		
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references and refer to Chapter 10 for a list of possible food service equipment.

**KITCHEN - Cooler/Freezer**  
**M-FS-1d**

CHAPTER 5: MIDDLE SCHOOL



CAPACITY: N/A  
 SIZE: Based on 10% of the kitchen area  
 ANCILLARY SPACES: Part of the Kitchen

**PROGRAM ACTIVITIES:**

- Space for refrigerated storage of perishable products

**SPATIAL RELATIONSHIPS:**

- Adjacent to food preparation area
- Access to the loading/receiving area

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Ventilation for refrigeration machinery
- Cleanable building surfaces
- Floor to be flush with adjacent kitchen floor

**NOTES:**

1. This is an example of a cooler/freezer. Food service equipment will vary from school district to school district.

**KITCHEN - Cooler/Freezer  
M-FS-1d**

CHAPTER 5: MIDDLE SCHOOL

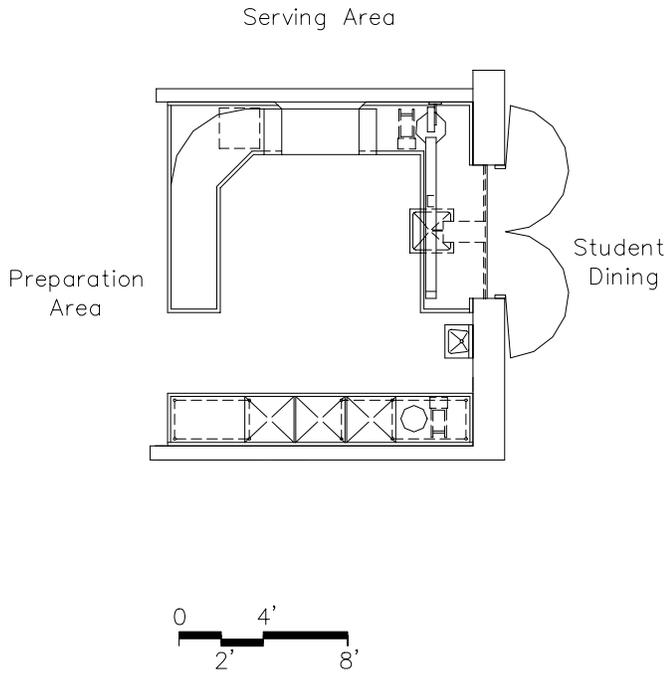
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Quarry tile	<b>093000</b>	Food service equipment	<b>114000</b>
Base:		<b><u>Fire Suppression:</u></b>	
Quarry tile base	<b>093000</b>	Fire <b>suppression</b> system	<b>211000</b>
Ceiling:		<u>Plumbing:</u>	
Manufactured insulated panel	<b>114000</b>	<b>N/A</b>	
Walls:		<u>HVAC:</u>	
Manufactured insulated panel	<b>114000</b>	Exhaust air system for compressors Div. <b>23</b>	
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
N/A		Single level switching	<b>262726</b>
		Incandescent lighting	<b>265100</b>
		Illumination level: See Table <b>8600-4</b>	
		Electrical connections to freezer/cooler refrigeration equipment	<b>262726</b>
		<b><u>Communications:</u></b>	
		N/A	
		<b><u>Electronic Safety and Security:</u></b>	
		N/A	
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references and refer to Chapter 10 for a list of possible food service equipment.

**KITCHEN - Ware Washing**  
**M-FS-1e**

**CHAPTER 5: MIDDLE SCHOOL**



**PROGRAM ACTIVITIES:**

- Space and equipment to scrape, wash, air dry, and store serving trays and utensils

**SPATIAL RELATIONSHIPS:**

- Adjacent to student dining

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Proper ventilation of space to remove steam and condensation
- Cleanable building surfaces

**CAPACITY:** N/A  
**SIZE:** Based on 9% of the kitchen area  
**ANCILLARY SPACES:** Part of the kitchen

**NOTES:**

1. This is an example of a ware washing area. Food service equipment will vary from school district to school district.

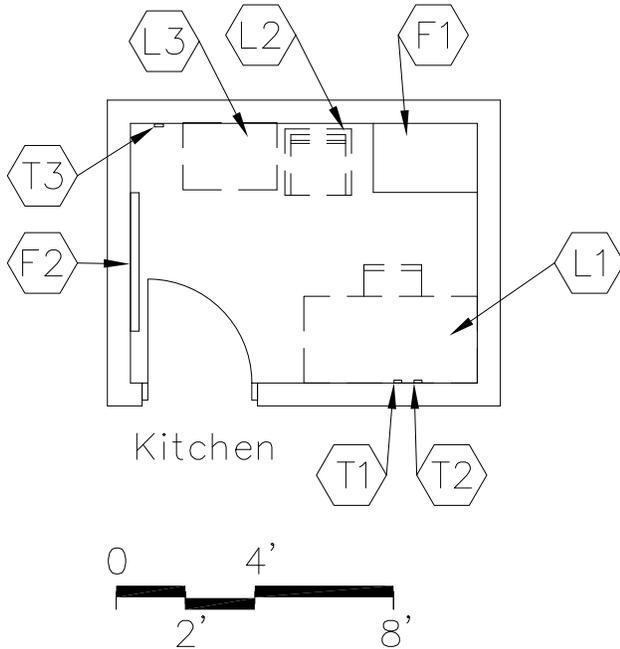
**KITCHEN - Ware Washing**  
**M-FS-1e**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Quarry tile	093000	Food service equipment	114000
Base:		<u>Fire Suppression:</u>	
Quarry tile base	093000	Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Cleanable, suspended, acoustical	095113	Lavatory	224000
Walls:		Connections to food service equipment	224000
Epoxy-painted concrete masonry units	<b>042000</b> /099100	<u>HVAC:</u>	
Option: Ceramic wall tile	093000	Supply/return air system	Div. 23
or latex paint	099100	Independent temperature control	230923
		Exhaust hood system	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
N/A		Dual level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		Connections to food service equipment	262726
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references and refer to Chapter 10 for a list of possible food service equipment.



CAPACITY: 1 - 2 persons  
 SIZE: 75 SF  
 ANCILLARY SPACES: Kitchen  
 M-FS-1

## PROGRAM ACTIVITIES:

- Space for the dietician to plan menus and meet with various vendors

## SPATIAL RELATIONSHIPS:

- Adjacent to kitchen

## ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control -  
 wall minimum **STC 45**  
 ceiling minimum **CAC 35, NRC 0.70**
- **Optional – window with integral blind**

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.

**DIETICIAN'S OFFICE**  
**M-FS-2**

## CHAPTER 5: MIDDLE SCHOOL

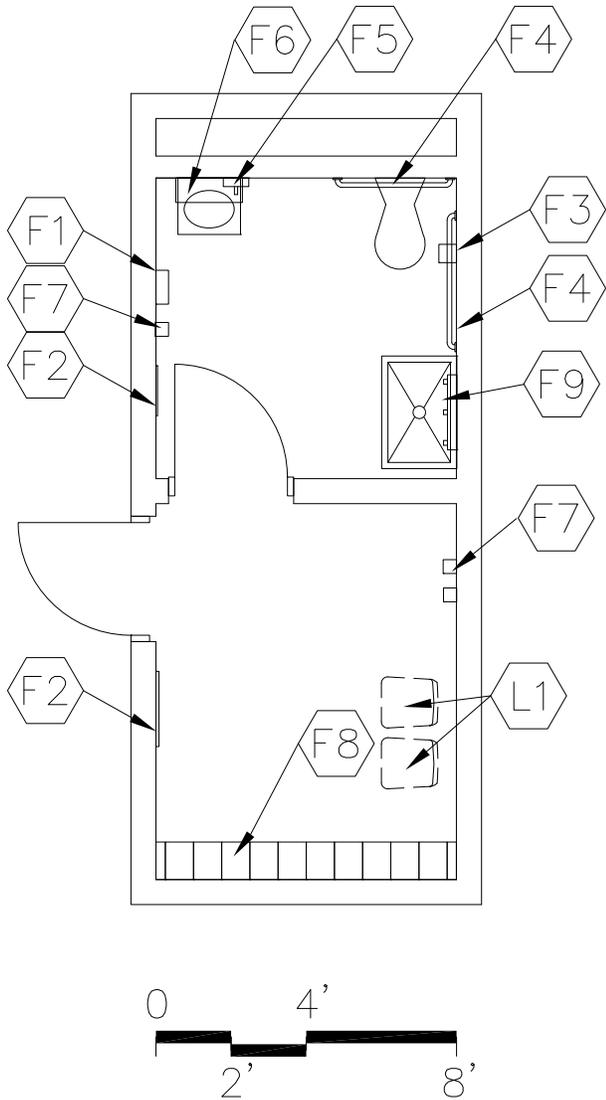
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>			
Linoleum, <i>ET</i> , or sheet vinyl	096500	<u>Fixed Items:</u>	
	096516	F1 2' of tall wardrobe (optional)	123550
Option: Quarry tile	093000	F2 4' of tack board	101100
<u>Base:</u>			
Resilient base	096500	<u>Fire Suppression:</u>	
Option: Quarry tile	093000	Fire suppression system	211000
<u>Ceiling:</u>			
Suspended, acoustical	095113	<u>Plumbing:</u>	
N/A			
<u>Walls:</u>			
Painted concrete masonry units	042000/199100	<u>HVAC:</u>	
		Supply/return air system	Div. 23
		Independent temp control	230923
		(coupled with similarly loaded adjacent spaces)	
<u>LOOSE FURNISHINGS:</u>			
L1 Desk and chair		<u>Electrical:</u>	
L2 Visitor chair		Single level switching	262726
L3 File cabinet		Fluorescent lighting	265100
Wastebasket		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to data and video port	262726
<u>Communications:</u>			
		T1 1 voice port and phone	271513/273113
		T2 1 data port near workstation	271513
		T3 1 video port	271533/271543
		Central sound system	275123
		Clock	275313
<u>Electronic Safety and Security:</u>			
		Life safety devices per code	283111
<u>Miscellaneous:</u>			
		Interior window (optional)	081113/088000

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Fixed equipment or loose furnishings can also be all fixed or all loose.

**RESTROOM / LOCKER ROOM**  
**M-FS-3**

CHAPTER 5: MIDDLE SCHOOL



CAPACITY: 2 persons  
 SIZE: 140 SF  
 ANCILLARY SPACES:

**PROGRAM ACTIVITIES:**

- Personal and health needs for food service staff

**SPATIAL RELATIONSHIPS:**

- Adjacent to ***kitchen***

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control -  
 wall minimum STC 48  
 ceiling minimum CAC 35, NRC 0.70
- Moisture- and stain-resistant finishes

NOTES:

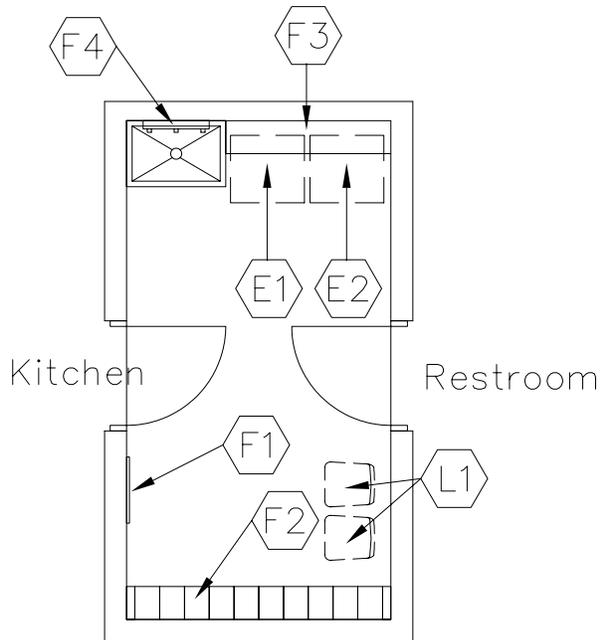
**RESTROOM / LOCKER ROOM  
M-FS-3**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES</u> <sup>1</sup> :	Spec. Ref.#	<u>FEATURES</u> <sup>1</sup> :	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, <i>ET</i> , sheet vinyl,	096516	F1 Towel dispenser	102813
rubber, rubber tile, or	096500	F2 <b>2</b> , 24" x 60" mirrors	102813
Optional: quarry tile	093000	F3 Toilet tissue holder	102813
		F4 36" and 42" grab bar	102813
<u>Base:</u>		F5 Soap dispenser	102813
Resilient base	096500	F6 Mirror with shelf above sink(optional)	102813
Optional: quarry tile, or	093000	F7 Coat hooks	102813
integral vinyl cove base		<b>F8 Lockers 12" x 12" x 60"</b>	<b>105113</b>
		<b>F9 Mop holder</b>	<b>102813</b>
<u>Ceiling:</u>		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
<u>Walls:</u>		<u>Plumbing:</u>	
Painted concrete masonry units	042000/099100	Wall-mounted water closet	224000
		Wall-mounted lavatory	224000
<u>LOOSE FURNISHINGS:</u>		<b>Floor service sink</b>	<b>224000</b>
<b>L1 Chairs</b>		Plumbing connections	224000/221116/221119
Wastebasket		<u>HVAC:</u>	
		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		<b>2</b> duplex receptacles	262726
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.



CAPACITY: 2 persons  
 SIZE: 125 SF  
 ANCILLARY SPACES: Kitchen, M-FS-1  
 Restroom, M-FS-3

## PROGRAM ACTIVITIES:

- Space for the food service staff to store their personal belongings and to change their clothing
- Space for the washing, drying, and storage of towels, aprons, etc.

## SPATIAL RELATIONSHIPS:

- Adjacent to kitchen
- Adjacent to restroom

## ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control -  
 wall minimum **STC 48**  
 ceiling minimum **CAC 35, NRC 0.70**

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.

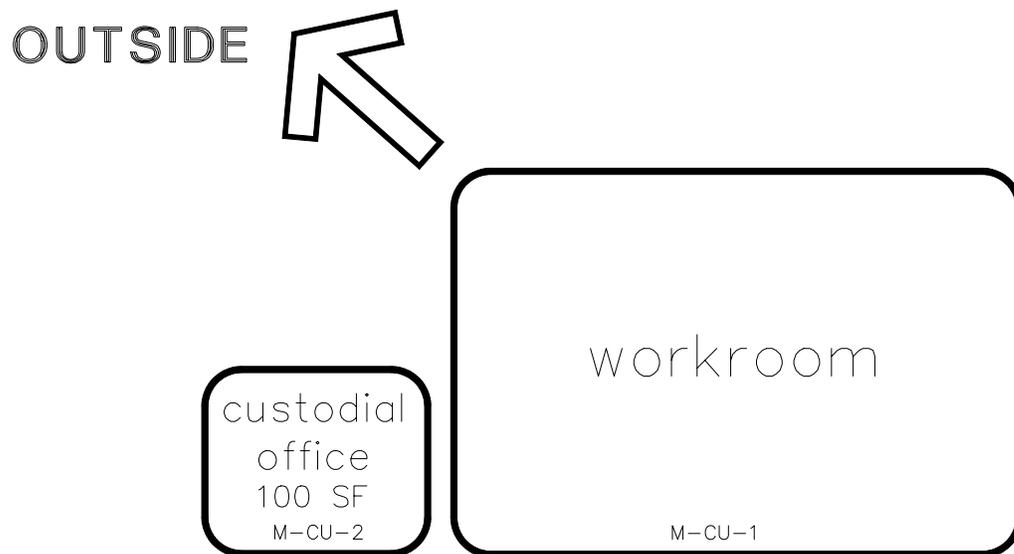
**LOCKER ROOM**  
**M-FS-4**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Sheet vinyl, rubber, rubber tile, or resinous flooring	096500 096723	F1 24" x 60" mirror (optional)	102813
		F2 Lockers 12" x 12" x 60"	105113
		F3 6' of wall cabinets or shelf (optional)	123550
		F4 Mop holder	102813
<u>Base:</u>		<u>Fire Suppression:</u>	
Resilient base, resinous flooring, or integral vinyl cove base	096500 096723	Fire suppression system	211000
<u>Ceiling:</u>		<u>Plumbing:</u>	
Suspended, acoustical with high-impact, hold-down clips	095113	Plumbing connections	224000/221116/221119
Option: exposed, painted pre-cast units	099100	Floor service sink	224000
		Washer connection	224000
<u>Walls:</u>		<u>HVAC:</u>	
Painted concrete masonry units	<b>042000</b> /099100	Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		Dryer vent system	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
L1 Chairs		Single level switching	262726
Wastebasket		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		Connections for washer and dryer	262726
<u>EQUIPMENT:</u>		<u>Communications:</u>	
E1 Washer		Central sound system	275123
E2 Dryer		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Provide storage cabinet for supplies if required by governing agency.	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.



## NOTES:

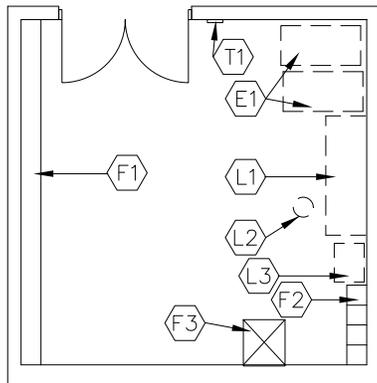
This is an example of how the custodial spaces in a middle school could be arranged. This is meant only to demonstrate the relationships between various spaces of this area.

Following are the Custodial space plates:

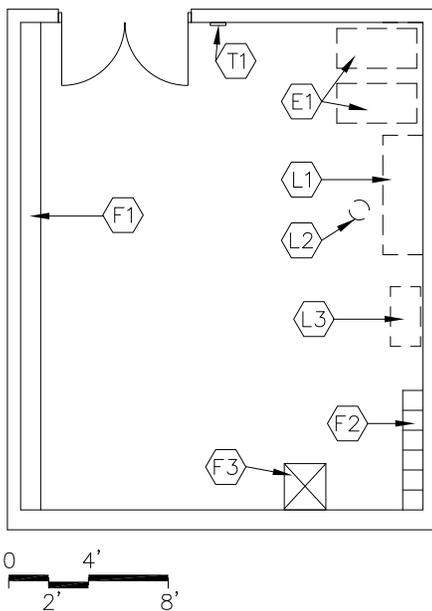
M-CU-1	Workroom
M-CU-2	Custodial Office

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200 SF



400 SF



**PROGRAM ACTIVITIES:**

- Space for storage of custodial equipment needed to maintain the building
- Space for equipment repair

**SPATIAL RELATIONSHIPS:**

- Near central storage area
- Near custodial office

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting

**CAPACITY:  
SIZE:**

**N/A  
200 - 400 SF**

**NOTES:**

1. Loose furnishings shown represent one of many possible arrangements.

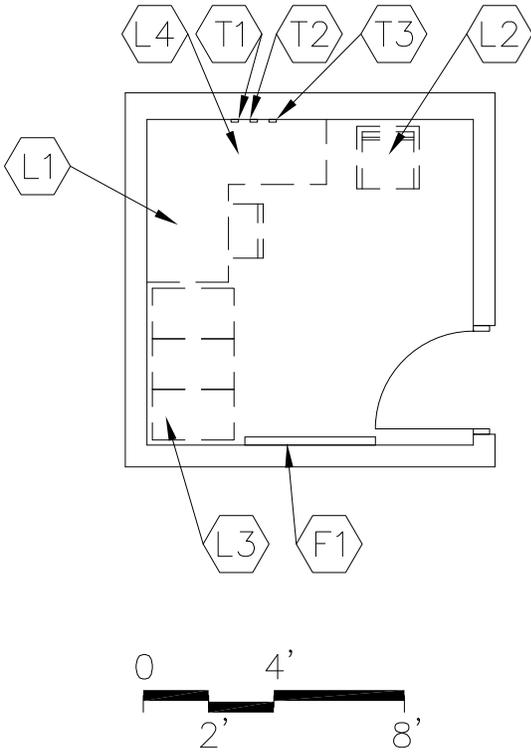
**WORKROOM  
M-CU-1**

## CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. <u>Ref.#</u>	<u>FEATURES<sup>1</sup>:</u>	Spec. <u>Ref.#</u>
<u>Flooring:</u>		<u>Fixed Items<sup>2</sup>:</u>	
<b><i>Polished concrete finishing, or colored concrete finishing</i></b>	<b>033510 033519</b>	F1 10' - 24' of open shelving, depths may vary (fixed or loose)	123550
<u>Base:</u>		F2 4 - 6 lockers	105113
Resilient base	096500	F3 Mop holder	102813
<u>Ceiling:</u>		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
<u>Walls:</u>		<u>Plumbing:</u>	
Painted concrete masonry units	042000/099100	Floor service sink	224000
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
L1 Workbench		Supply/return air system	Div. 23
L2 Stool		Independent temperature control	230923
L3 Tool cabinet		<u>Electrical:</u>	
Waste receptacles		Fluorescent lighting	265100
<u>EQUIPMENT:</u>		illumination level: See Table 8600-4	
E1 Recycling bins		Single level switching	262726
		4 duplex receptacles (minimum)	262726
		Electrical receptacles for custodial equipment	262726
		<u>Communications:</u>	
		T1 1 voice port and phone	271513/273113
		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Ranges shown indicate quantities for the smallest and largest possible room size.



## PROGRAM ACTIVITIES:

- Office for the custodian for scheduling, ordering, and inventory

## SPATIAL RELATIONSHIPS:

- Near custodial workroom

## ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control -  
wall minimum **STC 45**  
ceiling minimum **CAC 35, NRC 0.70**
- **Optional – window with integral blind**

CAPACITY:  
SIZE:

N/A  
100 SF

NOTES:

1. Loose furnishings shown represent one of many possible arrangements.

**CUSTODIAL OFFICE**  
**M-CU-2**

## CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, ET, sheet vinyl,	096500	F1 4' of tack board (optional)	101100
polished concrete finishing,or	096516		
colored concrete finishing	033510	<u>Fire Suppression:</u>	
	033519	Fire suppression system	211000
<u>Base:</u>		<u>Plumbing:</u>	
Resilient base	096500	N/A	
<u>Ceiling:</u>		<u>HVAC:</u>	
Suspended, acoustical	095113	Supply/return air system	Div. 23
		Independent temperature control	230923
		(coupled with similarly loaded	
		adjacent spaces)	
<u>Walls:</u>		<u>Electrical:</u>	
Painted concrete masonry units	042000/099100	Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		4 duplex receptacles	262726
		Double duplex receptacle adjacent to	
		data and modem port	262726
<u>LOOSE FURNISHINGS:</u>		<u>Communications:</u>	
L1 Desk and chair		T1 Modem port for temperature	
L2 Visitor chair		controls computer	271523
L3 File cabinets		T2 1 voice port and phone	271513/273113
L4 Computer desk return		T3 1 data port near workstation	271513
Wastebasket		Central sound system	275123
		Clock	275313
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		Interior window (optional)	081113/088000

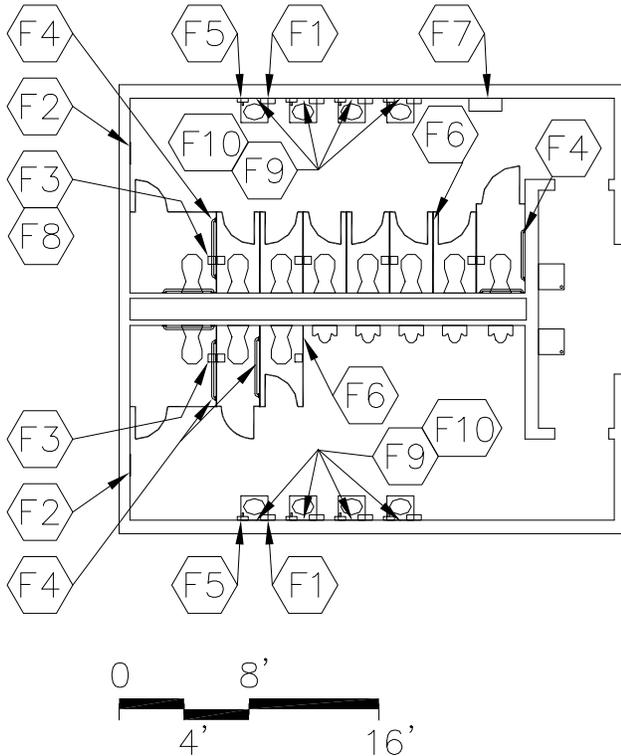
NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Fixed casework and loose furnishings can also be all fixed casework or all loose furnishings.

## LARGE GROUP RESTROOMS M-BS-1

### CHAPTER 5: MIDDLE SCHOOL

**Spaces to be determined by Design Professional based on the number of fixtures required.**



**CAPACITY:** Based on size of program area  
**SIZE:** Based on the sum of the program areas excluding building services, multiplied by 3.5%

#### PROGRAM ACTIVITIES

- Personal and health needs for the students

#### SPATIAL RELATIONSHIPS:

- Near student dining area
- Near public use areas, such as media center and gymnasium
- Near academic core area
- Restrooms located in several areas throughout building

#### ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting
- Environmental sound control –  
 wall minimum STC 53  
 ceiling minimum CAC 35, NRC **0.70**

#### NOTES:

1. Where individual restrooms are provided in lieu of large group restrooms, refer to M-BS-10.

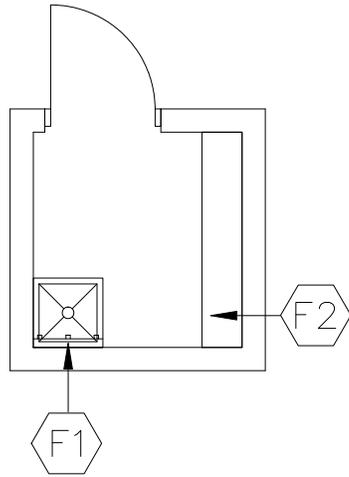
**LARGE GROUP RESTROOMS**  
**M-BS-1**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Ceramic mosaic tile	093000	F1 Towel dispensers	102813
Optional: porcelain tile, rubber, or resinous flooring	096723	F2 24" x 60" mirror	102813
		F3 Toilet tissue holders	102813
		F4 36" and 42" grab bar	102813
		F5 Soap dispensers	102813
		F6 Toilet partitions	102113
<u>Base:</u>		F7 Sanitary product dispenser	102813
Ceramic mosaic tile base	093000	F8 Sanitary product receptacles	102813
Optional: structural glazed tile, porcelain tile base, or resinous flooring	042000 096723	F9 16" x 24" mirrors with shelf (optional)	102813
		F10 Shelves (optional)	123550
<u>Ceiling:</u>		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
Optional: Abuse resistant gypsum wallboard	092116	<u>Plumbing:</u>	
<u>Walls:</u>		Wall-mounted water closets	224000
Painted concrete masonry units	042000/099100	Wall-mounted urinals	224000
		Wall-mounted lavatories or wash fountains	224000
		Wall hydrants	224000
		Plumbing connections	224000/221116/221119
		Drinking water coolers	224000
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
Waste Receptacles		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		Emergency lighting	265100
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Optional: electric hand dryers



CAPACITY:  
SIZE:

N/A  
50 SF

**PROGRAM ACTIVITIES:**

- Space for storage of custodial supplies throughout the building

**SPATIAL RELATIONSHIPS:**

- Near large group restrooms

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting

NOTES:

**CUSTODIAL CLOSET**  
**M-BS-2**

CHAPTER 5: MIDDLE SCHOOL

	Spec. Ref.#		Spec. Ref.#
<u>FINISHES<sup>1</sup>:</u>		<u>FEATURES<sup>1</sup>:</u>	
Flooring:		<u>Fixed Items:</u>	
Cure and seal concrete	033000	F1 Mop holder	102813
Base:		F2 Fixed or loose shelving (optional)	123550
Resilient base	096500	<u>Fire Suppression:</u>	
Ceiling:		Fire suppression system	211000
Cleanable, suspended, acoustical	095113	<u>Plumbing:</u>	
Walls:		Service sink or floor drain sink	224000
Painted concrete masonry units	042000/099100	Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
N/A		Exhaust air system	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		N/A	
		<u>Miscellaneous:</u>	
		N/A	

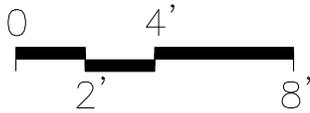
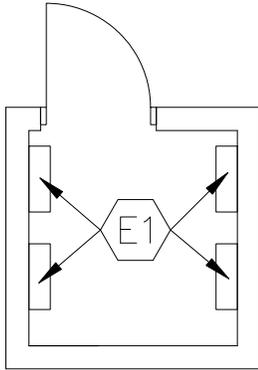
NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**ELECTRICAL CLOSET  
M-BS-3**

CHAPTER 5: MIDDLE SCHOOL

**Space to be determined by  
Design Professional.**



CAPACITY:  
SIZE:

N/A  
50 SF

**PROGRAM ACTIVITIES:**

- Space for electrical wiring and panels

**SPATIAL RELATIONSHIPS:**

N/A

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting

**NOTES:**

**ELECTRICAL CLOSET**  
**M-BS-3**

CHAPTER 5: MIDDLE SCHOOL

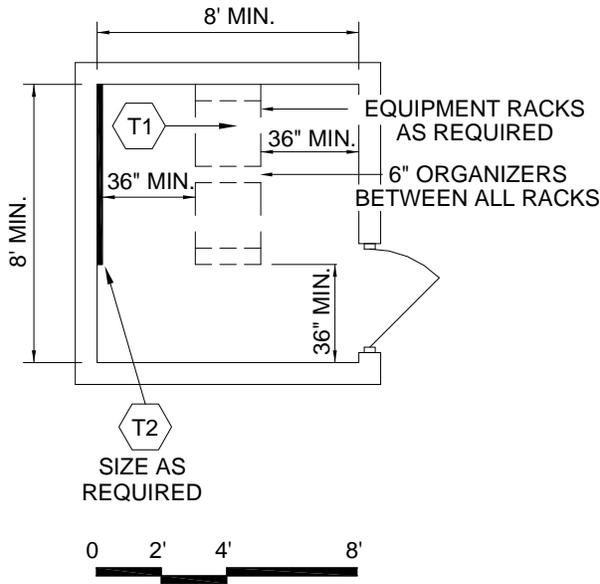
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
<b><i>Cure and seal</i></b> concrete	033000	N/A	
Base:		<u>Fire Suppression:</u>	
No base		Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Unpainted concrete masonry units	042000	To be determined by Design Professional	
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		E1 Electrical switchboard	262413/262416
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		N/A	
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.

**TELECOMMUNICATIONS ROOM  
M-BS-4**

CHAPTER 5: MIDDLE SCHOOL



**PROGRAM ACTIVITIES:**

- Space for technology needs

**SPATIAL RELATIONSHIPS:**

N/A

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting

CAPACITY: N/A

SIZE:

**0-75,000 SF =** ( ? ) 8 ft. x 8 ft. min.

**75,00-150,000 SF =** ( 1 ) 8 ft. x 10 ft., and  
( ? ) 8 ft. x 8 ft.

**150,000 SF plus =** ( 2 ) 8 ft. x 10 ft., and  
( ? ) 8 ft. x 8 ft.

**NOTES:**

1. This is an example of a telecommunications room. The equipment and layout will vary from school district to school district.

**TELECOMMUNICATIONS ROOM  
M-BS-4**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
<i>Polished concrete finishing, or</i>	<b>033510</b>	N/A	
<i>colored concrete finishing</i>	<b>033519</b>		
Base:		<u>Fire Suppression:</u>	
No base		Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Unpainted concrete masonry units	042000	Exhaust air system	Div. 23
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		1 duplex receptacle	262726
		Receptacles for data equipment	262726
		Telecommunications Grounding	270526/260526
		<u>Communications:</u>	
		T1 Technology equipment	
		Central sound system	275123
		Telephone Wiring	271313/271513
		Integrated Telephone System	273113
		Video Wiring	271333/271533/271543
		Digital on Demand Delivery System	274125
		Local Area Network Wiring	271513/271323
		Local Area Network Electronics	272100
		Grounding & Infrastructure Equipment	270526/271100
		T2 1/4" plywood back board	271313
		<u>Electronic Safety and Security:</u>	
		Security System	281300/281600/282300
		<u>Miscellaneous:</u>	
		N/A	

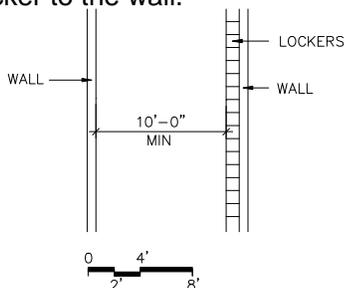
**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.

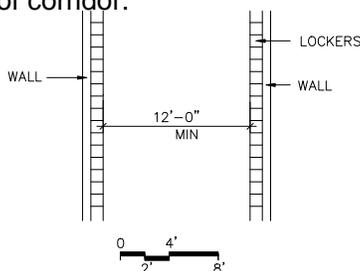
## CORRIDORS M-BS-5

### CHAPTER 5: MIDDLE SCHOOL

- Corridors shall be a minimum of 8 feet wide if no lockers are located in the corridor.
- Corridors shall be a minimum of 10 feet wide if lockers are located on one side of the corridor. The corridor width is from the face of the locker to the wall.



- Corridors shall be a minimum of 12 feet wide if lockers are located on each side of the corridor. The corridor width is from the face of the locker to the face of locker on opposite side of corridor.



- Instructional and activity areas shall be accessible by corridors without passing through another instructional or activity area.
- The corridors are to meet the existing requirements of applicable codes
- Stairs, ramps, and elevators are included under the corridor category.
- It is recommended that stairs in multi-story buildings not be enclosed unless required by code.

CAPACITY: Based on size of program area  
 SIZE: Based on the sum of the program areas excluding building services, multiplied by 20%

#### PROGRAM ACTIVITIES:

- Circulation space

#### SPATIAL RELATIONSHIPS:

N/A

#### ENVIRONMENTAL CONSIDERATIONS:

- Uniform lighting

#### VESTIBULES

- Area of vestibules to be included within area allotted for corridors.
- Width of vestibules can be no less than minimum width of adjacent corridor.
- Minimum corridor length to be 8'-0" between doors.
- Vestibules are to be provided at major entrances/exits and may be eliminated at minor entrances/exits as determined by the Design Professional.
- Provide automatic door operator on one leaf of main entrance/exit door and related vestibule door.
- Provide **a five-step or fifteen foot walk off mat** extending from main outside entry doors into the building and as wide as the entry doors.
- Option – entrance floor grilles. See Chapter 9, Section 124816.**

#### NOTES:

**CORRIDORS**  
**M-BS-5**

## CHAPTER 5: MIDDLE SCHOOL

	Spec. Ref.#		Spec. Ref.#
<b><u>FINISHES<sup>1</sup>:</u></b>		<b><u>FEATURES<sup>1</sup>:</u></b>	
<b><u>Flooring<sup>2</sup>:</u></b>		<b><u>Fixed Items:</u></b>	
Linoleum, ET, sheet vinyl,	096516	Corridor lockers	105113
rubber, carpet, or	096500	Fire extinguishers and cabinets	104400
carpet tile	096816	Recessed vinyl floor mats or	
	<b>096813</b>	surface mats	124813
<b>Base:</b>		Tack board or tackable wall surface	101100
Resilient base	096500		
Optional: structural glazed tile	042000	<b><u>Fire Suppression:</u></b>	
		N/A	
<b>Ceiling:</b>		<b><u>Plumbing:</u></b>	
Suspended, acoustical	095113	Drinking water coolers	224000
Option in vestibules: Abuse resistant			
gypsum wallboard	092116	<b><u>HVAC:</u></b>	
<b>Walls:</b>		Supply/return air system	Div. 23
Painted concrete masonry units		Temp ctrl from	230923
	042000/099100	adjacent instructional spaces	
<b><u>LOOSE FURNISHINGS</u></b>		<b><u>Electrical:</u></b>	
Recycling bins and waste receptacles		Dual level switching	262726
Fixed or loose benches		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
<b>NOTE:</b> At entries adjacent to dining/ commons		Duplex receptacles	262726
area, match dining/commons flooring.		Double duplex receptacle adjacent to	
		each video port	262726
		Means of egress lighting per code	265100
		Emergency lighting	265100
		<b><u>Communications:</u></b>	
		Video ports	271533/271543
		Data ports	271513
		Pay phone terminals	271513/273113
		Central sound system	275123
		Clocks	275313
		Wireless access points	
			271513/272100/272133
		<b><u>Electronic Safety and Security:</u></b>	
		Life safety devices per code	283111
		Security System	281300/281600/282300
		<b><u>Miscellaneous:</u></b>	
		Display cases and Directory	101200

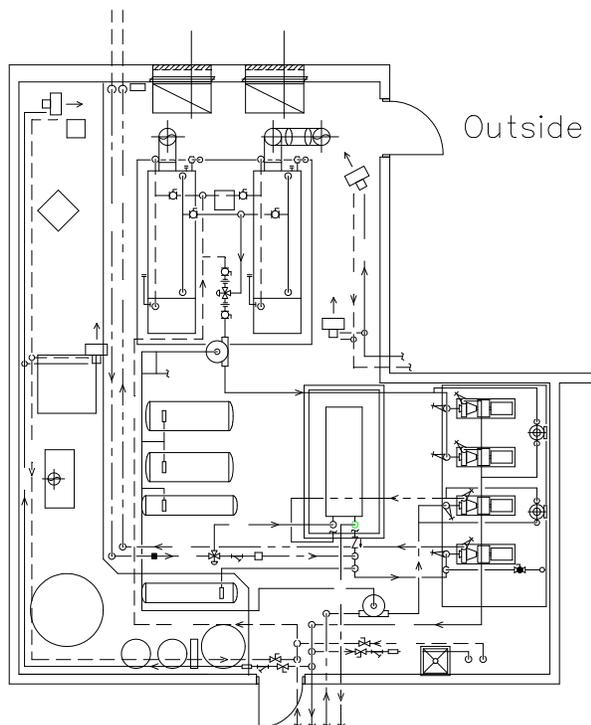
**NOTES:**

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Linoleum, VET, or sheet vinyl is to be used in vestibules, stairwells, and elsewhere as appropriate. Porcelain tile is optional in lobbies, with resilient or structural glazed tile base.

**MECHANICAL/ELECTRICAL SPACE/DECKS**  
**M-BS-6**

CHAPTER 5: MIDDLE SCHOOL

**Space to be determined by Design Professional.**



**CAPACITY:** Based on size of program area

**SIZE:** Based on the sum of the program areas excluding building services, multiplied by 6.9%

**PROGRAM ACTIVITIES:**

- Space for mechanical and electrical equipment

**SPATIAL RELATIONSHIPS:**

- Accessible for maintenance and repair
- Access to outside
- Isolate from main area of building
- Near loading/receiving area
- Near custodial area

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control –  
 wall minimum **STC 60**  
 ceiling minimum **CAC 35, NRC 0.70**

**NOTES:**

1. This is an example of a mechanical room. The equipment and layout will vary depending upon the heating, ventilating, and air conditioning system used.
2. A penthouse is considered a mechanical room.

**MECHANICAL/ELECTRICAL SPACE/DECKS**  
**M-BS-6**

CHAPTER 5: MIDDLE SCHOOL

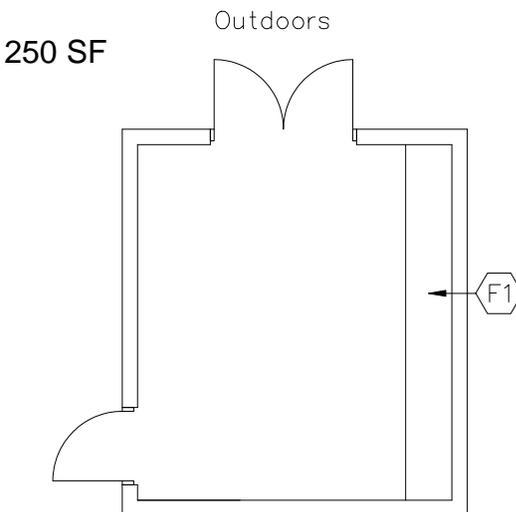
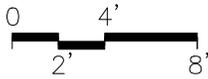
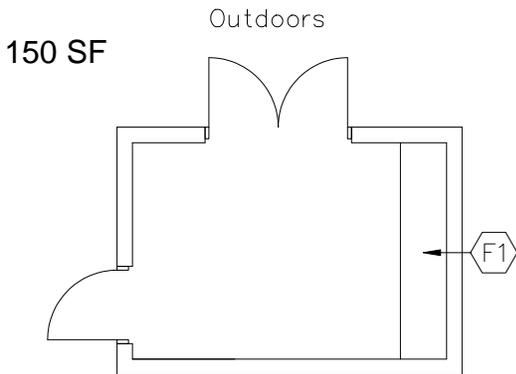
<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
<b>Cure and seal</b> concrete	033000	To be determined by Design Professional	
Base:		<u>Fire Suppression:</u>	
No base		N/A	
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	To be determined by Design Professional	
Walls: (note 2)		<u>HVAC:</u>	
Unpainted concrete masonry units	042000	To be determined by Design Professional	
<u>LOOSE FURNISHINGS:</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Others as determined by Design Professional	
		<u>Communications:</u>	
		Central sound system	275123
		Voice port and phone	271413/273113
		<u>Electronic Safety and Security:</u>	
		N/A	
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Option for penthouse to use metal panel on concrete masonry or metal panel on metal framing wall systems.

**STORAGE AREA  
M-BS-7**

**CHAPTER 5: MIDDLE SCHOOL**



CAPACITY: N/A  
 SIZE: 150 - 250 SF

**PROGRAM ACTIVITIES:**

- Space for storage of outdoor custodial equipment

**SPATIAL RELATIONSHIPS:**

- Near custodial office
- Near custodial workroom
- Direct access to outdoors

**ENVIRONMENTAL CONSIDERATIONS:**

N/A

**NOTES:**

**STORAGE AREA  
M-BS-7**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES</u> <sup>1</sup> :	Spec. Ref.#	<u>FEATURES</u> <sup>1</sup> :	Spec. Ref.#
Flooring:		<u>Fixed Items</u> <sup>2</sup> :	
<b>Cure and seal</b> concrete	033000	F1 10' - 16' of open tall shelving, depths may vary (fixed or loose)	123550
Base:		<u>Fire Suppression:</u>	
No base		Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure	---	N/A	
Walls:		<u>HVAC:</u>	
Unpainted concrete masonry units	042000	Exhaust air system	Div. 23
<u>LOOSE FURNISHINGS:</u>		Supplemental heat as required	Div. 23
N/A		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

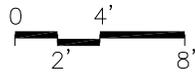
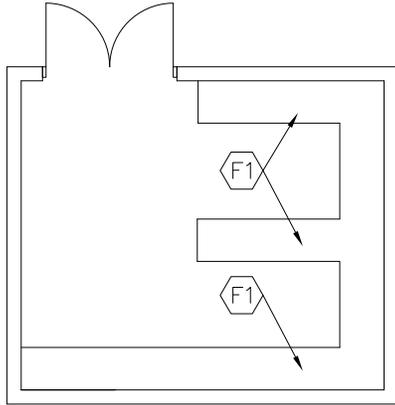
1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Ranges shown indicate quantities for the smallest and largest possible room size.

**CENTRAL STORAGE AREA  
M-BS-8**

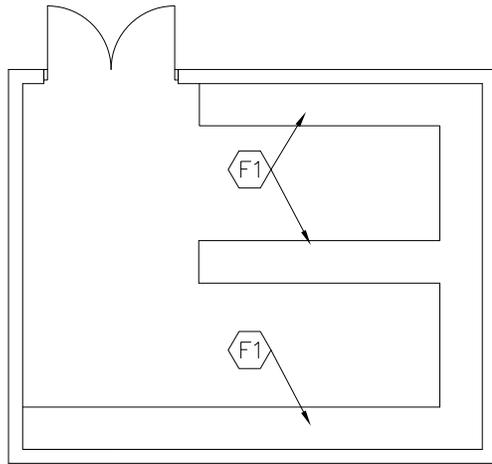
CHAPTER 5: MIDDLE SCHOOL

**Space to be determined by Design Professional.**

300 SF



400 SF



CAPACITY: N/A  
 SIZE: 300 - 400 SF

**PROGRAM ACTIVITIES:**

- Storage for paper products, utensils, supplies, etc., to be used throughout the entire building

**SPATIAL RELATIONSHIPS:**

- Near loading/receiving area
- Direct access to building circulation

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting

**NOTES:**

**CENTRAL STORAGE AREA  
M-BS-8**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items<sup>2</sup>:</u>	
<b>Cure and seal</b> concrete	033000	F1 26' - 32' of open tall shelving, depths may vary (fixed or loose)	123550
Base:		Option: mobile storage shelving	105626
No base			
Ceiling:		<u>Fire Suppression:</u>	
Exposed structure	---	Fire suppression system	211000
Walls:		<u>Plumbing:</u>	
Unpainted concrete masonry units	042000	N/A	
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
N/A		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Duplex receptacles	262726
		<u>Communications:</u>	
		N/A	
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

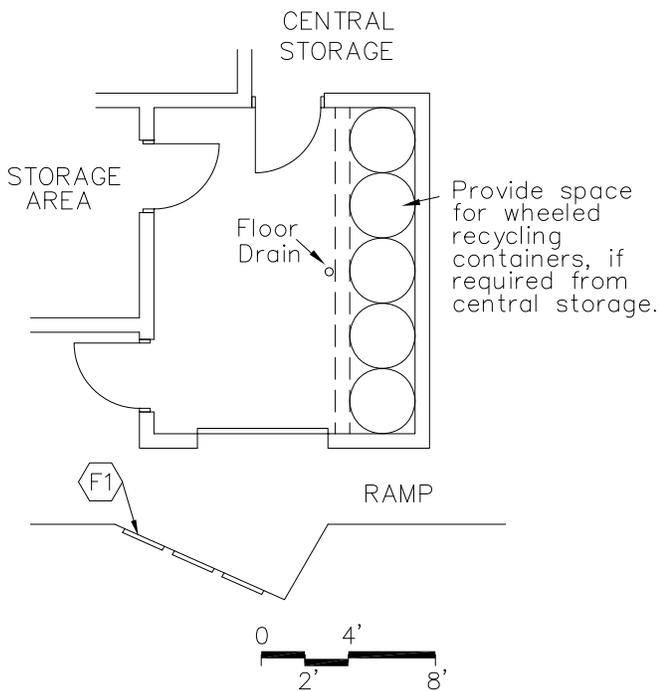
NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. Ranges shown indicate quantities for the smallest and largest possible room size.

**LOADING/RECEIVING AREA**  
**M-BS-9**

CHAPTER 5: MIDDLE SCHOOL

**Recycling space to be determined by Design Professional.**



**CAPACITY:**  
**SIZE:**

**N/A**  
**120 SF**

**PROGRAM ACTIVITIES:**

- Delivery of materials and goods to be used throughout the building

**SPATIAL RELATIONSHIPS:**

- Near food service spaces
- Near central storage area
- Near mechanical room
- Adjacent to loading dock

**ENVIRONMENTAL CONSIDERATIONS:**  
N/A

**MISCELLANEOUS:**

- Refer to Chapter 3, Section 3201, for site vehicular circulation requirements

**NOTES:**

1. If local collection agency allows co-mingling of materials, a recycling alcove may not be needed. Design team should meet the LEED intent when designing the recycling area.

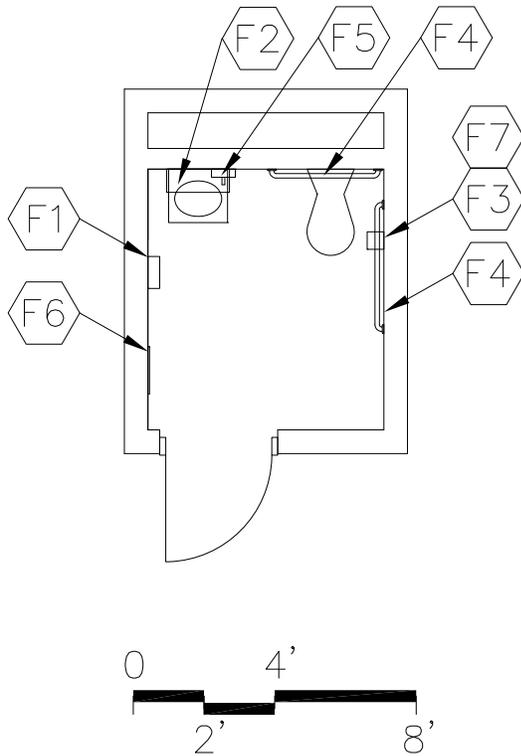
**LOADING/RECEIVING AREA**  
**M-BS-9**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
Flooring:		<u>Fixed Items:</u>	
Cure and seal concrete	033000	F1 Loading dock leveler and dock bumpers	111300
Base:		<u>Fire Suppression:</u>	
No base		Fire suppression system	211000
Ceiling:		<u>Plumbing:</u>	
Exposed structure		N/A	
Walls:		<u>HVAC:</u>	
<b>Epoxy-painted</b> concrete masonry units	042000 / 099100	Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
<u>LOOSE FURNISHINGS</u>		<u>Electrical:</u>	
N/A		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-4	
		Duplex receptacles	262726
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		N/A	
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.



CAPACITY: 1 person  
 SIZE: 60 SF  
 ANCILLARY SPACES:

**PROGRAM ACTIVITIES:**

- Personal and health needs for the building occupants

**SPATIAL RELATIONSHIPS:**

- Near academic area

**ENVIRONMENTAL CONSIDERATIONS:**

- Uniform lighting
- Environmental sound control -  
 wall minimum STC 48  
 ceiling minimum CAC 35, NRC 0.70
- Moisture- and stain-resistant finishes

**NOTES:**

1. Separate restrooms must be provided for male and female students

**RESTROOM  
M-BS-10**

CHAPTER 5: MIDDLE SCHOOL

<u>FINISHES<sup>1</sup>:</u>	Spec. Ref.#	<u>FEATURES<sup>1</sup>:</u>	Spec. Ref.#
<u>Flooring:</u>		<u>Fixed Items:</u>	
Linoleum, <i>ET</i> , sheet vinyl, or rubber	096516 096500	F1 Towel dispenser	102813 102813
Optional: quarry tile, or resinous flooring	093000 096723	F2 Mirror with shelf above sink(optional)	102813
		F3 Toilet tissue holder	102813
		F4 36" and 42" grab bar	102813
		F5 Soap dispenser	102813
<u>Base:</u>		F6 Sanitary product dispenser	102813
Resilient base	096500	F7 Sanitary product receptacle	102813
Optional: quarry tile, resinous flooring, or integral vinyl cove base	093000 096723		
<u>Ceiling:</u>		<u>Fire Suppression:</u>	
Suspended, acoustical	095113	Fire suppression system	211000
<u>Walls:</u>		<u>Plumbing:</u>	
Painted concrete masonry units	042000/099100	Wall-mounted water closet	224000
		Wall-mounted lavatory	224000
		Plumbing connections	224000/221116/221119
<u>LOOSE FURNISHINGS:</u>		<u>HVAC:</u>	
Wastebasket		Exhaust air system	Div. 23
		Supplemental heat as required	Div. 23
		<u>Electrical:</u>	
		Single level switching	262726
		Fluorescent lighting	265100
		Illumination level: See Table 8600-10	
		1 duplex receptacle	262726
		<u>Communications:</u>	
		Central sound system	275123
		<u>Electronic Safety and Security:</u>	
		Life safety devices per code	283111
		<u>Miscellaneous:</u>	
		N/A	

NOTES:

1. Finishes/Features: Refer to Chapter 9 for specification references.
2. F6 and F7 required for female restroom only.